Public EV charging stations, and particularly high-powered DC fast charging stations designed for highway corridors and for heavier-duty EVs like buses and trucks, face a distinct set of hurdles imposed by the current regulatory system and traditional, demand-based electricity rates.

Most prominent among barriers to deploying commercial EV charging are demand charges, which are electricity rates set by public utilities on their customers, including EV charging station owners, based on the maximum amount of power, kW, drawn for any given time interval, typically 15 minutes, during the billing period, multiplied by the relevant tariff demand charge.

Demand charges are designed to capture the marginal costs imposed on the grid by high-capacity, high-utilization infrastructure such as factories. However, when traditional demand charges are levied upon high-capacity, low-utilization infrastructure such as EV charging stations, they can place a disproportionate cost burden on the station owners.

The high-powered, fast-charging stations our Nation needs to serve the EV driving public, public and private fleet vehicle operators, and the trucking industry have different load profiles than most commercial entities, with periods of dormancy punctuated by spikes in activity. And unlike most commercial operations, their demand profile is driven by real-time customer activity. So it is difficult for these stations to optimize their load profiles.

The burden of demand charges varies by State and by region and can fail to accurately reflect the marginal costs imposed on the system by EV charging stations. For example, in the Colorado PUC Electric Vehicle Working Group Report published in 2019, the Colorado Public Utilities Commission found that demand charges result in the annual cost to operate a direct current fast charging, DCFC, station in one Colorado utility territory being 35 times higher than the cost in a neighboring service territory. The problem will only worsen for the still higher-demand and lower-utilization application of EV truck charging.

Demand charges, if not reformed, may also introduce new issues of inequity as America electrifies transportation. For example, homeowners are able to charge an electric vehicle on very affordable residential utility rates, which currently average $1.16 per gasoline gallon equivalent according to the Department of Energy. But those who live in multiunit housing and rent their abode, a population that is disproportionately low-income and minority, often cannot charge an EV at home. They will charge their EVs at public charging stations, and those public charging stations must pay much higher commercial utility rates, including commercial demand charges, which make up as much as 90 percent of public charging station's utility bills according to RMI.

In recent years, some States and utilities have recognized this inequity and taken steps to reform their utility rates, to reduce and reform commercial demand charges and to adopt rates designed for low-load or electric vehicle charging infrastructure. These utilities and regulators should be commended for their forward-leaning approach to a complicated issue. Utilities in Colorado have begun to do this, as have utilities in quite a few other States.

Section 40431 requires only those States and utilities which have not already done so to take up the issue of how demand charge rates affect EV charging in order to encourage new private-sector investment in EV charging stations.

These States and utilities are allowed 2 years to consider the establishment of new rates that A, promote affordable and equitable EV charging options; B, facilitate deployment of faster charging technology that improves the customer experience; C, accelerate third-party investment in EV charging infrastructure; and D, appropriately recover marginal costs.

Our intention is to ensure that alternatives to traditional, demand-based electricity rates are made available to EV charging station owners with appropriate oversight by State public utility commissions. To remove any doubt, section 40431 does not empower, encourage, or allow State public utility commissions to regulate the prices that third-party owned EV charging stations charge their customers for EV charging services. Those prices are set in a competitive marketplace that benefits consumers, and this legislation does not affect that marketplace.

Section 40431 should prompt forward-looking change at the State and utility level which appropriately reflects and accommodates the real differences in geographies, electricity markets, and business environments which exist between and within States and utility territories. It ensures that attention will be paid to this problem nationwide, but also that each State and utility can decide how to address the problem its own way. Ultimately, it should lead to new rate designs that enable the private sector to make economically sustainable investments in the high-powered charging stations that will help drivers, fleet operators, and truckers go electric, while more appropriately reflecting the actual marginal costs added to the grid by EV charging stations.

ADDITIONAL STATEMENTS

REMEMBERING PATRICK J. SOLANO

• Mr. CASEY. Mr. President, today I wish to honor the distinguished life and career of Patrick J. Solano, who passed away on January 23, 2021. I am proud to remember Pat, a resident of Pittston Township, PA, decorated World War II veteran and lifelong public servant. Pat will be remembered at an annual golf tournament in Luzerne County on August 6.

In 1942, Pat was drafted by the U.S. Army Air Corps after he graduated from Pittston Township High School. During his military career, he served as a flight engineer on 23 combat missions with the Eighth United States Air Force Heavy Bombardment Group, aboard the B–17 Flying Fortress. For his service during World War II, he was awarded the Group Presidential Citation, the Air Force Medal with two oakleaf clusters, and the Europe Combat Theater Medal with two Bronze Stars.

Pat's service to our country did not end with World War II, as he came home and embarked on a lifetime of public service at both the local and State level in Pennsylvania. He was recognized as a trusted political adviser for almost 50 years and served in the administrations of nine Governors of both political parties. His service to the Commonwealth of Pennsylvania crossed party lines, and he became known as a voice of reason and a unifying force in Harrisburg.

He served in the Pennsylvania Department of Environmental Regulation, later known as the department of environmental protection. Later, he was appointed the acting secretary for the department of conservation and natural resources when it was first created in 1995. Pat helped to shape the future of the department and its mission to conserve and sustain Pennsylvania's natural resources for present and future generations.

My thoughts and prayers are with Pat's wife, Marie; his children, Mary Pat, Cathy, Anita, Rita, Liz, and Anne; his 11 grandchildren and 3 great-grandchildren; and his countless friends.•

REMEMBERING ALLEN THOMAS NOBLE

• Mr. CRAPO. Mr. President, along with my colleagues Senator JIM RISCH, Representative MIKE SIMPSON, and Representative RUSS FULCHER, I honor Allen Thomas Noble, a stalwart of the city of Boise and a great Idahoan.

Allen Noble was a visionary, who loved our country. He was a native Idahoan, born in Idaho Falls. He graduated from Kuna High School and started out in farming in the Happy Valley of Idaho. Allen married Vera May Shulz, of Kuna, and they had five children: Susan, Linda, June, David, and Mark. As his obituary reads, ''He loved farm equipment and in 1958 bought an interest in Nampa International Harvester and moved his family to Nampa.'' Allen's deep love for farming was evident in his agricultural advancements, including his development of ''high lift pumping'' that advanced farm irrigation capabilities in the Dry Lake area and later near Glenns Ferry. In 1965, Allen married Billie Dee Jolley Johnson and added