



June 12, 2024

Assembly Member Lori Wilson
Chair, Assembly Transportation Committee
1020 N Street, Suite 112
Sacramento, CA 95814

Re: SB 59 (Skinner) – COSPONSOR SUPPORT

Dear Chair Wilson,

The Climate Center and Union of Concerned Scientists are proud cosponsors of SB 59 (Skinner), which authorizes the California State Air Resources Board (CARB) — in consultation with the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) — to require any weight class of battery electric vehicle (EV) to be bidirectional-capable, if it determines there is a sufficiently compelling beneficial bidirectional-capable use case.

In most EVs, electricity only flows one way, from the power source to the EV battery when the EV is plugged in to charge. In bidirectional vehicles, electricity can flow both ways, allowing an EV owner to utilize the power from the vehicle battery as an energy source. Bidirectional charging makes it possible to tap into the vast, largely-untapped energy storage capacity of the batteries in electric vehicles.

Existing California policy already calls for all sales of new, light duty passenger vehicles and school buses to be zero-emission vehicles by 2035. SB 59 takes the next step in EV policy towards a future in which current, once-in-a generation investments in electric vehicles could also help build a more resilient and reliable electrical grid. The CEC estimates that California will have 8 million EVs on the road by 2030 and 15 million by 2035- collectively, these vehicles hold a significant amount of battery storage.

With bidirectional capability, EVs can:

Lower costs for consumers: Californians are dealing with rapidly increasing electricity costs. Bidirectional EVs can be used by vehicle owners to reduce their electricity costs. Bidirectional EVs can also be used by grid operators to reduce the cost of service for all customers. The Electric Power Research Institute has estimated that vehicle-grid integration could [save California \\$1 billion annually](#)¹, and a recent [Brattle Group CA study](#)² noted that there is massive technical potential associated with discharging the batteries to provide electricity to the power grid when it is valuable.

Increase resilience to climate extremes: EVs can provide emergency [backup power](#)³ as climate change contributes to more extreme weather events and power outages. This approach is vastly preferable to continued reliance on thousands of polluting fossil fuel backup generators and is much cheaper per kWh of storage than stationary battery storage.

Bolster grid reliability: EV batteries can [support the grid](#)⁴ during peak demand. On September 6, 2022, California narrowly avoided disastrous power outages during an extreme heat event. Power outages can become a thing of the past if policymakers take advantage of the vast energy storage assets sitting unused most of the time in electric vehicles.

Reduce climate pollution: Bidirectional EVs can [displace the need](#)⁵ for methane gas generation and other polluting fuels. They can reduce demand for fossil fuel peaker plants — which are commonly located in disadvantaged communities — in the evenings and when the grid is stressed.

We urge you to support SB 59, which charts a course towards future utilization of electric vehicles as foundational assets in building a more affordable, resilient, and reliable grid for the future.

Sincerely,

Ellie Cohen
Chief Executive Officer
The Climate Center

Michele Canales
Western States Policy Advocate
Union of Concerned Scientists

¹ See <https://www.epri.com/research/products/000000003002014771>

² See <https://www.brattle.com/wp-content/uploads/2024/04/Californias-Virtual-Power-Potential-How-Five-Consumer-Technologies-Could-Improve-the-States-Energy-Affordability.pdf>

³ See <https://news.gm.com/newsroom.detail.html/Pages/news/us/en/2024/apr/0418-gmenergy.html>

⁴ See <https://blog.ucsusa.org/mark-specht/evs-can-support-power-grid-reliability-and-reduce-costs-heres-how/>

⁵ See <https://pubs.rsc.org/en/content/articlelanding/2022/YA/D2YA00204C>