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

Southern California Edison Company (SCE)

Volume C

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

SCE presents two candidate plans in its Long Term Procurement Plan (LTPP), a "Required Plan" and a "Best Estimate" plan ("proposed plan" or "recommended plan"). SCE considers the Best Estimate Plan to have the best combination of reliability and cost performance and recommends that the Commission adopt it.

DRA has specific comments and recommendations regarding SCE'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. SCE estimates that under its recommended plan it would need to procure a cumulative total of approximately 15,400 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 1,340 MW in SP-26 to meet reserves requirements, of which SDG&E would be responsible for 80% for its service territory (physical procurement).

DRA recommends that SCE 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 SCE presents a compelling case for using more stringent assumptions and our recommendations regarding reasonable planning assumptions for EE and DR. .If SCE estimates its needs using those assumptions, the quantity of contractual capacity and physical capacity required by 2016 is lower. For example, the contractual procurement would decline by approximately 800 MW (5%) and the

physical procurement by 700 MW (55%).

Energy Efficiency. DRA recommends that the Commission reject the assumptions regarding energy efficiency potential that SCE used in its Best Estimate Plan. Instead we recommend that the Commission require SCE to only use energy efficiency savings goals established in prior Commission Decisions in its procurement scenarios.

Demand Response. DRA recommends that SCE 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 2013. These assumptions are reasonable for planning purposes given the numerous initiatives underway to increase the availability of DR.

Other Generation Resources. SCE proposes to increase its procurement limits by 1,950 MW to provide insurance against uncertainties such as unexpected loss of capacity or greater than expected load growth. DRA recommends that the Commission defer consideration of this proposal until such time as SCE submits an adequate level of supporting documentation and analysis.

B. Procurement strategy

Renewable resources. DRA recommends that the Commission require SCE 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. SCE 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. SCE does not need the majority 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 SCE must initiate prior to the next LTPP because of procurement or construction lead times. SCE 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 SCE has identified needs in light of the corresponding procurement and construction lead times, and that it only approve contractual procurements for which SCE has identified needs prior to the next LTPP consistent with procurement lead times and with the phasing in of a laddered portfolio.

II. INTRODUCTION

Southern California Edison (SCE) filed its Long Term Procurement Plan (LTPP) on December 11, 2006. In that filing SCE presents two candidate plans, a "Required Plan" and a "Best Estimate" plan. SCE requests that the Commission adopt its Best Estimate Plan ("proposed plan" or "recommended plan").

On February 2, 2007, SCE filed an amendment to its LTPP indicating various corrections and updated figures.

The purpose of this volume is to assess whether SCE's Long Term Procurement Plan (LTPP) is reasonable. In order to make this assessment, DRA has considered SCE's proposals in the context of the Commission's direction as to how SCE 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 **integrate** all procurement policies and related programs."[1] (**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.[2]

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 SCE 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 SCE'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 SCE's LTPP.

IV. LONG-TERM PROCUREMENT RESOURCE PLAN 2007-2016

This section begins by summarizing SCE's recommended procurement resource plan. We then present our proposed adjustments to that plan in light of

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

[2] Ibid, p. 18

our assessment of SCE's positions regarding energy efficiency and demand response.

A. SCE's Recommended Plan

SCE recommends that the Commission adopt SCE's "Best Estimate Plan".[3] The plan is based on procurement for meeting a 15% Planning Reserve Margin (PRM) and SCE's 1-in-2 demand forecast. The plan includes the following:

- Investing in level of Customer Energy Efficiency (CEE) that is based on an analysis of the maximum reliably-achievable potential rather than the Commission's targets[4];
- Implementation of the California Solar Initiative (CSI) to 75% of the targets (about 600 MW by 2016)[5];
- Because of SCE's large portfolio of interruptible Demand Response (DR) programs, SCE will exceed the 5% DR target in all years; however, the plan assumes price-sensitive DR levels that are justifiable with the implementation of the AMI program and not the Commissions targets[6];
- Procuring renewable resources to meet the Renewable Portfolio Standard (RPS) of 20% by 2011[7];
- Procuring the following quantities of other generation supply resources by 2016 to meet bundled customer requirements:
  - Up to 2,250 MW of baseload products;
  - Up to 4,000 MW of shaping and peaking products;
  - Up to 5,650 MW of super-peaking capacity products; and
  - Up to 3,500 MW of seasonal super-peaking capacity products[8]; and,

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[3] SCE 2006 LTPP, Vol. 1B, page 111, lines 7-9.

[4] Ibid., p. 54, lines 11-14.

[5] Ibid., p. 55, lines 11-15.

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

[7] Ibid., p. 55, lines 18-20.

[8] Generic capacity needs to "meet bundled customer requirements" from SCE 2006 LTPP, Vol.

(continued on next page)

- Procuring up to 1,300 MW of new capacity in SP-26 by 2016, of which SCE is responsible for 80% or 1,070 MW, in order to meet physical needs. That procurement is based on the Company's 1-in-10 demand forecast and a 5% operating reserve margin. Prior to 2013 there does not appear to be a need for new capacity in SP-26[9].

SCE prefers the Best Estimate Plan because it considers that plan to have better cost and reliability metrics than the Required Plan. According to SCE the Required Plan would be overly expensive and not feasible. While the CO_2 emissions are higher in the Best Estimate Plan, according to SCE the incremental cost of achieving the incremental emission reductions of the Required Plan is prohibitive[10].

SCE proposes to increase capacity margin procurement limits by 1,950 MW to account for an N-1 contingency loss and higher than projected load growth[11].

The resource mix associated with the proposed plan is shown in Figures C - IV.1 and C - IV.2.

(continued from previous page)
1, Appendix A, Monthly S-1 Tables.

[9] SCE 2006 LTPP, Vol. 1B, page 33, line 18 to page 34, line 2.

[10] Ibid., p. 130, line 2 to p. 131 line 2.

[11] SCE 2006 LTPP, Vol. 1A, page 79, line 12 to page 80, line 2.

Figure C - IV. 1

Total proposed resources to meet SCE's bundled customer requirements in 2010 and 2016 (Best Estimate Case w/ SCE Load Forecast).

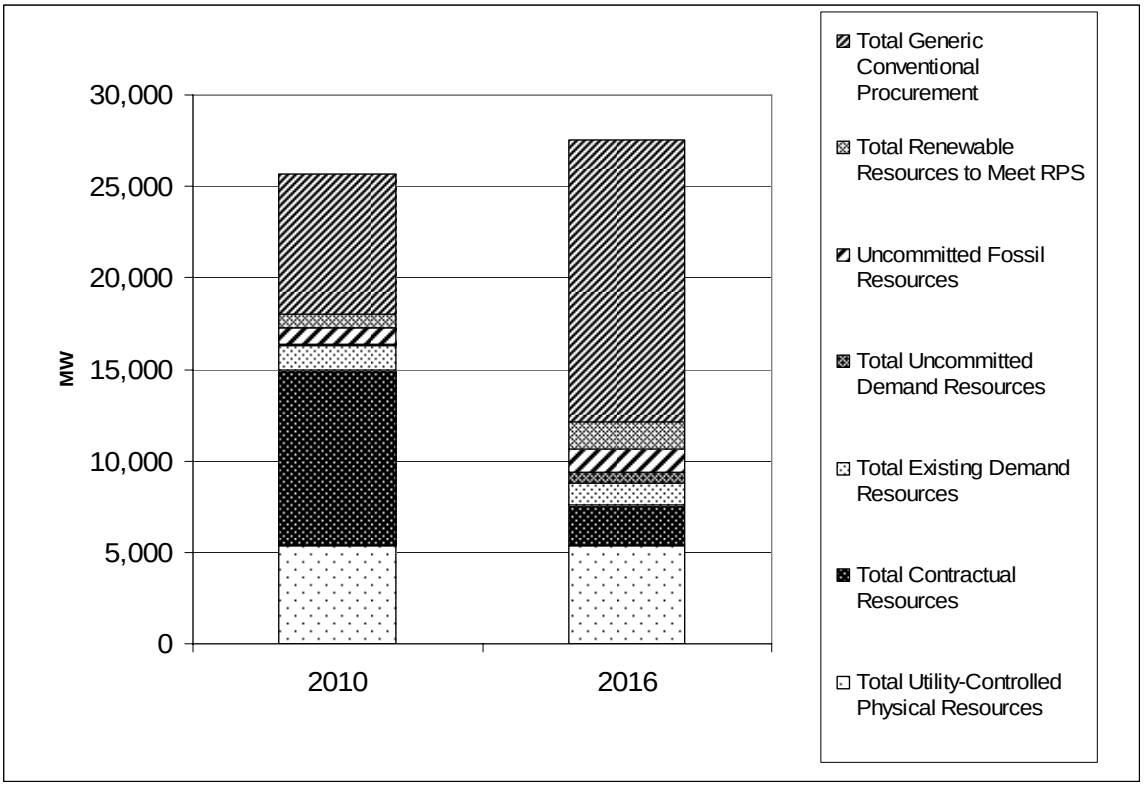
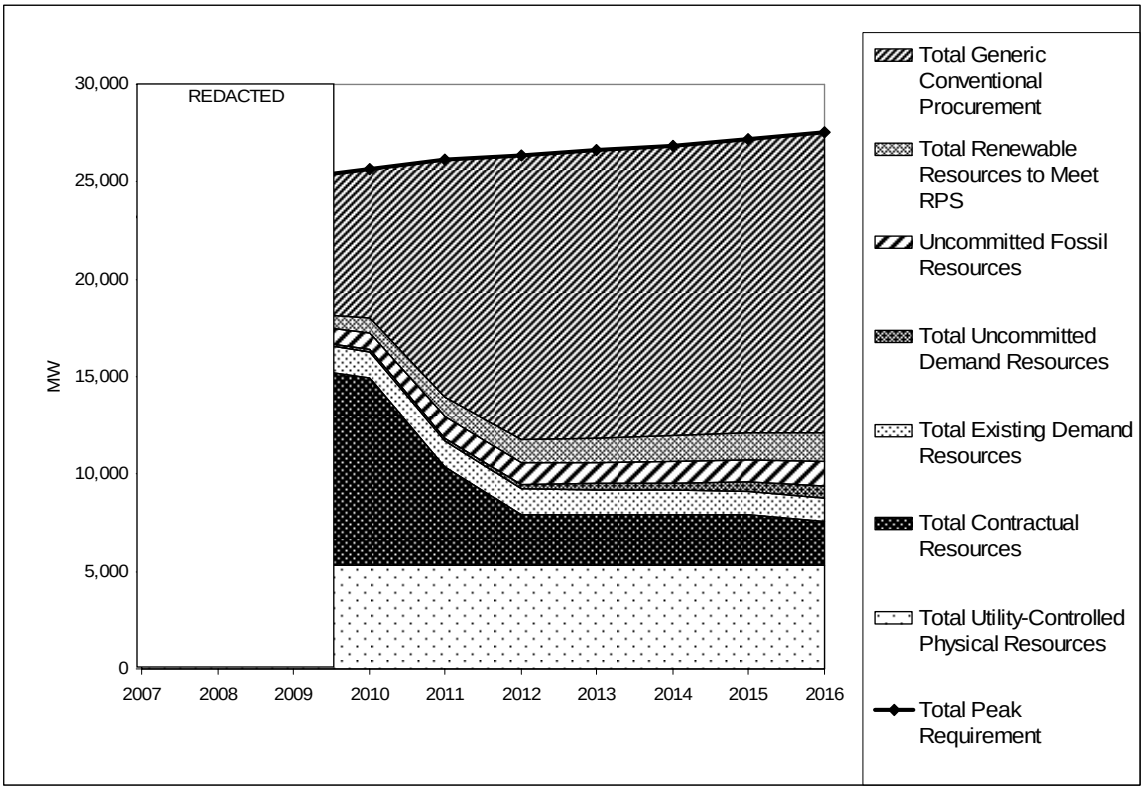


Figure C – IV. 2

Total proposed resources to meet bundled customer requirements, 2007-2016 (Best Estimate Case w/ SCE Load Forecast).



B. DRA Adjustments to Proposed Plan

We are proposing several adjustments to the quantities of contractual and physical capacity that SCE needs to procure under its recommended plan. These adjustments result from the application of the following assumptions:

- The use of energy efficiency forecasts consistent with Commission targets. The justification for that adjustment is presented in section IV-C below.
- The use of DR forecasts consistent with Commission targets. The justification for that adjustment is presented in section IV-D below;
- Adjustments to the PRM to reflect the impact of the preceding energy efficiency and DR adjustments; and
- The use of expected operating conditions, rather than adverse operating

conditions, to determine the need for physical capacity.

1. Contractual Procurement

The quantity of capacity that SCE needs to procure to meet bundled customer needs is overstated. This overestimate arises from the fact that SCE's estimate of needs is based on forecasts for energy efficiency and DR that are below Commission targets. These forecasts are discussed below in sections IV.C and IV.D. Applying the Commission's targets for energy efficiency and DR results in a reduction in bundled customer procurement need of approximately 1,000 MW by 2016. The impact of those adjustments is presented in Figure C – IV.3 and Table C - IV.1.

Figure C - IV.3

SCE's proposed annual generic procurement to meet bundled customer needs and DRA's adjusted proposed procurement (Best Estimate Case w/ SCE Load Forecast)

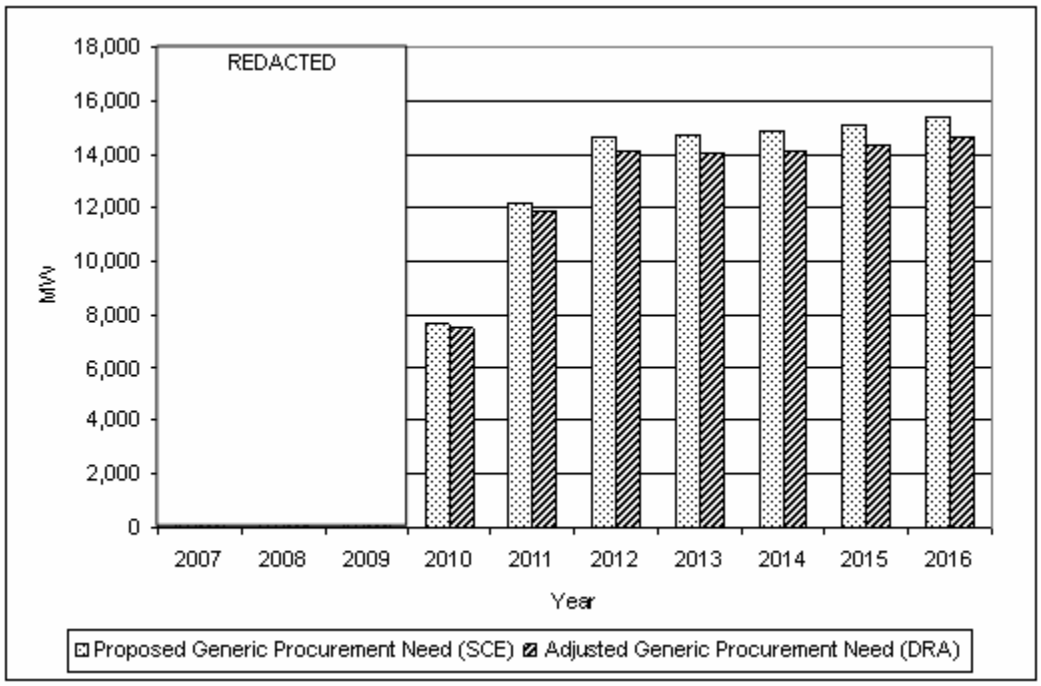


Table C - IV.1

SCE 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
	SCE Proposed Generic Procurement (MW)										
1	Proposed Generic Procurement[1]	REDACTED			7,636	12,196	14,602	14,729	14,850	15,075	15,404
2	Net Additional Capacity Need[2]				0	0	0	0	0	0	0
3 = 1 + 2	**Total Procurement Need**				**7,636**	**12,196**	**14,602**	**14,729**	**14,850**	**15,075**	**15,404**
	DRA Adjustments										
4	Energy Efficiency[3]				(114)	(167)	(218)	(275)	(331)	(380)	(425)
5	DR Adjustments[4]				0	(94)	(210)	(350)	(300)	(263)	(248)
6	15% PRM[5]				(17)	(39)	(64)	(94)	(95)	(96)	(101)
7 = 3+4+5+6	**Adjusted Total Procurement Need**				**7,505**	**11,897**	**14,110**	**14,011**	**14,124**	**14,336**	**14,629**

[1]From SCE 2006 LTPP, Attachment A, Monthly S1 & S2 Tables, "S1 - B.E. SCE" worksheet, line 231.
[2]Net open capacity position; from SCE 2006 LTPP, Attachment A, Monthly S1 & S2 Tables, "S1 - B.E. SCE" worksheet, line 238.
[3]SCE 2006 LTPP, Attachment A, Monthly S1 & S2 Tables, "S1 - B.E. SCE" worksheet, line 3 divided by 75% to get commission targets.
[4]Based on Attachment C-1, DRA's Proposed DR Amounts
[5]Sum of line 4 and line 5 multiplied by 15%.

2. Physical Procurement

The quantity of capacity that SCE needs to procure to meet the requirements within its service territory is also overstated. This overestimate arises from the fact that SCE's estimate of those needs is based on forecasts for DR that is below Commission targets and on "adverse" conditions rather than expected operating conditions. These adjustments are discussed below and summarized in Figure C – IV.4 and Table C - IV.2. The impact of these adjustments is to reduce the quantity of new capacity required in SP-26 by 2016 from 1,340 MW to 608 MW.

Figure C - IV.4

SCE's 2016 proposed physical needs and DRA's adjusted proposed need (Best Estimate Case w/ SCE Load Forecast)

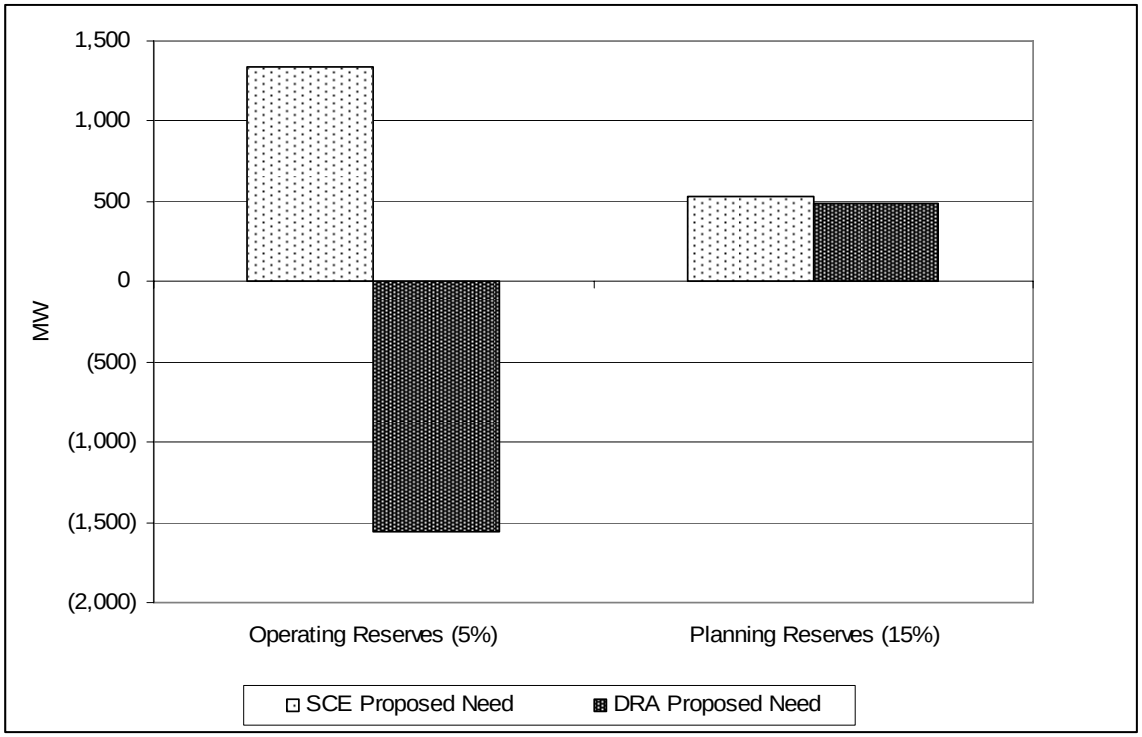


Table C – IV.2

SCE Proposed Service Area Requirements and DRA Proposed Adjustments, 2016

Reserves	Proposed Need to Meet Service Area Requirements in 2016 (MW)		
	SCE Proposed Need	DRA Proposed Need	DRA Adjustment - Reduction[3]
Operating Reserves (5%)[1]	1,340	(1,554)	2,894
Planning Reserves (15%)[2]	526	486	40

[1] SCE proposed operating reserve needs based on adverse conditions (SCE 2006 LTPP, Vol. 1B, p. 31, Table IV-7, line 24); DRA proposed operating reserve needs based on expected conditions.

[2] SCE proposed planning reserve needs based on expected conditions (SCE 2006 LTPP, Vol. 1B, p. 31, Table IV-7); DRA proposed operating reserve needs reflect adjustments for DR accounting.

[3] Difference shown as SCE proposed need minus DRA proposed need.

SCE determines the quantity of capacity it must procure to meet the requirements within its service territory, physical procurement, based on an assessment of capacity required for planning reserves and its operating reserves. Planning reserves are calculated as the difference between demand, adjusted for demand response program peak savings, and supply resources, including import capability. Operating reserves include an adjustment to supply resources to account for outages (average forced and planned). SCE determines the capacity it must procure to satisfy the higher of capacity needed to maintain planning reserves or capacity needed to maintain operating reserves

SCE's determination of the quantity of capacity it requires to meet physical need is overstated for several reasons.

- First, when calculating the operating reserves, SCE accounts for DR resources on the supply side, but does not include any reserve adjustment for DR to account for the fact that DR is actually a demand side resource. Applying a 5% reserve credit to DR resources results in a reduction in physical need of approximately 130 MW in 2016.[12]
- Second, SCE bases its estimate of capacity to meet operating reserves based upon a 5% operating reserve margin under adverse conditions. This

[12] Based on 2,585 MW of price responsive and interruptible DR times 5%; DR capacity value from SCE 2006 LTPP, Vol. 1B, p. 31, Table IV-7.

includes an adjustment to total demand for a 1-in-10 summer temperature demand, an assumption of higher than average outages (by one standard deviation, or 560 MW) and an assumption of higher than normal zonal transmission limitations. SCE does not provide a justification for basing its estimate on these adverse conditions rather than on expected operating conditions. (SCE presents an alternative estimate assuming expected operating conditions, but that assessment does not account for DR resources at all, and is based on a 7% operating reserve margin.)

If one estimates SCE's requirements for operating reserves based upon a correct accounting of DR resources and expected operating conditions, there is no need for additional capacity in the SP26 region over the entire planning period based on a 5% operating reserve margin.

According to SCE's planning reserve assessment, there is a need for approximately 658 MW of new physical capacity by 2016. However, this assessment for the SP26 region is also high due to improper accounting for DR resources (by about 50 MW)[13]. If one estimates SCE's requirements for planning reserves based upon a correct accounting of DR resources this requirement declines to 608 MW in SP26.

C. Energy Efficiency (EE)

1. Background

In its section on Energy Efficiency in its LTPP SCE states that it is presenting two candidate long-term procurement plans: 1) Required Plan; and 2)

[13] SCE calculates the planning reserve margin appropriately by using the following formula: Reserve Margin = ((Total Generation Capacity)/(Total Demand - DR savings) – 1). SCE then multiplies the Total Demand by the difference between the reserve margin as calculated in the above formula and 15% to calculate planning resource needs: Reserve Needs = (Total Demand) x (Reserve Margin – 15%) The proper formula for calculation of reserve needs should account for DR savings as follows: Reserve Needs = (Total Demand – DR Savings) x (Reserve Margin – 15%).

Best Estimate Plan.[14] The Required plan incorporates energy efficiency savings goals as directed by the Commission's Energy Efficiency goals decision (D.04-09-060) for program planning, years 2006 and beyond. SCE's Best Estimate Plan uses its own analysis[15] to determine the energy efficiency potential achievable in its service territory, which is much lower than the commission adopted goals.[16]

SCE, in collaboration with the other IOUs, undertook a statewide analysis of energy efficiency potential to forecast the "maximum reliable-achievable" energy efficiency[17]. The study was performed by Itron and KEMA and managed by Pacific Gas and Electric (PG&E).[18] In the plan's sections on energy efficiency SCE cites this report as the basis for its inability to attain the level of energy efficiency savings beyond 2008 required by the Commission.

2. Energy Efficiency Recommendations

(a) The Commission Should Only Use Energy Efficiency Savings Goals Established in Previous Commission Decisions for All SCE Procurement Scenarios

Commission direction is very clear that the energy efficiency savings targets established in previous Commission decisions are to be incorporated into SCE's long-term procurement plan.

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[14] SCE Application Volume I, Section V. p.69

[15] Ibid., p. 69

[16] This applies to "uncommitted" savings for years 2009-2016. Commission-adopted savings for 2006-2008 are embedded in the CEC Demand forecast (CEC-400-2005-034-SF-ED2, page 1-15) and cannot be modified by the IOUs.

[17] Ibid., p. 69

[18] California Energy Efficiency Potential Study/Itron, Volume 1, May 24, 2006, p. 1-1; California Industrial Existing Construction Energy Efficiency Potential Study/KEMA, Volume 1, p. 1-1.

The LTPP scoping memo states that,

> "…the 2006 LTPPs will need to reflect all of the procurement-related decision made by the Commission to date in all other procurement-related dockets."[19]

Previously, in its energy efficiency goals decision, the Commission affirmed that,

> "…the energy efficiency savings goals adopted in this proceeding should be fully reflected in the IOUs resource acquisition and procurement plans…"[20]

Furthermore, the Energy Efficiency goals decision orders that,

> "For the procurement plans that will be filed in 2006 and during subsequent procurement plan cycles, or for any updating to the long-term procurement plans required by the commission before then, PG&E, SDG&E and SCE shall incorporate the most recently-adopted energy savings goals into those filings."[21]

As noted above in this section and in the previous sections, the Commission expressly states its intent for SCE to incorporate only the most recently adopted energy savings goals into its long-term procurement plan. The Commission, therefore, should not consider any other energy efficiency assumptions in the context of this Long-term Procurement Proceeding.

(b) The Commission Should Reject SCE's Energy Efficiency Potential Best Estimate Plan Assumptions

The Commission should not consider the citing of SCE's own energy efficiency potential study as the basis for allowing SCE to use goals other than

[19] ACR and Scoping Memo on the Long Term Procurement Phase of R.06-02-013, September 25, 2006, p. 17.

[20] D.04-09-060. Conclusion of Law #3, p. 50

[21] D.04-09-060, Ordering Paragraph #6, p. 53

those directed by Commission decision D.04-06-060. If SCE has concerns about its energy efficiency savings targets, it should appropriately address them within the parameters of the energy efficiency proceeding, as noted above. As SCE points out in its filing, Energy Division (ED) has a process in place to update the energy efficiency potential savings goals as part of the planning process for the 2009 – 2011 energy efficiency portfolios.

The Commission intends to review the IOU energy efficiency goals on a regular basis and update them as warranted.

> "These goals shall be updated every three years for use in the subsequent program cycles. In preparation for the PY2009-PY2011 program cycle, Energy Division and California Energy Commission staff ("Joint Staff") shall jointly prepare recommendation for adjustments to today's adopted savings goals as appropriate, based on updated savings potential studies, accomplishment data, changes to mandatory efficiency standards and other evaluation studies and factors that staff deems appropriate."[22]

Thus, any concern on the part of SCE about the achievability of future energy efficiency savings targets has a defined forum within the context of the energy efficiency proceeding to address them. The potential study that SCE cites is their own interpretation of what savings are achievable and has not been vetted through a formal Commission process. It is essential to go through such a public process and review in order to understand the assumptions of SCE's potential study compared with those of the Commission-led study, where other parties can participate on the record.

SCE notes in its long-term procurement plan section on Energy Efficiency

[22] D.04-09-060, Energy Efficiency Goals Decision, p. 52.

that it has expressed concern numerous times during the 2006-2008 goals decision process.[23] Yet the Commission expressly denied SCE's request to use its own long-term planning goals for energy efficiency. In that goals decision, the Commission stated,

> "We also reject the recommendation of SCE and SDG&E that we adopt the electric savings forecasts presented in the LTRP filings in R.04-04-003 in lieu of the Joint Staff recommendations. We note that the savings values presented in SCE's and SDG&E's LTRP filings are considerably less than the economic and maximum achievable savings potential estimates developed in the disaggregated study…"[24]

At this time, based on lack of any record, DRA has no reason to believe that the Commission will find that current assigned energy savings targets for SCE are not attainable. The Commission has clearly defined its expectations for which energy efficiency assumptions to use in both the Long-Term Procurement and the Energy Efficiency proceedings. It also has a clearly defined and recurring process in place for updating the energy efficiency savings goals. DRA does not believe that it is appropriate to accept any energy efficiency scenario for SCE other than the Required Plan, which incorporates the Commission assigned savings targets. Accordingly, DRA has utilized only the Commission assigned energy efficiency numbers in SCE's Required Plan and urges the Commission to use only these numbers as well.

[23] SCE Long Term Procurement Plan, Volume II, Energy Efficiency Section 1.a) p. 71.

[24] D.04-09-060, p. 41

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 PG&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

SCE presents a "Best Estimate" plan and a "Required Plan." The Best Estimate plan reflects realistic DR reductions SCE can be achieve, particularly in the near term and the mid-term time horizon. The Best Estimate plan, however, does not reflect Commission's 5% goal for price-responsive programs even over the long-term. The plan shows SCE reaching only 75% of the Commission's 5% goal in 2016. SCE's Required Plan, on the other hand, reflects Commission's 5% goal for price-responsive programs throughout 2007-2016. DRA believes neither the Best Estimate plan nor the Required Plan include realistic DR reductions that can be achieved throughout 2007-2016. For its Required Plan SCE simply

assumes that beginning 2007 it will procure and meet its 5% goal – a totally unrealistic scenario.[25] Likewise, for its Best Estimate plan SCE assumes it will never reach its 5% goal during 2007-2016 – in DRA's opinion a too pessimistic a scenario that prematurely gives up on meeting its 5% goal. DRA believes SCE could expand its price-responsive programs gradually corresponding to its AMI deployment and reach the 5% goal by 2013.

DRA proposes a procurement plan for SCE that reflects the following assumptions.

1. Use "Best Estimates" of MW reductions for all DR programs in the near-term for the current DR program cycle (2006-2008).
2. Use "Best Estimates" of MW reductions for reliability DR programs for 2009-2016.
3. Ramp-up price-responsive DR to the full 5% goal during the first summer after the "full deployment" year of AMI in 2013.
4. Assume all Commission-approved programs are cost-effective.

Attachment C - 3 shows DRA's recommended resource procurement plan for SCE's DR resources based on the above assumptions.

E. Other Generation resources

SCE proposes to procure 1,950 MW of capacity in addition to its projected needs to provide insurance against uncertainties such as unexpected loss of capacity or greater than expected load growth. Specifically, "SCE recommends adding the following margins to unmet, base case capacity requirements: 850 MW to the limit as an n-1 contingency for loss of generator Qualifying Capacity, and

[25] Based on SCE's response to DRA's Data Request R.06-02-013-Phase2-SCE-skg-2, SCE meets only a fraction (8% to 16%) of its 5% goal between 2007 and 2009.

1,100 MW due to load growth being higher than projected in the expected case."[26]

SCE has not provided any analyses demonstrating the probability of such events. Moreover, even if there is a reasonable probability of such an event, SCE has not provided any cost/benefit analysis to demonstrate that adding 1,950 MW of capacity is the most cost-effective option for addressing it.

V. PROCUREMENT STRATEGY BY RESOURCE

A. Demand Response

SCE'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, SCE proposed several enhancements to its existing DR programs. In D.06-11-049, the Commission approved, with changes, most of SCE's proposed enhancements. That decision also ordered SCE 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 SCE. DRA believes SCE's AMI deployment beginning in 2009 and continuing through 2013 will be a major impetus behind SCE reaching its 5 % goal for price-responsive programs in DRA's recommended procurement plan for SCE.

B. 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

[26] SCE 2006 LTPP, Vol. IA at 79-80.

"Engineering, Procurement and Construction ('EPC') arrangements where the utility acts as the developer."[27] 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.'"[28] SCE identifies various concerns relating to over-reliance on procurement of resources not built or owned by the utility.[29]

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 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."[30] 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.

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

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

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

[30] SCE Supplemental Testimony at 3.

C. Other Generation Supply resources

SCE 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 types and quantities of projected procurements for bundled customers are presented in Figure C – V.1 and Table C - V.1. This table presents the estimated quantities needed to meet the open capacity requirement after accounting for procurement from preferred and planned resources. In order to represent the manner in which the utility procures capacity to meet fluctuating needs from year to year, this table 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.

Figure C - V.1

Composition of annual proposed generic product procurement to meet bundled customer requirements, 2007-2016 (Best Estimate Case w/ SCE Load Forecast)

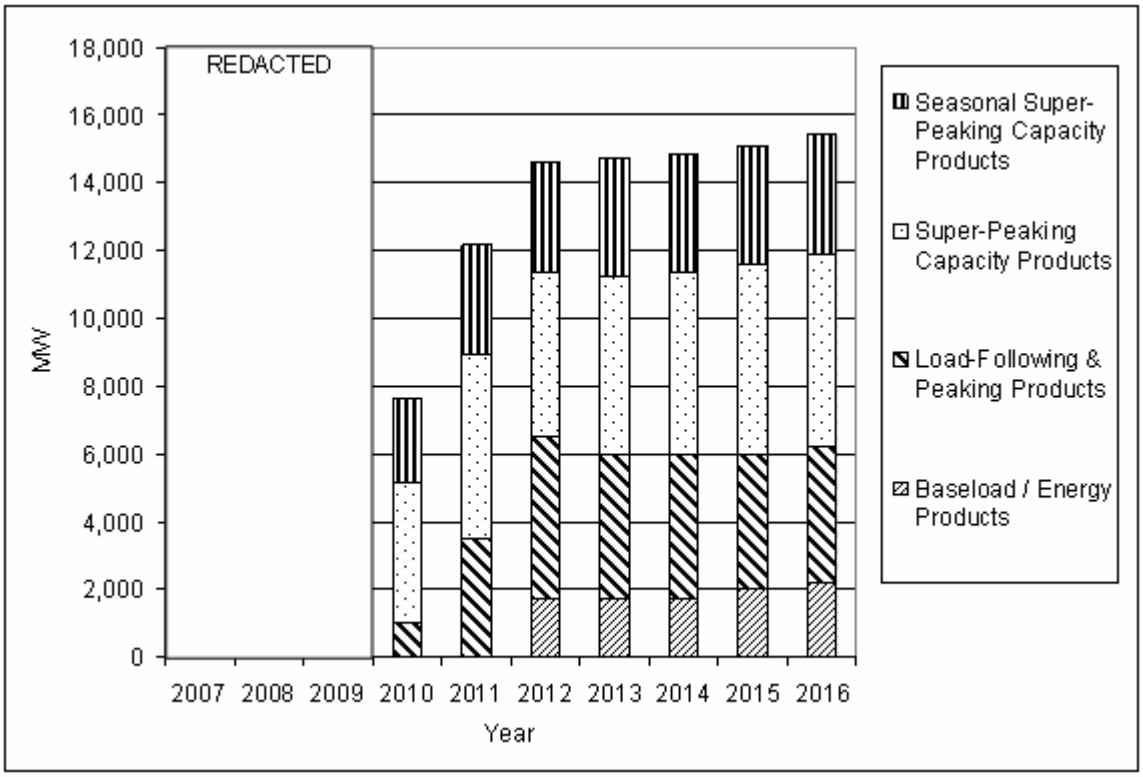

Table C – V. 1

SCE Proposed Generic Need, 2007-2016, Best Estimate Case

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Baseload / Energy Products				-	-	1,750	1,750	1,750	1,750	1,750
				-	-	-	-	-	250	250
				-	-	-	-	-	-	250
Baseload / Energy Products Total				**-**	**-**	**1,750**	**1,750**	**1,750**	**2,000**	**2,250**
Load-Following & Peaking Products				250	250	250	250	250	-	-
				250	250	250	250	250	250	250
				500	500	500	-	-	-	-
				-	2,500	2,500	2,500	2,500	2,500	2,500
				-	-	1,250	1,250	1,250	1,250	1,250
Load-Following & Peaking Products Total				**1,000**	**3,500**	**4,750**	**4,250**	**4,250**	**4,000**	**4,000**
Super-Peaking Capacity Products				23	23	23	23	23	23	23
				1,733	1,733	1,733	1,733	1,733	1,733	1,733
				-	-	-	-	-	-	-
				1,787	1,787	1,787	1,787	1,787	1,787	1,787
				594	594	-	-	-	-	-
				-	1,310	1,310	1,310	1,310	1,310	1,310
				-	-	-	377	377	377	377
				-	-	-	-	121	121	121
				-	-	-	-	-	225	225
				-	-	-	-	-	-	78
Super-Peaking Capacity Products Total				**4,137**	**5,447**	**4,853**	**5,230**	**5,351**	**5,576**	**5,654**
Seasonal Super-Peaking Capacity Products				500	500	500	500	500	500	500
				750	750	750	750	750	750	750
				500	500	500	500	500	500	500
				750	750	750	750	750	750	750
				-	750	750	750	750	750	750
				-	-	-	250	250	250	250
Seasonal Super-Peaking Capacity Products Total				**2,500**	**3,250**	**3,250**	**3,500**	**3,500**	**3,500**	**3,500**
Total Proposed Generic Procurement				**7,637**	**12,197**	**14,603**	**14,730**	**14,851**	**15,076**	**15,404**
Net Additional Capacity Needed				**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Proposed Generic Need				***7,637***	***12,197***	***14,603***	***14,730***	***14,851***	***15,076***	***15,404***

REDACTED

All data based on SCE 2006 LTPP, Attachment A, Monthly S1 & S2 Tables, "S1 - B.E. SCE" Worksheet, lines 227-230.

The proposed procurement to meet bundled customer needs as presented in Table B - V.1 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 these adjustments.

Table C – V.2

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SP-26 Resource Need	-	-	-	-	-	-	550	850	1,180	1,340
SCE Resource Need (80% of SP-26 regional need)	-	-	-	-	-	-	440	680	940	1,070

2. Discussion

Tables C-V.1 and C-V. 2 indicate that SCE does not need the majority of the capacity that it proposes to acquire over the 2007 – 2016 planning horizon until well after 2008, when it will have to defend its 2008 LTPP. As outlined in Volume A, there are several reasons why the Commission should only approve those physical procurements that SCE must initiate prior to the next LTPP because of procurement or construction lead times.

SCE has the opportunity to provide that information in its reply testimony in this proceeding. Specifically it could indicate the specific procurements which 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.

SCE is also faced with the need to procure a large quantity of contractual capacity in 2008 and 2009, as indicated in Table C - 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 SCE 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.

3. Recommendations

Approve contractual procurements for identified needs prior to the next LTPP consistent with procurement lead times and with the phasing in of a laddered portfolio.

Approve only physical procurements for identified needs in light of the corresponding procurement and construction lead times.

VI. EVALUATION OF RESOURCE PLAN

A. Demand Response

Although there is a lot of uncertainty about whether the IOUs will meet their 5% goal for "price-responsive" programs or whether the Commission will allow IOUs to count reliability programs towards their 5% goal, DRA agrees with SDG&E argument in its LTPP filing that "holding room for these goals ensures that resource commitments to day do not foreclose the opportunities in these policy areas in the future."[31] At the January 25, 2007 CAISO's 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 SCE'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.

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

VII. COST RECOVERY ISSUES

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