

# Battery energy storage system safety response

NineDot Energy brings clean, reliable power closer to home. Our community-scale battery energy storage systems keep the grid clean and the lights on across New York City.



## On-site safety systems

For NineDot Energy, safety is paramount. Each of our battery energy storage systems (BESS) is equipped with multiple redundant safety features. All batteries are approved by the FDNY, tested by Con Edison, protected by fencing and sprinkler systems, and monitored 24/7 by heat-sensing cameras connected directly to the FDNY, our company, and a certified BESS subject-matter expert. We currently use Tesla Megapacks, which have the following built-in safety features:

- Containerized design to stop the spread of gases or heat
- Off-gassing and cooling fans
- Spark plug to prevent gas buildup
- Separated modular battery cells
- Battery management system to shut off battery cells if adjacent ones are overheating

## On-site emergency management

The local fire station targets arrival at the BESS site within minutes of being dispatched by FDNY central station. Before operation, NineDot Energy develops an FDNY-approved site-specific hazard mitigation analysis and emergency management plan on which the local fire station is trained. The hazard mitigation analysis is designed so that, in the event of a fire, it will not spread beyond the perimeter of the BESS site and will often require fire-rated walls or other proactive measures. BESS safety events are very rare and we are not aware of any fire that has spread beyond a BESS site. Further, analysis of these events has shown that the composition of BESS fires are similar to those of house fires, and even cleaner than those of car fires, not requiring any hazmat response. Firefighters manage smoke, if any, with water and use handheld pollution monitoring devices to be sure that no hazardous materials response is required.

## Safety in action: A minute-by-minute response timeline

