

Comments on Site Suitability – Addendum on Water Protection

Comments by Michael DeChiara, Shutesbury, MA

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ATTN: Andy Greene/EFSB, Rick Collins/DOER, and EFSB/ DOER siting staff

I am submitting these additional comments on site suitability and possibly cumulative impact with a specific focus on **drinking water protection**. In short, industrial scale energy storage systems (ESS) projects should not be allowed to be sited in a manner that would endanger the drinking water of Massachusetts residents.

The context we face today is multiple threats to water quality, in general, and drinking water specifically. Drought is a known result of climate change that will reduce water availability. Increased contamination from PFAS is occurring across the Commonwealth; this is certainly the case in my town of Shutesbury. As we know these are forever chemicals. Additionally, as we look at the federal government, environmental protections and funding for oversight are being cut, increasing the likelihood of water contamination in the future, even if Massachusetts continues to try and be protective. These factors all mean that the Commonwealth should not and cannot further endanger drinking water supplies.

According to the Mass. Association of Boards of Health, groundwater is a source of drinking water for 251 of 351 communities in the Commonwealth. There are two primary sources of drinking water for these municipalities and their residents – private water wells and public water supplies. While different in scale and description, both are essential and, in most cases, cannot be replaced once compromised – either through reduced volume, or more relevant to siting regulation, contamination due to energy storage failures.

Private drinking wells are predominant in the many small towns of western and central Massachusetts. In Shutesbury for example, there is no municipal water supply; 100% of residents are reliant on private wells. Since these wells are often on a person's property, if the well is compromised, there is no alternative. In Shutesbury, in the instances where water contamination has occurred through an oil leak at the fire station and from PFAS, origins unknown, all households either require bottled water or expensive filtration.

For towns like Wendell, Westfield and Orange MA, residents rely on public water from an aquifer. In towns like Amherst and Northampton, the water comes from reservoirs. In all these situations, contamination would affect many, many households in town. For example, the Zone 2 aquifer in Orange where an energy storage facility is proposed, 70% of the population relies on this water. In Amherst, the Atkins reservoir, just downstream from a proposed 19-acre solar installation with energy storage, supplies drinking water to UMass Amherst.

In a recent presentation to the Franklin Regional Council of Governments, a representative of the National Fire Protection Association (NFPA) confirmed that large scale energy storage systems fail resulting in fire. Last year the largest ever ESS fire in the U.S. occurred at Moss Landing in California and burned for several days. The year prior, 2023, there were two ESS fires in upstate New York within one week of each other at different locations, these also burned for multiple days. These fires release toxins (some not even identified yet by NFPA) into the air. When water is used to contain thermal runaway (the best practice), the toxins end up in the ground and then the water. Even the best containment (which EFSB and DOER must require in project design) cannot prevent contamination of the groundwater after an ESS fire.

Given this, EFSB and DOER must plan for the worst. The current cumulative impact chart assumes a static, best case scenario, which is woefully inadequate. It would be great if there were never another energy storage accident but that is unrealistic and imprudent. Once there is an ESS accident and fire, the genie cannot be put back in the bottle. As regulatory bodies charged with public health, safety and welfare, EFSB and DOER must protect communities and their drinking water, which means assuming the worst can occur, since sometime, somewhere it will. Regulations must protect against the results of these accidents.

Please imagine someone telling you as a homeowner, *“we are sorry but your home no longer has potable water, and there is nothing we can do to fix this”*. A homeowner in this situation faces a home with dramatically diminished value, a life of bottled water or filtration, and their ongoing operational costs, and an unknown future of unknowns.

Simply put, if there is no reasonable mitigation possible, which for ESS accidents and drinking water, I would argue there is not, then development of energy storage systems in proximity to drinking water supplies should be 100% prohibited in all circumstances.

Thank you.