1. Please provide SDG&E's workpapers in electronic form, including working spreadsheets *as soon as possible*, if not sooner.

SDG&E Response 1: SDG&E is sending UCAN via Federal Express, a CD of its 2008 GRC workpapers by COB March 15, 2007.

Please be apprised that the CD is considered <u>confidential information pursuant to PUC</u> <u>Code Section 583 & General Order 66-C and to the Provisions of the Signed NDA in this Proceeding.</u>

Response Prepared by: Martha Cendejas

Date Submitted: 03/15/2007

- 2. For the residential class, please provide the following information for each of your individual load research customers in electronic format:
 - a. A customer identifier (does not need to be same as SDG&E's internal customer identifier only required for our internal quality control of data when we analyze it)
 - b. Number of days or hours of valid sample, divided between summer and winter, if possible.
 - c. Summer kWh, divided into on-peak, mid-peak, and off-peak
 - d. Monthly kWh divided by time of use period on a year-round basis.
 - e. Load in the coincident system peak hour in each month.
 - f. Load in the residential class noncoincident peak hour of the year (if available).
 - g. Non-coincident peak load for the individual customer on a monthly basis.
 - h. Type of customer (single-family or multi-family dwelling, or master metered) if available.
 - i. Whether the customer is a CARE customer.
 - j. Whether the customer is "basic" or "all electric."
 - k. Any other information collected by SDG&E related to type or square footage of dwelling unit, customer income, or household size, if available.
 - 1. The customer weighting factor used to reflect that a stratified sample was drawn.

SDG&E's Response 2:

See the attached file SDGE_ucan1_Q2. Data for question e is not readily available. For section j square footage was provided if available.



Response Prepared by: Leslie Willoughby

Date Submitted: 03/15/2007

- 3. For the small commercial class (Rate A excluding A-TC), please provide the following information for each of your individual load research customers in electronic format:
 - a. A customer identifier (does not need to be same as SDG&E's internal customer identifier only required for our internal quality control of data when we analyze it)
 - b. Number of days or hours of valid sample, divided between summer and winter, if possible.
 - c. Monthly kWh divided by time of use period on a year-round basis.
 - d. Load in the coincident system peak hour in each month.
 - e. Load in the residential class noncoincident peak hour of the year (if available).
 - f. Non-coincident peak load for the individual customer on a monthly basis.
 - g. Any information regarding whether the customer uses electricity for space heating and/or water heating if available.
 - h. Any other information collected by SDG&E related to the customer industry or business type, square footage of space; number of employees, etc., if available.
 - i. The customer weighting factor used to reflect that a stratified sample was drawn.

SDG&E's Response 3:

See attached file SDGE_ucan1_Q3. Part e is not readily available and part g was unavailable. Naics codes were supplied in response to part h.



Response Prepared by: Leslie Willoughby

Date Submitted: 03/15/2007

- 4. Please provide the amount of revenue requirements included in the distribution revenue requirement for each of the following programs (a) in existing 2007 revenues; (b) as projected in 2008.
 - a. Self-Generation Incentive Program
 - b. California Solar Initiative
 - c. Incentive payments made to customers for interruptible rate discounts, demand bidding, and other demand response programs.
 - d. Other operating costs of demand response programs
 - e. Annual Earnings Assessment Program (AEAP) or similar incentives for energy efficiency
 - f. Hazardous substance clean-up costs
 - g. Costs of electric energy transaction administration
 - h. Direct Access Discretionary Services costs

SDG&E's Response 4:

For items (a) through (f), SDG&E has made no proposals to change the revenue requirements associated with the programs listed. In this GRC Phase 2 proceeding the same revenue requirements are assumed for 2008.

a. Self-Generation Incentive Program:

2007: \$29.814 million 2008: \$29.814 million

b. California Solar Initiative:

2007: \$34.349 million 2008: \$34.349 million

c. Incentive payments made to customers for interruptible rate discounts, demand bidding, and other demand response programs:

2007: \$11.186 million 2008: \$11.186 million

d. Other operating costs of demand response programs:

Total cost included in response to item (c).

e. Annual Earnings Assessment Program (AEAP) or similar incentives for energy efficiency:

2007: \$12.459 million 2008: \$12.459 million

f. Hazardous substance clean-up costs:

2007: \$0.584 million 2008: \$0.584 million

Response Prepared by: Robert W. Hansen

SDG&E's Response 4 - Continued:

g. Costs of electric energy transaction administration
a) the amount in existing 2007 revenue requirement is from the most previous (2004) adopted Cost Of Service proceeding decision D.04-12-015. The decision authorized \$3.818 million in direct charges, which is expressed in 2004 dollar terms. It should be noted that post-test year adjustments have been applied to adjust the revenue requirement in total for 2005 – 2007 as adopted pursuant to D.05-03-023.
b) costs proposed in A.06-12-009, SDG&E's 2008 GRC Phase 1 filing: \$6.360 million in direct charges, which is expressed in 2008 dollar terms.

Response Prepared by: Terry Farrelly

Please note that Ms. Farrelly is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the cost of electric energy transaction administration should be raised in Phase 1 of the GRC. Ms. Farrelly will not be made available for Phase 2 evidentiary hearings.

h. Direct Access Discretionary Services costs. SDG&E has not tracked costs associated with DA Discretionary Services since 2000 at which time, there was less than \$119,000 in the account. As such, SDG&E has not projected any costs in 2008 in this account. Costs associated with these services, as well as all DA program activity costs have become imbedded in base rates for various areas. Miscellaneous revenues associated with DA Service Fees are then offset from SDG&E requested revenue requirements.

Response Prepared by: Robert W. Hansen

5. Is cash working capital associated with commodity generation included in the distribution rate? If so, please provide the revenue requirement for that cash working capital (a) in 2007 and (b) as projected in 2008.

SDG&E's Response 5:

Working cash requirement for generation is \$0 in 2007, consistent with the amount authorized in the SDG&E 2004 COS. The 2008 forecast of working cash related to generation included in the distribution revenue requirement is \$1,655,000 and the revenue requirement to cover return, taxes, and F&U is \$236,000.

Response Prepared by: Deb Yee

Please note that Ms. Yee is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the amount of working capital associated with commodity generation should be raised in Phase 1 of the GRC. Ms. Yee will not be made available for Phase 2 evidentiary hearings.

The revenue allocation and rate design proposals in the GRC Phase 2 implement the Phase 1 distribution revenue requirement, as described above.

Prepared by: Robert Hansen

6. Is cash working capital associated with SONGS included in the distribution rate? If so, please provide the revenue requirement for that cash working capital (a) in 2007 and (b) as projected in 2008.

SDG&E's Response 6:

Working cash requirement for SONGS is \$0 in 2007, consistent with the amount authorized in the SDG&E 2004 COS. In 2008 no allocation for SONGS Working cash requirement was made.

Response Prepared by: Deb Yee

Please note that Ms. Yee is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the amount of working capital associated with SONGS should be raised in Phase 1 of the GRC. Ms. Yee will not be made available for Phase 2 evidentiary hearings.

The revenue allocation and rate design proposals in the GRC Phase 2 implement the Phase 1 distribution revenue requirement, as described above.

Response Prepared by: Robert Hansen

7. Are A&G expenses associated with SONGS included in the distribution rate? If so, please provide the revenue requirement for those A&G expenses (a) in 2007 and (b) as projected in 2008.

SDG&E's Response 7:

A&G costs associated with SONGS included in the distribution revenue requirement is \$(65,000) in 2007 and \$24,000 in 2008.

Response Prepared by: Monica Haas

Please note that Ms. Haas is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the amount of A&G expenses associated with SONGS should be raised in Phase 1 of the GRC. Ms. Haas will not be made available for Phase 2 evidentiary hearings.

The revenue allocation and rate design proposals in the GRC Phase 2 implement the Phase 1 distribution revenue requirement, as described above.

Response Prepared by: Robert Hansen

Date Submitted: 03/15/2007

8. Please identify the amount of Administrative and General Costs included in (a) distribution and (b) generation in 2007 and as projected in 2008.

SDG&E's Response 8:

Decision 05-08-005 (re: Adoption of Cost Recovery and Ratemaking Mechanisms Relative to SDG&E's Acquisition and Operation of the Palomar Energy Center) and Decision 04-06-011 (re: Approval to Enter Into New Electric Resource Contracts Resulting from SDG&E'S Grid Reliability Request for Proposal) did not address (i.e., perform) an assignment of embedded A&G costs for recently acquired generation plants (Palomar combined-cycle and Miramar combustion-turbine plants), therefore it is not possible to present an amount for 2007 consistent with the GRC application. It was contemplated that activity would first occur as part of the 2008 GRC. Generation A&G costs projected in 2008 are \$3,018,000. This amount is stated in 2005 base year dollars.

Electric distribution A&G direct charges projected in 2008 are \$240,664,000. The electric distribution A&G costs included in the current 2007 revenue requirement are from the adopted 2004 Cost of Service (COS) proceeding decision D.04-12-015. Such costs are not readily comparable to the projected 2008 expenses as proposed in the GRC for a variety of reasons that include:

- These are two different periods in time and the dollars are not directly comparable. The 2004 COS was presented in \$2001 and the comparison would be to \$2005.
- Normal operations cause variances in account levels from year-to-year and forecast expenses can reasonably be expected to differ from actual expenses.
- The TY2004 COS final decision adopted a proposed settlement containing changes to most TY2004 FERC accounts to reflect various settling party positions. The 2008 projected amount reflects the "as-filed" level of expense in the 2008 GRC.
- The format of data presentation is different between the TY2004 proceeding and the TY2008 GRC, most notably in the treatment of shared services. Shared services were included in the FERC account presentation in the 2004 COS. The 2005 adjusted-recorded data being used for the 2008 GRC presents non-shared service expenses by FERC account and shared service expenses by cost center. There are also differences in the presentation of corporate center charges and pension and benefits.

SDG&E has not conducted any analysis comparing TY2004 COS final decision to 2008 proposed electric distribution A&G used in the TY2008 GRC, thus there is no directly comparable value that was specifically adopted in the 2004 COS that is available.

Response Prepared by: Paul Malin

Please note that Mr. Malin is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the allocation of A&G costs between distribution and generation should be raised in Phase 1 of the GRC. Mr. Malin will not be made available for Phase 2 evidentiar

9. Provide an explanation as to how Administrative and General costs are unbundled among functions and specifically between distribution and generation.

SDG&E's Response 9:

Answer excerpted from the testimony of Paul Malin (pages PDM – 9 through PDM - 11):

"....To allocate Electric Department expenses between the electric distribution, generation, and transmission functions, SDG&E used an allocation method based on labor charges for all O&M accounts other than Account 924 - Property Insurance. For capital reassignment and Clearing Accounts, SDG&E used actual 2005 data as described below. The labor ratio method is required by FERC for transmission rate setting. The adoption of this method for CPUC rate setting by SDG&E insures consistency between state and federal regulatory jurisdictions for the allocation of common Electric Department expenses. The Distribution of Salaries & Wages pages of the 2005 Annual Report of SDG&E to the CPUC, Electric Department (pages 354-353, are used for the labor ratio calculations, since this is also filed with the FERC as part of SDG&E's FERC Form 1. The information presented on the Distribution of Salaries & Wages pages is based on detailed analysis of how labor costs were charged to the various functional areas for 2005.

B. Electric Transmission Allocation

Various costs have been allocated to electric transmission and excluded from this GRC. The different categories and process are described below.

A&G Costs

All electric A&G accounts except Account 924, are allocated based on the labor ratio method. The labor ratio is calculated by taking the transmission functional direct labor divided by the net of total direct electric O&M labor, less A&G labor, plus a forecasted amount of incremental generation labor for 2008. The resulting rate of 11.6% is applied to all electric A&G, except Account 924, with the result being excluded from this GRC. See workpaper PDM-WP-6.

FERC Account 924

For Account 924 - Property Insurance, the FERC has established a different allocation methodology for setting transmission rates. This methodology is based on the ratio of total electric transmission plant to total electric plant, excluding San Onofre Nuclear Generating Stations (SONGS) Units 2 & 3. The resulting rate is 21.5%. This rate has been applied to the electric Account 924 expenses with the result being excluded from this GRC. See workpaper PDM-WP- 17.

Date Submitted: 03/15/2007

SDG&E's Response 9-Continued:

A&G Reassignment to Capital

Once the reassignment of electric A&G to capital takes place a portion is allocated to electric transmission. This electric transmission capital allocation rate is calculated by taking the actual 2005 direct electric transmission labor assigned to capital projects and dividing it by actual 2005 total direct electric labor assigned to capital. The resulting rate is 20.0%. This rate has been applied to electric **A&G** reassigned to capital with the result being excluded from this GRC. See workpaper PDM-WP-7.

Clearing Account Costs

An amount of electric O&M and capital related to electric transmission has been excluded from this GRC. The O&M exclusion rates for the various clearing accounts have all been calculated by dividing actual electric transmission O&M by total electric D&M costs. The capital exclusion rates for the various clearing accounts have all been calculated by dividing actual electric transmission capital by total electric capital costs.

C. Generation Allocation

Due to the addition of generation costs starting in mid-2006, an effort was made to incorporate forecasted 2008 generation costs in the various processes used to calculate the allocation rates described throughout this testimony. A portion of the remaining zlectric **A&G** after carving out transmission, has also been allocated to generation for this GRC. The allocation rate has been calculated by using labor ratios similar to the process for transmission. The resulting calculated rate is 3.1% after the allocation to transmission. See workpaper PDM-WP-8."

Response Prepared by: Paul Malin

Please note that Mr. Malin is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the allocation of A&G costs between distribution and generation should be raised in Phase 1 of the GRC. Mr. Malin will not be made available for Phase 2 evidentiary hearings.

Date Submitted: 03/15/2007

10. Are all franchise fees associated with generation (including payments in lieu of franchise fees for CDWR power) included in the generation revenue requirement? If not, identify the amount included in the distribution revenue requirement.

SDG&E's Response 10:

There is a gross up of the generation revenue requirement to include franchise fees on SDG&E owned energy. The municipal surcharges for DWR supplied power are NOT included in the generation revenue requirement.

Response Prepared by: Robert W. Hansen

11. How are charges in lieu of franchise fees for direct access customers treated in this rate design filing? Where is the revenue requirement for these charges included? Are these costs directly assigned to DA customers?

SDG&E Response 11:

SDG&E is a collection agent for municipal surcharges, but has no ownership of the revenues. Municipal surcharges for DA customers are directly assigned and collected in SDG&E's billing process. Municipal surcharges are NOT included in SDG&E's revenue requirements

Response Prepared By: Robert W. Hansen

12. Is SDG&E proposing any changes to the allocation of public purpose program revenue?

SDG&E Response 12:

No changes to the allocation of PPP revenue are proposed in this proceeding.

Response Prepared By: Robert W. Hansen

13. Please provide a description of how public purpose program revenue is allocated. Divide the PPP rate into components set by PU Code 399 and each other component (e.g., procurement energy efficiency, CARE, Low Income Energy Efficiency, renewables, etc.).

SDG&E Response 13:

The following table summarizes the allocation method used for the various PPP programs.

RD&D	System Average Percent Change
Renewables	System Average Percent Change
EE - Non-LI PPP Rate	direct allocation starting in 2006
Procurement EE Surcharge	direct allocation starting in 2006
CARE	Equal Cents per kWh for non-CARE
LIEE	Equal Cents per kWh

Response prepared by: Robert W. Hansen

14. Please provide SDG&E sales by customer class and rate schedule by month from 1996 to 2006.

SDG&E's Response 14:

See Excel file labeled SDGE-Data-Q14.xls



As discussed on March 7, 2007, the data is provided by class only.

Response prepared by: Greg Katsapis

15. Please provide heating and cooling degree-days for SDG&E by month from 1996 to 2006.

SDG&E's Response 15:

See Excel spreadsheet labeled SDGE-Data-Q15.xls

Provided are billing cycle weighted Hdd's and Cdd's. The 65 degree base is population weighted (residential), while the 60 degree base is employment weighted (commercial/industrial). Provided in the top portion of the spreadsheet are normal degree-days.



Response prepared by: Greg Katsapis

16. Please provide all estimates of the saturation of air conditioning for residential customers in SDG&E on an annual basis from 1996-2006.

SDG&E's Response 16:

The air-conditioning saturation was 35.2% in 2003 according to the RASS survey and in the 1998 RASS survey the air-conditioning saturation was 30%. Data for other years is not available.

Response prepared by: Leslie Willoughby

As discussed on March 7, 2007, the data is provided only for the years it is available.

Date Submitted: 03/15/2007

17. Please provide the number of residential customers by baseline climate zone at the end of each year from 1996-2006.

SDG&E's Response 17:

The attached Excel file labeled "UCAN_DR1_17.xls" shows the number of residential customers by baseline climate zones as of December for the years 1997 through 2006. Data is not available for the year 1996.

Note that in 2002 SDG&E's Climate Zone 1 was split into the Coastal zone and the Inland zone (D.02-05-010). Customer counts for the new zones are shown for years prior to 2002 according the current zone boundaries.



Response prepared by: James Magill

As discussed on March 7, 2007, the data is provided only for the years it is available.

18. Please provide a measure of electric prices in nominal dollar terms by month from 1996-2006 by customer class.

SDG&E's Response 18:



Response Prepared by: Susan M. Claffey

19. Please provide all available figures of regional income and regional employment for San Diego from 1996 to 2006.

SDG&E's Response 19:

Employment information can be found at: http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=4&SubID=166

Income information can be found at: http://www.bea.gov/regional/reis/default.cfm#step2 and choose Table CA04 for the San Diego area.

Response prepared by: Greg Katsapis

20. Please provide all available estimates of the amount of energy conserved by energy efficiency programs for each year from 1996-2006. Divide by sector (e.g., residential commercial, industrial) or customer class as available. Provide cumulative estimates to the extent available.

SDG&E's Response 20:

Attached are the Energy Efficiency Programs annual summaries for the years 1996-2005. The 2006 report will be filed in May 2007 and will be provided after it is filed. Due to the voluminous of the files, attached is a CD and hard copies of the reports.

Response prepared by: Martha Cendejas

21. Please provide the most recent internal forecasts of customers, sales, and peak demand prepared by SDG&E.

SDG&E's Response 21:

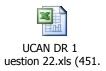
As discussed on March 7, 2007 the CEC forecast presented in this proceeding at Exhibit SDG&E-03, page GK-2 is the most recent SDG&E forecast. The most recent forecast prepared by SDG&E is the one for the last Rate Design Window proceeding, A.05-02-019.

Response prepared by: Greg Katsapis

22. Please provide the 100-hour data used to allocate generation demand costs.

SDG&E Response 22:

Attached is a separate spreadsheet model, "UCAN DR 1 Question 22.xls", composed of those tabs from the "TY 08 GRC Commodity Demand Workpapers.xls" spreadsheet model which provide the requested data.



23. Please provide class and customer coincident and non-coincident peak loads for each year from 2001 to 2006.

SDG&E Response 23:

Non-coincident Demand						
Class	Rates Included	2001	2002	2003	2004	2005
Residential Customers Small	(DR,DM,DS,DT,DP)	1,655,896	1,875,656	1,756,715	1,649,393	1,735,555
Commercial Customers Med./Large	A,ACT, ATOU AD, AL-TOU, A0-	518,282	513,827	483,147	526,751	525,337
C/I Customers Agric.	TOU,A6-TOU, AE/Av, Pat-1	1,682,083	1,748,802	2,045,411	1,919,969	2,102,676
Customers	PA, PA-TOU	26,114	36,270	24,707	23,342	28,466
St. Lights Customers	<u>LS-1, LS-2, LS-3,</u> <u>OL-1,DWL</u>	22,723	22,962	23,643	24,968	23,962

Coincident Demand						
Class	Rates Included	2001	2002	2003	2004	2005
Residential						
<u>Customers</u>	(DR,DM,DS,DT,DP)	1,113,143	1,107,812	1,595,166	1,387,715	1,228,857
Small						
Commercial		400 -0-	440 =04		40= 000	
Customers	A,ACT, ATOU	489,725	442,534	445,184	465,332	449,297
Med./Large	AD, AL-TOU, A0-					
Customers	TOU,A6-TOU,	1 554 050	1 607 010	1 715 571	1 700 107	1 750 020
Customers	AE/Av, Pat-1	1,554,952	1,607,912	1,715,571	1,799,107	1,750,030
Agric. Customers	PA, PA-TOU	20,877	18,616	12.034	18,079	16,990
-	·	20,011	10,010	12,034	10,079	10,990
St. Lights	<u>LS-1, LS-2, LS-3,</u> OL-1,DWL	0	22.962	0	0	0
<u>Customers</u>	OL-1,DVVL	U	22,962	U	U	U

Note: Non-Coincident demands are estimated separately by rate schedule and added together to create the non-coincident demand for the class. This results in a slightly higher non-coincident demand level than it would otherwise be if all rate schedules non-coincident demand were estimated all together. The class most affected by this is the Med. / Large C/I class.

Response Prepared By: Kathryn Smith/Leslie Willoughby

24. Please provide the number of customers by customer class and rate schedule on a monthly basis from 1996 to 2006.

SDG&E's Response 24:

See Excel file labeled SDGE-Data-Q24.xls



As discussed on March 7, 2007, the data is provided by class only.

Response prepared by: Greg Katsapis

Date Submitted: 03/15/2007

25. Please provide the forecast increase in the number of customers by customer class from 2006-2011.

SDG&E Response 25:

Class	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Residential	18,113	18,138	18,463	17,777	17,279
Sm. Commercial	979	943	920	868	802
Med./Large C/I	602	604	608	605	600
Agriculture	9	9	9	9	9
Street Lights	-62	-59	-57	-56	-55
Total	19,641	19,634	19.942	19,202	18,635

Response prepared by: Greg Katsapis

26. Please provide all studies conducted by SDG&E as to the effect of tiered residential rates on electricity consumption on an annual basis and by season and time of use.

SDG&E Response 26:

SDG&E has conducted no studies of the effect of tiered residential rates on consumption.

Response Prepared By: Robert W. Hansen

27. Please provide the amount of capital spending on replacing distribution system elements (other than customer access elements) in each historical year from 2000-2005 and consistent with the Phase I forecast for 2006-2008.

SDG&E Response 27:

The attached file includes two tabs, a summary and detail of capital spending for each historical year from 2001-2005 and the Phase I forecasts for 2006-2008. The electric distribution costs are divided into blanket and specific projects, then further broken down by functional area. All years are stated in 2005 (\$).



Response Prepared By: Caroline Winn

Please note that Ms. Winn is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the amount of capital spending on replacing distribution system elements should be raised in Phase 1 of the GRC. Ms. Winn will not be made available for Phase 2 evidentiary hearings.

28. Please provide all available information on the number of (a) meters; (b) transformers; and (c) service lines that have been replaced in each year from 1996 to the present. Divide service lines between overhead and underground.

SDG&E Response 28:

This information requested related to replacements is not readily available because SDG&E does not track costs in this manner.

Response Prepared By: Caroline Winn

Please note that Ms. Winn is a witness in Phase 1 (the revenue requirement portion) of the GRC, not Phase 2 (the electric rate design portion) of the GRC. Any issues related to the number of meter, transformer, or service line replacements should be raised in Phase 1 of the GRC. Ms. Winn will not be made available for Phase 2 evidentiary hearings.

Date Submitted: 03/15/2007

29. Please provide the number of customers served from overhead and underground using most recent information.

SDG&E Response 29:

The table below provides the information requested by Residential and Commercial Account categories.

Total Overhead Accounts	459,460
Total Residential OH	422,842
Total Commercial OH	36,618
Total Underground Accounts	892,725
Total Residential UG	781,345
Total Commercial UG	111,380

30. Please provide all available information differentiating residential class hookup costs between single-family and multi-family applications.

SDG&E Response 30:

The available information differentiating Transformers, Meters, and Services (TSM) costs, also known as hookup costs, between single-family (schedule DR) and multi-family (schedule DM) are provided in the customer marginal cost workpapers. Specifically the workpapers model "TY 08 GRC Customer Workpapers.xls", tabs: "Res TSM", "DR DR-LI TSM UC", "DM TSM UC", and "Res TSM UC", provide detailed information pertaining to these costs.

31. Please provide the number of transformers serving 1, 2, 3, 4, 5, up to 20 or more residential customers.

SDG&E Response 31:

The attached table provides the requested data.

Group	Count		
1	19785		
2	11550		
3	7290		
4	6398		
5	5383		
Up to 20	56927		
20<			
More	12813		

32. Please provide estimates of the diversity of individual residential customer loads at the transformer as they relate to the number of customers at the transformer.

SDG&E Response 32:

Please refer to the response to Question 33, the request for any and all manuals that detail how SDG&E calculates diversity in customer loads and sizes transformers to serve residential load. The response to Question 33 provided a PDF document of that portion of the SDG&E Design Standards Manual which pertained. Table numbers 1, 2 and 3 on the last three pagers of that PDF document provide the requested data in great detail as the answer this Question 32.

33. Please provide any and all manuals or other documents that detail how SDG&E calculates diversity in customer loads and sizes transformers to serve residential loads.

SDG&E Response 33:

Please be apprised that this attachment is considered <u>confidential information pursuant</u> to PUC Code Section 583 & General Order 66-C and to the Provisions of the Signed <u>NDA in this Proceeding.</u>

34. Please provide the number of transformers serving 1, 2, 3, 4, 5, up to 20 or more residential customers.

SDG&E Response 34: --Duplicate of UCAN DR-01 Question 31

35. Please provide estimates of the diversity of individual residential customer loads at the transformer as they relate to the number of customers at the transformer.

SDG&E Response 35 -- Duplicate of UCAN DR-01 Question 32

36. Please provide any and all manuals or other documents that show how SDG&E calculates diversity in customer loads and sizes transformers to serve residential loads.

SDG&E Response 36 -- Duplicate of UCAN DR-01 Question 33

37. Please provide peak load at each distribution substation in the most recent three years. Identify the time of the peak load.

SDG&E Response 37:



SDGE_UCAN Q37.xls (26 K

The substation peaks with date and MW are in the attached file SDGE_UCAN1Q37. No data for the time of substation peaks was available, the peaks generally occur between 2pm and 7pm.

Response Prepared By: Leslie Willoughby/Can Troung

38. Please explain why it is reasonable to consider the non-coincident peak loads at transformers to establish demand at substations, which is highly diversified from the individual customer loads.

SDG&E Response 38:

The non-coincident demand at transformers is not considered to establish allocation demand determinants for calculating marginal substation revenue responsibilities, also known as marginal cost revenue. The proxy for substation allocation demands by customer class is based on a weighting of customer class non-coincident class peaks and customer class coincident (with system peak) peaks, with weighting factors of 0.2 and 0.8 respectively. SDG&E agrees that the non-coincident peak loads at the transformers is highly diversified from individual customer loads.

39. Please provide hourly loads by customer class in spreadsheet form for the three years used to develop the 100-hour load allocations.

SDG&E Response 39:

Attached are three spreadsheets for Years 2003, 2004, and 2005 which provide the requested hourly loads.







UCAN DR 1 Q39 Yr UCAN DR 1 Q39 Yr UCAN DR 1 Q39 Yr 2003.xls (2 M... 2004.xls (2 M... 2005.xls (2 M...