Vermont Fire & Rescue Coalition Vermont State Firefighters Association

Energy Storage System Placarding Request 3/21/2025

Senate Committee of Government Operations

- Dean Gilmore Chair Government Affairs Committee- Vermont State Firefighters Assocation
- David DiBiase Chief City of Vergennes Fire Department, 2nd Vice President- Vermont State Firefighters Association

Energy Storage Systems

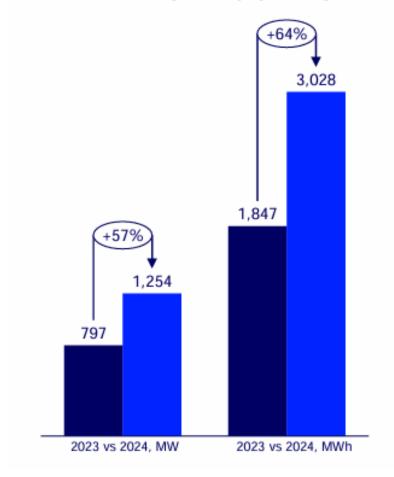
- Onsite battery storage
- Many different makes and models
- Stored in a variety of locations
- No way to identify prior to entry of a building
- Active in state programs to promote these programs



Growth

- As of 2023 GMP was on track to install about 400 battery storage devices in homes this year already, according to testimony by Josh Castonguay, the company's chief innovation and engineering executive. That rate could triple, to 1,200 annually, under the new proposal – sevendays.com
- Expected steady growth year to year.

Residential segment, yoy changes



Fire Service Concerns

- Unknown hazard to firefighters
 prior to entry
- Batteries have multiple modes of failure and symptoms of failure, including thermal runaway, off gassing, explosion, rapid fire growth, increase flammability.



Video aftermath



Figure 21 – Garage door location following garage explosion [26].

Make shift solutions- Case study

December 17, 2022 – Sanbornton, New Hampshire, United States

On Saturday, December 17, 2022, one woman was injured in a fire resulting from a battery backup system that was utilized during a power outage. The battery system was installed in a mechanical room and constructed from three used lithium-ion batteries repurposed from Chevy Volt cars [24]. When the homeowner investigated a "popping" sound, she described the battery as "bubbling over" and when she returned with a fan, the battery was on fire with flame extension to the ceiling, at which point the local fire department was called. Figure 18 is a photograph of the incident after the fire.



Request

- Similar to code requiring Roof and floor truss systems be identified. We request a requirement that a placard such as the one to the right be required off all installation of energy storage systems in structures. This request includes placarding of systems already installed by a certain date.
- This vital information provides quick and easy identification to firerfighters that arrive on scene and can reduce the risk by understanding the elements that are at play.
- Cost vs benefit is huge, each sign costs less then \$20.

