



FILED

04/18/19
04:59 PM

**BEFORE THE PUBLIC UTILITIES
COMMISSION OF THE STATE OF
CALIFORNIA**

Order Instituting Rulemaking to Oversee
the Resource Adequacy Program,
Consider Program Refinements, and
Establish Annual Local and Flexible
Procurement Obligations for the
2019 and 2020 Compliance Years.

Rulemaking 17-09-020
(Filed September 28, 2017)

**WELLHEAD ELECTRIC COMPANY, INC.'s COMMENTS ON
THE CAISO'S DRAFT FLEXIBLE CAPACITY NEEDS
ASSESSMENT FOR 2020**

Paul Z. Cummins, Vice-President
Wellhead Electric Company, Inc.
650 Bercut Dr., Suite C
Sacramento, CA 95811
Tel: (916) 447-5171
E-mail: pcummins@wellhead.com

April 18, 2019

**BEFORE THE PUBLIC UTILITIES
COMMISSION OF THE STATE OF
CALIFORNIA**

Order Instituting Rulemaking to Oversee
the Resource Adequacy Program,
Consider Program Refinements, and
Establish Annual Local and Flexible
Procurement Obligations for the
2019 and 2020 Compliance Years.

Rulemaking 17-09-020
(Filed September 28, 2017)

**WELLHEAD ELECTRIC COMPANY, INC.’s COMMENTS ON
THE CAISO’S DRAFT FLEXIBLE CAPACITY NEEDS
ASSESSMENT FOR 2020**

Pursuant to the California Public Utilities Commission’s (the “Commission”) Rules of Practices and Procedure and the Assigned Commissioner and Administrative Law Judge’s Amended Scoping Memo and Ruling issued on January 29, 2019, Wellhead Electric Company, Inc. (“Wellhead”) respectfully submits these comments on the CAISO’s Draft Flexible Capacity Needs Assessment for 2020 (the “Assessment”).

I. INTRODUCTION.

Wellhead appreciates this opportunity to provide these brief comments on the Assessment. The Assessment shows a significant increase in the maximum 3-hour net load ramp, which is reasonable. Wellhead anticipates that this trend will continue given the expected renewable development over the next several years. In these comments Wellhead will make the following suggestions:

- In addition to planning that is focused on how to efficiently manage the 3-hour net load ramp, the CAISO should evaluate intra-hour flexibility needs;
- While the CAISO’s methodology for deriving the flexible capacity requirements is sound, the CAISO should give ϵ a value substantially greater than zero to address forecasting errors that result from variables beyond the CAISO’s control; and
- The value given to ϵ should come from resources capable of addressing intra-hour flexibility needs.

II. In addition to planning focused on how to efficiently manage the 3-hour net load ramp, the CAISO should evaluate intra-hour flexibility needs.

Flexible capacity requirements should ensure the “right” set of resources are procured to meet all the flexibility needs of the system. System flexibility needs include both inter-hour (3-hour net load ramp) and intra-hour (load following and operating reserves) flexibility. The Assessment is intended to set the requirements needed to meet the forecasted 3-hour net load ramps. However, it does not evaluate any intra-hour flexibility needs.

The CAISO conducted a gas-fired retirement study¹ (the “Retirement Study”), which was discussed in both the 2018-2019 TPP process as well as the CPUC’s IRP proceeding. The Retirement Study results showed that given the CPUC’s preferred renewable portfolio and conservative gas-fired retirement assumptions, the CAISO would not be able to meet load following and operating reserve requirements. While the Retirement Study was not solely focused on flexibility needs, it did highlight that without the “right” type of flexible capacity the CAISO could face intra-hour flexible capacity shortfalls even while still meeting the 3-hour net load ramp.

To avoid these shortfalls in 2020, a sub-set of the flexible capacity requirement should come from resources capable of providing fast flexibility. Wellhead understands that the models and objectives of the Assessment and the Retirement Study differ. Nevertheless, Wellhead encourages the study and reporting on the intra-hour flexibility needs within the Assessment. Given the current timeline of the RA Enhancements process, Wellhead asks that the Assessment be expanded to evaluate intra-hour flexibility needs while the policy process proceeds.

III. While the CAISO’s methodology for deriving the flexible capacity requirements is sound, the CAISO should give £ a value greater than zero to address forecast errors resulting from variables beyond the CAISO’s control.

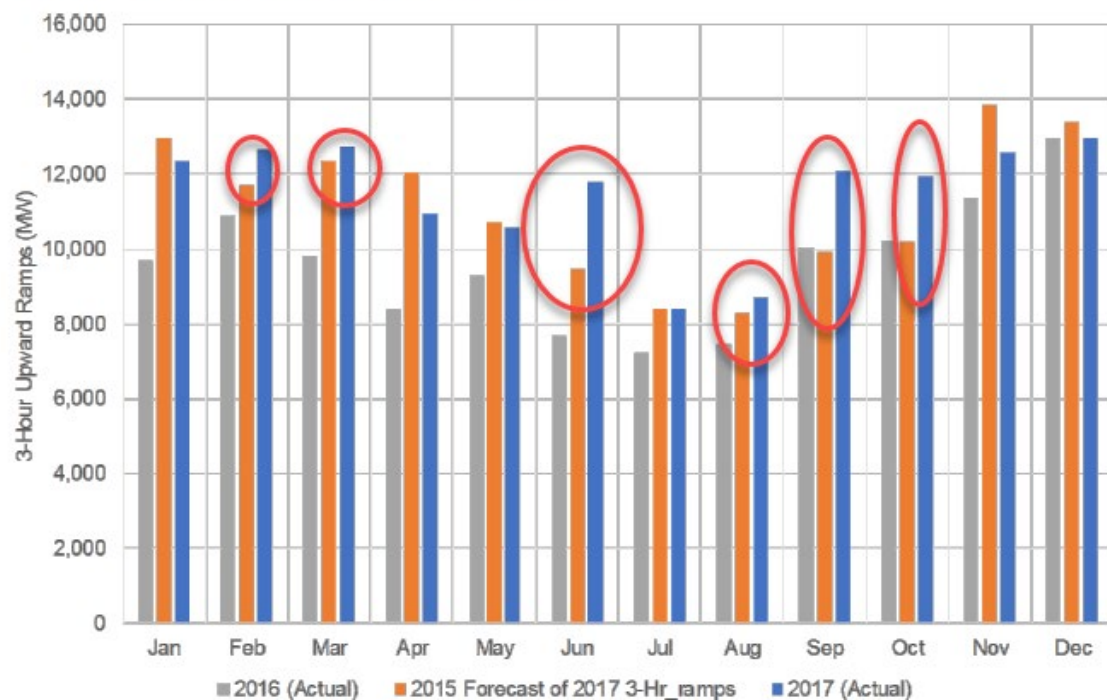
The actual flexible capacity needed in many months (as shown below, with circles added for emphasis²) has exceeded the forecasted need. The point is made that the CAISO should increase the Flexible Capacity Requirements to account for reasonably anticipated forecast errors. This

¹ CAISO, 2018-2019 Transmission Plan, dated March 29, 2019. Pg. 456.

² CAISO’s Flexible Capacity Requirements for 2020 through 2020 dated January 29, 2019 pgs. 17 and 18.

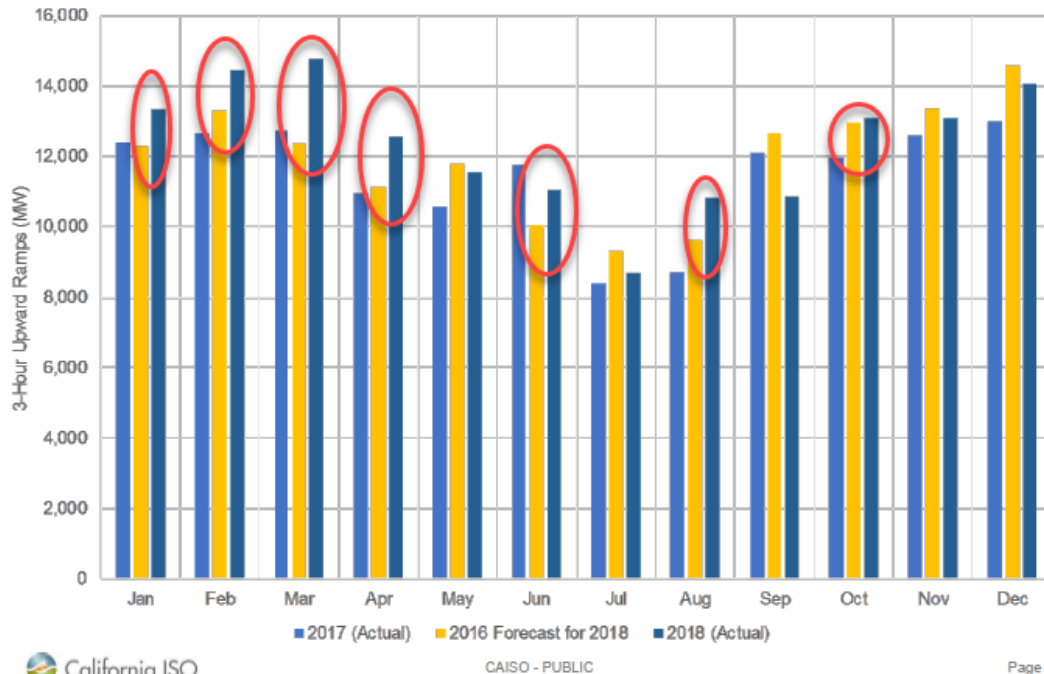
can be done by giving ϵ^3 (in the Flexible Capacity Requirements formula) a positive value sufficient to account for historical forecast errors. Wellhead suggests using the greatest forecast error of the prior full year to determine the value of “ ϵ ” for the year being forecasted. For example, Wellhead estimates that a deficiency of 1,712MW occurred in August of 2018. Therefore “ ϵ ” would equal 1,712 for purposes of calculating the 2020 flexible capacity requirements.

2015 forecast of 2017 3-hour upward ramps vs. actual 2017 3-hour upward ramps



³ The formula used to “calculate the ISO system-wide flexible capacity needs” includes “ ϵ ” which represents an “Annually adjustable error term to account for load forecast errors and variability methodology”. See Assessment at page 4.

2016 forecast of 2018 3-hour upward ramps vs. actual 2018 3-hour upward ramps



IV. The value given to ϵ should come from resources capable of addressing intra-hour flexibility needs.

In anticipation of the CAISO incorporating intra-hourly flexible needs into the Assessment, resources procured to account for ϵ should be “Fast-Flex” Resources with the following performance standards:

- i. A resource must achieve its PMAX from a non-generating condition in fifteen (15) minutes or less. This aligns well with the CAISO fifteen-minute market and one potential objective of the current FRACMOO initiative⁴.
- ii. Minimum ramps to PMAX per day – two (2).
- iii. Minimum uptimes of thirty (30) minutes or less. This assures that Fast Flex Resources can operate at PMAX and be useful for corrective capacity purposes, and, in the case of GHG-Producing resources not overstay their welcome, i.e.

⁴ CAISO’s Flexible Resource Adequacy Criteria and Must Offer Obligation – Phase 2, Second Revised Flexible Capacity Framework, dated April 27, 2018, Page 4.

GHG-producing resources will get out of the way of renewables when no longer needed.

- iv. Sustained operations at PMAX – duration capability of at least four (4) hours.
- v. The ability to return to a non-generating condition in 15 minutes or less.
- vi. Examples of potentially eligible resources include, but are not limited to, stand-alone battery storage, various other forms of storage (gravity, hydro, fast start units with either hydrocarbon or RNG fuels, fuel cells, 10-minute start enabled gas-fired units (Peakers), and various forms of hybrids that combine technologies to achieve Fast Flex Resources standards consistent with SB1136.

V. CONCLUSION

Evaluating intra-hourly needs and adding to the flexible capacity requirements to account for forecast errors will positively contribute to ensuring the grid remains safe and reliable. The CAISO should adopt the foregoing suggestions and incorporate them into the Flexible Capacity Needs Assessment.

Wellhead appreciates the opportunity to participate in this proceeding and looks forward to its continue participation.

Dated: April 18, 2019

Respectfully submitted,

/s/

Paul Z. Cummins, Vice-President
Wellhead Electric Company, Inc.
650 Bercut Dr., Suite C
Sacramento, CA 95811
Tel: (916) 447-5171
E-mail: pcummins@wellhead.com