Docket:	:	R.06-02-013
Exhibit Number	:	
Commissioner	:	Michael R. Peevey
Admin. Law Judge	:	Carol A. Brown
ORA Project Mgr.	:	Sepideh Khosrowjah
	:	

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

R.06-02-013

REPORT ON THE LONG-TERM PROCUREMENT PLANS OF

San Diego Gas and Electric Company (SDG&E)

Volume D

San Francisco, California
March 2, 2007

REDACTED VERSION

REDACTED VERSION

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ATTACHMENTS

MEMORANDUM

This report was prepared by the Division of Ratepayer Advocates (DRA) of the California Public Utilities Commission (Commission) in R.06-02-013 proceeding. In this docket, the IOUs, Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric Company (SDG&E), request that the Commission to approve their Long Term Procurement Plans (LTPP) for the period of 2007-2016. In this report DRA presents its analysis and recommendations associated with the Investor Owned Utilities' (IOU) requests.

Sepideh Khosrowjah served as DRA's project coordinator in this review, and is responsible for the overall coordination in the preparation of this report.

I. SUMMARY OF RECOMMENDATIONS

SDG&E presents only one candidate plan in its Long Term Procurement Plan (LTPP), "Preferred Plan". It tests this plan under three different needs scenarios, "base", "high" and "low".

DRA has specific comments and recommendations regarding SDG&E's estimates of its need for resources and availability of preferred resources and its procurement strategy for certain resources.

A. Estimates of Need and of Availability of Preferred Resources

Need. SDG&E estimates that under its recommended plan it would need to procure a cumulative total of approximately 1,900 MW by 2016 to meet the requirements of its bundled customers (contractual procurement). It also estimates that by 2016 there would be a need for approximately 1,500 MW to meet reserves requirements for its service territory (physical procurement) if the Sunrise Powerlink is not built, and 499 MW if it is built.

DRA recommends that SDG&E adjust its estimate of need by calculating it using energy efficiency and DR forecasts consistent with Commission targets, as well as using expected operating conditions rather than adverse operating conditions to determine the need for physical capacity. This recommendation reflects continued use of Commission guidelines regarding planning assumptions until SDG&E presents a compelling case for using more stringent assumptions and our recommendations regarding reasonable planning assumptions for EE and DR. If SDG&E estimates its needs using those assumptions, the quantity of contractual capacity and physical capacity required by 2016 is substantially lower. For example, the contractual procurement would decline by approximately 435 MW (20%) and the physical procurement by 360 MW (25% to 75%).

Demand Response. DRA recommends that SDG&E adjust its

recommended plan to reflect the position that all Commission-approved programs are cost-effective as well as to use "Best Estimates" of MW reductions for all DR programs in the near-term and for reliability DR programs for 2009-2016. It should also ramp-up price-responsive DR to the full 5% goal during the first summer after the "full deployment" year of AMI in 2011. These assumptions are reasonable for planning purposes given the numerous initiatives underway to increase the availability of DR.

Renewable resources. DRA concludes that SDG&E's Preferred Plan does not address the goal of 33% renewables by 2020 adequately. DRA recommends that the Commission require SDG&E to present a plan with a goal of 33% renewable energy by 2020 and not make it conditional on other factors, such as load growth. in order to comply with Commission guidelines.

B. Procurement strategy

Renewable resources. DRA recommends that the Commission require SDG&E to fully analyze renewable generation ownership options as resource plan candidates, either in a compliance filing in this proceeding or for the next LTPP. These recommendations are consistent with the Commission desire, expressed in D.04-12-048, that IOUs evaluate the full range of procurement options.

Other Generation resources. SDG&E is proposing to procure significant quantities of conventional generation to meet the projected requirements of bundled customers, i.e. contractual needs, and of its service territory, i.e., physical needs over the 2007 to 2009 planning horizon. SDG&E does not need much of this capacity until well after 2008, when it will have to defend its 2008 LTPP. As outlined in our general position on procurement, there are several reasons why the Commission should only approve those physical procurements that SDG&E must initiate prior to the next LTPP because of procurement or construction lead times. SDG&E has the opportunity to provide that information in its reply testimony in

this proceeding. There are also benefits associated with phasing in a laddered portfolio for its contractual procurements.

DRA recommends that the Commission only approve physical procurements for which SDG&E has identified needs in light of the corresponding procurement and construction lead times, and that it only approve contractual procurements for which SDG&E has identified needs prior to the next LTPP consistent with procurement lead times and with the phasing in of a laddered portfolio.

II. INTRODUCTION

San Diego Gas and Electric (SDG&E) filed its Long Term Procurement Plan (LTPP) on December 11, 2006. In that filing, SDG&E presents one "Preferred Plan" with a "base" need scenario and also with a "high" need and a "low" need scenario.[1]

SDG&E recommends that the Commission adopt its "Preferred Plan" ("preferred plan", "proposed plan" or "recommended plan").[2] The plan is based on procurement for meeting a 15% PRM and SDG&E's 1-in-2 demand forecast.

The purpose of this volume is to assess whether SDG&E's Long Term Procurement Plan (LTPP) is reasonable. In order to make this assessment, DRA has considered SDG&E's proposals in the context of the Commission's direction as to how SDG&E is to incorporate Commission policies into its LTPP. As the Commission notes in its scoping memo, this is an umbrella proceeding: "One of the primary goals of this rulemaking is to serve as the Commission's forum to

[1] SDG&E 2006 LTPP, Vol. 1, page 167.

[2] SDG&E 2006 LTPP, Vol. 1, page 177.

integrate all procurement policies and related programs."[3] (**emphasis added**) The Commission clearly states its directive to the IOUs in its scoping memo:

"This proceeding will not be a place to relitigate the targets already established elsewhere. Instead, any problems concerning goals or targets established in other Commission proceedings will be addressed and resolved in the appropriate proceeding – not in this proceeding."[4]

Accordingly, DRA does not intend to debate policy issues within this LTPP proceeding.

This volume presents DRA's assessment of the extent to which the LTPP filed by SDG&E complies with Commission policies and the guidelines set out in the Assigned Commissioner's Ruling and Scoping Memo (ACR/Scoping Memo) issued on September 25, 2006. Our assessment is organized according to the outline specified in the ACR/Scoping Memo for consistency and ease of cross-references. However, the assessment is primarily limited to those aspects of PG&E's LTPP where we have concerns or a disagreement.

III. PROCUREMENT IMPLEMENTATION PLAN

Based upon the information we have reviewed to date we do not disagree with this aspect of SDG&E's LTPP.

IV. LONG-TERM PROCUREMENT RESOURCE PLAN 2007-2016

This section begins by summarizing SDG&E's recommended procurement resource plan. We then present our proposed adjustments to that plan in light of our assessment of SDG&E's positions regarding energy efficiency (EE) and demand response (DR).

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[3] ACR and Scoping Memo on the Long Term Procurement Phase of R.06-02-013, p. 16

[4] Ibid, p. 18

A. SDG&E Proposed Procurement Authorization

SDG&E presents a "Preferred Plan" with a "base" need scenario and also with a "high" need and a "low" need scenario.

- The base need is based on a modified CEC load forecast and Commission-adopted goals for EE and DR and current levels of DA.
- The high need scenario is based on a higher bundled load forecast and assumes that Otay Mesa Power plant's on-line date delayed one year to 2010.
- The low need scenario assumes a lower bundled load forecast.

SDG&E recommends that the Commission adopt its "Preferred Plan".[5] The plan is based on procurement for meeting a 15% PRM and SDG&E's 1-in-2 demand forecast. The plan includes the following:

- Investing in level of Customer Energy Efficiency (CEE) that is consistent with the Commission's targets[6];
- Implementation of the California Solar Initiative (CSI) to meet the targets[7];
- Investing in level of CEE that is consistent with the Commission's targets[8];
- Procuring renewables to provide 22% energy needs in 2010 and increasing over time[9];
- Procuring the following quantities of other generation supply resources by 2016 to meet bundled customer requirements:
    - Up to 514 MW of baseload products
    - Up to 1,250 MW of shaping and peaking products

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[5] SDG&E 2006 LTPP, Vol. 1, page 177.

[6] Ibid., p. 178.

[7] Ibid.

[8] Ibid., p. 54, line 21 to p. 55 line 2.

[9] Ibid., p. 178.

- Up to 146 MW of seasonal super-peaking capacity products[10]
- A total of up to approximately 1,900 MW of capacity[11]; and,

- Procuring up to 250 MW of new capacity in 2008[12] and a total of nearly 1,000 MW by 2016 to meet physical resource needs in the SDG&E service area[13].

SDG&E does not present any plan comparison for reliability, cost, or environmental impacts. They state that the plan reduces the greenhouse gas (GHG) emission rate, provides for stable costs, ensures reliability, and, therefore, represents a reasonable basis for moving ahead with procurement[14].

Figures D - IV.1 and D – IV.2 show the resource mix associated with the proposed plan.

[10] Generic capacity "to meet bundled customer requirements" from SDG&E 2006 LTPP, Vol. 1, Exhibit IV-3.

[11] Ibid., p. 179.

[12] Ibid., p. 179.

[13] Ibid., p. 172, Table IV-4.

[14] Ibid., p. 206.

Figure D - IV.1

Total proposed resources to meet SDG&E's bundled customer requirements in 2010 and 2016 (Preferred Plan)

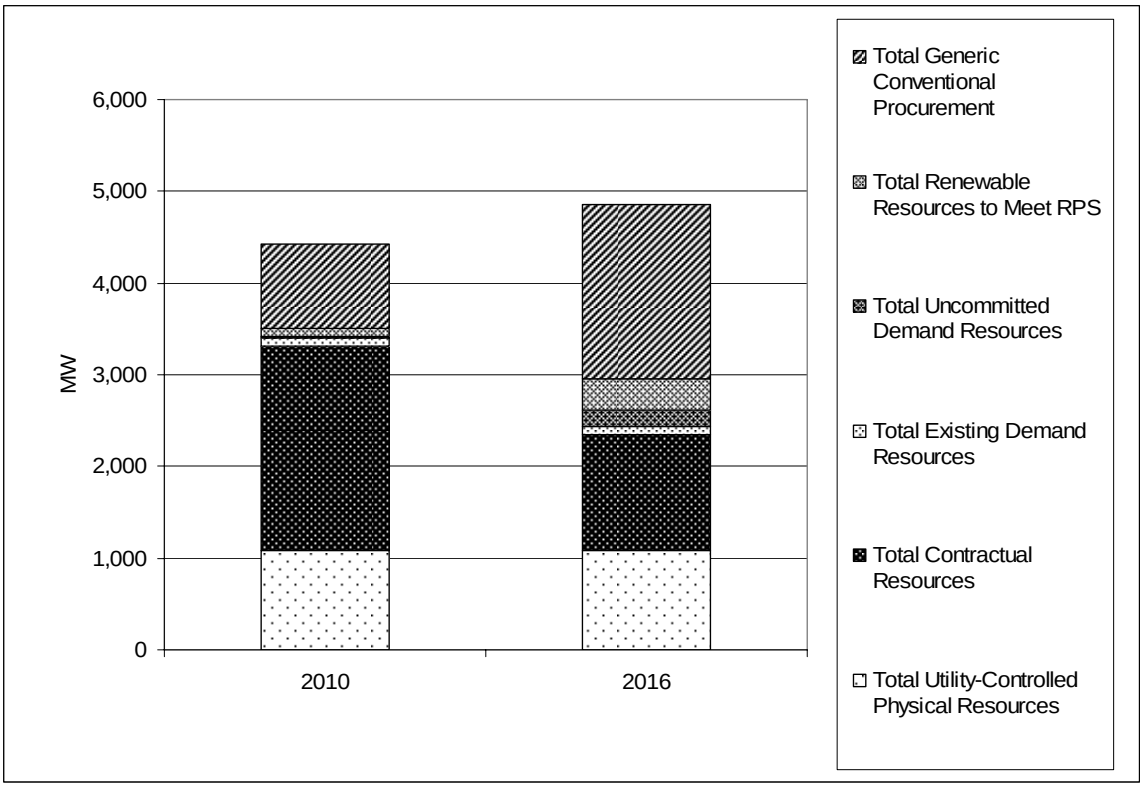
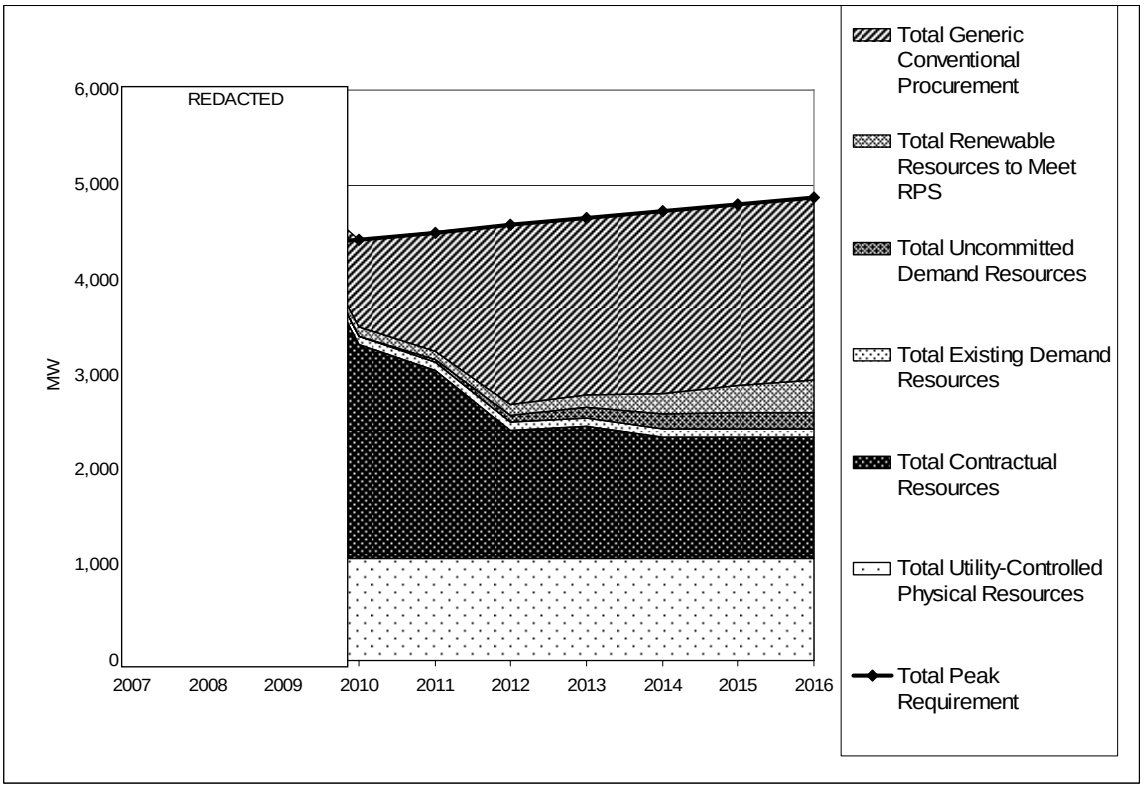


Figure D – IV. 2

Total proposed resources to meet bundled customer requirements, 2007-2016 (Preferred Plan)



This Figure illustrates the following key points:

- Significant but gradual load growth
- Drastic decline in committed contractual resources over a period of several years
- Steady increase in preferred resources
- A large and growing unmet need allocated to "generic conventional procurement"

B. Summary of DRA Adjustments to SDG&E's Proposed Plan

We are proposing two sets of adjustments to SDG&E's proposed bundled customer procurement need in the Preferred Plan.

- The first set of adjustments correct for SDG&E's erroneous upward adjustments to the CEC load forecast for the years of 2009 to 2016. The justification for that adjustment is presented in section IV.C below.
- The second set are to reflect the adjustments to DR as described in Section IV.D and Attachment D-3. The justification for that adjustment is presented in section IV.D below.

The impact of those adjustments on SDG&E's proposed procurements for contractual capacity are presented in Figure D – IV.3 and Table D - IV.1.

Figure D - IV.3

SDG&E's proposed annual generic procurement to meet bundled customer needs and DRA's adjusted proposed procurement (Preferred Plan)

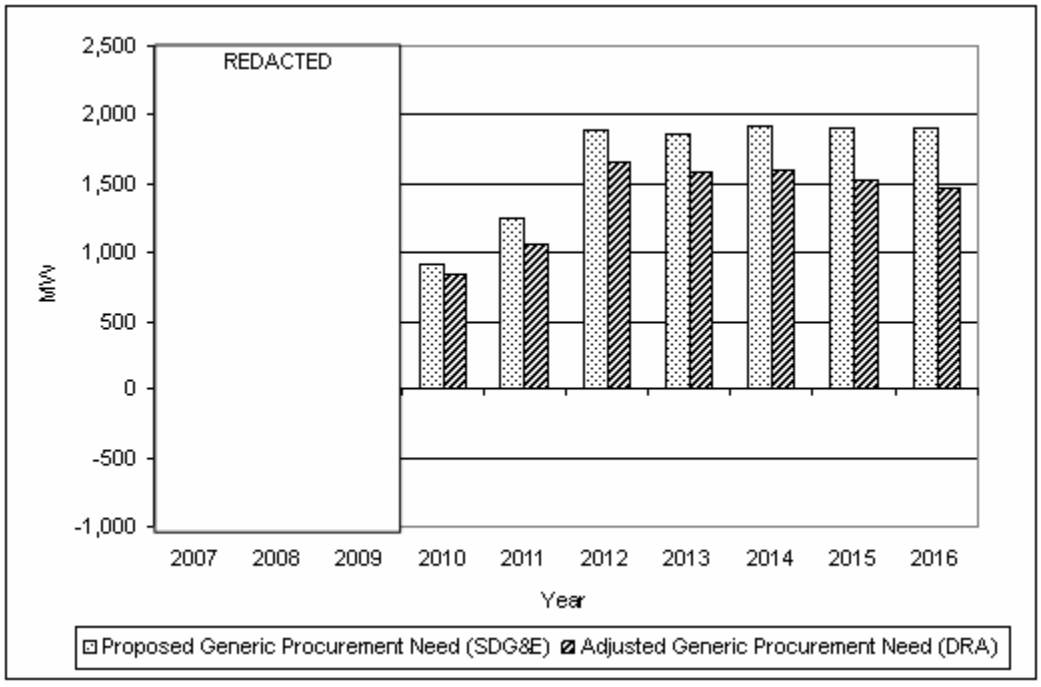


Table D - IV.1

SDG&E Proposed Generic Procurement to Meet Bundled Customer Needs and DRA Proposed Adjustments, 2007-2016

Line		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	SDG&E Proposed Generic Procurement (MW)										
1	Proposed Generic Procurement[1]	REDACTED			921	1,247	1,886	1,864	1,923	1,906	1,910
2	Net Additional Capacity Need[2]				0	(1)	(0)	(1)	(0)	(0)	0
3 = 1 + 2	**Total Procurement Need**				**922**	**1,247**	**1,886**	**1,863**	**1,923**	**1,906**	**1,910**
	DRA Adjustments										
4	Subtracting EE from Total Load[3]				(106)	(156)	(198)	(238)	(285)	(332)	(379)
5	Reserve Adjustment Based on Lower Load[4]				(9)	(23)	(30)	(36)	(43)	(50)	(57)
6	DR Adjustments[5]				42	0	0	0	0	0	0
7 = 3+4+5+6	**Adjusted Total Procurement Need**				**849**	**1,068**	**1,659**	**1,589**	**1,595**	**1,524**	**1,475**

[1]From SDGE 2006 LTPP, Vol. 1, Exhibit IV3, line 194.

[2]Net open capacity position; from SDGE 2006 LTPP, Vol. 1, Exhibit IV3, line 201.

[3]From SDGE 2006 LTPP, Vol. 1, Exhibit IV3, line 2.

[4]Line 4 multiplied by 15%.

[5]Based on Attachment D-1, DRA's Proposed DR Amounts

We are proposing three sets of adjustments to SDG&E's proposed physical service area procurement need:

As with the contractual need, the first set of adjustments correct for SDG&E's erroneous upward adjustments to the CEC load forecast for the years of 2009 to 2016. The justification for that adjustment is presented in section IV.C below.

SDG&E does not account for DR peak savings in the calculation of physical needs, and, therefore, the second set of adjustments apply DR peak savings to the calculation of physical need.

SDG&E represents physical need based on a 1-in-10 summer temperature demand, and does not present any assessment of physical need based on a 1-in-2 summer temperature demand. The third set of adjustments illustrates the effect of moving to a 1-in-2 summer temperature demand criterion.

Figure D – IV.4 and Table D – IV.2 illustrate how these adjustments affect the calculation of physical needs for SDG&E.

Figure D - IV.4

SDG&E's 2016 proposed physical needs and DRA's adjusted proposed need

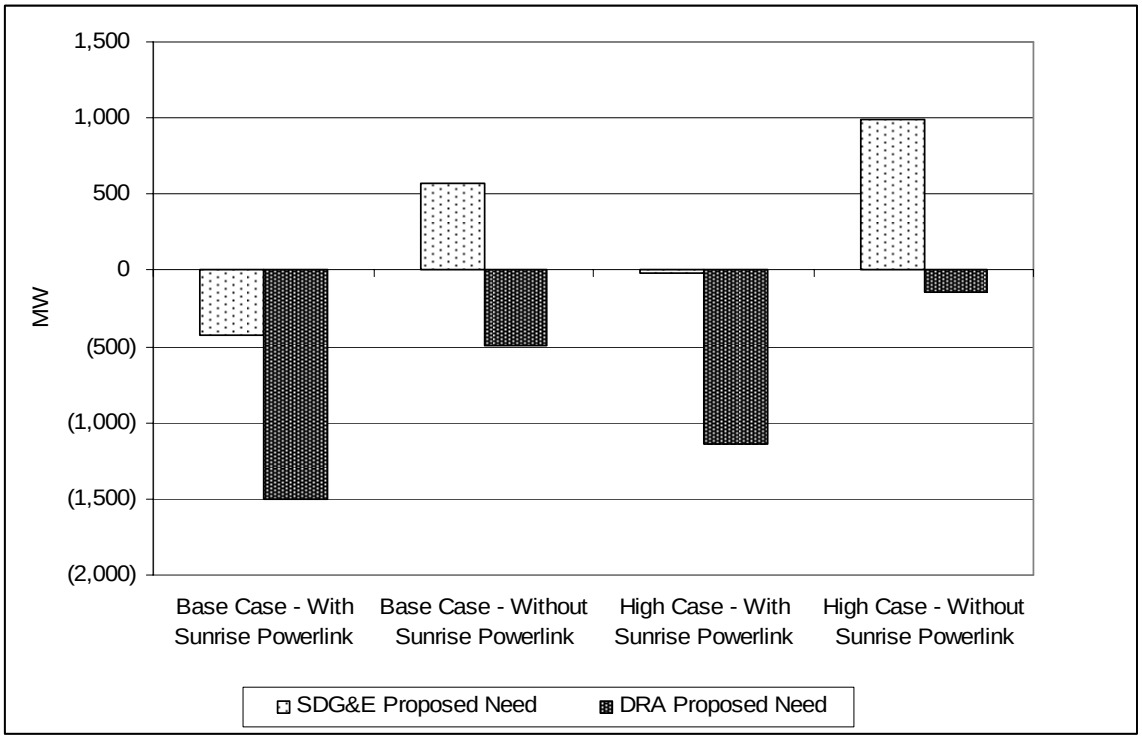


Table D – IV.2

SDG&E Proposed Service Area Need and DRA Proposed Adjustments, 2016

Scenario	Proposed Need to Meet Service Area Requirements in 2016 (MW)		
	SDG&E Proposed Need	DRA Proposed Need[3]	DRA Adjustments - Reductions[4]
Base Case - With Sunrise Powerlink[1]	(426)	(1,499)	1,073
Base Case - Without Sunrise Powerlink[1]	574	(499)	1,073
High Case - With Sunrise Powerlink[2]	(15)	(1,140)	1,125
High Case - Without Sunrise Powerlink[2]	985	(140)	1,125

[1] From SDG&E 2006 LTPP, Exhibit IV-10; negative numbers represent a surplus in capacity needed to meet SDG&E's service area need.

[2] From SDG&E 2006 LTPP, Exhibit IV-11; negative numbers represent a surplus in capacity needed to meet SDG&E's service area need.

[3] Includes EE and DR adjustments based on data from Excel File "Load", mentioned specifically in Benjamin Montoya affidavit dated Dec. 21, 2006.

[4] Difference shown as SDG&E proposed need minus DRA proposed need.

C. Load Forecast and Energy Efficiency

SDG&E does not properly account for Energy Efficiency (EE) savings in its LTPP application, which results in EE having no impact on their procurement needs.

In response to a DRA data request[15], SDG&E indicated that the source of the load forecast used in its LTPP application is the 2005 CEC Demand Forecast.[16] Page 1-15 of the CEC demand forecast indicates that EE goals for 2009-2016 are not included in peak load: "only the impacts of the energy efficiency goals thorough 2008 are accounted for in this forecast." Based upon this statement, the Commission's EE savings goals for 2009-2016 defined in D.04-09-060 should be subtracted from the load forecast to reduce procurement needs.

Table D – IV.3, below, shows SDG&E's adjustments to the CEC load forecast for use in its LTPP. SDG&E adjusted the CEC load forecast figures in a worksheet circulated on December 26, 2006.[17] The adjusted load forecast is transferred into SDG&E's Resource Accounting Tables (CRATs and ERATs)[18] as the "Forecast Total Peak- Hour Load", Line 1. "Uncommitted Energy Efficiency" is subtracted in Line 2 of these tables, but these figures are exactly the same as those initially added to the CEC load forecast to derive SDG&E's adjusted load forecast. The result is that the "Firm LSE Resource Requirement" in Line 13 of the CRATs and Line 11 of the ERATs is unaffected by energy efficiency savings goals, as shown in the example below for base case demand in MW.

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[15] R.06-02-013-Phase 2 - SDG&E-tcr- 1**,** Dated December 11, 2006.

[16] CEC-400-2005-034-SF-ED2, California Energy Demand 2006-2016 Staff Energy Demand Forecast, Revised September 2005.

[17] Excel File "Load", mentioned specifically in an affidavit from Benjamin Montoya dated December 21, 2006.

[18] SDG&E 2007-2016 LTPP Exhibits, Exhibits IV-3 and IV-4

Table D – IV.3

SDG&E's load forecast adjustments to base case demand (MW).

	Line Description	Source	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Gross generation from CEC Sept 05 forecast, SDG&E Form 1.4a	Load, CEC-IEPR, Line 4	4437	4518	4588	4655	4722	4789	4856	4921	4983	5045
2	Forecast adjusted to CEC June 2006 Update (1.01807 factor)	Load, Base Case, Line 4	4516	4598	4670	4738	4806	4874	4942	5009	5072	5135
3	Uncommitted EE Savings	Load, Base Case, Line 3	-	-	54	106	156	198	238	285	332	379
4	Adjusted SDGE Load Forecast	Summation	4516	4598	4723	4843	4962	5072	5181	5294	5403	5513
5	Forecast Total Peak-Hour Load	Exhibit IV-3, Line 1	4516	4598	4724	4844	4962	5072	5180	5294	5404	5514
6	Commission Savings Goals '09-'16	Exhibit IV-3, Line 2	-	-	54	106	156	198	238	285	332	379
7	Forecast Total Peak-Hour Load adjusted for EE savings	Subtraction	4516	4598	4670	4738	4807	4874	4942	5009	5072	5136
8	Line 2 minus Line 7	Subtraction	0	0	-1	-1	0	0	1	0	-1	-1

Notes

1) Load data from Excel File "Load", mentioned specifically in Benjamin Montoya affidavit dated Dec. 21, 2006

2) Exhibit data from CRAT table, SDG&E 2007-2016 LTPP, Exhibits, Exhibit IV-3, all values for August

D. Demand Response

1. Recent Developments in Procurement Policy

On January 25, 2007 the Commission issued an Order Instituting

Rulemaking (OIR) R.07-01-041 on Demand Response (DR). That OIR could have an impact on the level of DR in SDG&E's LTPP.

- First, the Commission stated that the OIR will set DR goals for 2008 and beyond and will also clarify which DR programs can be counted towards meeting these goals. The current goals are set at 5% of utility's peak demand for price responsive day-ahead DR programs.
- Second, the OIR states that the protocols to be developed in the OIR for DR Load Impact measurements will be incorporated in future RA proceedings.
- Third, OIR also proposes to coordinate efforts so that DR resources are efficiently incorporated in the CAISO's wholesale markets. The OIR will consider modifications to existing retail (utility-controlled) DR programs to align them with CAISO's operational needs.

2. Discussion and Recommendations

SDG&E presents a "Preferred Plan" with a "base" need scenario and also with a "high" need and a "low" need scenario. None of the three scenarios include a "Best Estimate" scenario that reflects realistic DR reductions that can be achieved in the mid-term based on the actual DR reductions achieved during summer 2006. SDG&E simply assumes that as early as 2009 it will procure and meet its 5% goal.[19] DRA thinks this is unrealistic given that SDG&E does not expect to reach even 50% of its 5% goal in 2008 [20]and it does not expect to fully deploy its AMI until 2011, at the earliest. DRA believes SDG&E could expand its price-responsive programs only gradually corresponding to its AMI deployment and reach the 5% goal by 2011. DRA proposes a procurement plan for SDG&E

[19] SDG&E's LTPP filing, Volume I. p.3

[20] SDG&E's confidential response to DRA's data request no. R 06-02-013-Phase 2-SDG&E-skg 2

that reflects the following assumptions.

1. SDG&E should use "Best Estimates" of MW reductions for all DR programs in the near-term for the current DR program cycle (2006-2008).
2. SDG&E should use "Best Estimates" of MW reductions for reliability DR programs for 2009-2016.
3. SDG&E should ramp-up price-responsive DR to the full 5% goal during the first summer after the "full deployment" year of AMI in 2011.
4. For the purposes of LTPP, SDG&E should assume all Commission-approved programs are cost-effective.

Attachment D-3 shows DRA's recommended resource procurement plan for SDG&E's DR resources based on the above assumptions.

E. Renewable Energy Procurement Strategy

1. Introduction

SDG&E's plans estimate that 16% of energy need in 2010 will come from renewable contracts already contracted. They hope to contract for the remaining 4% before that time and/or use "flexible compliance" to meet the 2010 goal of 20% renewable. After 2010 they contemplate increasing their renewables beyond 20% based on "cost effectiveness, resource fit, GHG targets, etc." In their graph entitled "Preferred Plan Energy Mix"[21] the renewable percentage appears to be about 26% in 2016.

SDG&E's Preferred Plan does not address the goal of 33% renewables by 2020 adequately. In addition to complying with the mandated RPS standard of 20% by 2010, Energy Action Plan II of the Commission and the California Energy Commission set a goal of 33% renewable electricity by 2020. This higher renewable goal will also be necessary to meet the State's Greenhouse Gas cap as required by AB32. The Commission has directed the IOUs, in the preparation of

[21] P. 16 of SDG&E LTP "Post-Filing Workshop" (Dec. 19, 2006) handouts.

their LTPPs, to "…show a resource plan that is compliant with EAP II, including attempting to achieve 33% renewables by 2020. If the preferred resource plan does not put the IOU on a path to achieve 33% by 2020, the IOU should provide for the differences between its preferred resource plan and a 33% plan including information about the differences between plan costs, resource availability."[22]

SDG&E presents alternative projections of direct access and community choice aggregators (CCAs). However, they all apparently make the same assumptions about use of renewable energy.

The preferred plan energy mix shows about 26% renewables by 2016, which is an increase over the 20% required in 2010, but does not indicate a renewable energy growth rate that would result in 33% renewables by 2020. This level of contribution is read from SDG&E's figure titled "Preferred Plan Energy Mix. This estimate doesn't meet the State's renewable energy goals as directed by the Commission's Energy Action Plan II, and appears to be inconsistent with estimated renewable energy levels that will be required to meet the State's Greenhouse Gas cap as required by AB32.

Regarding the capacity value of the California Solar Initiative SDG&E assumes that these building mounted solar PV panels will be at one-half output (150 of 300 MW installed) during peak loads. Although this depends on the orientation angles of the panels the 50% rating appears to be low, as other studies have found an effective load carrying capability in the range of 75% of rating for solar panels.[23]

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[22] ACR/Scoping Memo, Long Term Procurement Phase for R.06-02-013, Attachment A, page 17

[23] See R. Perez et al., "Update: Effective Load-Carrying Capability of Photovoltaics in the United States," Solar 2006 Conference. "Update: Effective Load-Carrying Capability of Photovoltaics in the United States," preprint.

(continued on next page)

2. Recommendation

DRA asks the Commission to require SDG&E to proceed toward 33% renewable energy by 2020 and not make it conditional on other factors.

DRA also notes that the State's RPS system already includes an inherent maximum limit on renewable costs in excess of fossil fuel costs based on Supplemental Energy Payments and the comparison of future renewable costs to the proxy cost of fossil fuel plants estimated by the market price referent (MPR).

V. PROCUREMENT STRATEGY BY RESOURCE

A. Demand Response

SDG&E's existing DR programs are described in its LTPP filing, Volume 1. These programs were authorized by the Commission in D.06-03-024.

Responding to the Commission's directives in August 2006, SDG&E proposed several enhancements to their existing DR programs. In D.06-11-049, the Commission approved, with changes, most of SDG&E's proposed enhancements. That decision also ordered SDG&E to file several advice letters to roll out several new and innovative DR programs: (1) A five-year term DR RFP; (2) A five-year term "Permanent Load Shifting" RFP; (3) A 2007 "AutoDR" proposal; and (4) Expansion of its AC cycling program. These programs fit into near-term and mid-term resource portfolio in DRA's recommended procurement plan for SDG&E. DRA believes SDG&E's AMI deployment beginning in 2008 and continuing through 2011 will be the major impetus behind SDG&E reaching its 5 % goal for price-responsive programs in DRA's recommended procurement plan for SDG&E.

(continued from previous page)
See also National Renewable Energy Laboratory. "Dynamic Maps, GIS Data, and Analysis Tools," (website) Solar Maps, http://www.nrel.gov/gis/solar.html

Although there is a lot of uncertainty about whether the SDG&E will meet its 5 % goal for "price-responsive" programs or whether the Commission will allow SDG&E to count reliability programs towards its 5% goal, DRA agrees with SDG&E that "holding room for these goals ensures that resource commitments to day do not foreclose the opportunities in these policy areas in the future."[24] At the January 25, 2007 CAISO Market Issues Forum on DR, Commissioner Chong once again exhorted the utilities to increase the effectiveness and participation in their price-responsive DR programs to move closer to the 5% goal. DRA believes SDG&E's AMI deployment, other technology-enabled DR programs (e.g. Auto DR, PCTs etc.) and time differentiated tariffs (e.g. CPP, RTP etc) could increasingly play an effective role in meeting the Commission's 5% goal in future.

B. Other Generation Supply Resources

SDG&E is proposing to procure significant quantities of conventional generation to meet the projected requirements of bundled customers, i.e., contractual needs, and of its service territory, i.e., physical needs.

1. Procurements

The generic procurement to meet bundled customer requirements is shown in Figure D – V.1 and Table D - V.1. This table shows when the preferred resource contractual procurements (as incremental changes in total capacity, rather than relevant to specific contracts) would go into effect.

[24] San Diego Gas & Electric Company - 2007-2016 Long-Term Procurement Plan, Volume I. p.167

Figure D - V.1

Composition of annual proposed generic product procurement to meet bundled customer requirements, 2007-2016 (Preferred Plan).

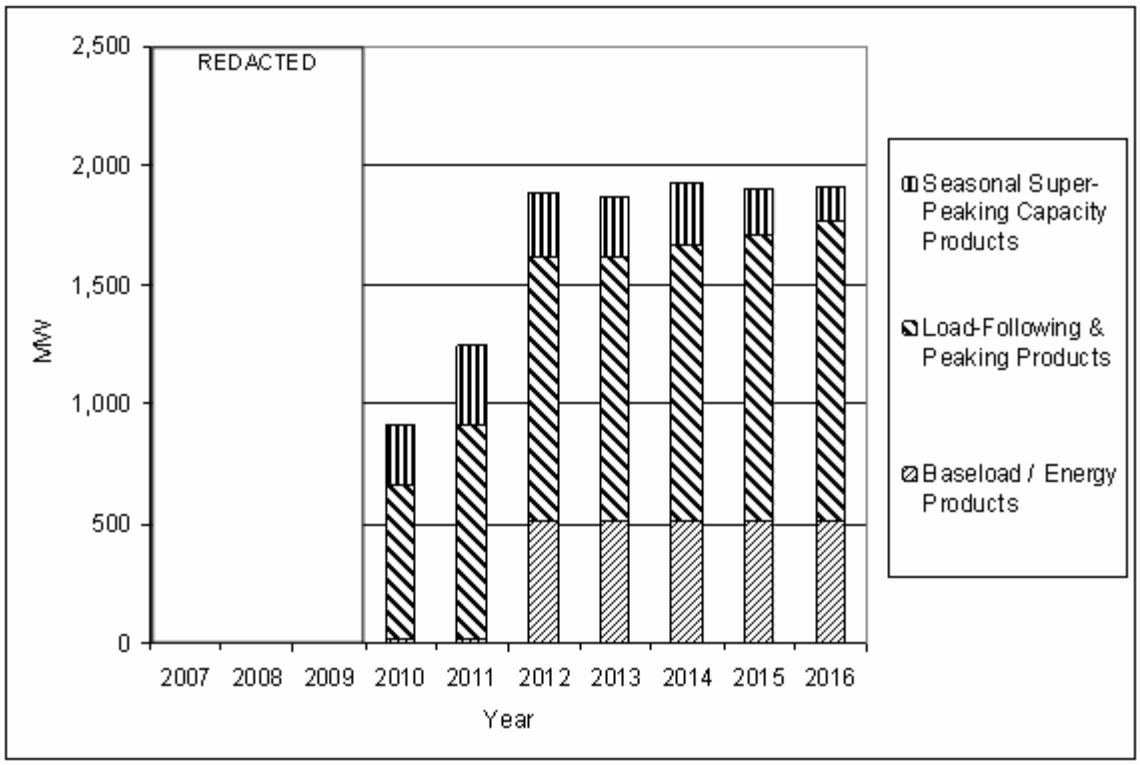

Table D - V.1

SDG&E Proposed Generic Procurement, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Baseload / Energy Products	REDACTED			14	14	14	14	14	14	14
				-	-	500	500	500	500	500
Baseload / Energy Products Cumulative Total				**14**	**14**	**514**	**514**	**514**	**514**	**514**
Load-Following & Peaking Products				100	100	100	100	100	100	100
				550	550	550	550	550	550	550
				-	250	250	250	250	250	250
				-	-	200	200	200	200	200
				-	-	-	-	50	50	50
				-	-	-	-	-	50	50
				-	-	-	-	-	-	50
Load-Following & Peaking Products Total				**650**	**900**	**1,100**	**1,100**	**1,150**	**1,200**	**1,250**
Super-Peaking Capacity Products				-	-	-	-	-	-	-
				-	**-**	**-**	**-**	**-**	**-**	**-**
Seasonal Super-Peaking Capacity Products				-	-	-	-	-	-	-
				83	83	83	83	83	83	83
				46	46	46	46	46	46	-
				67	67	67	67	67	-	-
				61	61	-	-	-	-	-
				-	54	54	54	54	54	54
				-	22	22	-	-	-	-
				-	-	-	-	9	9	9
Seasonal Super-Peaking Capacity Products Total				**257**	**333**	**272**	**250**	**259**	**192**	**146**
Total Proposed Generic Procurement				**921**	**1,247**	**1,886**	**1,864**	**1,923**	**1,906**	**1,910**
Net Additional Capacity Needed				**0**	**(1)**	**(0)**	**(1)**	**(0)**	**(0)**	**0**
Total Proposed Generic Need				***921***	***1,246***	***1,886***	***1,863***	***1,923***	***1,906***	***1,910***

All data based on SDGE 2006 LTPP, Vol. 1, Exhibit IV3, lines 190-193.

NOTE: In order to represent the manner in which the utility procures capacity to meet fluctuating needs from year to year, table D - V.1 was assembled as an illustrative example of how various capacity products could be added up to produce the utility's proposed total in each capacity product category. Values in individual rows represent illustrative incremental additions and do not necessarily represent any specific proposed contracts.

Table D – V.2 shows the physical service area needs. Table D - V.2 illustrates that SDG&E's procurement needs are greatly dependent on the outcome of the Sunrise Powerlink application.[25] Clearly, expectations about whether the

[25] It is worth noting that SDG&E has not provided any analyses of the risk that the Sunrise Powerlink project will not be approved and/or of the risk of a material delay in its expected on-line date. SDG&E response to R.06-02-013 - Phase 2 - SDG&E - Synapse - 10, question 12.

Sunrise Powerlink is built will impact the most appropriate LTPP for SDG&E. Consideration of whether it should be built will be a decision involving complex trade-offs of various types of costs and alternative resource plans. An appropriate LTPP could be developed by SDG&E for either potential outcome.

Table D - V.2

SDG&E's proposed procurement plan: physical resource needs for SDG&E based on 1-in-10 demand and N-1 contingency[26] (MW)

Base Case	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
With Sunrise Powerlink	**55**	**(33)**	**496**	**722**	**663**	**623**	**587**	**546**	**497**	**426**
Without Sunrise Powerlink	**55**	**(33)**	**496**	**(278)**	**(337)**	**(377)**	**(413)**	**(454)**	**(503)**	**(574)**
High Needs Case	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
With Sunrise Powerlink	**(41)**	**(207)**	**(273)**	**465**	**374**	**302**	**234**	**174**	**105**	**15**
Without Sunrise Powerlink	**(41)**	**(207)**	**(273)**	**(535)**	**(626)**	**(698)**	**(766)**	**(826)**	**(895)**	**(985)**

It is worth noting that the proposed procurement to meet bundled customer needs and physical service area needs as presented in Tables D – V.1 and D – V.2, respectively, do not include any of the adjustments discussed above in Section IV.B. The proposed level of procurement should be considered in the context of those adjustments.

2. Discussion

Table D – V.2 indicates that SDG&E does not need much of the capacity that it proposes to acquire for four or more years into the future—well after it will have to defend its 2008 LTPP. SDG&E proposes procurement of up to 250 MW of

[26] SDG&E 2006 LTPP, Vol. 1, Exhibit IV-10.

peakers in 2008[27] as well as a combined cycle plant in 2012[28]. As outlined in Volume A, there are several reasons why the Commission should only approve those physical procurements that SDG&E must initiate prior to the next LTPP because of procurement or construction lead times. Therefore, approval of the combined cycle plant in 2012 is premature aside from any preliminary activities that may need to commence earlier than the IOU's 2008 LTPP.

SDG&E has the opportunity to provide lead time information in its reply testimony in this proceeding. Specifically, it could indicate the specific procurements that it believes must be pre-approved in this proceeding because of the lead times and other relevant factors affect their timing. That filing should include sufficient documentation to support Commission review and decisions concerning date of need and procurement and construction lead times.

SDG&E is also faced with the need to replace a very large quantity of contractual capacity within a period about three years. (See, Table D – V.1, above.) This exposes bundled service customers to considerable price risk as existing contractual positions expire within a short time frame. As outlined in Volume A, there are several reasons why SDG&E should seek to avoid such exposures in the future by phasing in a laddered portfolio for its contractual procurements. Such a laddered portfolio would be composed of a group of positions, each covering a fraction of the total need, but with staggered expiration dates. The result would be to limit the fraction of bundled customer contractual need exposed to the market at any one point in time.

In addition, SDG&E relies on a specific retirement assumption regarding the South Bay Power Plant, owned by the Port of San Diego (Port). SDG&E states

[27] Ibid., p. 178, lines 19-22.

that the Port "purchased this plant with a specific plan to shut it down at the end of the current operating lease in 2009," and that "the Port continues to reiterate that its plan is to shut down the facility at the end of the current lease, as discussed in [SDG&E 2006 LTPP] Volume 1, page 171."[29] DRA believes that this retirement assumption may have a critical bearing on not only the level of physical need assumed in the LTPP, but also on how critical the Sunrise project will be to SDG&E. While DRA does not at this time dispute this retirement assumption, it does wish to point out the connection and the need for the retirement justification to be examined closely.

3. Recommendation

DRA recommends that the Commission approve contractual procurements for identified needs prior to the next LTPP consistent with procurement lead times and with the phasing in of a laddered and portfolio.

DRA recommends that the Commission approve only physical procurements for identified needs in light of the corresponding procurement and construction lead times.

VI. EVALUATION OF RESOURCE PLAN

Please see Volume A.

VII. COST RECOVERY ISSUES

SDG&E proposes that the Commission revise the method for calculating debt equivalence for comparing bids from a PPA to a utility-owned resource. The Commission has previously chosen to deal with the issue of debt equivalence in

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(continued from previous page)

[28] Ibid., p. 179, lines 9-11.

[29] SDG&E Response to DR 9, Q10.

cost of capital proceedings and on a case-by-case basis. DRA has argued in previous rulemakings (R04-04-003) that debt equivalence should be handled in cost of capital proceedings (see D04-12-048 at 143). DRA now reiterates its position that the cost of capital proceeding is the appropriate venue to weigh the issues involved in determining debt equivalence methodology, including SDG&E's proposed increase to a 30% risk factor.

VIII. COMMISSION REVIEW OF IMPLEMENTATION OF PROCUREMENT PLAN

A. Renewable Energy Procurement Strategy

At least one IOU has highlighted the *potential* benefits of generation procurement under a utility-ownership framework, such as a turn-key contract or "Engineering, Procurement and Construction ('EPC') arrangements where the utility acts as the developer."[30] As PG&E points out, "The Commission has emphasized the importance of procurement flexibility to obtain the best resources for customers. For example, in D.04-12-048, the Commission lifted a ban on affiliate transactions for procurement concluding that 'it is in the best interest of ratepayers and consumers to allow for a full vetting of all available resources in an RFP.'"[31] SCE identifies various concerns relating to over-reliance on procurement of resources not built or owned by the utility.[32]

In general, utility ownership should be considered as a potentially cost-effective alternative for the procurement of renewable generation, especially when needed to meet RPS targets. Of particular interest in regard to non-fossil fuel

[30] PG&E Supplemental Testimony at I-1. *See*, also, SCE Supplemental Testimony at 2-5.

[31] D.04-12-048 at 128-129.

[32] E.g., SCE 2006 LTPP, Vol. II at 14.

technologies is that fact that, as SCE puts it, "A utility-owned project is dedicated to its customers' use over its entire lifecycle…By contrast, independent projects have a 'merchant tail' beyond the contract term, i.e., a hard expiration date. That is, the contract only provides benefits to utility customers for a fixed period of time, after which customers no longer have rights to the resource, and any remaining benefits accrue to the resource owner."[33] For renewable resources, it is reasonable to expect that the economic benefits of the project will be especially heavily loaded onto any such "tail." The Commission should require the IOUs to fully analyze renewable generation ownership options as resource plan candidates, either in a compliance filing in this proceeding or for the next LTPP.

IX. TESTIMONY ON SELECTED PROCUREMENT POLICY ISSUES

B. Procurement Practices

2. Credit and Collateral Policies

(See Volume A)

C. Risk Management Practices

2. Application of TeVaR to Measure the Customer Risk Tolerance Threshold

(See Volume A)

[33] SCE Supplemental Testimony at 3.