April 16, 2025

The Honorable Assemblymember Cottie Petrie-Norris
Chair, Assembly Committee on Utilities and Energy
1020 N Street, Room 408A
Sacramento, CA 95814

RE: Assembly Bill 740 (Harabedian) - SUPPORT

Dear Chair Petrie-Norris,

We write to express our strong support for AB 740 (Harabedian), which takes a critical step in addressing California's energy affordability crisis by enabling the commercialization of Virtual

Power Plants (VPPs). By leveraging distributed energy resources (DERs) such as home batteries, electric vehicles and their mobile batteries, smart thermostats, and heat pumps, AB 740 will optimize the use of our grid infrastructure and lower electricity costs, enhance grid reliability, and reduce greenhouse gas emissions.

The Urgent Need for Virtual Power Plants (VPPs) & Load Flexibility

California faces an electricity affordability crisis, with utility bills rising up to 127% over the past decade and transmission and distribution costs increasing to nearly $6 billion annually in just the last few years. As demand for electricity grows due to electrification, it is imperative that we maximize the efficiency of existing grid infrastructure and move away from reliance on costly peaker plants.

A virtual power plant (VPP) is a system of thousands of distributed energy resources (DERs) in homes and businesses, like smart thermostats, electric vehicle chargers, home and EV batteries, and smart water heaters, that work together to balance energy supply and demand at a large scale. By enabling more flexible and decentralized power sources that use clean energy, VPPs reduce emissions and increase energy affordability, security and independence.

A Brattle Group study projected that VPPs at scale could avoid $750 million per year in traditional power system costs. Instead, $500 million would be paid directly to VPP participants—Californians who could enroll as easily as by getting a free or subsidized smart thermostat from their local utility—and $50 million per year would be savings realized for all ratepayers—including those who don't participate in VPPs.

The nation's largest VPP pilot is the California Energy Commission's (CEC) Demand Side Grid Support (DSGS) program, created by AB 205 (Ting, 2022). This program has helped California avoid blackouts since the Summer of 2022 and has enrolled over 500 MW in capacity through over 300,000 participants. Further, 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 legislature recognized the benefits of load flexibility through SB 846 (Dodd, 2022), which required the CEC to establish a load shift goal. In response, the CEC established a Load-Shift Goal of 7 GW by 2030. However, the state's progress towards that goal is unknown.

The Solution: AB 740

AB 740 unlocks the affordability, reliability, and clean energy benefits of VPPs, builds on California's existing 7 GW Load-Shift Goal, and leverages lessons learned from the state's successful DSGS program by requiring the development of a statewide VPP strategy. Specifically, this strategy would chart a path for VPPs to alleviate resource adequacy obligations, assess solutions to data access challenges, and maximize cost savings to all ratepayers.

This strategy would be drafted in a transparent way in collaboration with ratepayer organizations, consumer organizations, the clean energy industry, the affected workforce, and load-serving entities.

Further, AB 740 would require the preparation of a study assessing the effects of VPPs at scale on electricity bills and greenhouse gas emissions, and would require investor-owned utilities to report on their efforts to meet the state's load flexibility goal.

VPPs: A Win for Affordability, Reliability, and Emissions Reductions

AB 740 will ensure California fully leverages the benefits of VPPs, including:

- Reducing electricity costs by rightsizing grid investments and lowering reliance on expensive fossil fuel peaker plants.
- Enhancing reliability by leveraging distributed energy assets to help balance the grid during extreme weather and high demand periods.
- Cutting greenhouse gas emissions by shifting energy consumption to times when renewables are abundant and reducing dependence on fossil-fueled generation.

California has long been a leader in clean energy innovation, but we risk falling behind if we do not prioritize the expansion of VPPs beyond pilot programs. AB 740 will help unlock the full affordability and decarbonization benefits of load flexibility and ensure that ratepayers, especially low-income and disadvantaged communities, see the financial benefits of the clean energy transition.

For these reasons, we respectfully urge your support for AB 740.

Sincerely,

Edson Perez, Senior Principal
Advanced Energy United

Laura Deehan, State Director
Environment California

Ellie Cohen, CEO
The Climate Center

Laura Neish, Executive Director
350 Bay Area Action

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