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## DIVISION OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

### COMMENTS ON THE DRAFT CALIFORNIA ENERGY COMMISSION 2009 – 2011 LOAD FORECAST

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## **I. Introduction**

Consistent with its statutory mission to obtain the lowest possible rate for service consistent with reliable and safe service levels, the Division of Ratepayer Advocates (DRA) submits the following comments to inform the Integrated Energy Policy Report (IEPR) Committee's decision and encourage the adoption of a 2010-2020 load forecast that will both minimize costs to ratepayers served by California's Investor Owned Utilities (IOUs) and enable reliable service.

The California Energy Demand Staff Draft Forecast Report for 2010-2020 (CED 2009) explains its purpose: to anticipate "electricity and end-user natural gas consumption and peak electricity demand for California as a whole and for each major utility planning area within California for 2010-2020."<sup>1</sup> What the report does not address is the significance of the demand forecast for California's utilities and energy ratepayers. The adopted demand forecast will serve as the foundation for the California Public Utilities Commission's (CPUC's) Long Term Procurement Planning,<sup>2</sup> a process which determines what, if any, new resources California's investor owned utilities should procure to ensure reliable service to their customers. As such, the final demand forecast will impact the amount of energy California's utilities procure as well as the cost of this procurement for ratepayers.

## **II. Illustrating How Load Forecasting Impacts Ratepayers**

Given the significance of the choice facing the IEPR Committee, DRA highlights the following facts concerning the impact of the Committee's decision:

- The CED 2009 projects that growth in IOU peak demand has, and will continue, to slow significantly. Table 1 illustrates the magnitude of this change in terms of capacity.

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<sup>1</sup> CED 2009, p. 1.

<sup>2</sup> R. 08-02-007

Table 1	Change in Peak Demand Relative to CED 2007 (MWs) <sup>3</sup>		
	2010	2015	2018
IOU	2010	2015	2018
PG&E	-810	-1,210	-1,531
SCE	-1,184	-1,792	-2,168
SDG&E	-93	-139	-215
All IOU Total:	-2,087	-3,141	-3,993

If the CED 2009 is accurate, the IOUs peak demand will be 3,993 MWs less than the California Energy Demand Staff Forecast Report for 2008-2018 (CED 2007).

- Putting the 3,993 MW in context is striking: the most recent CPUC Long Term Procurement Planning decision,<sup>4</sup> which relied on the CED 2007 for peak demand, authorized the IOUs to procure a total of 2,430 MW for the comparable period in the last planning horizon. In other words, resources are being procured to meet 2,430 MW of need that, according to the CED 2009, does not exist any more.<sup>5</sup>

In sum, these facts illustrate how the CEC’s load forecasting impacts ratepayers. Based on the CED 2007, the IOUs were authorized to procure at least 2,430 MW more than the CED 2009 believes will be necessary.

DRA presents these facts and their collective impact on ratepayers not to criticize the CED 2007 but to 1) remind stakeholders that load forecasting has

<sup>3</sup> DRA’s calculation subtracts the CED 2007 forecast for each year from the CED 2009 high-rate case projections for each utility and year.

<sup>4</sup> D. 07-12-052 authorized PG&E 1,200 MWs, SCE 1,900 MWs, and SDG&E 530 MWs

<sup>5</sup> The IOUs made modifications to the accounting of energy efficiency savings in CED 2007 forecasts to obtain even higher need authorizations.

significant impacts on California's ratepayers and 2) temper reliability concerns by illustrating factual evidence that shows the IOUs have already been authorized to procure enough electricity generation to meet the level of need indicated in the CED 2009.

### **III. Adopt a Forecast that Anticipates an Increase in Electricity Rates**

The CED 2009 includes high-rate, mid-rate, and low-rate scenarios. Each scenario illustrates a degree of electricity price demand response; the higher the rate, the lower the consumption. The low-rate case assumes no increase in rates between 2010 and 2020, while the mid-case and high-case assume 15% and 30% rate increases respectively. DRA recommends that the IEPR Committee adopt the high-rate case scenario in CED 2009 because it most closely aligns with recent estimates of electricity rate changes through 2020.

The low-rate scenario is unrealistic and should not be adopted by the IEPR Committee. In light of historic rate trends as well as projections of future rate impacts associated with State energy policy goals, it would be erroneous to assume rates will not increase between 2010 and 2020. Historically, California's rates have, on average, increased.

The CEC reports that between 1982 and 2008 the statewide average retail electricity price rose from 7.7 cents/kWh to 13.3 cents/kWh, an average annual increase of 2.7%.<sup>6</sup> These data points demonstrate that historically electricity rates have increased. DRA suggests that this trend will continue and likely be accelerated by the rate impact of California energy policy goals. Therefore, the State must plan for these rate increases in order to ensure that the situation is not exacerbated with over procurement.

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<sup>6</sup> [http://energyalmanac.ca.gov/electricity/Electricity\\_Rates\\_Combined.xls](http://energyalmanac.ca.gov/electricity/Electricity_Rates_Combined.xls) -- Tab "Statewide Average"

The State has adopted certain policy goals that will result in an increase in electricity rates between the years 2010 and 2020.<sup>7</sup> One of these goals is California's Renewable Portfolio Standard (RPS) which requires electricity providers to procure renewable resources by 2010. Recent studies suggest that extending this RPS target in the next planning horizon would lead to rate increases. Since the incremental cost of requiring the purchase of these more expensive resources will result in higher end user rates, it is unreasonable to assume that there will be no increase in rates between 2010 and 2020. DRA's conclusion regarding the likelihood of higher rates for the forecast years stems from a recently released report<sup>8</sup> from the CPUC which forecasts the rate impact of varying renewable mandates. The report anticipates that in reaching a 20% RPS by 2020 rates would rise 19.5% relative to current rates<sup>9</sup>. Furthermore, reaching a 33% RPS<sup>10</sup> would result in rate impacts between 20.5% and 31.3% relative to current rates according to some recent studies.<sup>11</sup>

The high-case scenario more accurately reflects anticipated rates in 2020 and is consistent with the CPUC report's findings. As such, the IEPR Committee should adopt the high-rate scenario.

Finally, price elasticity measures how a buyer reacts to a price change. Price elasticity is important to load forecasting because it anticipates how price changes – as quantified by the high-, mid-, and low-rate scenarios in CED 2009 – will impact energy demand. Future load forecasts would benefit from a better understanding of the elasticity of electricity in California. As such, DRA supports the CEC's commitment to reexamine electricity price demand response in the

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<sup>7</sup> CPUC authorized programs that will have a rate impact include, but are not limited to: Advanced Metering Infrastructure, Smart Grid, California Solar Initiative, IOU Solar Photovoltaic Programs, low income energy assistance programs.

<sup>8</sup> 33% Renewable Portfolio Implementation Analysis Results, June 2009.

<sup>9</sup> Current law requires a more ambitious 20% by 2010 --

<sup>10</sup> Consistent with Executive Order S-14-08, AB32 Scoping Memo, and 2007 IEPR

<sup>11</sup> 33% Renewable Portfolio Implementation Analysis Results, June 2009. Table 6, page 24 (includes "Gas Only" Scenario rate impact of 16.7%)

2011 IEPR.<sup>12</sup> Additional investigation will improve the accuracy of future load forecast through greater understanding of ratepayer response to price changes.

#### **IV. Accounting for IOU Energy Efficiency Program Impacts**

DRA has been a strong supporter of cost-effective energy efficiency (EE) as the first choice resource for meeting California's future energy needs. As a part of its efforts to promote EE as a resource, DRA was an active participant in the 2007 IEPR, calling for clarification on how the effects of IOU efficiency programs impact the CEC load forecast. DRA applauds the CEC for addressing its concerns as a part of developing the CED 2009 and, in large part, providing the needed clarification.

As a participant in the Demand Forecasting Energy Efficiency Quantification Project (DFEEQP), DRA has witnessed first hand the CEC's efforts to improve the accounting of energy efficiency in its load forecast. This project's efforts have contributed to considerable improvements in load forecasting, especially with the improved accounting of residential lighting programs in CED 2009.

In order to incorporate these improvements into the load forecast, the CED 2009 appropriately applies a "realization rate" to energy efficiency program savings claimed by IOUs. DRA believes that using unverified IOU savings claims would unnecessarily risk the integrity of the load forecast by assuming future EE program impacts that may not be realized. In the absence of established verification distinguishing between energy efficiency program savings claimed by IOUs and actual energy savings, realization rates provide a useful estimate of the actual program impacts.

Furthermore, DRA supports the CED 2009's use of the CPUC Energy Division's *Energy Efficiency 2006-2007 Verification Report* to assume a 70%

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<sup>12</sup> CED 2009, p. 11.

realization rate<sup>13</sup> for savings claimed by IOUs between 2006-2008. The *Verification Report* is the only independent assessment of IOU EE program success in 2006 and 2007. It provides the best-available basis for assuming what IOU EE program success has been.

Consistent with DRA's support of the *Verification Report* as a reputable and relevant assessment of IOU EE program success<sup>14</sup>, DRA takes exception to the CED 2009 assumption that the IOU's will achieve 85% of their saving in program years 2009-2011. DRA believes that assuming a realization rate of 85% is overly optimistic; past experience, as quantified and documented by the *Verification Report*, causes DRA to be skeptical about a 85% realization rate. DRA recommends that the integrity of the load forecast should be further reinforced by assuming a realization rate of 70% for program years 2009-2011, as it did for program years 2006-2008. DRA looks forward to a future in which the CPUC has an established verification system that is supported by stakeholders. In the meantime, the use of DRA's recommended realization rate will be adequate. In closing, DRA encourages the CEC to sustain its commitment to capturing the impacts of energy efficiency programs in its load forecasts. In the near term, DRA encourages the CEC to incorporate publicly-owned utility program impacts and low income efficiency program impacts into the revised CED 2009. Looking to the future, it is essential that the DFEEQP, or a successor, include improved accounting of IOU energy efficiency programs beyond residential lighting.

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<sup>13</sup> CED 2009, p. 156

<sup>14</sup> However, going forward DRA supports energy consumption as a critical means of more accurately factoring energy efficiency savings into long-term procurement planning. As noted throughout Energy Division's white paper on devising an incentive mechanism to reward investor owned utilities, energy consumption is a key indicator of measuring Energy Efficiency program success. "Proposed Energy Efficiency Risk-Reward Incentive Mechanism and EM&V Activities," Prepared by Energy Division, California Public Utilities Commission, April 1, 2009. <http://docs.cpuc.ca.gov/efile/RULINGS/99882.pdf>

**V. Conclusion**

DRA appreciates the IEPR Committee's consideration and encourages the adoption of a CED 2009 consistent with these comments.

Respectfully,

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