Date of Hearing: August 20, 2025

ASSEMBLY COMMITTEE ON APPROPRIATIONS
Buffy Wicks, Chair
SB 541 (Becker) – As Amended July 17, 2025

Policy Committee: Utilities and Energy Vote: 13 - 2

Urgency: No State Mandated Local Program: Yes Reimbursable: No

SUMMARY:

This bill requires a number of analytical and regulatory actions to encourage the shift of electricity demand (referred to as "load") from periods of peak demand to periods of lesser demand, generally referred to as "load shifting."

Specifically, this bill, among many other things:

1) Directs the California Energy Commission (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), as directed, to take various actions to determine, among other things, the cost-effectiveness and potential of, and barriers to, non-emergency load shifting.

2) Directs the CEC, by January 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 and the amount of load shifting each retail supplier is aiming to achieve in future years in comparison to each retail supplier's load-shifting potential, as determined by CEC.

3) By January 1, 2028, requires the CPUC to develop a strategy to reduce the total distribution infrastructure investments required to meet long-term electricity load growth by enabling large electrical corporations (IOUs) to leverage, where cost-effective, distributed resources and load shifting to increase the utilization of existing distribution and transmission infrastructure, increase the effective load-hosting capacity of existing distribution and transmission infrastructure or provide bridging solutions to enable faster energization of new loads.

4) In support of the strategy described above, requires the CPUC to require each IOU to (a) make data available to the public that quantifies the potential for increased utilization of segments of its distribution grid by reducing peak load, as specified, and (b) implement programs, rate designs or other incentives identified by the CPUC to enable the development of cost-effective load-shifting capacity or other peak demand reduction in constrained distribution areas.

5) Requires each IOU to consider available load-shifting capacity or other peak demand reduction in its annual distribution system planning and to rely on this capacity or demand reduction if certain conditions are met.

FISCAL EFFECT:

This bill creates significant new analytical, administrative and regulatory workload for both CEC and CPUC, with ongoing annual costs likely in the high hundreds of thousands of dollars, at least.

1) CEC anticipates the need for $656,000 ongoing for three permanent positions to:

   a) Lead development of rules and guidelines for load shift credit accounting, manage data reporting process for retail suppliers and track the state's progress toward increased load flexibility.

   b) Facilitate interagency coordination and lead strategy development efforts.

   c) Evaluate the ability of load flexibility resources to qualify for or reduce a load-serving entity's resource adequacy obligations.

   CEC notes its main funding source, ERPA, faces an ongoing structural deficit and warns it, therefore, may not be an appropriate fund source to support the implementation of this bill.

2) The CPUC describes the work this bill creates for it as developing a strategy to reduce distribution infrastructure investments through cost-effective deployment of distributed resources and load shifting; directing IOUs to implement new programs and rate designs and overseeing their implementation; integrating new data into planning processes; and coordinating closely with CEC and CAISO.

   The CPUC estimates costs of approximately $1.4 million (Public Utilities Commission Utilities Reimbursement Account), as follows: $911,000 for three permanent senior regulatory analysts and $257,000 for one three-year limited-term administrative law judge, and $480,000 for outside consultants, hardware and staff training, including modeling capacity and updated avoided cost studies.

COMMENTS:

1) **Purpose.** The author intends this bill to shift electric load from times of peak demand to times of lesser demand, thereby making more efficient and more cost-effective use of the electricity transmission and distribution systems. The result, the author asserts, will support "housing and EVs and data centers much faster, and at much lower cost, than building more capacity to serve even higher peaks."

2) **Background.** Load-shifting refers, very generally, to the movement of demand for electricity ("load") from a period of high demand to a period of low demand. The state relies on load shifting to further the state's electric reliability and clean energy goals. As one simple example, many of the state's electrical utilities offer customers rates for electricity that vary with the time of day. Under such time-varying pricing, the utility charges higher electricity prices during the hours of the day—4:00 p.m. to 8:00 p.m. in the summer months, for example—for which the utility anticipates relatively higher demand for electricity. The hoped for result is that customers will respond to these price signals and put off uses of electricity to hours when electricity costs and demand are lower. Such load-shifting mechanisms, if successful, reduce stress on the electrical system. The mechanisms may also

lower both the cost of generating electricity and the pollutants produced by it, since the energy resources used during times of highest demand also tend to be the most expensive and the dirtiest.

In keeping with state law, 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.) As noted in other committee analyses of this bill, CEC cautioned in the report:

> The proposed goal is not intended to suggest that the state should pursue these targets without the evaluation of the cost-effectiveness of specific resources or programs that would contribute to the goal…The load-shift goal is set at the statewide level and does not intend to set subgoals for specific program types, sectors, or jurisdictions.

This bill, among other things, directs CEC publish the amount of load shifting each retail supplier of electricity achieved in the prior calendar year and the amount of load shifting each retail supplier is aiming to achieve in future years in comparison to each retail supplier's load-shifting potential, as determined by CEC. The author describes this not as setting load-shifting subgoals for each electric utility and similar such entity. Rather, the author characterizes the bill as attempting to "create accountability for our electricity suppliers to seek cost-effective load shifting."

3) **Support and Opposition.** 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."

   The bill is opposed by load serving entities.

   The statewide and regional associations representing the state's municipal utilities (also known as publicly owned utilities, or POUs), describe the bill as potentially "creating significant burdens for POUs and could undermine their ability to develop cost-effective, locally tailored load management strategies." They go on to write:

   > POUs are governed by locally elected or appointed boards and are not subject to California Public Utilities Commission (CPUC) jurisdiction. This local governance structure allows POUs to design demand management programs that are cost-effective, community-driven, and responsive to regional needs. SB 541 risks undermining this framework…While load shifting is important, we don't believe it is efficient or cost-effective to require public utilities to achieve a load shifting target that may not be aligned with a public utility's own priorities and cost-effective approaches to achieve load shifting.

The California Community Choice Association (CalCCA) similarly opposes the bill, asserting 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." CalCCA warns this bill:

> would impose significant additional work on [CEC] staff, at either an increased cost or at the expense of existing Commission workload, without delivering any benefit or helpful analysis. Given that the state is facing an electric affordability crisis and the CEC's main operating fund, the Energy Resources Programs Account (ERPA) is facing a structural deficit, CalCCA does not believe the CEC should be assigned a significant body of new work that will not provide any affordability or climate benefits.

Similarly, the state's three largest IOUs—Pacific Gas and Electric Company, San Diego Gas & Electric Company and Southern California Edison Company—also oppose the bill, unless it is amended, and generally see no need for it, though they affirm their commitment to supporting distributed energy resources and load-shifting goals.

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