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SDG&E Comments on Revised CED Forecast 2018-30

Additional submitted attachment is included below.
Dear Chairman Weisenmiller and fellow Commissioners:


I. INTRODUCTION

SDG&E has no significant issues with Staff’s system level forecast for either electric energy use or peak demand for SDG&E’s service territory. For energy use, the 2016 starting point for sales seems accurate and the long-term growth rates of 1.28% for Mid Case Baseline end-use consumption and 0.64% for Mid Case Baseline sales seem reasonable. The long-term growth rate of negative 0.50% seems plausible for the fully managed Mid-Case Baseline forecast, with Mid-Case AAEE and AAPV, given that a small measure of SB 350 savings impacts is included in the forecast. The weather normalized 2017 starting point for peak demand is accurate and extremely close with SDG&E’s own calculations on this item. The long-term growth rates of 0.98% and 0.10% for unmanaged peak demand, with peak-shift, and the fully managed forecast peak demand, respectively, seem reasonable.
II. RECOMMENDATIONS

SDG&E recognizes and applauds the herculean effort Staff performed to produce the 2017 Revised Forecast. However, the delivery of the IEPR results (to the CEC IEPR website) was done in a piece meal fashion, which left very little time for the IOUs and POUs to review these results in depth. SDG&E notes that a more timely due process, with a sufficient review time, needs to be developed for the next IEPR forecast.

SDG&E also recognizes that various scenarios (or work products) from the 2107 Revised Forecast will be used to support other regulatory proceedings such as the California Independent System Operator’s (CAISO) Transmission Planning Process (TPP), and the California Public Utilities Commission’s (CPUC) Integrated Resource Plan (IRP) and Distributed Resources Plan (DRP). To support these proceedings, SDG&E believes some of the demand forecast forms used to document the IEPR forecast results require more detail information.

SDG&E provides the following examples where such details may be needed:

   a. Forms that display forecast results

1. Form 1.1. Add columns after Total Consumption to display the effect of additional savings, by sector, that make the grand total a managed forecast.

2. Form 1.1b. Add columns after Total Sales to display the effect of additional savings, by sector, that make the grand total a managed forecast.

3. Form 1.2. Add columns after Total Energy to Serve Load to display the effect of additional savings, by sector and with losses, that make the grand total a managed forecast.

4. Form 1.3. Bring back this form, which displays peak demand by sector at the time of system peak. Add columns to display EV charging. Also, add additional columns to display the effect of additional savings, by sector and with losses, that make the grand total a managed forecast.

5. Form 1.4. Add columns after Final Net Peak Demand to display the effect of additional savings, with losses, that make the grand total a managed forecast. Separate out AAPV if it is an amount still separate from AAEE savings.

6. Form 1.5. Expand the form to include tables that display energy. There should be tables for the Baseline forecast and each of the managed forecasts that are likely to be used by the CPUC and CAISO in their resource planning proceedings.

7. Form 1.7. This form is for documenting private supply. There are three parts to this form – 1.7a (Energy), 1.7b (Peak Impact MW), and 1.7c (Installed Capacity MW). The CEC’s forecast documentation includes only form 1.7a. All IOUs are expected to complete forms 1.7a, b, and c. SDGE suggests that parts 1.7b&c be added to CEC documentation.
b. Forms that display forecast assumptions

Form 2.2. As currently used, this form displays the economic and demographic forecast drivers for each of the Baseline forecasts – Low, Mid, and High. There should be footnotes at the bottom of the form that source each of the drivers. Also, the scope of the form needs to be expanded to display the detail assumptions for each of the baseline forecast modifiers, such as residential and commercial electric vehicles, PV and CHP, and BTM storage.

c. Forms That Document Demand Forecast Methods and Models

The CEC Staff documents their methods and models in a summary fashion in various places throughout the Statewide and Utility Planning Area Forecast Report publications. The appendices to these reports usually provide extra detail. In addition to these displays, SDG&E recommends that the CEC Staff re-issue a former publication titled, *Energy Demand Forecast Methods Report*. This publication provided more details, which were concentrated in one document.

d. Workshops and Meetings

New technologies are placing increasingly multiple demands on electric demand forecasting. Energy forecasters at the IOUs, POUs and the CEC Staff have a lot to learn before we begin the next IEPR forecasting cycle. SDG&E would like to suggest holding monthly or quarterly Demand Analysis Working Group (DAWG) meetings to share knowledge on important forecasting topics, such as tracking and forecasting EVs, BTM PV, BTM Energy Storage, the effects from energy efficiency legislation (e.g., SB 350 and AB 802), and forecasting hourly loads.

In reviewing and comparing the CEC Staff’s IEPR forecast with its own forecasting efforts, SDG&E has identified a few examples that demonstrate the need to convene more DAWG workshops to further investigate modeling differences:

1. The CEC and SDG&E both forecast the Agricultural/Water Pumping sector. The CEC reports a different history of recorded energy consumption than does SDG&E. CEC’s history is lower than SDG&E’s and yet the CEC’s forecast of energy is higher.

2. The CEC reports a different history of private supply than does SDG&E. The CEC’s history and forecast is higher in both residential and non-residential sectors.

3. The CEC and SDG&E both forecast Electric Vehicle (EV) charging. SDG&E found that the CEC and SDG&E differ in their estimates of car counts in SDG&E’s service territory for the historical years 2015 and 2016, and differ significantly in the first forecast year in 2017.
4. SDG&E reviewed the CEC’s hourly load forecast for the SDG&E service area and found the following discrepancies to investigate further:

   a. The hourly forecast for years 2018 through 2030 doesn’t include load for the extra day that occurs in leap years;

   b. Hourly values don’t appear to sum to the values displayed on forms that report annual energy; and

   c. The hourly forecast doesn’t appear to tie to other forms that report forecast detail.

III. CONCLUSION

   SDG&E thanks the Energy Commission for the opportunity to submit these comments, supports the Staff’s efforts to forecast energy and peak demand for all of California, in particularly, for SDGE’s planning area, and looks forward to working with Staff to improve these forecasts.

Sincerely,

/s/ Tim Carmichael

Tim Carmichael
Agency Relations Manager
San Diego Gas & Electric