

Flexible Demand Resources are Key to the Future of California's Grid!



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Flexible Demand Resources Lack Compensation

As illustrated by the August 2020 outages, our current energy grid requires significantly greater levels of flexible demand resources (e.g. demand response, energy efficiency, and other distributed energy resources). While many resources provided valuable demand reduction, and even more stood ready but were unable to participate, current rules preclude resources from monetizing demand reduction. Moreover, as California continues to lead in electrifying buildings and transportation –alongside deploying much higher levels of renewable generation– flexible demand resources take on even greater importance. **It is imperative that we develop and implement a market that appropriately values and compensates flexible resources for California's current and future energy demands.** We need to move from a carbon-centric world where supply is expected to be available to meet whatever energy demand requires, to a world where energy use can be encouraged to more closely follow the supply available from a carbon-free grid.

Regulatory Hurdles Preclude Full Deployment

While the technology that drives demand response has evolved greatly over the last 15 years, the regulatory framework governing demand response remains rooted in the past. Procurement limits, slashed program budgets, and outdated cost-effectiveness requirements have artificially limited the availability of flexible resources. These regulatory hurdles can and must be immediately overcome through a number of regulatory policy reform efforts:

- Allow behind-the-meter resources to fairly compete for resource adequacy opportunities
- Create a framework to harness the flexibility in customer loads to integrate clean resources

Flexible Resources Drive Economic Benefit

In addition to obvious grid benefits, flexible resources provide invaluable bill savings for Californians already under incredible strain from the COVID-19 health and economic crisis. As

just one example, during the August 2020 heat storm, one demand response company alone paid its customers more than \$1.3 million to save more than 1 Gigawatt Hour of energy. Resolving regulatory hurdles maximizes the volume of energy programs to help Californians.

Legislative Reform is Critical

- Flexible loads and behind-the-meter (BTM) distributed energy resources (DERs) must be prioritized as essential elements of an integrated, reliable energy grid.
- Require CPUC, CAISO and CEC leadership to embrace and champion demand-side resources as a pathway to both reliability and meeting climate goals.

Immediate actions the Legislature can take:

- Set near-term enforceable, peak demand procurement targets to ensure that greater levels of Energy Efficiency (EE) and Demand Response (DR) resources are available to meet grid and resilience needs by summer 2022.
 - No less than 8% of peak loads met by DR/DER, growing to 16% by 2030.
 - Emergency programs should be allowed to grow from current level of 2 to 4%.
 - California should elevate the role of DERs by carving out a separate space, making up 10% of total capacity.
- Require the CPUC to eliminate DR RA procurement caps in the RA proceeding (CPUC recently adopted an 8.3% per-Load Serving Entity DR cap despite no record of over-procurement) and allow DR/DER to qualify for local RA.
- Restore DRAM budget to 2018 levels (\$27 million).
- Require the CPUC and CAISO to streamline and standardize resource counting, qualification, and measurement to maximize resources available to meet Resource Adequacy and grid needs in a cost effective carbon free method.
 - No Load Impact Protocols, Add new baselines options – 5 in 10; FSL
 - Allow hybrid DR/DER resources to export to the grid
 - Notably, the cost of removing these barriers is low compared to investment in power plants, battery storage, and other supply-side remedies
- Require the CPUC to consider DERs that have fuel switched to RPS-eligible fuels to participate in DR/DER programs.

Longer Term – Legislative orders to agencies for ongoing action:

- Encourage the CPUC, CAISO and CEC leadership to embrace and champion demand-side resources and flexible load as a pathway to both reliability and meeting climate goals

- Prioritize technologies that enable flexible energy use (e.g. smart thermostats, buildings, process/pumping loads, EV charging equipment) and behind-the-meter (BTM) distributed energy resources (DERs) as essential elements of an integrated, reliable energy grid
- Create rate structures that encourage customers to shift the time of their energy use
- California's energy market needs to provide clear signals of optimal behavior to DERs, and compensate flexible loads for the grid value they provide
- Transfer administrative authority for third-party flexible load solutions from CPUC to CEC to create an integrated statewide DR deployment capability that is tied to reliability needs and meeting climate goals.

Greg Wikler, Executive Director • gwikler@cedmc.org • www.cedmc.org