QUESTIONS & ANSWERS FROM THE ZONING MEETING

	Question	Answer
1	Please explain how this project is less impactful to the environment and ecologically more benefical than a housing project?	Ideal site qualifications for a Battery Energy Storage System (BESS) include proximity to existing transmission infrastructure, availability to interconnect to the grid with minimal network upgrades, sufficient participating real estate, and little to no detrimental impacts on natural and historical resources or surrounding stakeholders. While housing would potentially be viable at this site there are key benefits that make siting BESS at this location preferred over housing: 1.Traffic – During operations, BESS projects do not require daily commuting or service trips, whereas housing would result in a measurable increase in daily local traffic. 2.Emissions – HVAC and daily vehicle trips for a housing development would result in an increase in on-site emissions in perpetuity. There are no on-site emissions related to the 20-year operation of the BESS. 3.Infrastructure – Housing would result in increased demands on local schools, utilities, and roads. BESS projects do not require this increased demand and in turn directly benefits local electrical utilities by supporting local and regional grid stability. 4.Climate – BESS enables higher penetration of renewable energy resources by storing energy generated from wind and solar and reducing curtailment (energy in excess of real time demand) and displaces the need for fossil-fuel peaker plants that have a disproportionately higher air quality impact on local communities and ecosystems. Housing, by contrast, generally increases lifetime energy demand and associated emissions. 5.Reversibility – BESS is designed with a finite operating life of 20-30 years, at which point it can be upgraded in place to meet future need or fully removed with site restoration. Appendix D of the draft application includes a full draft decommissioning plan which includes a commitment to remove specialized equiptment and materials, disconnect power / utilities, remove any structures/foundations/piping, as well as restore the site back to its original character.
2	Draft Application states that the proposed project falls within the intensity of uses allowed via special permit in the R40 zone - please explain?	There is precedent in other jurisdictions that BESS projects and land uses other than residential can be successfully integrated into residentially-zoned property provided that standard metrics such as proposed impervious coverage, visibility, and utility infrastructure are taken into account. Ecological impacts such as land alteration, wildlife habitat alteration, and stormwater management for projects such as schools, stadiums, and hospitals would be similar or even more impactful than the proposed BESS facility.
3	Please explain the safety / design features being used to safeguard the aquifer and other wetland resources at the proposed site?	The proposed BESS facility has most recently been altered in layout such that all proposed electrical equipment is outside of the delineated Aquifer Protection Area, and this relocation has also placed any disturbance associated with the facility entirely outside of any known local Upland Review Area (i.e., 200+ feet from the ordinary high water line of West Branch Aspetuck River and 100+ feet from any delineated wetlands). The project has been designed to incorporate a stormwater management plan which aims to ensure that anticipated peak rates of stormwater runoff from the site are lower than existing rates, and water quality treatment is provided to the proposed impervious areas as well. Regarding the design of the electrical equipment itself, any equipment containing liquid will be fitted with secondary containment measures to protect against release during emergency situations.
4	In Section 3D of the introduction, it is stated that the BESS will be tested at least annually. Is that sufficient cadence?	The testing cadence provided in Section 3D is specifically related to capacity services. If town leadership would like an estimated breakdown of all testing on a per annum basis, this can be provided and we can incorporate into our final application narrative.
5	What duty cyle are you expecting to run? Will you discharge / recharge the BESS daily?	The facility is designed to operate 365 cycles per year (nominally one full charge and one full discharge per day).
6	The noise study provided limits on how the fans will be operated on the Tesla battery packs. How will residents be assured that this operating limit will not be exceeded?	The operating limits identified in the noise study will be incorporated directly into the project's Operations and Maintenance requirements and the contractual operating agreement with the OEM. These limits will define how and when the battery pack cooling fans may operate, including any maximum speeds, duty cycles, or ambient-condition thresholds assumed in the noise analysis.
7	Section 4 discusses project benefits and specifically greenhouse gas emissions. Are these emissions considered only for the BESS facility or do the greenhouse gas emissions considered apply to the end-to-end supply chain of all components that make up the plant? Does it consider the amount of emissions from mining rare earth metals for their processing, transformer construction, etc?	Section 4 of the draft application discusses the critical role of Battery Energy Storage Systems (BESS) in supporting regional clean energy goals to decarbonize our electricity supply and reduce greenhouse gas emissions, with a focus on the net operational effects on the regional electric grid over the Project's lifetime, including the project's role in supporting integration of renewable energy and reducing reliance on higher-emitting peaking generation. The GHG analysis in Section 4 does not include a cradle-to-grave, full life-cycle assessment of all components that make up the plant (e.g., mining, materials processing, component manufacturing, or global transportation). Those upstream "embodied" emissions occur across a distributed international supply chain and are not typically included in project-level environmental permitting analyses. Instead, the study boundary is consistent with standard practice for infrastructure projects and focuses on emissions that are reasonably attributable to the construction and operation of the facility at the project site. That said, we recognize the importance of broader life-cycle considerations. The Lithium Iron Phosphate (LFP) BESS technology planned for this project does not rely on significant quantities of rare-earth metals, and the project team works with manufacturers that adhere to recognized environmental, labor, and materials-sourcing standards. In addition, battery systems are designed for refurbishment, reuse, and end-of-life recycling, which further reduces long-term material impacts as the recycling market continues to mature. BESS projects are considered a critical decarbonization tool in order to meet mandated state and federal net-zero goals, with the IEA estimating that 60% of CO2 reductions in the energy sector by 2030 alone will be facilitated by batteries either directly or indirectly.
8	Section 4 "… by providing peaking capacity and balancing services including reserve capacity, frequency regulation…." - Can LFP batteries support both reserve capacity and frequency regulation simultaneously from the same installed battery pack?	The facility is designed to support grid reliability. It can be operated to provide reserve capacity, and it is also capable of providing fast-response balancing services such as frequency regulation. If multiple services are provided in the same period, the plant's available MW and state of charge are managed so that capability is allocated and not double-counted.
9	What is the distance from the EMF generation source to the nearest resident? Business? Will the EMF interfere with cell, internet or satelite signals? If so, within what radius from the EMF source?	The equipment utilized on BESS projects does not generate electric or magentic fields at levels that could interfere with cellular, internet, or GPS signals. The closest residence to the BESS equipment is +/- 345 ft, and the closest residence to the high voltage equipment is even further than that
10	What are the benefits to the town - You discuss improved power outage, but most of our outages come from downed trees / tree limbs. Explain reasoning	The project benefits to the town of New Milford are numerous, and vary from benefits experienced during the construction of the project all the way through the lifetime of project operations. Economic: - Estimated $40M in local tax payments over the Project life - Ability to design a Host Community Agreement, allocating a set figure of yearly donations from developer towards priorities that matter most in New Milford - Reducing ratepayer bills by stabilizing energy prices and reducing reliance on expensive Peaker plants ○ Allows for the shifting of low-cost off-peak energy into late afternoon / evening peak ○ Will substantially impact how Locational Marginal Pricing is set, leading to lower true cost of power ○ Can delay or avoid costly upgrades to transmission and distribution lines, which is largely funded via passing through costs to rate payers - Creation of both temporary and long-term jobs both during construction and during project operations - Significant uptick is local economic output at a state and local level during construction and project operations Health and Environment: - Substantial estimated reductions in air, soil, and water pollutants avoiding an estimated 151,000+ tons of emissions per year - Estimated to displace 183 GWh/yr of fossil fuel generation - Estimated to save 123 years of life in a typical year of operation - Project is expected to generate $36 million in economic benefits in a future typical year of operation from reduced pollution, lower healthcare costs, and improved environmental services - Potential to work with landowner to place unutilized acreage into a permanent conservation easement
11	Does each Tesla battery have HVAC and fire supression? Are the packages climate controlled?	HVAC or Heating, Ventilation, and Air Conditioning use forced air to maintain temperatures. Tesla Megapacks and other BESS utilize a Chiller (liquid cooling/heating) system to maintain battery temperatures within operational limits. These systems provide better thermal control, efficiency, noise reduction, and safety for the systems. The enclosures do not have a built in fire suppression system. Megapack is designed to prevent battery fires and be resilient if they occur. Testing shows that if one occurs, Megapack safety systems can control and contain a fire within the unit without suppression usage.

		BESS site design prioritizes safety through careful equipment layout, fire-resistant enclosures, and appropriate spacing to prevent fire spread. Systems are designed to meet or exceed applicable codes and standards, including NFPA 855 and the International Fire Code. Advanced monitoring, controls, and automatic shutdown systems provide early detection and rapid response to abnormal conditions. Combustible Gas Reduction systems are incorporated to manage flammable gases if an incident occurs. Sites are also designed in coordination with local fire officials to support safe emergency response and community protection.
12	What are the protocols for fire protection? Can fires spread from a single battery to the entire array?	Megapack is designed to prevent battery fires and be resilient if they occur. Testing shows that if a fire does occur, Megapack safety systems can control and contain a fire within the unit without the aid of fire suppression.
13	What fumes are given off during a fire? What debris from a fire can enter the aquifer?	Gases resulting from a Megapack fire are similar to those of a typical structure fire: hydrogen, carbon dioxide, carbon monoxide and methane.Only trace amounts of acid gases are released during a fire. These gases, such as hydrogen fluoride, come from burning plastics, not battery cells. The concentrations are small enough that they are quickly diluted upon contact with the air, meaning there is no negative impact to air quality in the surrounding area. An independent safety study looked at what would happen if a fire occurred at the battery system under extremely unlikely and severe conditions, including very strong winds. The purpose was to understand whether smoke or gases could affect nearby people or properties. The study showed that: -Harmful gas levels at ground level remain well below levels considered dangerous to life. -Gas concentrations that could cause temporary health effects dissipate quickly and are limited to a small area close to the equipment. These gas levels do not reach nearby roads or neighboring homes. In short, even when assuming a highly conservative, worst-case scenario, the study indicates that a fire at the battery system would not pose a health risk to the surrounding community
14	Will you be providing the town with required fire fighting equipment needed for this facility?	Have been engaging with the fire department directly on this matter - will continue to work with fire department leadership to identify any equiptment that they may feel is necessary to serve this facility
15	What is the response time for your maintenance contactor to arrive on site in case of a facility fault, failure or a fire?	For a fire scenario Flatiron will contract a team of energy storage safety experts to provide immediate, 24/7 phone support to first responders. The service provider has a team in the greater NYC area and personnel in central Connecticut who will be able to be on-site within 2 hours to advise first responders locally. The service provider SME will have knowledge of the site and the response to provide immediate guidance to the fire service before taking a more active role at the site. Ultimately, this third party will take on the role of hazard support personnel (HSP), assuming responsibility for the site from local fire services, providing expert fire watch and fire fighting capability, stabilizing the affected system, supporting investigation, decommissioning, and disposal of the damaged systems. For more general faults on site, the site will be monitored 24/7 by an O&M service provider through a remote network operations center. Operators will triage issues based on detailed telemetry available from site and can respond remotely to de-energize portions of the site. Non-critical issues can be addressed by local technicians dedicated to the project as soon as the next operating day, as needed.
16	Flatiron said that he facility will be lighted. Provide lighting plan - NM enforces a dark sky policy with no glare for all industrial type facilities	A lighting plan and accompanying photometric study will be provided for review. It is anticipated that any proposed exterior light fixtures open the environment will be installed as full cut-off to protect against uplight pollution.
17	Flatiron said that they would landscape the site - NM expects 4 season landscaping of a variety of native species such that neighboring properties cannot see the facility	As part of our permit-level design package, Flatiron will be incorporating a proposed landscaping plan for the facility. Our design intention is to utilize a host of native plant species to act as substantial vegetative buffering so that the project is s
18	Projected load growth in New Milford, state of CT, New England, and the continental US by Year, Percentage, MW, Anticipated Population Growth - expected to be 2050	New Milford - Specific New Milford load forecasts are not available CT - CTDEEP provides an Integrated Resource Plan roughly every 2 years - the CSC also issues and annual "Review of the Ten-Year Forecast of Connecticut Electric Loads and Resources". The 2024 report projected a statewide summer peak load of 6,150 MW for 2024, growing to 6,772 MW by 2033 at a compound annual growth rate of 1.08%. These projections do not exceed a 10 year outlook, however elements of Connecticut's role in the anticipated doubling of ISO-NE's load growth are called out in their 2050 Transmission Study. Current Population - 3,675,069 Estimated 2050 Population - Largely flat, 3.7 million ISO NE - The 2050 Transmission Study completed by ISO-NE identified Southwest Connecticut as an area of "high-likelihood concern" due to projected high load density and position within the power system. There are only two 345 kV paths connecting this region to the rest of New England, which creates a bottleneck for the amount of power that can flow into these regions and a grid reliability concern if there should be a loss of one or both of these lines causing strain on the 115 kV system. The "best case" winter peak in 2050 is 51 GW, whereas the worst case winter peak in 2050 is 57 MW. Highest winter peak on record is 22,818 MW in Jan 2004, with 28,130 MW being the all-time high in August, 2006. Winter peak is projected to more than double by midcentury. ISO-NE is historically a summer-peaking system, however this is expected to shift to a winter-peaking system by mid-2030's as state -mandated electrification policies for heating take effect. Current Population - 15.4 million Estimated 2050 Population - 15.6 million United States - Load growth in the United States has been largely flat for the last two decades, however this is anticipated to change drastically due to the rapid expansion of data center development and broader electrification efforts. Projections for total US electricity required by 2050 range 50% to 78% above current levels, with anticipated compound annual growth rate sitting at approximately 2% through that same time period. Notably, the Northeast and West are expected to experience the largest demand increases stemming from electric vehicles between 2035-2050. This increase equates to 1,233 GW at projected peak national load. Current Population - 343 million Estimated Population - 360-388 million
19	Please provide data demonstrating that the other Tier 1 providers being considered (SK, Hithium, Fluence) are 'Buy American' compatible	Since our Zoning Commission Informational Session, we have refined the Tier 1 providers that we are considering for this project design. While Tesla remains the preferred likely Original Equipment Manufacturer, we are also considering Fluence as a secondary option. Fluence has leading domestic content capabilities with robust America-based supply chain operations. Please see below for a breakdown of these operations: - Enclosures - Utah, Arizona - Chiller / HVAC - Texas - OCTE/CSE - Georgia - Inverter - South Carolina - Cell - Tennessee Across these 6 production facilities, Fluence has created greater than 1,500 jobs in the United States.
20	What is the level of funding you will provide to New Milford for a 3rd party peer review?	Hoping to coordinate with Mayor to identify what the scope of work for this 3rd party peer review would be so that we can discuss level of funding and how best to initiate study work. Awaiting guidance from town leadership.
21	Based on your proposed location, what disaster scenarios have you considered? How will you mitigate the effects of these disasters? Have you considered a failure of the Candlewood Lake Earthen Dam?	The facility has been designed in accordance with the FEMA-designated floodway and floodplain of the West Branch Aspetuck River, being horizontally and vertically outside of the delineated floodplain limits. A potential failure of the Candlewood Lake Earthen Dam would not fall under the purview of a typical site plan application and was not considered or investigated by this project team.

Q18 Sources: https://www.iso-ne.com/static-assets/documents/100008/2024_02_14_pac_2050_transmission_study_final.pdf
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