The California ISO commissioned this report to address concerns about the accuracy of the ISO’s current methodology for measuring supply side demand response resource performance. The goal of this analysis was to identify and test an option for measuring demand response resource impacts on grid operations, particularly during extreme stress on the power system. Specifically, Recurve tested and refined open source comparison group methods to evaluate demand response impacts, focusing analysis on the August 2020 heatwave events. The report also explores ways to further improve the methodology for correctly assigning real time performance value.

The attached report details Recurve’s methodology, analysis, and results for several demand response providers participating in the study.

Based on the findings on this report, the ISO is able to confirm that the FLEXmeter methodology is a tariff-compliant option that demand response providers can use to settle ISO market dispatches. The report also provides recommendations for strengthening its control group business practice specifications. Appendix A to the attached report provides detail on Recurve’s FLEXmeter methodologies and the current ISO Tariff control group methodology.

The report’s updated baselining methodology together with the comparison group selection and adjustment process offer reliable and consistent demand response resource performance assessment, particularly in extreme weather situations like August 2020.

As the independent market operator, ISO seeks to settle demand response transactions transparently, appropriately, and fairly for their supply-side performance value. The FLEXmeter methodologies described in this report would allow the ISO to fulfill that objective and consistent with the ISO Tariff. The study results support consideration of its use in other performance-based assessments of demand response.

The ISO is committed to working with the California state agencies to overcome the barriers of data access and handling that enable development of quality comparison groups if it is found to be preferred. We look forward to supporting the State agencies and stakeholders in considering the use of a clear and transparent performance methodology not only for correctly assessing real time performance for demand response, but one that can be consistency applied across all agencies.

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