



**Testimony of Jordan Graham on Behalf of Tesla in Favor of SB 959
SB 959- Distributed Renewable Integration and Vehicle Electrification Act (DRIVE Act)**

**Senate Education, Energy, and the Environment Committee
February 29, 2024**

To the Chairman and Honorable Members of the Committee:

Tesla submits these written comments in **SUPPORT** of SB 959 (DRIVE Act). The DRIVE Act would enable and implement an important set of tools that can be used jointly by Maryland utilities and consumers to manage grid stress, improve the reliability of electric service, and cost-effectively leverage customer-sited energy assets for the benefit of all ratepayers. With the increasing adoption of customer-sited battery energy storage systems and electric vehicles, it is imperative that utilities implement programs that incentivize customers to volunteer the untapped value of their distributed energy resources (DER) to support state energy goals and the broader electric system.

Tesla's mission is to accelerate the world's transition to sustainable energy. Tesla is a leading original equipment manufacturer (OEM) of electric vehicles, and a leading OEM and installer of residential solar and battery energy storage systems, grid-scale battery energy storage systems, and electric vehicle charging equipment.

Tesla is particularly supportive of the DRIVE Act's direction for the Maryland Public Service Commission to establish a program to compensate owners and aggregators of DER on a pay-for-performance basis for the electric distribution system support services that they provide. Maryland residents have installed over 3,700 of Tesla's residential battery energy storage devices, the Tesla Powerwall. Customers purchase Powerwalls and other battery energy storage systems primarily to provide their own home with a source of backup power in the case of a grid outage. However, customers in the Northeast, California, Puerto Rico, Texas, and numerous other states have repeatedly shown that they will allow their batteries to be aggregated together and used collectively for the benefit of the grid if they are given the correct opportunity, compensation, and program design. The DRIVE Act directs the Maryland Public Service Commission and the state's utilities to implement programs to do exactly that.

The simple fact is that Maryland and other states cannot afford to forego using the untapped value that can be provided by distributed battery systems already deployed in the state. As more vehicles and appliances are electrified, as a glut of data centers come online, and as more industrial facilities are built, utilities are finding themselves increasingly strained to serve the new load and are often under-projecting their future energy needs. After years of flat peak electricity demand, data from the Federal Energy Regulatory Commission (FERC) released in December shows that utility load growth forecasts nationally had jumped 81% compared to projections from just two years ago.¹ In January, PJM tripled its annual load growth forecast over the next decade, driven by data center growth and electrification.² Georgia Power recently announced that its 2030 load growth projections are now roughly 17-times higher than what the utility projected just two years ago.³ Meanwhile, in Dominion Energy in Virginia, the utility estimates that its data center capacity could double in the next four years, despite already comprising roughly one-fifth of the utility's load.⁴

As Maryland prepares for similar growth opportunities and scenarios, it is imperative that utilities and policymakers seek to fully leverage the energy resources that already are on the grid. The DRIVE Act would direct Maryland regulators and utilities to do exactly that. Not only would these programs put to use what would otherwise be untapped resources, but they also would allow residential customers to participate in the clean energy transition and to use the resources that they've already purchased and installed to benefit their state and community. Providing customers fair compensation for the services that their energy systems provide also improves the economics of owning such systems, and effectively decreases total system ownership costs. At a time when Maryland has set a target of bringing online 3 gigawatts of battery energy storage capacity by 2033, these sorts of customer-focused VPP programs are essential to meeting those aims.

Tesla has experience managing aggregations of residential battery energy storage systems – often called virtual power plants (VPP) – in dozens of utility territories across the nation. The programs have a proven track record of providing ratepayer savings and increasing grid reliability. In the Northeast, the ConnectedSolutions battery VPP program has brought proven load reduction and ratepayer savings in Massachusetts, Connecticut, Rhode Island, and New Hampshire. In Vermont, Green Mountain Power's VPP program, has been saving ratepayers between \$2 million and \$3 million annually since 2018.⁵ In California, the Emergency Load Reduction Program launched in 2021, and in 2022 CAISO credited the utility program with helping to avoid the need for rolling

¹ [“US electricity load growth forecast jumps 81% led by data centers, industry: Grid Strategies.”](#) Utility Dive. 13 Dec. 2022.

² [“PJM triples annual load growth forecast to 2.4% driven by data centers, electrification.”](#) Utility Dive. 9 Jan. 2024.

³ [Georgia Power 2023 Integrated Resource Plan Update.](#) Oct. 2023.

⁴ [“Dominion: Virginia's Data Center Cluster Could Double in Size.”](#) Data Center Frontier. 11 Oct. 2024.

⁵ [“GMP's Energy Storage Programs Deliver \\$3 Million In Savings for All Customers During 2020 Energy Peaks.”](#) 29 Sept. 2020.

blackouts.⁶ A recent Department of Energy report projected that multi-resource VPPs could address roughly 10-20% of peak demand by 20230, helping to avoid \$10 billion in annual grid costs.⁷

The other policies in the DRIVE Act also would work toward reducing peak demand and improving grid reliability. Time-of-use electricity rates help alleviate grid stress by incentivizing electricity use during times of lower demand. And facilitating installation or interconnection of bidirectional electric vehicle systems creates a pathway for EVs to provide backup power to customers or potentially to participate in the same type of VPP programs as stationary battery energy storage systems.

For all these reasons, Tesla offers its full support of SB 959 and respectfully requests a favorable report from this committee.

Respectfully,

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⁶ [“Californians saved the grid again. They should be paid more for it.”](#) Canary Media. 15 Sept. 2022.

⁷ [“The Pathway to: Virtual Power Plants Commercial Liftoff.”](#) U.S. Department of Energy. September 2023.