

Senate Bill 59

Unleashing the Power of EVs with Bidirectional Capability Senator Nancy Skinner (D-Berkeley)

BILL SUMMARY

SB 59 would allow the California Air Resources Board (“CARB”) to require certain weight classes of battery electric vehicles to be bidirectional-capable. Achieving this capability for electric vehicles will ensure that a larger number of EV buyers have the option to utilize their EV as backup power for their home or other use. It will also ensure that, as California expands EV ownership, EVs can be an asset to grid reliability and resilience.

ISSUE

Wildfires, heatwaves and other extreme weather events can lead to [power outages](#). During the extreme heat of wave of 2022, California suffered many power outages, and narrowly averted catastrophic issues, as electricity demand reached a record high of 52 gigawatts (GW). One tool that helped keep the lights on was California’s reliance on utility grade batteries which can store power and, when needed, send that power to the grid.

Fortunately, the batteries in our electric vehicles can be used similarly and can power more than just vehicles. EVs with ‘bidirectional’ capability enable the energy stored in the battery of the EV to be used to power, for example, homes or buildings in much the same way that a diesel generator or a home battery pack does.

This is especially useful as EV batteries can be charged during the day, when there is abundant renewable energy, and then use that stored energy to power homes and buildings, or even the grid. This is a huge benefit during evening peak hours, when electricity demand is higher and the sun isn’t shining.

EVs with bidirectional capability can still rely on existing charging facilities. SB 59 does not require dismantling California’s charging infrastructure. Homeowners who want to use their EV to power their homes will need to make slight modifications to their home charging, but public charging

facilities are still fully able to charge any EV with bidirectional capability. SB 59 furthers California as a leader in achieving grid stability with clean power sources."

SOLUTION

SB 59 will:

- Allow the CARB, in consultation with the California Energy Commission and the Public Utilities Commission, to require certain weight classes of vehicles to be bi-directional capable.
- The California Air Resources board will only make this determination if there is a strong enough benefit to EV operators and to the grid.

SUPPORT

1000 Grandmothers for Future Generations
350 Bay Area
350 Bay Area Action
350 Conejo / San Fernando Valley
350 Humboldt
350 South Bay Los Angeles
350 Southland Legislative Alliance
350 Ventura County Climate Hub
Active San Gabriel Valley
Adopt a Charger
Alameda County Democratic Party
Alliance of Nurses for Healthy Environments
The Better World Group
California Alliance for Retired Americans (CARA)
California Business Alliance for a Clean Economy
California Climate Voters
California Environmental Voters
California Interfaith Power & Light
California Native Plant Society, Alta Peak Chapter
California Nurses for Environmental Health & Justice
California Religious Action Center of Reform Judaism
California Teachers Association
Catholic Charities, Diocese of Stockton
Center for Biological Diversity
Center for Community Action & Environmental Justice

Center for Community Energy
Center for Energy Efficiency and Renewable Technologies
Central California Asthma Collaborative
Chademo Association
City of Port Hueneme
Civicwell
Clean Coaliton
Clean Earth 4 Kids
Cleaneearth4kids.org
Climate Action California
Climate Equity Policy Center
Climate Health Now
Climate Reality Project, San Fernando Valley
Climate Resolve
Climate Witness Project
Coalition for Clean Air
Community Environmental Council
Cool Davis
Courage California
Democrats of Rossmoor
Electrify Now
Endangered Habitats League
Environment California
Environmental Working Group
Ev Loop
Ev-seg
Fierce Courage Consulting
Fossil Free California
Fridays for Future Fresno
Friends Committee on Legislation of California
Friends of The Eel River
Glendale City Council
Glendale Environmental Coalition
Greenlatinos
Greenpeace USA
Grid Alternatives
High Noon Advisors
Human Impact Partners
Indivisible California
Indivisible California Green Team
Indivisible Marin
Indivisible South Bay LA
Joint Venture Silicon Valley
Kaluza
Klm Consulting
Leap
Legacy Solutions
Let's Green Ca!
Local Clean Energy Alliance
Long Beach Alliance for Clean Energy
Los Angeles Business Council

Los Angeles Regional Collaborative for Climate Action and Sustainability
Lucid
Lutheran Office of Public Policy - California
Morongo Basin Conservation Association
Move LA
North Bay Electric Auto Association
Nuvve Holding Corp
Occidental Arts and Ecology Center
Peace and Freedom Party of California
Peninsula Interfaith Climate Action
Plug in America
Queers 4 Climate
Recolte Energy
Redwood Coalition for Climate and Environmental Responsibility
Restore the Delta
Rising Sun Center for Opportunity
Romero Institute
San Diego 350
San Diego Community Power
San Francisco Bay Physicians for Social Responsibility
San Jose Community Energy Advocates
Santa Barbara Standing Rock Coalition
Santa Cruz Climate Action Network
Sierra Club Buena Vista Chapter
Sierra Club California
Socal 350
Stand.earth
Sunflower Alliance
Sunpower Corporation
Sunrun
Sustainable Claremont
Sustainable Rossmoor
Synergistic Solutions
Terraverde Energy
The Climate Center
The Climate Reality Project: Silicon Valley
The Phoenix Group
Union of Concerned Scientists
Uniting the Central Coast for Action
Valley Improvement Projects
Voices for Progress
Vote Solar
World Business Academy
Yolo Interfaith Alliance for Climate Justice

CONTACT

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