

Storage Batteries, First Responder Safety and Solar Zoning

The Livingston County Planning Department's Preliminary Agenda for July 11, 2019 listed reports that the Towns of Avon, Leicester, York and Livonia were exploring "Moratoriums [sic] prohibiting large scale battery energy storage systems for a period of one year".

On August 22, 2019 at 6pm, The Town of Avon will hold a Public Hearing on their moratorium.

What is the concern?

It's well documented and acknowledged by the NYS grid operators that large scale solar installations in western NY will not assist NYS with peak load demand challenges. Solar simply does not produce energy for the grid during peak demand times starting around 6pm.

Gov. Cuomo's solution is \$40M in new subsidies to co-locate storage batteries with solar/wind installations; the funding is available in November, 2019. The NYS Power Authority has just announced a \$30M 20megawatt lithium-ion battery system for Franklin County, NY. These subsidies are in support of Gov. Cuomo's goal of 3,000 megawatts of storage capacity in NY by 2030. Clearly, there are more subsidies coming. In fact, NYSERDA has a 30 page Program Manual for Retail Energy Storage Incentives published in June 2019. Wood MacKenzie, an international energy consulting firm estimates that by 2024, world-wide spending on these high capacity battery installations will reach \$71B as storage battery prices fall. Clearly, there are more batteries coming.

Batteries contain even more noxious materials than solar and wind components. And, although not often, *they spontaneously catch fire* as we've seen in aircraft, phones and hoverboards. Every time you go through TSA or to the Post Office to mail something you answer the lithium-ion battery possession question. The Energy Industry Group of AIG, an American multinational finance and insurance company, has issued an advisory "Lithium-ion Battery Energy Storage Systems".

Again, what is the concern for the Town of Rush?

- www.windpowermonthly.com, March 6, 2014 notes that ". . .was highlighted by the \$30M lithium-ion battery fire that closed FirstWind's 30megawatt Kahuku project in Hawaii in 2012"
- Arizona Power Services Company (APS). reported a 1.5megawatt lithium-ion battery fire in Flagstaff, AZ in 2012. APS press releases after the fire said APS has studied the problem, had come up with many solutions and had implemented them.

- Arizona Power Services Company's April 23, 2019 lithium-ion battery fire and subsequent explosion sent 8 firefighters and a police officer to the hospital as reported by the Associated Press, Jonathan Cooper, June 23, 2019. Many homeowners have installed rooftop solar in Arizona. Arizona Power has been building substations in developments and adding large scale batteries because of solar's inability to provide power during significant periods of the day/night.

The Fire Protection Research Foundation has been commissioning studies because of the unexpected challenges first responders face with new alternative energy equipment, photovoltaic (PV)/solar panels as well as batteries. Underwriters Laboratories found, among other challenges, that lock-on shock hazards continue even in artificial light, like that caused by emergency lighting or by a fire department light truck. And, a disconnect switch may not safely turn off equipment because of combiner boxes, where multiple circuits are wired together. PV panel installations are dangerous and co-located batteries make them more so. Surrounding acres of PV panels and co-located batteries with locked, seven foot fences, keep most animals and the unwary individual out. But *first responders have to get in to protect the community.*

So how do we protect our first responders- the Rush volunteer firefighters, EMTs and police? What do we do about the potential shock hazards/fires/explosions from PV systems with large scale co-located storage batteries if constructed in Tier 3 installations in Rush? If our local solar law permits these systems and co-located batteries, what special training and protective clothing is needed? What does our liability insurance carrier recommend to protect the Town in this litigious world?

The Steering Committee of Residents United has asked the Town Board to do more research and possibly exclude Tier 3 co-located batteries in the Town's local solar zoning code. Please [Click Here](#) for the Town's and Residents United's position with respect to battery storage co-located with acres of Tier 3 solar.

And we also recommend that you read the Steering Committee's information and recommendation on PILOTS [Click Here](#). PILOTS are yet another taxpayer subsidy to solar developers just like the currently known \$40M and \$30M NYS subsidies announced for battery co-location.