

CONCURRENCE IN SENATE AMENDMENTS

AB 740 (Harabedian)

As Amended September 4, 2025

Majority vote

SUMMARY

Requires the California Energy Commission (CEC) to adopt a virtual power plant (VPP) deployment plan by January 1, 2027. The bill specifies the process for the CEC to generate the plan and outlines the priorities of the plan. The bill also requires the CEC to include the VPP deployment plan in its integrated energy policy report (the IEPR)

Senate Amendments

- 1) Makes the CEC requirements of the bill subject to available funding.
- 2) Changes the date of the publication of the plan from November 1, 2026 to the next update of the biennial integrated energy policy report after January 1, 2027.

COMMENTS

VPPs consist of a network of decentralized, medium scale power generating units and flexible loads, such as batteries, EVs, smart appliances, and flexible heating and cooling loads that can be effectively managed to the benefit of grid operators. A primary function of VPPs is to orchestrate aggregates of distributed energy resources (DERs). DERs are located on or near the site of end-use and are typically connected to the distribution grid. They fall into three categories: demand flexibility, electricity generation, and storage.

In 2020, the Federal Energy Regulatory Commission released Order No. 2222, which enabled distributed energy resources to better participate in electricity markets run by regional grid operators, primarily mediated by a distributed energy resource aggregator (a VPP or the utility itself). Despite this federal permission structure, how virtual power plants should integrate into CAISO is still unclear. In addition, there remains ambiguity as to how aggregators are classified relative to utilities, how they will be regulated by the CPUC, and how these programs can be deployed at scale.

In 2021, the CPUC approved the creation of the Emergency Load Reduction Program (ELRP) as a pilot program for a demand response approach to help avoid rotating outages during peak summer electricity use. ELRP incentivizes load reduction and is administered by the three IOUs. Virtual Power Plants are permitted to participate in this program.

The CEC established a Load-Shift goal of 7,000 MW by 2030 and has been seeking solutions to meet this goal. In 2022, AB 205 passed, establishing the Demand Side Grid Support (DSGS) program administered by the CEC. The goal of the DSGS program is to offer incentives to electric customers that provide load reduction and backup generation to support the state's electrical grid during extreme events, reducing the risk of blackouts. The current DSGS program guidelines includes two VPP pilot programs.

In 2023 the CEC established load management standards that require utilities to develop and standardize the communication of time varying rates, intending to allow third parties to participate in demand response and VPPs. In 2024, the CEC released the Virtual Power Plant

Approaches for Demand Flexibility solicitation, which provides \$15,000,000 in grants to fund demonstrations of community-based VPP approaches that increase demand flexibility.

According to the Author

"As Californians face high energy bills, virtual power plants offer a simple solution - using clean energy already in our homes and businesses to stabilize the grid, lower costs, and strengthen our future. I'm proud to partner with Advanced Energy United, Environment California, and The Climate Center to make energy cleaner and more affordable in our state."

Arguments in Support

The bill is supported by a number of environmental organizations, solar industry organizations and trade groups, several building industry associations, as well as the Linde Center for Science, Society and Policy at Caltech. A coalition of environmental and clean energy advocacy groups writes that "VPPs are one key tool of load flexibility—the ability to shift electricity consumption away from times when electricity is expensive, scarce, and highly polluting towards times when it is inexpensive, plentiful, and clean." The building industry associations write in support arguing that, "this bill will empower households to reduce energy expenses while enhancing grid reliability and clean energy adoption...A recent Brattle Group Report found widespread VPP adoption could save Californians \$750 million annually."

Arguments in Opposition

No opposition on file.

FISCAL COMMENTS

According to the Assembly Committee on Appropriations, this bill would create significant new analytical work for the CEC; therefore, it will need significant new resources for a limited time, likely in the hundreds of thousands of dollars.

The CEC estimates one-time costs of \$191,309 and ongoing costs of \$114,976 annually (Energy Resources Program Account [ERPA]) for one temporary and one permanent position to execute the required analysis within less than a year. The permanent position would continue in future fiscal years. The CEC notes an ongoing structural deficit within the ERPA fund, its main operational funding source.

VOTES:

ASM UTILITIES AND ENERGY: 18-0-0

YES: Petrie-Norris, Patterson, Boerner, Calderon, Chen, Davies, Mark González, Harabedian, Hart, Irwin, Kalra, Papan, Rogers, Schiavo, Schultz, Ta, Wallis, Zbur

ASM APPROPRIATIONS: 14-0-1

YES: Wicks, Arambula, Calderon, Caloza, Dixon, Elhawary, Fong, Mark González, Hart, Pacheco, Pellerin, Solache, Ta, Tangipa

ABS, ABST OR NV: Sanchez

ASSEMBLY FLOOR: 79-0-0

YES: Addis, Aguiar-Curry, Ahrens, Alanis, Alvarez, Arambula, Ávila Farías, Bains, Bauer-Kahan, Bennett, Berman, Boerner, Bonta, Bryan, Calderon, Caloza, Carrillo, Castillo, Chen, Connolly, Davies, DeMaio, Dixon, Elhawary, Ellis, Flora, Fong, Gabriel, Gallagher, Garcia,

Gipson, Jeff Gonzalez, Mark González, Hadwick, Haney, Harabedian, Hart, Hoover, Irwin, Jackson, Kalra, Krell, Lackey, Lee, Lowenthal, Macedo, McKinnor, Muratsuchi, Nguyen, Ortega, Pacheco, Papan, Patel, Patterson, Pellerin, Petrie-Norris, Quirk-Silva, Ramos, Ransom, Celeste Rodriguez, Michelle Rodriguez, Rogers, Blanca Rubio, Sanchez, Schiavo, Schultz, Sharp-Collins, Solache, Soria, Stefani, Ta, Tangipa, Valencia, Wallis, Ward, Wicks, Wilson, Zbur, Rivas

UPDATED

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