

SENATE THIRD READING

SB 541 (Becker)

As Amended September 5, 2025

Majority vote

SUMMARY

Directs the California Energy Commission (CEC) to undertake several actions to promote shifting electricity use ('load') away from peak periods to times of lower demand, a practice generally known as "load shifting."

Major Provisions

- 1) Directs the CEC, as part of its regularly published Integrated Energy Policy Report (IEPR), and in consultation with the California Public Utilities Commission (CPUC) and the California Independent System Operator (CAISO), to take various actions to determine, among other things, the cost-effectiveness, potential of, and barriers to, non-emergency load shifting.
- 2) Directs the CEC, by July 1, 2028, and every other year thereafter, to analyze and publish on its website the amount of load shifting each retail supplier of electricity achieved in the prior calendar year.
- 3) Requires the CEC to establish standards for estimating the amount of load shifting for each type of load flexibility effort undertaken by retail suppliers. Requires periodic updates of these standards.
- 4) Specifies that the provisions of the bill do not impose obligations or mandate procurement of load-shifting technologies.
- 5) Defines "load shifting" to explicitly exclude backup generators powered by fossil fuels, or any other generation resource that is not renewable or zero-carbon.

COMMENTS

"Load shifting" generally means moving electricity use ("load") from periods of high demand to times of lower demand. California relies on load shifting to support both electric reliability and clean energy goals. A common example is time-varying rates: many utilities charge higher prices during peak hours—for instance, 4:00 to 8:00 p.m. in summer—when demand is expected to be highest. Customers are encouraged to adjust their usage in response, shifting activities to cheaper, off-peak hours. When effective, these mechanisms ease stress on the grid, reduce the cost of power generation, and cut pollution, since the resources used to meet peak demand are often the most expensive and most polluting.

As mandated by statute (SB 846, Dodd, Chapter 239, Statutes of 2022), the CEC developed a goal for shifting load to reduce net peak electrical demand (the greatest amount of demand for electricity, minus electricity supplied by wind and solar resources) and policies to increase demand response and load shifting. To do so, CEC issued the "SB 846 Load Shift Goal Commission Report" in May of 2023. The CEC set a system-wide load-shift goal of 7,000 megawatts (MW), which CEC described as "aspirational but achievable with robust policy

support." (For reference, typical peak summertime demand on the electrical system managed by CAISO is about 45,000 to 50,000 MW.)

The CEC cautioned in its SB 846 Report that the proposed statewide load-shifting goal is not meant to imply that California should pursue targets without first evaluating the cost-effectiveness of the specific resources or programs involved. The goal is set at the statewide level and was not intended to establish sub-goals for individual program types, sectors, or jurisdictions.

This bill does require the CEC to evaluate the cost-effectiveness of specific load-shifting programs and other types of load-shifting interventions. However, it also requires the CEC to publish – on a supplier-by-supplier basis – the amount of load shifting each retail electricity provider achieved in the prior year, relative to its load-shifting potential, as determined by the CEC. According to the author, this is not about setting individual sub-goals for each utility or similar entity, but about creating accountability for electricity suppliers to pursue cost-effective load shifting. Some electric utilities dispute this, with the California Municipal Utilities Association noting the bill creates "significant burdens...and could undermine their [the utilities'] ability to develop cost-effective, locally tailored load management strategies."

According to the Author

According to the author: "We need to improve electricity affordability while also providing power faster to support new housing, EV chargers, data centers, and other economic growth. The good news is that our electricity system has a lot of spare capacity – 99% of the time. It is only a few peak hours, less than 100 per year, where we struggle to meet demand. A recent study from Duke estimated that CA has almost 6000 MW of capacity for new load outside of the top 1% of hours. That's enough to power 3M homes or 30 massive new data centers. If we can reduce load during those peak hours, by shifting some demand to other times, then we can unlock all that spare capacity to support housing and EVs and data centers much faster, and at much lower cost, than building more capacity to serve even higher peaks. SB 541 attempts to create accountability for our electricity suppliers to seek cost-effective load shifting by having the CEC divide its 7000 MW load shift goal among suppliers and track progress. It also directs the PUC to create more transparency about where load-shifting would help reduce constraints in the distribution system and to require and enable IOUs to develop load flexibility in constrained distribution areas more proactively so that we can support new loads faster and get more out of the poles and wires we've already paid for."

Arguments in Support

The bill is supported by clean energy industry groups and associations and the Natural Resources Defense Council, the latter of which expresses support for load-shifting, in general, and asserts the bill "strengthens implementation of the state's load shifting target, which will ease the deployment of zero-emission energy and create a more resilient electricity grid."

Arguments in Opposition

The bill is opposed by load-serving entities, such as public and private electricity providers. The California Community Choice Association (CalCCA) asserts that the gap between load-shifting potential and actual load shifting "is not due to a lack of motivation or effort – it is due to technical barriers, regulatory uncertainty, and market dynamics such as voluntary customer participation."

FISCAL COMMENTS

According to the Assembly Committee on Appropriations, this bill creates significant new analytical, administrative, and regulatory workload for the CEC, with ongoing annual costs likely in the high hundreds of thousands of dollars, at least. The Appropriations Committee also notes the CEC's main funding source faces an ongoing structural deficit. Finally this bill may also create potentially significant costs for the CPUC to consult with the CEC.

VOTES**SENATE FLOOR: 27-10-3**

YES: Allen, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Cortese, Durazo, Gonzalez, Grayson, Laird, Limón, McGuire, McNERNEY, Menjivar, Padilla, Pérez, Rubio, Smallwood-Cuevas, Stern, Umberg, Wahab, Weber Pierson, Wiener

NO: Alvarado-Gil, Choi, Dahle, Grove, Jones, Niello, Ochoa Bogh, Seyarto, Strickland, Valladares

ABS, ABST OR NV: Hurtado, Reyes, Richardson

ASM UTILITIES AND ENERGY: 13-2-3

YES: Petrie-Norris, Boerner, Calderon, Mark González, Harabedian, Hart, Irwin, Kalra, Papan, Rogers, Schiavo, Schultz, Zbur

NO: Davies, Ta

ABS, ABST OR NV: Patterson, Chen, Wallis

ASM APPROPRIATIONS: 11-4-0

YES: Wicks, Arambula, Calderon, Caloza, Elhawary, Fong, Mark González, Ahrens, Pacheco, Pellerin, Solache

NO: Sanchez, Dixon, Ta, Tangipa

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