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Testimony in Support of
House Bill 1100 – Battery Storage and Solar Arrays Safety Training Grant Program and Fund
Environment and Transportation Committee
Economic Matters Committee
March 8, 2023

The Rural Maryland Council supports House Bill 1100 - Battery Storage and Solar Arrays Safety Training Grant Program and Fund. This bill establishes the Battery Storage and Solar Arrays Safety Training Grant Program in the Maryland Energy Administration, funded through a special, nonlapsing fund known as the Battery Storage and Solar Arrays Safety Training Grant Fund (the “Fund”). This program will provide grants to local governments to train local fire departments on certain safety aspects associated with lithium-ion battery storage systems installed with solar arrays; and other provisions generally relating to lithium-ion battery storage and solar arrays.

A solar battery is an energy storage solution that is used to collect and store power generated from alternative energy sources such as wind and solar generation facilities. These types of systems are put in place to maximize the use of alternative energy, increase energy independence, and reduce the carbon footprint. There are risks involved using these types of systems, one of which is thermal runaway. According to UL Research Institutes, [UL Research Institutes](#), Thermal runaway is one of the primary risks related to lithium-ion batteries and occurs when a lithium-ion cell generates heat at a rate several times higher than the rate at which heat dissipates from the cell. When these batteries fail or overheat, they release flammable, toxic gases that can spark a fast-spreading fire that is extremely difficult to extinguish, leading to tremendous damage to the battery and surrounding area.

Simply Google ‘firefighter training for lithium batteries’ and you will find story after story of devastation caused by lithium-ion battery fires and the lack of training of firefighters to address them. According to the U.S. Fire Administration, fires involving lithium-ion batteries are increasing rapidly, as they are in a growing number of applications including consumer products, transportation products, and power generations within the nation’s electric power grid. These fires are difficult to control because the source of gases that are creating the flames is confined within a cell battery that will not allow water in. Training is essential to help firefighters better understand the physical phenomena that determine how hazards develop during the lithium-ion incidents and how to best deal with them.

As Maryland moves towards a renewable energy portfolio, measures must be taken to do it safely. It is imperative that Maryland fire departments are sufficiently trained to handle incidences caused by lithium-ion battery malfunctions. House Bill 1100 will provide the training and funds to make this happen and the Rural Maryland Council requests your favorable support of HB1100.