SUPPORT S.2237:

AN ACT DEFINING CLEAN ENERGY

The proposed "Act Defining Clean Energy" would amend the recently passed "An Act promoting a clean energy grid, advancing equity, and protecting ratepayers" (the "2024 Mass Climate Law") to exclude already-existing storage facilities from state-mandated, ratepayer-funded energy storage procurements; remove nuclear fusion from the Massachusetts renewable portfolio standard; and clarify that pumped storage facilities do not constitute "clean" energy facilities.

The 2024 Mass Climate Law aims to support the development of energy storage but may subsidize existing energy storage and hoped-for futuristic technologies at the expense of state electric ratepayers. Massachusetts' two 50-year-old pumped hydropower storage plants could earn \$700 million of electric customers' money¹ to do what they are already doing—or worse, to operate at times when it reduces the cost-effectiveness of the regional electric markets and grid and causes additional ecological damage.

An Act Defining Clean Energy is necessary to:

Protect Ratepayers from Unnecessary Price Hikes

Under the 2024 MA Climate Law, state ratepayers will pay for energy storage through rate hikes. The cost will be high—about \$2 billion for the full mandate. Subsidies for new storage facilities and new technologies may be justified to grow the energy storage sector and may save ratepayers money in the long run. But 35% of this mandate (\$700 million) could go to already-existing storage facilities-a waste of our money.

An Act Defining Clean Energy will prevent rate hikes to pay for existing energy storage.

Avoid market interference by legacy storage projects

Legacy providers of utilityscale energy storage currently buy and sell electricity in the New England wholesale electric power markets just like other power producers. They only operate and earn revenue when it lowers costs for the grid. If they win one of the mandated contracts, they may operate on a noncompetitive basis, undercutting newer technologies and raising overall costs.

An Act Defining Clean
Energy will stop
subsidies to giant legacy
pumped hydro storage
facilities that could
undermine regional
market competition and
cost-effectiveness

Ensure Feasible, Affordable, Safe Technologies

The 2024 clean energy law adds nuclear fusion to Massachusetts' renewable portfolio standard (RPS) though it is unlikely to be a commercially viable source of energy for 20+ years, and its risks and challenges are untested. The law also allows joint procurements of nuclear power with other states—but uranium mining, nuclear waste disposal, and nuclear accidents still have high risks for environmental and human health.

An Act Defining Clean Energy will ensures Massachusetts will meet its climate goals with energy that is energies that are truly safe, clean and renewable.

Prevent Increased Ecosystem & Climate Impacts

Electricity from pumped storage hydro is neither green nor clean. Northfield Mtn kills millions of aquatic organisms each year, erodes riverbanks, confuses fish, and harms shoreline species. And, like all storage, pumped hydro uses more electricity than it generates, usually increasing greenhouse gas emissionsespecially if it operates outside the markets.

An Act Defining Clean Energy will exclude pumped hydro storage from the definition of clean energy facilities, avoiding subsidies that increase their ecosystem and climate

¹ Similar procurements in New York for 4700 MW of new storage (which will be added to 1300 MW of existing storage) are estimated to cost almost \$2 billion (\$1.98 billion) (<u>Utility Dive</u>, <u>NY Dept of Public Service</u>). As a rough estimate this suggests a cost of \$420 million per 1000 MW. Since Massachusetts' two existing large utility-scale storage plants together have a capacity of about 1800 MW, procuring their existing storage could cost about \$750 million at this price. <u>A recent New York procurement costs \$200 million for 396 MW</u>, suggesting the cost to procure Massachusetts' existing legacy storage could be as much as \$900 million.