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 2016 and 2017 Compliance Years

Rulemaking 14-10-010 (Filed October 16, 2014)

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REPLY COMMENTS

I. Introduction

Pursuant to the Assigned Commissioner and Administrative Law Judge's Phase 2 Scoping Memo and Ruling issued December 23, 2015 the California Independent System Operator Corporation (CAISO) submits these reply to comments on the CAISO's Local Capacity Requirements (LCR) and Flexible Capacity Requirements (FCR) studies. These reply comments specifically respond to issues raised by Pacific Gas & Electric Company (PG&E) and The Utility Reform Network (TURN).

II. Discussion

A. LCR Study

TURN and PG&E raise issues regarding (1) the CAISO's LCR process, (2) the LCR results for the Los Angeles (LA) Basin and San Diego areas and (2) the treatment of demand response resources in the LCR study. The CAISO responds to each of these issues below.

i. The LCR Study Process

As TURN points out, the CAISO posted its Draft 2017 LCR analysis on March 16, 2016 and hosted a stakeholder call on March 21, 2016. The draft results were subsequently removed from the CAISO's website when it became apparent that there were errors in the results. However, this did not "deprive" stakeholders of an opportunity to review the draft results before they were finalized. The CAISO posted its modified draft results again on April 11, 2016 and held another stakeholder call on April 14, 2016. Because the initial draft results had been

¹ The Draft LCR Report and Study Results posted on April 11, 2016 can be found on the LCR stakeholder process webpage: http://www.caiso.com/Documents/Draft2017LocalCapacityTechnicalReportApr112016.pdf.

removed from the website, the CAISO provided an extended two-week period for comments on the draft results, which concluded on April 28, 2016. No stakeholders provided substantive comments on the LCR report within the extended timeframe.²

Furthermore, as is apparent in TURN's subsequent comments in this proceeding, TURN was able to compare the initial draft results with the final results. The fact that TURN actually analyzed these results proves there was no prejudicial impact.

ii. LA Basin Area and San Diego Sub-Area Needs

The CAISO conducted two sensitivity analyses for needs in the LA Basin area and San Diego sub-area. There are two distinct circumstances that drove the need to study these sensitivities. The first circumstance is the potential peak shift associated with the impact of behind-the-meter solar generation which may understate the local peak area load in the LA Basin and San Diego sub-area. The CAISO specifically addressed the peak shift issue in the San Diego sub-area because it appeared to be the most significantly impacted on a year-over-year basis based on the critical contingencies that would affect this area. To address the potential peak shift the CAISO studied a sensitivity analysis with less contribution from rooftop solar generation during the hour of 6:00 PM when customer demand remains high. The amount of peak shift due to loads remaining high without the contribution of solar photovoltaic distributed generation at early evening hour (*i.e.*, 6:00 PM) is approximately 651 MW in the Southern California Edison Company service area, and approximately 228 MW in the San Diego metropolitan area.

Separately, the CAISO also analyzed a sensitivity in which limited use or unavailability of Aliso Canyon would affect delivery of gas to generating facilities in the LA Basin during summer peak load conditions. In an effort to help mitigate the Aliso Canyon gas storage constraints, the CAISO balanced the gas generation resource needs in the LA Basin and the San Diego sub-area to lessen the impact that the absence of Aliso Canyon has on the reliability of the electric transmission system in the LA Basin and San Diego area.

Both of these sensitivities represent possible scenarios that must be studied to ensure reliability. The peak shift issue presents a potential long-term reliability issue that may impact more local areas in the future. The CAISO will continue to study the potential peak shift in its transmission planning analyses and conjunction with demand forecast prepared by the California

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² The Office of Ratepayer Advocates provided timely comments that related to procedural concerns. PG&E provided substantive comments on April 29, 2016, after the close of the comment period.

Energy Commission. The Aliso Canyon impacts may be limited in time, if the Aliso Canyon facility returns to operational status. However, the CAISO recognizes that the outlook for this scenario is uncertain at this time, and the Aliso Canyon unavailability may continue to be an issue for some time. The CAISO will continue to monitor the status of the Aliso Canyon storage facility and any implications it may have on local reliability issues.

iii. LCR Study Treatment of Demand Response Resources

After the close of the stakeholder comment period and after the CAISO posted its final LCR study, PG&E filed stakeholder comments with the CAISO regarding the treatment of demand response resources. Because these comments were submitted after the CAISO posted its final results, no changes were incorporated in the final LCR study, though the CAISO did post a response to PG&E's comments on its LCR stakeholder process webpage.³ The CAISO believes that PG&E should raise this issue during the 2018 LCR process in order to ensure that its issues are addressed

As noted in CAISO's response to PG&E's stakeholder comments, the 2017 LCR base cases do not include demand response models in the PG&E area. PG&E and the CAISO are currently evaluating the provided DR models as well as the proper way of use for inclusion in the 2016-2017 TPP process. PG&E can identify as part of their resource selection the demand response resources that it believes address the local capacity requirement and it may be counted to the extent that the identified resources resolve studied contingencies. The new base cases will be utilized this year in the 2021 and 2026 Long-Term LCR studies as well as the 2018 LCR studies. Separately, the CAISO has begun consultation on additional issues related to the use of demand response, in particular the necessary characteristics for slow response products to be dispatched on a pre-contingency basis to meet local capacity needs. In that process, the CAISO looks forward to cooperating with PG&E and other stakeholders to determine how to best utilize demand response resources for local capacity concerns.

B. FCR Study

PG&E and TURN raise two concerns regarding the FCR study: (1) the impact of certain non-Commission jurisdictional load serving entity (LSE) requirements not being included and (2) the accuracy of certain figures in the study.

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³ http://www.caiso.com/Documents/CommentsandISOResponsesonFinal2017LocalCapacityResults.pdf.

i. Impact of Missing Data from Non-Jurisdictional LSEs

With respect to the first issue, PG&E correctly notes that the CAISO's FCR assessment lacks wind and solar data from a total of eight non-Commission jurisdictional LSEs. The FCR study was not eligible to be re-run, because the CAISO was not able to obtain the incomplete information and re-run the study prior to May 1, as required by CAISO tariff Section 40.10.1.2.1(b).

The magnitude of the solar and wind resources not included in the study is very small in comparison to overall flexible capacity requirements. The CAISO estimates that the total missing solar and wind resources account for less than one percent of the entire CAISO system wind and solar resources in 2017. Due to the small magnitude of the missing data, the lack of information does not present an overall reliability issue. The impact on Commission jurisdictional LSEs is very limited due to both the small magnitude of the information not included in the study and the nature of the flexible capacity methodology. To the extent the missing information has any impact on Commission jurisdictional LSEs, it would likely only slightly modify the identified Maximum Three-Hour Net-Load Ramps and Maximum Secondary Three-Hour Net-Load Ramps. The Commission jurisdictional LSE FCR allocation would not be significantly affected.

The CAISO shares PG&E's concerns regarding the failure of certain LSEs to submit required information for the FCR study. In the future, the CAISO will seek to proactively identify non-compliant LSEs and obtain information in a timely manner to enable it to run the assessment with all relevant data.

ii. Corrected Figure 6

TURN correctly notes that Figure 6 of the FCR report was not correctly updated to reflect changes made in response to Energy Division staff's stakeholder comments. The CAISO has provided an updated Figure 6 below.

Total Flexible Capacity Needed in Each Category Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

500

3,066

6,429

■ Super-Peak Flexibility

496

3,042

6,380

576

3,535

7,414

576

5,141

5,797

749

6,687

7,541

729

6,514

7,345

Updated Figure 6

The CAISO will amend its posted FCR report to correct Figure 6.

673

6,008

6,775

661

5,903

6,656

■ Peak Flexibility

602

3,694

7,747

547

3,355

7,037

III. Conclusion

■ Super-Peak Flexibility

■ Peak Flexibility

■ Base Flexiblity

16,000 14,000 12,000 10,000

> 8,000 6,000 4,000 2,000 0

Jan

706

6,300

7,104

642

5,733

6,465

■ Base Flexiblity

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The CAISO appreciates this opportunity to provide reply comments and requests that the Commission approve the LCR and FCR reports as the basis for establishing 2017 procurement obligations.

Respectfully submitted,

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