

**JACKSON W. MUELLER, JR., L.L.C.**

16149 Redmond Way #396, Redmond, WA 98052  
30 Palatine #148, P.O. Box 6009, Irvine, CA 92616  
tel 949.679-2491 ☎ fax 949.502-4961  
jwmueller@attglobal.net ☎ cell 206.601.2578

White Paper  
California Resource Adequacy Costs for Direct Access Customers

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This letter is to document the benefit of hedging the Resource Adequacy Requirement adder for Direct Access electric service through Sempra, the Energy Service Provider. Section 1 is to detail Sempra's services and the Section 2 is to provide my detailed analysis of the California Resource Adequacy Requirement for Direct Access customers.

**SECTION 1: Sempra's Offer**

I recommend that Direct Access customers of Sempra Energy Solutions (SEMPRA) accept an offer from SEMPRA to fix the price of the Direct Access Resource Adequacy Requirement *capacity* adder for 2007. The current *commodity* electricity price of electricity will remain unchanged. The adder price offer for this new regulatory requirement is less than \$5.00 per MWh for the period January 1 through December 31, 2007.

SEMPRA has proposed an Addendum that will fix the price of the "Resource Adequacy Requirement" rather than passing the cost directly through to its Direct Access customers at market prices. Sempra's fixed price offer is a relative discount to the California Public Utility Commission's Direct Access Working Group Final Report of February 1, 2006 which estimates the charges utilities will make to bundled utility customers for the "Resource Adequacy Requirement" will be:

"For 2006, the parties agree that the RA/Capacity cost adder will be **\$8/MWH for SCE** and **\$4/MWH for PG&E**, which will be added to the average strip price. The parties agree that they will revisit the level of the RA/Capacity cost adders for years after 2006 as more information concerning the cost of generation capacity and/or resource adequacy becomes available." [Emphasis added in bold]

**These program provisions were extended to calendar year 2007 by California Public Utilities Commission Administrative Law Judge Mark J. Wetzel on August 18, 2006.**

I recommend that Sempra's Direct Access customers take advantage of SEMPRA'S offer to minimize operating costs and keep future options open.

## **SECTION 2: ANALYSIS OF THE CALIFORNIA RESOURCES ADEQUACY REQUIREMENT FOR DIRECT ACCESS CUSTOMERS**

### **Executive Summary**

After a careful and objective review of the public record, meaningful interviews with SEMPRA'S competitors, and detailed interviews with trusted interveners in the California energy regulatory arena, I am confident that *incremental electric service requirements* to each Direct Access customer, *above its current electricity purchase agreement*, have been intentionally imposed on SEMPRA (and consequently its customers) by the California Public Utilities Commission (CPUC). From a large body of public testimony and legislative requirements that I have provided herein, the CPUC has deliberately initiated a new type of electric service (capacity planning reserves) for all regulated utilities and Energy Services Providers, including Sempra. The same-month, year-before electric demand peaks that SEMPRA has used in its new Addendum offering to its Direct Access customers are not explicitly required between SEMPRA and its customers, but the forecast methodology is what the CPUC has required of SEMPRA for its aggregate customer base beginning June 1, 2006. Yes, the CPUC knows this program will cost consumers extra operating costs and that the new program is not fully developed, but the program has been legally ordered by the CPUC upon regulated utilities and Energy Service Providers. In response to their obligations, SEMPRA has offered a flat price to hedge the new service requirement cost at a discount price to default rates estimated by the CPUC staff. Since I represent the interests of Direct Access customers, I did my best to find regulatory provisions and contract interpretative provisions that could help Direct Access customers minimize their operating expense by avoiding the new incremental electric service requirements, but only found refuge in the upcoming public hearings the CPUC will hold to get feedback on the first few months of operating experience of this new program later this year.

I recommend that Direct Access customers accept SEMPRA'S Addendum to fix the price of its Resource Adequacy Requirement (RAR) obligation only through the end of the year and in the interim assess its options in the legal and regulatory forums to best meet its needs in California.

I am happy to share my redline versions of the California regulatory material I recited in writing this document, if that helps with your review.

### **Detailed Regulatory Research**

The California Public Utility Commission (CPUC) issued its Decision<sup>1</sup> on June 19, 2003 that utilities were to resume responsibility for procurement of their electricity on January 1, 2003. The responsibility for power above its own equity generation and long term purchase agreements was previously provided by the California Department of Water Resources since the "Energy Crisis" of 2000-2001. In its Decision, the CPUC (Commission) stated:

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<sup>1</sup> CPUC Decision 03-06-076 in R.01-10-024, Order Modifying Decisions 02-10-062 and 02-12-074 and Denying Rehearing; pursuant to Assembly Bill 57 and Senate Bill 1976 which became effective on September 24, 2002 and were codified as Public Utilities Code Section 454.4.

"The statute provides that the Commission has the authority to review and modify an electrical corporation's procurement plan. (§ 424.5(e).) Finally, the statute expressly acknowledges the Commission's continuing authority to oversee affiliate transactions, to investigate and penalize utility fraud, and to disallow costs incurred as a result of gross incompetence, fraud, abuse, or similar grounds. (§ 424.5 (h).)"<sup>2</sup>

The CPUC further stated:

"We also have ample independent authority under state law to require information from energy suppliers, based on our broad authority to regulate public utilities, which includes the authority to investigate matters pertaining to public utility regulation. (See *SDG&E v. Superior Court* (1996) 13 Cal.4th 893, 915 (quoting *Consumers Lobby Against Monopolies v. Public Utilities Comm'n* (1979) 25 Cal.3d 891, 905 (discussing source of Commission authority under Article XII of the California Constitution and Public Utilities Code section 701).) In addition to our broad authority under the Constitution and section 701, the Commission has specific authority under Public Utilities Code section 311 to subpoena records and testimony needed for an investigation."<sup>3</sup>

In its final Order, the CPUC stated as a supplement to its conclusions of law:

"20. The Federal Power Act does not preempt our authority under state law to prevent affiliate abuses in procurement of power by the electric utilities we regulate."<sup>4</sup>

The California Public Utility Commission (CPUC) issued its Decision<sup>5</sup> on January 26, 2004 and stated the following about utility procurement of energy:

"AB 57 and SB 1976, codified in Pub. Util. Code § 454.5, provides a regulatory procurement framework for the Commission that (1) requires each utility to prepare and file a procurement plan that meets specified requirements; (2) provides the criteria by which the Commission should review and either adopt, modify, or reject each utility's plan; (3) eliminates the need for after-the-fact reasonableness reviews of utility actions in compliance with an approved plan; (4) ensures timely recovery of prospective procurement costs incurred pursuant to an approved plan; and (5) requires that an approved plan enable the utility to fulfill its obligation to serve its customers at just and reasonable rates, with such just and reasonable rates to include an appropriate balancing of price stability and price level."<sup>6</sup>

The CPUC went on to state:

**"In this decision, the Commission (1) directs that each Load Serving Entity (LSE) within the utility's service territory (i.e., utility, Energy Service Provider (ESP) or Community Choice Aggregator) has an obligation to acquire sufficient reserves for its customer's load located; (2) adopts a**

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<sup>2</sup> Op. Cit., Page 3.

<sup>3</sup> Op. Cit., Page 33.

<sup>4</sup> Op. Cit., Page 45.

<sup>5</sup> CPUC Decision 04-01-050 in R.01-10-024 of January 26, 2004.

<sup>6</sup> Op. Cit., Page 8.

reserve margin for LSEs of 15-17%; (3) directs the LSEs to meet this 15-17% reserve requirement by no later than January 1, 2008, through a gradual phase-in including the establishment of interim benchmarks to become effective in 2005; (4) establishes a requirement that utilities forward contract 90% of their summer (May through September) peaking needs (loads plus planning reserves) a year in advance; and (5) continues the 5% target limitation on utilities' reliance on the spot market (i.e., Day-Ahead, Hour-Ahead, and Real-Time energy) to meet their energy needs."<sup>7</sup> [Bold emphasis added.]

The CPUC acknowledged that the RAR program capacity reserves would result in higher operating costs and stated:

"First, **there is a trade-off between reliability and least-cost service** given the cost to acquire and retain reserves. As TURN's witness Woodruff noted, each incremental increase in reserves offers progressively smaller improvements in reliability. As SDG&E calculated, each additional 1% increase in reserve level adds \$2.8 million to its costs."<sup>8</sup> [Bold emphasis added.]

The CPUC then separated reserves into two categories: **operating reserves** and **planning reserves** and stated:

"In D.03-12-062 the Commission adopted the Joint Recommendation's statement that reliable operation of the electric system requires two types of reserves — operating reserves and planning reserves. **In order to ensure reliability, a grid operator must ensure that there are sufficient resources available to meet peak demand, plus an additional reserve to accommodate unexpected outages. The level of the reserve is determined by the Western Electricity Coordinating Council and is approximately 7% of peak demand. This is the operating reserve.** [Bold emphasis added.]

**Planning reserves involve a longer-term perspective of ensuring that in real-time there will be sufficient energy to meet peak demand plus needed operating reserves. Typically this requires that a utility have more than 7% reserves, since at any given time some percentage of plants may not be available due to such factors as maintenance, forced outages, fuel limitations, or in the case of hydroelectric power, insufficient water.**"<sup>9</sup> [Bold emphasis added.]

The CPUC went on to detail the calculation of reserves by providing the following definitions that I believe both regulated utilities and Energy Service Providers (including Sempra) have and will use to determine electric prices and rates. From my experience before the CPUC as a Rate Witness at Pacific Gas and Electric Company from 1970-1987, I believe the **Operating Reserve Margin has been the sole means of setting prices and rates for Direct Access and utility tariffs, respectively, until the RAR was ordered by the CPUC. Further I believe the new Planning Reserve Margin is supplemental in both its electric procurement and pricing.** Here are definitions:

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<sup>7</sup> Op. Cit., Page 11.

<sup>8</sup> Op. Cit., Page 15

<sup>9</sup> Op. Cit., Pages 20-21

“Planning Reserve Margin (“PRM”): The reserve margin shall be an obligation over and above the capacity required to meet peak demand. PRM is computed as follows:  $PRM = [ (Dependable\ Capacity/Peak\ Load) - 1 ] \times 100\%$ . In calculating PRM, “Dependable Capacity” shall not be reduced to reflect Reasonably Expected Resource Outages.

Operating Reserve Margin (“ORM”): ORM shall be used for purposes of reviewing resource adequacy over a shorter term, such as a year or less and shall be applicable to short term procurement plans. ORM is computed as follows:  $ORM = \{ [ (Dependable\ Capacity - Reasonably\ Expected\ Resource\ Outages)/Peak\ Load] - 1 \} \times 100\%$ .”<sup>10</sup>

In response to relatively encouraging testimony to **collectively procure capacity** to meet the RAR requirements imposed by the CPUC, the CPUC stated:

**“Each LSE in the utility service territory (utility, ESP, community choice aggregator) would be responsible for acquiring its own reserves** needed to ensure reliable service...”<sup>11</sup> “The assigned Commissioner ruled in the April 2, 2002 Scoping Memo that there should be no transactions with any affiliates of the respondent utilities, not just their own affiliates.”<sup>12</sup> “Given the strong interaction between resource procurement and resource adequacy it is desirable that California rather than federal regulators make the necessary decisions.”<sup>13</sup> [Bold emphasis added.]

Regarding the CPUC’s authority to require the RAR, it stated:

“The major impediment to implementing this approach is a perceived concern as to whether the Commission currently has the jurisdictional authority to impose resource adequacy requirements upon ESPs and community choice aggregators. PG&E, SDG&E, SCE, and TURN all believe that the Commission has the requisite authority. ARM and WPTF do not. SDG&E and SCE both note that the Commission could impose reserve requirements upon non-utility LSEs (such as Energy Service Providers or ESPs) under the requirements of Pub. Util. Code § 394. This code section allows the Commission to determine that ESPs demonstrate “technical and operational reliability” and “financial viability.” Similar legislative requirements apply to community aggregators as well. Under the requirements of AB 117, community aggregators must demonstrate both “reliability” (Pub. Util. Code § 366.2(c)(4)(b) as well as “any other requirements established by state law or by the Commission concerning aggregated service” (Pub. Util. Code § 366.2 (c)(4)(D). **Requiring an ESP or community aggregator to acquire adequate reserves in order to ensure reliable service would appear to clearly fall within this legislative authority.**”<sup>14</sup> [Bold emphasis added.]

In its Conclusions of Law, the CPUC stated:

“The Commission’s legislative mandate is to ensure that all utility customers receive reliable service at just and reasonable rates, as specifically stated in Pub. Util. Code § 451 with § 701 giving the Commission power to undertake all

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<sup>10</sup> Ibid.

<sup>11</sup> Op. Cit., Page 36

<sup>12</sup> Op. Cit., Page 67

<sup>13</sup> Op. Cit. Page 182 from Findings of Fact No. 6

<sup>14</sup> Op. Cit., Pages 37-38

necessary actions to properly regulate and supervise California's investor-owned utilities."<sup>15</sup>

**"The Commission has authority to impose reserve requirements on non-utility load serving entities (such as Energy Service Providers) under Pub. Util. Code 394."**<sup>16</sup> [Bold emphasis added.]

"A 15-17% reserve level also strikes an appropriate balance for ensuring reliable service by providing incentives to encourage the retention of existing resources, whereas setting reserves at a higher level could require the utilities to make short-term investment decisions inconsistent with the Energy Action Plan's preferred "loading order" of new resources."<sup>17</sup>

"The utilities should meet this 15-17% requirement by no later than January 1, 2008. In their procurement filings, the utilities should justify reserve levels above 15%, although we recognize that given the inherent "lumpiness" of resource additions, the utilities may acquire reserves above 15%, depending on the timing of the resource additions to meet demand."<sup>18</sup>

In its Interim Opinion Regarding Resource adequacy<sup>19</sup>, the CPUC provided the following **guidance on planning reserve margin to LSEs but is silent on how the LSEs are to secure this from its Direct Access customers:**

"Each LSE is subject to a planning reserve margin (PRM) requirement of 15-17% for all months of the year. Each LSE must meet this obligation no later than January 1, 2008 through a gradual phase-in, with interim benchmarks becoming effective in 2005."<sup>20</sup> **"...(W)e clarify here that the 15-17% planning reserve requirement applies to the entire year. Indeed, anything short of a year round reserve requirement would constitute sub-optimal and inadequate assurance of grid reliability."**<sup>21</sup> [Bold emphasis added.]

The CPUC accelerated the date of implementation to be consistent with Governor Schwarzenegger's letter request and the CPUC responded as follows:

"We therefore adopt June 1, 2006 as the date to achieve full implementation of the 15-17% PRM. We are mindful of the caution CAISO has raised about the feasibility of fully satisfying long-term resource adequacy requirements for this date. As discussed further below, in Phase 2 we direct parties to develop a package of reporting requirements and an initial filing date that reveals resources under the LSEs' control for 2006. We expect that the second year's filing requirements, i.e. September 2006 filings for Summer 2007, may be enhanced to more fully reflect our long-term resource adequacy requirements."<sup>22</sup>

The CPUC offered its reasons for beginning the RAR quickly as it stated:

"In this decision, we set forth a variety of regulatory mandates and requirements intended to promote increased and retained supply for the near future,

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<sup>15</sup> Op. Cit., Page 192. Conclusion of Law No. 1.

<sup>16</sup> Op. Cit., Page 192. Conclusion of Law No. 2.

<sup>17</sup> Op. Cit., Page 192. Conclusion of Law No.6.

<sup>18</sup> Op. Cit., Page 192. Conclusion of Law No.7.

<sup>19</sup> CPUC Decision 04-10-035 in R.01-10-024. of October 28, 2004.

<sup>20</sup> Op. Cit, Page 4, item (2.)

<sup>21</sup> Op. Cit, page 9, Section 3.1 Nature of the Obligation to be Satisfied.

<sup>22</sup> Op. Cit., Page 14.

and to set up a robust structure for the longer term. The decision, along with AB 57 and other statutory and regulatory actions, gives regulatory clarity to the market, will lead to revenue adequacy for suppliers, and will provide stability to utility and other load serving entities. All of these outcomes benefit the public by promoting reliability."<sup>23</sup>

Following are the directions the CPUC made to LSEs to forecast electrical load and meet RAR requirements, again with no reference to how these may be applied to their Direct Access customers:

"The principal contested issue is whether the obligation should be the LSE's own peak or the LSE's loads at monthly system peak. The difference reflects the degree of coincidence that each LSE's own peak has with the overall system peak."<sup>24</sup>

"Further, we will **require that all LSEs file their historic hourly loads for the preceding calendar year when they submit a load forecast so that the CEC may readily determine how loads may have changed, in both aggregate characteristics and hourly patterns.** The schedule and confidentiality arrangements under which the CEC performs this activity and provides adjusted load forecasts to each LSE will be finalized in Phase 2."<sup>25</sup> [Bold emphasis added.]

"We want these resource adequacy forward commitments to be made in the context of the LSE's own procurement efforts, and not some separate side requirement that does not connect to the realities of procurement. We therefore direct all LSEs to prepare load forecasts on the basis of their best estimate of future customers and their loads. We intend to aggressively pursue an approach that yields accurate load forecasts by all LSEs. We will establish a tracking system that compares forecasts with actual loads and creates penalties for excessive deviations. LSE forecasts that assume or reflect significant load reductions will be subject to rejection or a requirement for additional justification."<sup>26</sup>

**"To create initial safeguards against gaming, we will request that the CEC review LSE load forecasts in light of the historic loads of each LSE,** and compare the aggregate of the LSE load forecasts to independent service area and control area load forecasts available to the CEC (either its own or those of CAISO). To facilitate this, we direct the LSEs to provide to the CPUC and the CEC, along with their forecasts based on best estimates of future customers and their loads, an up-to-date accounting of their current customers and loads. We request that the CEC make an assessment based on all available information at their disposal, and bring obvious discrepancies to our attention for further investigation. We further request that CEC do so well in advance of the September 30 compliance filings by the LSEs. If patterns of systematically low load forecasts are revealed by CEC analyses, we will take appropriate action at that time."<sup>27</sup> [Bold emphasis added.]

Concerning the cost of RAR, the CPUC stated:

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<sup>23</sup> Op. Cit., Page 15

<sup>24</sup> Op. Cit., Page 16, Section 3.4.1 Coincidence Adjustment

<sup>25</sup> Ibid

<sup>26</sup> Op. Cit., Page 17, Section 3.4.2, Basis for LSE Load Forecasts

<sup>27</sup> Op. Cit., Pages 17-18

“On the cost side, an LSE’s customers might have to pay more to acquire necessary resources. Certainly LSEs themselves would have higher forecasting and planning costs as a result of efforts to comply with more complex resource adequacy requirements. Arguably, market power might be exacerbated by imposition of these requirements on LSEs who are smaller and less able to resist holdouts for higher prices. Finally, individual LSEs may have problems collectively acquiring generation to address a problem that stems from weaknesses in the transmission system, which is not their “fault.”

**We are persuaded that the likely benefits outweigh the likely costs.** We will direct parties to address the implementation details of a local reliability requirement in future proceedings. We note that although our adopted policy is to minimize reliance on RMR contracts, we expect RMR contracts to remain available in the future, principally as a backstop mechanism to address local market power.”<sup>28</sup> [Bold emphasis added.]

**“We are sensitive to the arguments of SCE and others that forward contracting for capacity does not come without a cost.** However, ensuring that 100% of forecasted capacity needs are met a month ahead will serve to reduce the risks of high prices in the short-term markets, and decrease the need to rely on the CAISO’s Residual Unit Commitment (RUC) process, which is costly for consumers.”<sup>29</sup> [Bold emphasis added.]

For power that is purchased in meeting the RAR and then electrical demands do not require the power, the CPUC stated the power may be conditionally resold back to the wholesale market as unneeded (likely at a loss to the purchase price):

“We agree with the general concept put forward by CAISO. It is pointless to create a body of resource adequacy requirements that create contractual obligations for generators to serve load, and then not require generators to do so. Further, adjustment of LSE requirements to base them upon the LSE’s share of control area peak demand inherently builds in a concept of “pooling” that this contractual requirement would effectuate. Clearly, the LSE who has a contract with a generator should have first call on that generator, but if the system demands that a generator be called upon for the benefit of the system, then the generator must be required to operate. A sequence of requirements to first be scheduled by the LSE, then to bid into Day-Ahead markets if not scheduled, and then be subject to RUC if the bid is not accepted is appropriate. We adopt this as our policy going forward. Contracts executed after completion of Phase 2 proceedings on this topic should include such provisions in order to be eligible to count as qualified capacity in satisfaction of forward commitment obligations.”<sup>30</sup>

**The CPUC revisited the issue of capacity versus energy to emphasize that current supply contracts by LSEs almost wholly are dedicated to providing energy and the new RAR is intended to require incremental reserve capacity:**

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<sup>28</sup> Op. Cit., Pages 33-34

<sup>29</sup> Op. Cit., Page 38.

<sup>30</sup> Op. Cit., Page 42

"In comments on the draft decision, several parties expressed concern that prohibitions and limitations approved herein will have negative impacts on their overall portfolios. In response to these concerns, **we clarify here that these requirements are established for purposes of inducing forward commitments with resources that are appropriate to satisfying a 15-17% benchmark for a summer peak capacity metric. Prospective restrictions on liquidated damage contracts, eligibility thresholds that exclude energy limited resources that cannot be available for a minimum number of hours in a month, and other means by which capacity qualifies to cover loads and a 15-17% planning reserve margin are all part of creating a capacity-oriented resource adequacy requirement.** Such limitations do not apply to the use of these resources for energy purposes. To satisfy the energy needs of their customers, LSEs may acquire, contract with and make use of resources that do not qualify for these resource adequacy requirements, unless there are other restrictions expressly established in other decisions for other reasons."<sup>31</sup> [Bold emphasis added.]

In its Conclusions of Law, the CPUC stated:

"LSEs shall prepare load forecasts on the basis of their best estimate of future customers and their loads."<sup>32</sup>

"LSEs shall include all losses in their load forecasts, including distribution losses, transmission losses, and appropriate estimates of unaccounted for energy."<sup>33</sup>

"We adopt this as our policy: all resources identified as satisfying RAR shall conform to a sequence of requirements to first be scheduled by the LSE, then to bid into Day-Ahead markets if not scheduled, and then be subject to RUC if the bid is not accepted."<sup>34</sup>

In its Opinion Regarding Resource Adequacy,<sup>35</sup> **the CPUC reaffirmed the requirement for the RAR to be implemented by June 2006, with a strong sentiment that the new RAR requirements were clearly not "business as usual" anymore:**

"Reaffirming and clarifying the policy framework that it established in Decision (D.) 04-01-050 and D.04-10-035, the Commission implements a program of resource adequacy requirements (RAR) applicable throughout the service territories of California's three largest investor-owned electric utilities (IOUs). The IOUs as well as electric service providers (ESPs) and community choice aggregators (CCAs) (collectively, load-serving entities or LSEs) are required to demonstrate that they have acquired the capacity needed to serve their forecast retail customer load and a 15-17% reserve margin beginning in June 2006. **The Commission takes this action to promote investment in the resources needed to reliably serve California's growing demand for electricity and ensure that those resources are available to the California Independent System Operator (CAISO),** all while effectively and fairly allocating procurement and reliability responsibilities among market participants and oversight agencies. We are adopting RAR in order to

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<sup>31</sup> Op. Cit., Page 45, Section 3.10 Resource Adequacy Requirements: Capacity v. Energy

<sup>32</sup> Op. Cit., Page 53, Conclusion of Law 7.

<sup>33</sup> Op. Cit., Page 53, Conclusion of Law 9.

<sup>34</sup> Op. Cit., Page 55, Conclusion of Law 25

<sup>35</sup> CPUC Decision 05-10-042 in R.04-04-003 of October 27, 2005.

spur infrastructure development and assure that capacity is available to the CAISO for dispatch. In so doing, **we are rejecting business as usual and instead favoring more robust LSE procurement practices.**<sup>36</sup> [Bold emphasis added.]

Regarding the uniqueness of the RAR obligations above historical supply arrangements, the CPUC stated:

**"As TURN puts it, "the primary rationale for RAR up to now has been system reliability, not generator economics."**<sup>37</sup> [Bold emphasis added.]

**"...(W)e view RAR as a physical, capacity-based program where a significant portion of the capacity is committed beforehand."**<sup>38</sup> [Bold emphasis added.]

**"D.04-01-050 adopted an LSE-based RAR program wherein each LSE is responsible for acquiring the resources needed for its own forecasted load and a reserve margin.** This is consistent with the established regulatory principle of establishing prices on the basis of cost causation. Ultimately load will be served through the CAISO, and an LSE that does not provide resources in proportion to the load of its retail customers could effectively be subsidized by others. Through LSE-based RAR, we seek to eliminate "free ridership" and to minimize CAISO procurement where the costs of such procurement are socialized without reference to cost causation. Therefore, to the extent possible, we will favor RAR design elements that promote the LSEs' procurement responsibility over those that rely on CAISO procurement."<sup>39</sup> [Bold emphasis added.]

**"We are adopting RAR in order to spur infrastructure development and assure that capacity is available to the CAISO for dispatch. In so doing, we are rejecting business as usual and instead favoring more robust LSE procurement practices."**<sup>40</sup> [Bold emphasis added.]

**"This almost certainly means that LSEs and their suppliers will need to change their procurement strategies. We will seek to avoid imposing unnecessary disruptions and costs on market participants, and we recognize that transitional mechanisms will be required to avoid unduly impairing existing business arrangements. On the other hand, as we move forward to give effect to D.04-01-050, we will not refrain from implementing those RAR program elements we determine to be necessary for reliability simply because those requirements may require changes in the operations of market participants."**<sup>41</sup> [Bold emphasis added.]

Several parties petitioned to delay the start of RAR until it was more fully developed. The CPUC stated:

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<sup>36</sup> Op. Cit., Page 2, Summary

<sup>37</sup> Op. Cit., Page 8, Section 3.3 Revenue Adequacy

<sup>38</sup> Op. Cit., Page 9, Section 3.3 Revenue Adequacy

<sup>39</sup> Op. Cit., Page 11, Section 3.5 LSE-Based Procurement

<sup>40</sup> Op. Cit., Page 12, Section 3.6A new paradigm for LSEs and Their Suppliers

<sup>41</sup> Ibid.

"Several parties urge that we postpone implementation of the local capacity requirement until that element of RAR is more fully developed."<sup>42</sup>

"The alternative of delaying the start of any RAR program until the details of all possible program elements are more fully vetted is simply unacceptable given the fragility of California's grid reliability. The other alternative--implementing program elements that have not been fully and fairly considered--is equally unacceptable given both due process requirements and the possibility of adopting unnecessarily costly RAR schemes."<sup>43</sup>

Regarding the cost of the LSE in providing the planning reserve into the market, the CPUC said the following about the LSE's ability to recover that cost if the capacity is not needed by its customer base:

"We hereby reiterate that an RA resource must submit a zero dollar (\$0) bid for RA capacity bid into RUC and that an RA resource will not be eligible for any RUC availability payment or revenue."<sup>44</sup>

Looking to the future the CPUC stated:

"The workshop report described general agreement of the participants that a policy of aligning a resource's qualifying capacity with the CAISO's capacity rating for that resource implies that the required 15-17% reserve margin should be evaluated and possibly adjusted. This is because if average forced outage rates decline as a result of tying RAR eligibility to performance, then presumably the overall reserve requirement could be safely reduced. Conversely, if average forced outage rates are high, then a higher reserve requirement may be justified. **After we have gained experience with the operation of the RAR program, it will be appropriate to revisit the 15%-17% reserve margin and consider possible adjustment.**"<sup>45</sup> [Bold emphasis added.]

Procedurally the CPUC provided the following direction for LSE's to assemble load data and RAR plans with confidentiality:

"Until further notice, LSEs' preliminary load data should be submitted to this Commission's Energy Division, which will promptly transmit the data to the CEC for review and analysis. As suggested by ARem, the LSE's submittal should include contact information for responsible personnel. The CEC will report the results of its review and any adjustments it has calculated to the Commission's Energy Division as well as the LSEs and the CAISO. The LSE will then use that adjusted forecast as the basis for its procurement obligation.

The confidentiality rules adopted by this Commission will govern this process. LSEs should work directly with the designated CEC staff to respond to any CEC data requests, and failure of an LSE to respond would constitute violation of an order of this Commission. Any disputes between the CEC and an LSE should, in the first instance, be addressed informally by the principals and, where appropriate, our staff. If a dispute cannot be resolved this way it should then be referred to this Commission. We will direct our staff to explore detailed procedures for responding to

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<sup>42</sup> Op. Cit., Page 13

<sup>43</sup> Op. Cit., Page 14

<sup>44</sup> Op. Cit., Page 16.

<sup>45</sup> Op. Cit., page 20

such referrals and make appropriate recommendations for our consideration. Until further notice, such disputes should be referred to the Commission by a motion in R.04-04-003 or successor proceeding that addresses RAR."<sup>46</sup>

Based on formal contacts with SEMPRA'S major competitors in California (Constellation Energy and APS ES) it is clear that the LSEs are very mindful of the CPUC's guidance and are using the same standard on a customer-by-customer basis, namely to require incremental RAR capacity to be purchased for each customer based on their individual, historical loads in the prior year. Regarding the accuracy of LSE forecasts, the CPUC provided the following guidance:

"In comments on these issues a number of parties expressed the view that LSEs should not be held accountable for the accuracy of their load forecasts. We generally agree that this should be the case, as forecasts of demand by their very nature may entail considerable variability. At this time, we do not have information regarding the extent of such variability that would allow us to set reasonable accuracy standards. In order that we may explore such standards in the future, we ask the CAISO to provide actual load data to the CEC to enable the CEC to evaluate load forecast accuracy on an LSE-specific basis. We add this caveat: if it were demonstrated that an LSE knowingly used false or unreasonable assumptions to skew the forecast in its favor, it would be reasonable to hold the LSE accountable for such actions. Moreover, regardless of the assumptions or methods used, if any LSE's load forecasts consistently or systematically understate actual demand, that will be reason for investigation and possible sanction."<sup>47</sup>

Here is the CPUC's guidance on preparing RAR capacity forecasts:

"The question of which load forecast method to use has already been resolved, and we will not revisit the question here. In accordance with D.04-10-035, **LSEs should prepare and submit hourly load forecasts based on the best estimates approach.**"<sup>48</sup>

"D.04-10-035 provided that RA obligations should rest upon coincident peaks rather than the unadjusted peaks of each LSE. **Two alternative approaches to the coincidence adjustment were discussed in the Phase 2 workshops: (1) use of historic coincident factors (historic approach) and (2) determination of coincident peaks directly from the hourly load forecasts submitted by the LSEs (forecast approach).** The workshop report described advantages and disadvantages of both options and invited comment on which of them should be adopted. The comments revealed preferences for both options. [Bold emphasis added.]

**We adopt the historic approach.** While, in theory, forecasts might be more accurate (and as CAISO observes, more in line with our decision to use the best estimate rather than the current customers approach), we have insufficient experience with these forecasts to justify making that conclusion. It may be the case that the historic approach is just as accurate, if not more so."<sup>49</sup> [Bold emphasis added.]

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<sup>46</sup> Op. Cit., page 30

<sup>47</sup> Op. Cit., pages 31-32.

<sup>48</sup> Op. Cit., Page 35

<sup>49</sup> Op. Cit., page 36

Here is the CPUC's list of considerations for load forecasts made by LSEs

"Load forecast documentation includes:  
Current and projected customer counts.  
Projected changes in contract loads.  
Adjustments for municipal departing load and community choice aggregators projected to depart from an IOU in the forthcoming year.  
Description of load forecasting methodology including regression equations and other descriptive information.  
Other historic data needed to understand nature of load forecasting methodology.

**Historical hourly loads for the previous year.**

Historical hourly loads adjusted to normal weather, and the weather data and methodology used to make such adjustments."<sup>50</sup> [Bold emphasis added.]

The CPUC said the following about data submitted by the LSEs. It is clear that all LSE data are confidential, and the data (including contractual conditions and usage served individually by ESPs) are confidential:

"Confidentiality Issues - The comments revealed a general consensus that **LSE resource tabulations are considered as confidential as LSE load data or even more so.** As we noted earlier in connection with the confidentiality of LSE load data, the Commission is generically considering confidentiality protocols in R.05-05-040. Pending the completion of that process, **we will take a conservative approach to the treatment of LSE resource data by providing that such data shall remain confidential until further order.** Subject to appropriate non-disclosure protocols, access to this confidential data shall be limited to this Commission, the CAISO, the CEC, and other government agencies to the extent required by law. In addition, non-market participants shall have access to this data to the same extent, if any, that non-market participants have access to historic and forecast load data pursuant to ALJ ruling in this or successor RAR proceeding. Since these data represent an important improvement in the quantity and quality of data about future load and resource balances, we will authorize public disclosure by the CEC of aggregations of these data in making overall control area and statewide assessments."<sup>51</sup> [Bold emphasis added.]

Here are compliance penalties ordered by the CPUC:

"In deference to the concerns raised by many parties regarding the uncertainties of compliance with a new program, **we adopt TURN's suggestion for establishing a baseline penalty of 150% of the monthly cost of new capacity for 2006 only. For 2007 and beyond, a penalty of 300% should apply.** As noted earlier, this Commission retains authority and responsibility for administration of its own programs. This applies to compliance and enforcement as well."<sup>52</sup> [Bold emphasis added.]

What did Southern California Edison say to protect its costs for implementing the RAR program?

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<sup>50</sup> Op. Cit., Page 84

<sup>51</sup> Op. Cit., Pages 88-89

<sup>52</sup> Op. Cit., Page 94

"...unless there is also a equitable allocation of the benefit and cost of such resources, the CPUC must determine the magnitude of the need for new generation in SP-15 and whether such need requires the implementation of transitional policies that will support electricity system reliability for all customers in that area."

What are the likely costs for the RAR above current obligations of LSEs to meet the voluminous public requirements of the CPUC? Although not approved by the CPUC, here is feedback from the CPUC staff that shows the CPUC's estimates are nearly three times the offer from SEMPRA for meeting RAR:

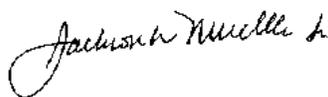
**"For 2006, the parties agree that the RA/Capacity cost adder will be \$8/MWH for SCE and \$4/MWH for PG&E, which will be added to the average strip price. The parties agree that they will revisit the level of the RA/Capacity cost adders for years after 2006 as more information concerning the cost of generation capacity and/or resource adequacy becomes available."**<sup>53</sup> [Bold emphasis added.]

On August 18, 2006 CPUC Administrative Law Judge Mark J. Wetzel ruled<sup>54</sup> that the 2006 program that began June 1, 2006 would be continued into 2007 and that the Local Resource Adequacy Program would be the subject of regulatory hearings with implementation in 2008. No limitation or material change was made to the 2006 program.

## Conclusion

I believe the information and documentation I have provided shows the Resource Adequacy Requirement claimed by SEMPRA as an incremental expense to its Direct Access customers is valid. I recommend that Direct Access customers of Semptra accept SEMPRA'S offer to hedge that risk to avoid an even higher price via an involuntary pass-through charge. I am ready to provide additional consulting support on this subject, if needed.

Sincerely,



JWM:hs

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<sup>53</sup> Final Report of the Working Group to Calculate CRS Obligations Associated with Municipal Departing Load and Direct Access, Corrected by Energy Division, February 1, 2006

<sup>54</sup> Rulemaking 05-12-013, "ALJ Ruling Regarding Phase 2 of the OIR to Consider Refinements to and Further Development of the Commission's Resource Adequacy Program" of August 18, 2006