

2016-2017 Transmission Planning Process: Characteristics of Slow Response Local Capacity Resources Stakeholder Call 4/26/16

Submitted by	Company	Date Submitted
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Background

The California Independent System Operator (CAISO) conducts its annual transmission planning process (TPP) to identify potential system limitations as well as opportunities for system reinforcements that improve reliability and efficiency. The TPP product is the ISO Transmission Plan, which provides an evaluation of the ISO control grid, examines conventional grid reliability requirements and projects, summarizes key collaborative activities and provides details on key study areas and associated findings. The CPUC’s long-term procurement plan process coordinates closely with the CAISO’s TPP each year. The CAISO has initiated an examination of the ability of specific resources to meet dispatch parameters for reliability, including specifically “fast” and “slow” resources, under the auspices of the TPP.

Comments

The CPUC Staff appreciates that the CAISO has initiated this particular discussion, focused on the means by which resources of various dispatch times could meet certain dispatch requirements in local areas. These comments focus solely on the stakeholder call that the CAISO held on Tuesday, April 26th, and the accompanying slide presentation.

Forum

At the beginning of the stakeholder call, CAISO staff mentioned that other issues around the topic of local resource adequacy requirements will be addressed in another forum. CPUC Staff understands that CAISO is conducting this study as part of the TPP because one of the purposes of local capacity resources are to offset a potential need for greater transmission resources for local areas. The CPUC staff is concerned, however, that conducting this review within the TPP is not the appropriate forum in which to resolve local RA issues, especially because it is not clear how the results of this study will be used to do more than plan for transmission needs, given that the purpose of the TPP is to inform transmission needs.

At the beginning of the stakeholder call on April 26, a CAISO staff member mentioned that the “other issues” around the topic of response times for local resources will be addressed elsewhere. CPUC staff appreciates this mention, and recommends that the CAISO establish a stakeholder process that will address all issues associated with this topic, and in a comprehensive manner. Furthermore, when such a stakeholder initiative begins, the connection between this study’s results and that process should be clearly explained in an issue paper, and the results of this study should be incorporated into that initiative. Finally, CPUC staff requests that the Schedule provided on Slide 9 of the April 26 slide presentation include detail as to when the results of this study will feed into a larger stakeholder process, and operational rule development.

Terminology

CPUC Staff wishes to note that the terminology in the slide presentation¹ for the April 26th stakeholder call is not consistent with adopted terminology in CPUC proceedings. The CPUC does not use the terms “fast” and “slow” response to refer to Demand Response programs. While these terms may have been used in earlier TPP studies, the CAISO should provide specific definitions of these terms as used in the TPP so that stakeholders may comment on them or propose alternatives.

Missing Details

For each of the two study method options presented on the call, we request that these study options be described in more detail, in a public document provided for review and comment. At a minimum, these detailed descriptions should include:

- 1) A clear definition of what specific use-limited, “slow response” resources will be evaluated – including, at a minimum, fuel type, resource type, nature of use limitation and current start-up time.
- 2) Specific definition of the resource in each Local Capacity Area (LCA), including the actual DR program name.
- 3) Description of the source and vintage of data used for both study methods.
- 4) “(S)ignificant upward availability adjustments to the minimum requirements may be needed to account for some of these factors.”(Slide 7, penultimate bullet). We request more detail as to the criteria that will be used to determine whether adjustments to availability are necessary in the first instance. We further request detail as to the actual availability adjustment made to each resource.

Further, in the interest of transparency and formation of consistent regulations, we request that the spreadsheets for both study options, with all data, be provided confidentially to the CPUC for review.

Slow Response Resources for Local Capacity

¹ “Characteristics of Slow Response Local Capacity Resources – Study Plan”. Powerpoint presentation for stakeholder call held on April 26, 2016.

The CAISO's proposed study would calculate, for different Local Capacity Areas (LCAs), the amounts of pre-contingency positioning for slow response resources that would keep resulting hourly net loads below certain specified thresholds that could have reliability implications. Magnitudes of this calculated use of "slow response" resources would be quantified in terms of MW, duration and frequency of calls. This could reduce the amount of "fast response" local capacity resources needed to achieve a given level of reliability.

However, it seems that slow response resources could *also* reduce the need for fast response resources even without prepositioning. This could occur if any of the fast response resources are energy limited (which seems likely), and if slow response resources could respond in time to reduce the needed duration of response from the energy-limited fast response resources. For example, a particular set of energy-limited fast response resources might only be able to provide 50 MW over the required 4 hour duration of response but might be able to provide 100 MW for 2 hours, if they could then be replaced by slow response resources. CPUC Staff request that the CAISO consider and report the feasibility of such a mechanism, and conduct applicable studies if warranted.

DR Program Assumptions

The final bullet on Slide 7 of the CAISO's presentation states the following:

"DR contracts typically are limited to one year, so future availability may be impacted as use increases. This is a concern in particular in those areas where DR is used to avoid investment in transmission or more dependable local capacity resources."

This assumption is mistaken. To date, DR program portfolios of the investor owned utilities (IOUs), and their associated budgets and program tariffs, are approved by the CPUC on a three year basis. The DR programs that are currently in place were actually originally funded in the 2012-14 program cycle, and have now been extended for two years, through the close of 2016. This means that these programs have been in existence for 5 years. Furthermore, in Rulemaking (R.) 13-09-011, longer program cycles (in excess of three years) may also be considered for programs starting in 2018.

CAISO staff has explained to CPUC Staff that the bullet reflects its understanding of the program participation requirement for an individual customer. To this latter point, it is generally true that customers are not required to sign up for a program in excess of one year. However, the DR provider can sign up new customers for a particular program to replace those that leave, and it is also reasonable to assume that a customer may leave one DR program only to immediately sign up for another DR program, provided by either a third party DR provider or a utility. In either case, the resource is no less reliable from the perspective of the grid operator, and should not be depicted as such. Further, as more DR is integrated into the CAISO market, it is reasonable to assume that the DR provider, be it a third party or a utility, will be even more motivated to ensure that the capacity it offers into the market is reliable and consistent.