

**Town of Rotterdam  
Planning Commission  
September 16, 2025**

**Workshop (6:00 pm)**

1. **Town of Rotterdam – Battery Energy Storage Systems.** Report and Recommendation to the Town Board to amend Chapter 270 to include code on Battery Energy Storage Systems (BESS).

**Agenda & Public Hearings (V. Dalton Bambury Hearing Room 2<sup>nd</sup> Floor) – 7:30 pm**

*Approval of the Summary of Minutes September 2, 2025*

1. **The Crossings at Helderberg Meadows – 3379 Guilderland Avenue.** The applicants request a Waiver of Site Plan review for modifications to building footprints and easements, on an approved Site Plan (July 19, 2022) to construct 124 condominium units on a ±67.95-acre portion of the Helderberg Meadows Planned Residential District (PRD) located on the northwest side of Guilderland Avenue. Engineer: Steenburgh Consulting Engineering, PLLC.



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ZENOBĒ

Zenobē Americas Inc.  
33 Irving PI  
10th Floor, Suite #1085  
New York, NY 10003

September 10, 2025

To the Town of Rotterdam Town Board:

Zenobe Americas Inc. (Zenobe) is a developer, owner, and operator of utility-scale Battery Energy Storage Systems (BESS). Our mission is to make energy reliable and cost-effective for communities through the deployment of energy storage. Zenobe owns over 1,200 MW of operational and under construction energy storage systems. We are currently exploring the development of a project in the Town of Rotterdam.

Zenobe previously sent a letter stating that we estimate that the project would generate approximately \$200,000 annually to local stakeholders. We are following up with this letter to further explain how this number was calculated, and which local groups would receive the revenue.

Separately, Zenobe has asked our attorneys at Hodgson Russ LLP to send a letter which offers a general overview of Payment in Lieu of Taxes (PILOT) Agreements and Host Community Benefit Agreements (HCBAs) as they are typically structured in New York State. That correspondence is intended to serve as a non-project-specific introduction to the agreements and to supply indicative agreements executed elsewhere in New York State for the Town's reference.

Projects of this type typically execute two separate agreements related to taxes; a PILOT agreement with the County Industrial Development Agency (in this case the Schenectady Metroplex Development Authority), and a Host Community Benefit Agreement (HCBA) directly with the Town (in this case the Town of Rotterdam). The figures below reflect common New York market practice and Zenobe's typical commercial approach; the amounts discussed below are indicative and would be subject to standard negotiations and approvals.

#### **Payment in Lieu of Taxes (PILOT)**

Large scale renewable energy and energy storage projects typically negotiate and execute a PILOT agreement with the County Industrial Development Agency; in the case of this project, the agreement would be executed with the Schenectady Metroplex Development Authority. Zenobe has had preliminary discussions with the Schenectady Metroplex Development Authority, and they have indicated that they would be open to an agreement of this type, contingent upon the project being acceptable to the Town of Rotterdam.

In New York State, PILOT agreements for energy storage projects are typically in the amount of \$1,000/MW annually, subject to an annual escalation of 2%. The agreement is typically for 15-20 years. As the proposed project in Rotterdam is 100 MW, this would result in a Year 1



payment of \$100,000/year, escalating to ~\$132,000/year by the end of a 15-year term and ~\$146,000/year by the end of a 20-year term.

Revenue from PILOT agreements is typically split between the County, Town, and School District where the project is located. The percentage allocations are dependent on local conditions; we have typically seen splits of ~15% to the Town, ~35% to the County, and ~50% to the School District. We have not discussed the split that would be applicable to this Project which would be determined based on the split between jurisdictions applicable to other types of taxes.

#### **Host Community Benefit Agreement (HCBA)**

In addition to the PILOT Agreement, energy storage projects typically execute a separate Host Community Benefit Agreement directly with the Town where the project is located. The HCBA is intended to provide more flexibility to the Town in terms of where the funding is directed. Zenobe has previously negotiated HCBA's in which the funding is directed primarily to the Town, with a share directed specifically to the local Fire Department to help with readiness, training, and equipment needs associated with battery energy storage projects.

In previous situations, Zenobe has negotiated Host Community Benefit Agreements in the range of \$1,050/MW annually, subject to an annual escalation of 2%. The agreement is typically for 15-20 years. As the proposed project in Rotterdam is 100 MW, this would result in a Year 1 payment of \$105,000/year, escalating to ~\$138,500/year by the end of a 15-year term and ~\$153,000/year by the end of a 20-year term.

Revenue from Host Community Benefit Agreements typically accrue primarily to the Town, though Zenobe is open to other arrangements that could potentially direct a larger percentage of the funding to the School District. Typical splits are 95% to the Town with the remaining 5% sent to the Fire Department (in cases where the Fire Department is funded separately).



## Summary of Typical Revenue

The tables below summarize the information presented above, for a 100 MW system.

Year 1	Town	School District	County	Fire Department	Total Local Revenue
PILOT	\$15,000	\$50,000	\$35,000	\$0	\$100,000
HCA	\$100,000	\$0	\$0	\$5,000	\$105,000
<b>Total</b>	<b>\$115,000</b>	<b>\$50,000</b>	<b>\$35,000</b>	<b>\$5,000</b>	<b>\$205,000</b>

Cumulative (15 years)	Town	School District	County	Fire Department	Total
PILOT	\$259,401	\$864,671	\$605,270	\$0	\$1,729,342
HCA	\$1,729,342	\$0	\$0	\$86,467	\$1,815,809
<b>Total</b>	<b>\$1,988,743</b>	<b>\$864,671</b>	<b>\$605,270</b>	<b>\$86,467</b>	<b>\$3,545,150</b>

Cumulative (20 years)	Town	School District	County	Fire Department	Total
PILOT	\$364,461	\$1,214,868	\$850,408	\$0	\$2,429,737
HCA	\$2,429,737	\$0	\$0	\$121,487	\$2,551,224
<b>Total</b>	<b>\$2,794,198</b>	<b>\$1,214,868</b>	<b>\$850,408</b>	<b>\$121,487</b>	<b>\$4,980,961</b>

### Conclusion

Zenobe appreciates the opportunity to present the above information to the Town of Rotterdam while you evaluate your draft Energy Storage Law. Zenobe is prepared to offer the Town and other local entities the annual and cumulative payments outlined above through a combination of a PILOT agreement with the Schenectady Metroplex Development Authority and a Host Community Benefit Agreement directly with the Town of Rotterdam.

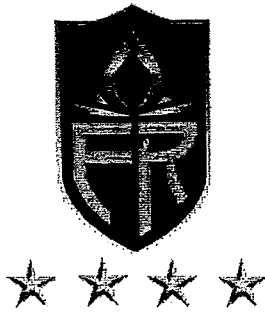
Zenobe believes that the proposed energy storage project has the opportunity to provide significant revenue for Town, County and School services, while requiring relatively few local resources. In addition, projects such as ours would bring approximately \$15M in construction contracts to the Town (where we would use local labor to the fullest extent possible), reduce energy costs, and increase energy reliability and resiliency across the region.

Zenobe respectfully encourages the Town Board to enact an energy storage law that allows well-sited and well-developed projects to be advanced within the Town of Rotterdam. Please refer to our previous letter, sent August 14, 2025, for Zenobe's comments on the currently proposed draft law.

Best,  
James Robinson  
Head of Project Development  
Zenobe Americas Inc.

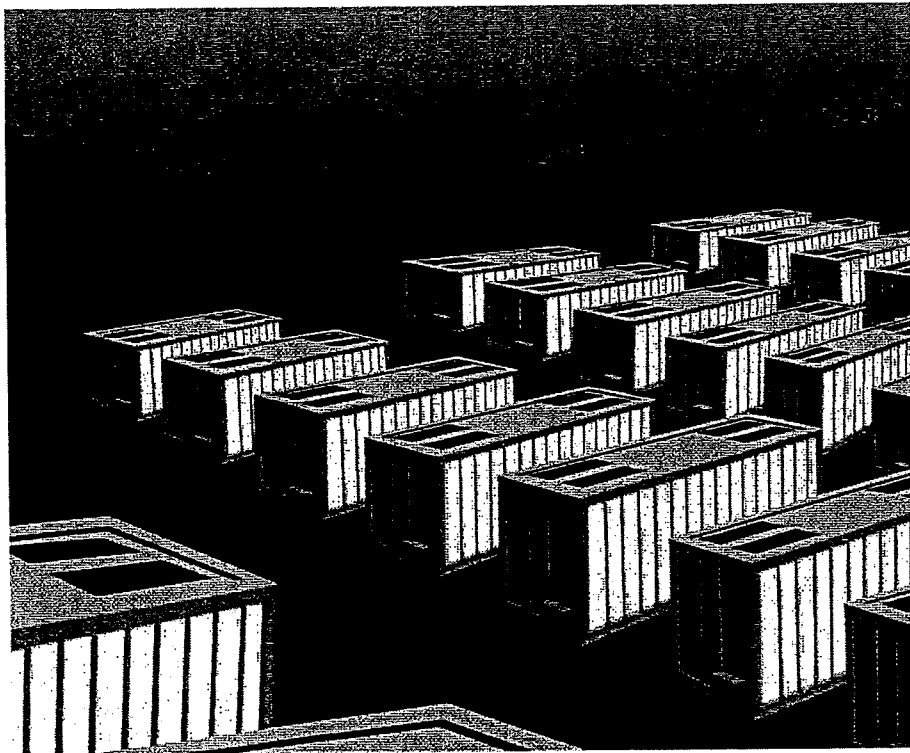
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# Assessment of Potential Impacts of Fires at BESS Facilities

EXECUTIVE SUMMARY | April 25, 2025



Prepared by Fire & Risk Alliance, LLC. for:  
The American Clean Power Association ©

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The issuance of this report does not authorize the use of the company name or marks on any advertising, promotion, marketing or external use other than ACP use, related to the data in this Report, without FRA prior written permission.

## Revision Notes:

Revision 0	17 March, 2025	Initial Release	Authored: JG, JM, MF	Reviewed: NR	Approved: NR
Revision 1	25 April, 2025	Section 1.3 Correction	Authored: JG, JM, MF	Reviewed: NR	Approved: NR

# 1 Executive Summary

Battery Energy Storage Systems (BESS) have become an essential component of modern energy infrastructure, supporting grid stability, renewable energy integration, and peak demand management. While concerns about fire hazards have been raised, historical data and scientific studies indicate that BESS remains a relatively safe technology with minimal environmental contamination risks. Furthermore, many reported fire incidents involved legacy systems that were designed, installed, and operational before the development and implementation of comprehensive national safety standards, such as NFPA 855 and UL 9540A.

This report provides an analysis of historical BESS fire incidents and, their causes, a review of the types of contaminants released, the extent of environmental impacts, and how advancements in safety regulations and technology have mitigated risks.

In none of the reviewed cases of environmental sampling related to the BESS fire events were contaminant concentrations found that would pose a public health concern or necessitate further remediation. This finding includes airborne contamination sampling conducted on-site, off-site, and within nearby communities, as well as relevant sampling of water from firefighting activities, automatic suppression system run-off, and groundwater testing in specific instances.

## 1.1 Historical Incidents: Context and Key Findings

A review of 35 documented large-scale BESS fire incidents in the United States (2012–2024) provides valuable insights into the evolution of ESS safety. These incidents occurred in 16 states, with California reporting the highest number (12). The following key trends emerged from the analysis:

- **Legacy System Involvement:** Many of these incidents involved early-generation BESS units that predate modern safety codes and lacked rigorous testing and integrated safety features.
- **Early Lifecycle Failures:** Nearly half (51%) of incidents reported the age of the system, with almost half of those incidents occurring within the first six months of operation, highlighting potential challenges during the commissioning and initial operational phases of BESS units.
- **Operational State at Time of Incident:** Among incidents where operational status was known, 69% of fires occurred during system use, while 17% took place during assembly, testing, or pre-commissioning.
- **Challenges in Root Cause Analysis:** Investigating BESS fires is complex due to the destruction of components at high temperatures. Available data suggests that failures primarily stemmed from system integration, construction, and assembly issues rather than fundamental battery chemistry concerns.
- **Advancements in Safety and Design:** Newer ESS units benefit from improved safety measures, such as advanced thermal management, suppression systems, and containment enclosures, significantly reducing the likelihood of large-scale incidents.

## 1.2 Case Studies of Notable BESS Fire Incidents

Several high-profile incidents illustrate the evolution of BESS safety and the limited environmental consequences of such fires. These incidents were also selected because they have published environmental impact assessments. Notable examples include:

- **Valley Center, CA (2022):** A small component-level BESS fire at a 560 MWh system. The fire was contained to a single module within a rack in one enclosure.
- **East Hampton, NY (2023):** A larger component-level fire at a 40 MWh system. The fire reportedly began as a result of a smoldering battery.
- **Surprise, AZ (2019):** A BESS enclosure fire and explosion in a 2 MWh system. Several firefighters were injured due to unexpected gas ignition and to date remains the sole incident in the US in which a person was injured.
- **Escondido, CA (2024):** A BESS enclosure fire at a 120 MWh system. The fire was limited to a single enclosure and had a duration of approximately 13 hours.
- **Lyme (Chaumont), NY (2023):** A BESS enclosure fire in a 15 MWh system. Four enclosures and two transformers were involved.
- **Melba, ID (2023):** A BESS enclosure fire that occurred in an 8 MWh system while in the pre-commissioning stage. The fire caused several battery stacks to be burned, and the fire had a duration of 3 days.
- **Warwick, NY (2023):** Two separate BESS fires occurred within 24 hours at a 36 MWh and a 17.9 MWh system. The BESS were allowed to consume themselves in a controlled manner, illustrating the shift in firefighting tactics from active suppression efforts to passive cooling of targets.

Table 1 summarizes the environmental sampling that was reported in the literature for each of the case studies selected. The documented record of environmental sampling performed for these events showed considerable variation in both the type of sampling conducted and the protocols employed, particularly concerning airborne contamination testing. Sampling was carried out by site personnel, HAZMAT first responders, and State and EPA personnel, often involving third-party consultants or testing laboratories.

Table 1: Summary of Environmental Sampling Performed at Case Study BESS Fires

Case Study	Location	Date	Sampling Method	Sampling Frequency	Sampling Duration
1	Valley Center, CA	5-Apr-22	N/A	N/A	N/A
2	East Hampton, NY	31-May-23	X	X	X
3	Surprise, AZ	19-Apr-19	X	X	X
4	Escondido, CA	5-Sep-24	X		X
5	Lyme (Chaumont), NY	27-Jul-23	X	X	X
6	Melba, ID	2-Oct-23	X		
7	Warwick, NY	26-Jun-23	X	X	X

In addition to the case studies summarized above, a large indoor BESS fire occurred on January 16, 2025 involving a 1,000 MWh system at Moss Landing, CA. As of the drafting of this report, the investigation is ongoing and the environmental impact is being monitored closely.

### 1.3 Regulatory and Scientific Assessments on Environmental Impact

- **ISO Standard 26367-1** provides a framework for assessing the environmental impact of fires.
- **EPA Risk Management Program** provides guidance on how to conduct off-site consequence analyses under the EPA's Clean Air Act and provides guidance both on establishing the worst-case scenarios for evaluation and data on a variety of toxic substances.
- **EPRI Guidance Documents:** The Electric Power Research Institute (EPRI) has published guidance on the available plume models that may be used for evaluating the potential airborne contamination from BESS fires and these guidance documents provide a modeling framework for performing air modeling simulations of BESS fires.
- **Community Risk Assessment Studies:** Studies performed by various engineering consultants model the spread of acid gases (HF and sometimes HCN and HCl) and conclude that acid gas emissions generally do not reach levels of concern beyond the immediate fire site. This conclusion is supported by limited large-scale BESS fire testing.

### 1.4 Environmental Impact Assessment

The environmental consequences of BESS fires have been a subject of increasing scrutiny. However, data from real-world incidents, experimental studies, and environmental monitoring efforts indicate that BESS fires have a minimal long-term environmental impact compared to other large industrial and structural fires.

#### 1.4.1 Airborne Emissions from BESS Fires

A key concern in BESS fire events is the release of toxic gases, but studies indicate that emissions are largely confined to the immediate vicinity of the fire, with rapid dissipation and concentration reduction in open-air scenarios. It has also been shown that fires involving BESS share many similarities with conventional fires, particularly those involving plastics, in terms of combustion byproducts. This is because the materials that make up lithium-ion batteries—such as polymer-based separators, electrolytes, and enclosures—contain hydrocarbons and other organic compounds that produce similar combustion emissions when the materials are exposed to high temperatures. Key findings on airborne contaminants include:

- **Common Gases Released:** BESS fires primarily emit CO, CO<sub>2</sub>, and volatile organic compounds (VOCs), and may emit other trace gases such as HF, HCN, or others depending on the battery chemistry and overall materials of construction of the BESS unit.
- **Limited Off-Site Impact:** Air sampling from past incidents has found that contaminant concentrations beyond the immediate fire scene do not pose a public health risk. For example, monitoring at the Escondido, CA and NY incidents showed no detectable hazardous concentrations in nearby communities and initial shelter in place and evacuation orders were generally lifted shortly after the measurements were taken.
- **Flammability and Gas Dispersion:** The rapid dispersion of gases in outdoor BESS fires limits the potential for widespread toxic exposure. Studies show that the local concentration of gases rarely reaches flammability limits in well-ventilated environments and toxic gases are rapidly diluted.

#### 1.4.2 Soil and Water Contamination

Concerns about soil and water contamination primarily arise from firefighting suppression efforts, particularly when large volumes of water are used. However, available data from real-world incidents and testing does not support the notion of widespread contamination risks. Key findings include:

- **Firefighting Water Runoff:** The consensus best practice for response to a BESS fire is to allow the BESS to consume itself and provide cooling water to targets if needed. Unless there is direct suppression water applied to the BESS on fire, any cooling water applied will be similar to rain and no potential contaminants will be included in any runoff. While lithium-ion battery fires produce chemical byproducts, studies show that their solubility in water is low, limiting the potential for groundwater contamination if direct suppression efforts are performed. Additionally, standard stormwater management practices help prevent runoff from reaching natural water sources in the event that the fire department determines that suppression efforts are required.
- **Environmental Sampling Results:** In past BESS fire incidents where environmental sampling was conducted, water and soil samples did not reveal hazardous contamination levels requiring remediation.

## 1.5 Firefighting Strategies and Risk Mitigation

Lessons learned from BESS fire events have impacted the firefighting tactics and safety features for newer BESS installations and provided increased awareness of safety and environmental considerations.

### 1.5.1 Key Firefighting Considerations

The evolution of BESS firefighting strategies has led to a shift in approach, particularly in cases where deep-seated battery fires occur within enclosed containers. Fire suppression tactics now emphasize containment and cooling of targets rather than active suppression efforts, therefore reducing potential environmental impacts, particularly those associated with soil and water contamination.

- **Controlled Burn Approach:** Many fire departments now adopt a strategy of letting a burning BESS container consume itself rather than applying excessive amounts of water. This minimizes the potential runoff and reduces potential exposures to soil and water.
- **Regulatory Compliance:** Adherence to updated standards such as NFPA 855 and UL 9540A ensures that newer BESS installations include fire safety features designed to limit fire initiation and propagation, therefore reducing potential environmental impacts in the event of a fire.

### 1.5.2 ESS Safety and Environmental Considerations

While BESS fire incidents have raised safety concerns, it is important to contextualize these events within the broader landscape of industrial and energy-related hazards. Many documented BESS fires involved early-generation systems that predate modern safety standards. The implementation of robust national codes and advancements in ESS design have significantly improved fire safety and reduced risks.

Crucially, environmental monitoring data from real-world BESS fire incidents does not support claims of widespread contamination. Airborne emissions are short-lived and localized, soil and water contamination risks are minimal, and existing firefighting strategies further mitigate potential environmental harm.

As the BESS industry continues to evolve, adherence to best practices in system integration, commissioning and fire protection will further enhance safety and environmental sustainability. With continuous ongoing research and advancements in technology, ESS remains a reliable and safe energy storage option.

# Town of Rotterdam

## PROPOSED LOCAL LAW NO.      OF THE YEAR 2025

**BE IT ENACTED** by the Town Board of the Town of Rotterdam, in the County of Schenectady, as follows:

**I. SECTION ONE – TITLE**

This Local Law shall be known as the “Battery Energy Storage System”.

**II. SECTION TWO - LEGISLATIVE INTENT AND PURPOSE**

It is the intent of this local law to amend the Town of Rotterdam Zoning Law, as the same may have been amended from time to time, to enact provisions providing for Small-scale Battery Energy Storage System (S-BESS), Large-Scale Battery Energy Storage System (L-BESS) and Utility-Scale Battery Energy Storage Systems (U-BESS) installations in the Town, as defined in this local law through addition of a new Section, Section 270 Battery Energy Storage Systems, to Article VIII (Supplementary Regulations) of the Town of Rotterdam Zoning Law. It is further the intent and purpose of this local law to, in accordance with the Town of Rotterdam Comprehensive Plan, to responsibly locate Large Scale Battery Energy Storage Systems (L-BESS) and Utility-Scale Battery Energy Storage Systems (U-BESS) within the Town. Accordingly, this local law modifies certain use definitions relating to prohibited uses, energy storage systems, and public utilities.

The Town finds that well-planned, suitably sized, and located Battery Energy Storage Systems can be beneficial. This law seeks to foster thorough project planning and appropriate siting.

- A. Protecting the health, safety, and well-being of our First Responders through responsible siting, pre-incident planning and education, continuing education and training, adequate protection and equipment, and the implementation of best practices to reduce potential hazards.
- B. Allowing Town of Rotterdam residents, landowners, farms, and government to safely locate Battery Energy Storage Systems resources in a way that is consistent with the nature and character of the Town in accordance with the Town of Rotterdam Comprehensive Plan and the Natural Resource Inventory.
- C. Promoting and supporting our Town’s Open Space Plan with Battery Energy Storage Systems zoning that protects and preserves open space, agricultural lands, and

environmentally significant areas of Town as designated by our Comprehensive Plan and Natural Resource Inventory.

Protecting the Town's unique ecosystem of plants, wildlife, and habitats, particularly in the western upland and rural areas of Town.

- D. Recognizing the importance of Agriculture and protecting water and soils conducive to farming. Agricultural areas and surrounding areas should not be used for Utility-Scale Battery Energy Storage Systems (U-BESS).
- E. Protecting and ensuring farmland, agricultural land, and forested land are put to their highest and best use.
- F. Protecting and promoting scenic and environmental resources by minimizing Utility-Scale Battery Energy Storage Systems (U-BESS) facilities' impacts on these resources as outlined in the Rotterdam Comprehensive Plan including, but not limited to, fresh watersheds, floodplains, historic sites, conservation easements, trails, parklands, wetlands, wildlife, and scenery, and areas for recreational and outdoor activities.
- G. Protecting the property values of those properties neighboring and within the viewshed and sound shed of a Utility-Scale Battery Energy Storage Systems (U-BESS).
- H. Conserving the rural character of western Rotterdam and rural hamlets, including Rotterdam Junction and Pattersonville.

### **III. SECTION THREE - AUTHORITY**

This local law is adopted by the Town Board of Town of Rotterdam (hereinafter referred to as the "Town Board") pursuant to its authority to adopt local laws under Article IX of the New York State Constitution; Articles 2 and 3 of the Municipal Home Rule Law; Article I of the Town Zoning Law, particularly Section 2 which authorize the Town to adopt zoning provisions that promote health and general welfare, encourage the most appropriate use of land throughout the Town, encourage development in accordance with a comprehensive plan and professional planning techniques, and improve the quality of life throughout the Town.

### **IV. SECTION FOUR - DEFINITIONS**

Article II- Definitions Section 270-5 of the Town of Rotterdam Zoning Law is hereby amended to add the following definitions:

**BATTERY(IES)**: A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store

energy electrochemically. For the purposes of this law, batteries utilized in consumer products are excluded from these requirements.

**BATTERY ENERGY STORAGE SYSTEM:** One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery, an electric motor vehicle, uninterruptible power supply systems, or a energy storage system for temporary use. A Battery Energy Storage System is classified as follows:

- A. Small-Scale Battery Energy Storage Systems (S-BESS) have an aggregate energy capacity less than or equal to 150kWh. Designed to produce energy for onsite consumption.
- B. Large-Scale Battery Energy Storage Systems (L-BESS) have an aggregate energy capacity greater than 150kWh and less than or equal to 600kWh and, if in a room or enclosed area, consist of only a single energy storage system technology. Ground-Mounted Large Scale Battery Energy Storage Systems are further defined as those which may be installed in a dedicated use building, within a cabinet, and/or a walk-in unit. Designed to produce energy for onsite consumption.
- C. Utility-Scale Battery Energy Storage Systems (U-BESS) have an aggregate energy capacity greater than 600kWh, are comprised of more than one storage battery technology in a room or enclosed area or are co-located with Solar Energy Systems and other energy generation facilities designed to produce energy for onsite consumption and/or released into the energy grid.

**BATTERY SYSTEM'S AREA:** Area of battery including required local and state safe operating clearances.

**ENERGY CODE:** The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the Energy Law, as currently in effect and as hereafter amended from time to time.

**FIRE CODE:** The fire code Section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

**HAMLET OF PATTERSONVILLE-ROTTERDAM JUNCTION:** A census designated place in Schenectady County, New York, United States.

**TOWN OF ROTTERDAM BATTERY ENERGY STORAGE SYSTEM PERMIT:** The Town's minimum submittal requirements for electrical and structural plan review applicable to small-scale Battery Energy Storage Systems with an aggregate energy

capacity less than or equal to 600kWh, based on the 2020 NYSERDA Battery Energy Storage System Model Permit, as may be amended.

UNIFORM CODE: the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

The following definition is hereby replaced in entirety and amended, as follows:

SOLAR ENERGY EQUIPMENT AND SYSTEMS: Solar collectors, controls, heat pumps, heat exchangers, and or other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed. Solar systems include solar thermal, photovoltaic and concentrated solar. For energy storage devices, refer to Battery Energy Storage System in this Section.

#### **V. SECTION FIVE - APPLICABILITY**

- A. The requirements herein shall apply to all Battery Energy Storage Systems and equipment installations modified or installed after the effective date of this law, excluding general maintenance and repair.
- B. Modifications to an existing Battery Energy Storage System that increases the battery system's area by more than 5 percent (exclusive of moving any fencing) from original approval shall be subject to this law.
- C. All Battery Energy Storage Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code ("Building Code") the NYS Energy Conservation Code, and the Town of Rotterdam Code. Whichever code is more stringent shall govern.
- D. To the extent that any other Town law, rule or regulation, or parts thereof, are inconsistent with the provisions of this law, the provisions set forth in this law shall control only as they pertain to Battery Energy Storage Systems.
- E. Any proposed Battery Energy Storage Systems subject to review by the New York Board on Electric Generation and Siting and the Environment pursuant to Article 10 of the New York State Public Service Law, or the Office of Renewable Energy Siting pursuant to Article 94-c of the Executive Law, shall be subject to all substantive provisions of this law and any other applicable laws, codes, ordinances and regulations of the Town of Rotterdam, and any other applicable state or federal laws.

**VI. SECTION SIX - PROHIBITED USE -UTILITY-SCALE BATTERY ENERGY STORAGE SYSTEMS**

A TLBESS failure has the potential to undermine public health, safety and welfare, will

**VI. SECTION SIX - PROHIBITED USE -UTILITY-SCALE BATTERY ENERGY STORAGE SYSTEMS**

A. U-BESS failure has the potential to undermine public health, safety and welfare, will potentially be situated in locations without access to water supply for fire suppression, and will overtax the Town's first responders. U-BESS failure resulting in fire can produce a range of toxic gasses and particulates, including several highly toxic compounds including benzene, toluene, styrene, biphenyl, hydrogen fluoride and many others.

U-BESS is a permitted use in the I-2 zoning districts.

U-BESS is not permitted in the aquifer recharge zone and tributary areas.

U-BESS is not permitted in the Hamlet of Pattersonville-Rotterdam Junction.

Section 6(b). In accordance with the findings set forth in this Section, Article II- Definitions Section 270-5 of the Town of Rotterdam Zoning Law is hereby added, as follows:

USE, PROHIBITED: Within a district, a use that is not listed as a permitted or a special use is a prohibited use. In addition, development within non-conforming uses that are detrimental to the natural environment are specifically prohibited within the Town, including landfills, open mining, strip mining, open composting, salvage or junkyards, debris dumping, open petroleum or chemical tank farms, Tier 3 or Tier 4 Scale Solar systems, and utility-scale Battery Energy Storage Systems.

**VII. SECTION SEVEN - LARGE-SCALE BATTERY ENERGY STORAGE SYSTEMS AS AN SPECIAL USE**

A. Allowing L-BESS for onsite power consumption in existing districts for B-1, B-2, C-1, and I-1 is permitted as a special use with the understanding that all existing zoning and planning requirements are met as well as the guidelines in this law.

**SECTION EIGHT - UTILITY-SCALE BATTERY ENERGY STORAGE SYSTEMS AS AN ALLOWABLE USE**

A. Allowing U-BESS in existing I-2 is permitted with the understanding that all existing zoning and planning requirements are met as well as the guidelines in this law.

## **IX. SECTION NINE - GENERAL REQUIREMENTS**

### **A. Applicability:**

1. The requirements of this Zoning Law shall apply to all Battery Energy Storage Systems permitted, installed, or modified in the Town of Rotterdam after the effective date of applicable amendments to this Section, excluding general maintenance and repair.
2. Battery Energy Storage Systems constructed or installed prior to the effective date of applicable amendments to this Zoning Law shall not be required to meet the requirements of this Section.
3. Modifications to, augmentations, retrofits or replacements of an existing Battery Energy Storage System that increase the total Battery Energy Storage System designed discharge duration or power rating shall be subject to this Section.

### **B. General Requirements:**

1. A building permit and an electrical permit shall be required for installation of all Battery Energy Storage Systems. The building permit shall be administered in accordance with Town requirements, including this Zoning Law.
0. Issuance of permits and approvals under this Zoning Law shall include review pursuant to the State Environmental Quality Review Act, as appropriate.
  1. All Battery Energy Storage Systems and all other buildings or structures that (1) contain or are otherwise associated with a Battery Energy Storage System and (2) are subject to the Uniform Code and/or the Energy Code shall be designed, erected, installed, and operated in accordance with all applicable provisions of the Uniform Code.
  2. Application fees. Application for construction of a Battery Energy Storage System shall be subject to the payment of fees in amounts indicated in the Town Schedule of Fees as adopted by the Town Board.

## **X. SECTION TEN - SMALL-SCALE BATTERY ENERGY STORAGE SYSTEMS – PERMITTING REQUIREMENTS**

**A. Zones Allowed:** Allowed by right in all zones.

**B. Applications, Approvals, Fees, and Permits:** S-BESS Application and Building Permit. Fees in accordance with the most current version of the Town of Rotterdam Fee Schedule. Systems in a non-residential zone may require site plan reviews under other Sections of Town code.

C. Setbacks:

1. S-BESS shall conform to the setbacks in the subject zoning district. If there is an existing structure which is nonconforming with its zone requirements, setbacks for new structures shall conform to the current Town Code.

D. Specific Requirements:

1. S-BESS shall be required to display a permanent plaque or directory placed in an exterior location near the main or front entry of a residence or other structure that is readily visible to firefighters to identify the system disconnect(s) location. The plaque or directory shall meet all New York State Building Code standards for reflection, lettering, and color for easy visibility.

**XI. SECTION ELEVEN - LARGE-SCALE BATTERY ENERGY STORAGE SYSTEMS  
- PERMITTING REQUIREMENTS**

- A. Zones Allowed: Allowed by special use in Zones B-1, B-2, C-1, I-1 and I-2.

- B. Applications, Approvals, Fees, and Permits: L-BESS Application and Building Permit. Fees in accordance with the most current version of the Town of Rotterdam Fee Schedule. Non-residential systems may require site plan reviews under other Sections of Town code.

C. Setbacks:

1. L-BESS located by special use shall be set back from the property line at a minimum of 100 feet.
2. L-BESS Facility Areas shall be setback at a minimum of 150 feet from wetlands, ponds, and streams, unless otherwise waived from this requirement by the Planning Commission upon receiving any required permit from a state or federal regulatory agency.
3. The following will not be subject to the required property line setback herein unless otherwise directed by the Town of Rotterdam Planning Commission.
  - a. Access roads proposed from a public road to the fence of a L-BESS facility, including any stormwater management, or other necessary infrastructure installed for the purpose of this access road.

D. Specific Requirements:

1. When located outside of a building or structure the L-BESS shall be in a side or rear yard.
2. L-BESS shall be required to display a permanent plaque or directory placed in an exterior location near the main or front entry of the building or structure that is readily visible to firefighters to identify the system disconnect(s) location. The plaque or directory

- shall meet all New York State Building Code standards for reflection, lettering, and color for easy visibility.
3. L-BESS shall be required to be self-contained and have a built-in fire extinguishing system supplied by the L-BESS manufacturer.
  4. L-BESS shall be allowed only in zoning districts where there are fire hydrants fed from a municipal water supply within 500 feet of the L-BESS batteries. L-BESS are not allowed in any zoning district without municipal water. L-BESS is prohibited in the Hamlet of Pattersonville-Rotterdam Junction.
  5. Where site plan approval is required elsewhere in the regulations of the Town for the principal use, the L-BESS shall be subject to site plan review. In its review of the site plan, the Planning Commission shall apply the standards and procedures set forth in Section 11 of this Local Law. Site plan review of L-BESS development shall include review of the adequacy, location, arrangement, size, design, screening, accessibility for emergency response, and general site compatibility of proposed L-BESS.
  6. The Planning Commission may require a submission of a noise analysis, an emergency response plan as part of the site plan application, and/or a decommissioning plan. The Planning Commission may require a performance guarantee, in accordance with the provisions of this Local Law, Section 13.
  7. The Planning Commission may require after consultation with the responding fire district that the Applicant and/or Operator of the L-BESS provide safety and first responder training. The Town may, from time to time, require training of new personnel, and funding, or other mechanisms to cause such training to be provided, which shall be provided by the owner/operator upon request by the responding fire district.
  8. Only (1) L-BESS may be located on a single parcel with a minimum of 2 acres.
  9. Pre construction for L-BESS projects shall include well water and ground contamination testing.
    - a. The Applicant, Town, and TDE shall develop a list of potential contaminants that will be tested for, and the location of testing based on the proposed equipment for the L-BESS facility prior to testing.
      - i. List of contaminants that may be tested for includes but is not limited to: sulfuric acid, mercury, nickel, cadmium (known Carcinogen), cadmium telluride, lead, lithium, cobalt, lithium, iron, arsenic, silicon, copper, silver, selenium, copper indium selenide, copper indium gallium, diselenide, (di)selenide, hexafluoroethane, polyvinyl fluoride, PFAS, and any other contaminant required for testing by the Town, County or State for this type of facility at the time testing takes place.

- b. At the Applicant's cost, an escrow account with the Town shall be established to provide an independent third-party testing agency which will provide testing of the Facility Area and of water wells on properties within 1000-ft of the Facility Area.
  - c. At the Applicant's expense, notice shall be given to all property owners within 1000-ft that water well testing is available prior to L-BESS construction at the cost of the L-BESS Applicant.
  - d. Pre-construction testing: Initial testing shall take place within 12-months of establishing the escrow account. Test results for the Participating L-BESS Properties shall be furnished to the Town.
10. L-BESS must have a continuously maintained connection to the municipal water supply, where municipal water is available. The L-BESS application must obtain in writing from the local fire department the type of fire department connection.
11. L-BESS shall not be located within one half mile of public structures that are or can be designated as follows under the NYS Building Code:
- a. Category III – structures that represent substantial hazard to human life.
  - b. Category IV – structures designated as essential facilities. **XII.**

## **SECTION TWELVE - UTILITY-SCALE BATTERY ENERGY STORAGE**

### **SYSTEMS – PERMITTING REQUIREMENTS**

A. Zones Allowed: Allowed by right in Zone I-2.

B. Applications, Approvals, Fees, and Permits: U-BESS Development Application; Site Plan, Special Use Permit approval process; Building Permit. Fees in accordance with the most current version of the Town of Rotterdam Fee Schedule.

1. A pre-submission conference with the Town is required. The Applicant shall provide the opportunity for an on-site visit by any interested Town committee or board members.

C. Setbacks:

1. U-BESS located in zones I-2 shall be set back from the property line at a minimum of 100 feet.
12. U-BESS Facility Areas shall be setback at a minimum of 150 feet from wetlands, ponds, and streams, unless otherwise waived from this requirement by the Planning Commission upon receiving the proper permit from a state or federal regulatory agency, where required by such agency.
13. The following may not be subject to the required property line setback herein unless otherwise directed by the Town of Rotterdam Planning Commission.

- a. Access roads proposed from a public road to the fence of a U-BESS facility, including any stormwater management, or other necessary infrastructure installed for the purpose of this access road.

D. Escrow for Review and Operations: U-BESS projects will require more oversight and services by the Town and their selected consultants. In addition to the normal escrow requirements of Section 7, the account shall also include adequate funding for any necessary mailings by the Town, construction inspections, annual inspections, and for monitoring during operation of the facility. The escrow account shall be replenished when required by the Town and shall be maintained for the life of the project. Failing to replenish the account will result in enforcement action by the Town or activating the Decommissioning Agreement.

E. Specific Requirements:

1. All applicable requirements listed under Section 9, and all requirements of Section 12 of this Law.
2. The Applicant shall disclose the full scope of the planned size of the project, including any other involved municipalities, and shall not segment the application for purposes of reducing the apparent significance of proposed plans. Where the Planning Commission or Lead Agency has substantial proof that the ultimate scope of the project may exceed that which is being proposed by the Applicant, it shall conduct its review and base its findings on the larger potential scope.
3. All requirements of Site Plan Approval. In addition, Site Plans for the application shall also contain the following:
  - a. Location map showing types of existing structures and uses on the site, public roads, and properties with abutting boundaries of the site including any bordering municipalities.
  - b. The Site plan shall provide the surveyed data of abutting properties to the Participating Property parcel(s) showing all principal and accessory buildings (residential and commercial), roads, utilities and private or public wells; and labeling distances from those features to the Participating Property boundary;
  - c. Location and description of all U-BESS components, whether on site or off site, all above and below-ground utility lines on the site, transformers, POI, Renewable Energy Electrical Substations when required for project, fencing, laydown, and storage areas to be used as part of construction and other ancillary facilities or structures;
  - d. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
  - e. Label all setback distances as required by Town Laws; 2. Part 1 of a Full Environmental Assessment Form for SEQRA.

3. Upon receipt of an application, at the Applicant's expense, a notice of the proposed project to all abutting owners of property to the Participating Property boundaries regardless of municipality shall be required. The Applicant shall provide proof of mailing to the Town. Notices shall contain a summary of the project, a designated contact person, with telephone number, e-mail address, and mailing address from whom information will be available on a going forward basis.
4. An electrical one-line diagram detailing the associated components, and electrical interconnection methods, with all disconnects and overcurrent devices identified.
5. Manufacturer data on all proposed U-BESS components.
6. Documentation of access to the Facility Area via a lease agreement or other instrument to show the landowner's consent to the project.
7. Documentation of utility notification, including proof of interconnection agreement. Projects not viable to the utility company shall not be considered by the Planning Commission.
8. Decommissioning plan, including cost estimate and description and form of financial surety as described in other Sections of this Law.
9. Deforestation: Previously cleared or disturbed areas are preferred locations for U-BESS projects.
0. Acoustical noise studies by an independent third-party vendor shall be submitted with the application, which provide analysis of all noise-generating equipment that may be included in the project, including for construction. Noise generated from the U-BESS components and associated ancillary equipment, including but not limited to transformers, inverters, storage devices and substations shall provide for no discernable difference from existing noise levels at property lines. The study shall contain:
  - a. Actual measurements of existing daytime and nighttime ambient noise at the boundary of the participating properties. Ambient noise testing locations and schedule shall be discussed with the Planning Commission before testing takes place.
  - b. Proposed noise model to predict the potential increase in noise from pre-construction to post-construction conditions at both the project boundaries and nearest adjacent receptors (neighboring houses, etc.).
  - c. Noise studies shall follow industry norms and report their findings using A-weighted methodologies. The Planning Commission may require additional

analysis as they deem appropriate and may require noise mitigation or additional setbacks as needed.

11. As part of the Operation, Safety and Maintenance Plan in Section 14 of this Law, the Applicant shall document existing firefighting resources near or on the Participating Properties that may include, but not be limited to: the distance to nearest fire hydrant, dry hydrants, ponds, or other waterbodies for drawing water in emergency situations.
12. U-BESS shall not exceed a maximum project size of 5 contiguous acres.
13. In addition to Section 12(f)(6) of this Law, the required notice to surrounding landowners shall contain a link to a project website, created and paid for by the Applicant, which is meant to disseminate information to the public. At the Applicant's expense, publication of notice of application shall be made in newspapers designated by the County of Schenectady and Town of Rotterdam for the same. Notice shall also be provided to each member of the State and County Legislature in whose district any portion of the proposed U-BESS is in, or which district the project abuts upon.
14. Upon submission of an application, the Applicant shall conspicuously post signage on the frontage of participating properties at all roads abutting the proposed project and at the proposed entryways/exits to the project. Signage must be of sufficient size to contain the name of the proposed project, the application number, a rough concept map of the project, and contact information for the developer as well as a proposed project website address. Signage shall be sized and placed at a safe distance from the public roadway so as not to interfere with sight distance on the roadway or any adjacent driveways.
15. In addition to the Noise Studies requirements under Section 12 of this law, within 90-days of project completion the Applicant or facility owner shall conduct a post-construction noise sampling at locations and schedule discussed with the Planning Commission prior to testing. If noise sampling is found to be greater than predictions the Applicant may be required to mitigate the sound to a level sufficient to the Planning Commission. Failure to implement mitigation measures within 90-days of notice will result in enforcement procedures by the Town. The Applicant may request one (1) 90-day extension if reasonable evidence that the requested measures cannot be completed in 90-days are established. Further, violations and penalties of this provision shall be handled in accordance with other Sections of Town Code concerning noise violations. The Town may use the project's escrow account to hire an independent third-party engineer/noise monitor to oversee compliance with noise requirements and the ongoing obligation of the same for the lifetime of the project.

14. At the Planning Commissions discretion, a Road-Use Agreement may be required for the desired traffic route.
15. Pre construction for U-BESS projects shall include well water and ground contamination testing.
  - a. The Applicant, Town, and TDE shall develop a list of potential contaminants that will be tested for, and the location of testing based on the proposed equipment for the U-BESS facility prior to testing.
    - i. List of contaminants that may be tested for includes but is not limited to: sulfuric acid, mercury, nickel, cadmium (known Carcinogen), cadmium telluride, lead, lithium, cobalt, lithium, iron, arsenic, silicon, copper, silver, selenium, copper indium selenide, copper indium gallium, diselenide, (di)selenide, hexafluoroethane, polyvinyl fluoride, PFAS, and any other contaminant required for testing by the Town, County or State for this type of facility at the time testing takes place.
  - b. At the Applicant's cost, an escrow account with the Town shall be established to provide an independent third-party testing agency that may provide testing of the Facility Area and of water wells on properties within 1000-ft of the Facility Area.
  - c. At the Applicant's expense, notice shall be given to all property owners within 1000-ft that water well testing is available prior to U-BESS construction at the cost of the U-BESS Applicant.
  - d. Pre-construction testing: Initial testing shall take place within 12-months of establishing the escrow account. Test results for the Participating U-BESS Properties shall be furnished to the Town.
18. Landscape and Screening: Buffers shall use existing vegetation to the fullest extent practicable. If existing vegetation does not provide the desired screening or buffer width it shall be supplemented with new landscaping to form a continuous hedge at least 14 feet in height at planting shall be required and maintained for the life of the project. Berms, solid fencing, and opaque enclosures are the least desirable method of screening but may be proposed in situations where existing or new landscaping for screening is not practical. New landscaping proposed for the project shall be species native to the region and selected by a Registered Landscape Architect. All landscaping and screening methods shall be maintained and replaced as necessary during the life of the project.
19. U-BESS must have a continuously maintained connection to the municipal water supply, where municipal water is available. The U-BESS application must obtain in writing from the local fire department the type of fire department connection.

20. U-BESS shall not be located within one half mile of public structures that are or can be designated as follows under the NYS Building Code:
- a. Category III – structures that represent substantial hazard to human life.
  - b. Category IV – structures designated as essential facilities.

### **XIII. SECTION THIRTEEN – REQUIRED AGREEMENTS**

The following applies to Utility-Scale Battery Energy Storage Systems (U-BESS), unless waived or altered by the Planning Commission.

- A. Road Use Agreement:** The Applicant shall execute a road use agreement with the Town if Town roads are to be used for the project. Prior to the issuance of the building permit and commencement of construction, an existing condition assessment of the proposed hauling routes using Town roads shall be undertaken by the Applicant at the Applicant's expense. Any damage to a Town during construction caused by the operator or its subcontractors shall be repaired or reconstructed to the satisfaction of the Town Highway Superintendent at the operator's expense.
- B. Performance Guarantees:** The Town will require the Applicant or facility owner to provide, prior to construction, a performance bond or cash escrow that names the Town of Rotterdam as the beneficiary, to ensure proper operation and maintenance of all below noted facilities, both during and after construction and until the U-BESS is removed from operation. If the Applicant or facility owner fails to properly operate and maintain below noted facilities, the Town, after giving reasonable notice for non-emergencies, may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs. After which, the account shall be replenished by the Applicant or facility owner within 90 days, or else the facility will be considered abandoned, and decommissioning shall be enacted.
1. Facilities for performance guarantees:
    - a. All proposed landscaping and screening for the project in the amount of 50 percent the installed cost.
    - b. Stormwater management and erosion and sediment control facilities required for the project in the amount of 50 percent the installed cost.
    - c. Any other facility as part of the proposed project, deemed necessary for inclusion to this Section by the Planning Commission.
- C. Decommissioning:** The Applicant shall execute a Decommissioning Agreement and financial surety as described in Section Fourteen of this Law.
- D. Indemnification:** The Applicant system shall execute an Indemnification Agreement with the Town. The agreement shall require the Applicant/owner/operator to at all times defend, indemnify, protect, save, hold harmless and exempt the Town and its

officers, councils, employees, attorneys, agents and consultants from any and all penalties, damages, costs or charges arising out of any and all claims, suits, demands, causes of action or award of damages whether compensatory or punitive, or expenses arising there from either at law or in equity, which might arise out of or be caused by the placement, construction, erection, modification, location, equipment's performance, use, operation, maintenance, repair, installation, replacement, removal or restoration of said U-BESS, excepting however any portion of such claims, suits, demands, causes of action or award of damages as may be attributable to the negligent or intentional acts or omissions of the Town or its employees or agents. With respect to the penalties, damages or changes referenced herein, reasonable attorneys' fees, consultant fees and expert witness fees are included in those costs that are recoverable by the Town.

- E. Payment in-lieu of Taxes: The Applicant shall enter into an agreement for a payment in lieu of taxes (PILOT) Agreement with the Town Board pursuant to Real Property Tax Law Section 487. This PILOT agreement shall be reviewed and approved by the Town Board. A PILOT agreement executed with the county IDA, acceptable to the Town Board, in its sole discretion, for the U-BESS may serve to meet the requirements of this Section.
1. No building permit shall be issued, or construction commenced for a U-BESS until such time as the PILOT agreement has been executed by all parties and recorded at the Office of the County Clerk.
  2. The PILOT shall run to the benefit of the Town and School District and be executed by the operator and the owners of the real property upon which the U-BESS is to be located and such signatures be notarized in such a way that allows the PILOT agreement to be recorded at the Office of the County Clerk. Prior to commencement of construction, the PILOT agreement shall be recorded at the Office of the County Clerk as a lien on the property and indexed against the property/properties upon which the U-BESS is to be constructed. The intent of this provision is so that should the operator of the U-BESS default with regard to the PILOT agreement, such obligation will become the responsibility of the then owner of the property upon which the U-BESS is sited and failure to satisfy the terms of such agreement will permit the Town to enforce such agreement against the owner.

#### **XIV. SECTION FOURTEEN – SYSTEM OPERATIONS AND SAFETY**

The following applies to Large-Scale Battery Energy Storage Systems (L-BESS) and Utility-Scale Battery Storage Systems (U-BESS), unless waived by the Planning Commission or noted otherwise in this document.

- A. Operation, Safety and Maintenance Plan: The Applicant shall submit a comprehensive operation, safety and maintenance plan that addressing the following:
1. An executive summary sheet at the front of the document which clearly shows the following:
    - a. Facility owner information and contact, both phone and current email address.

- i. Landowner information and contact, both phone and current email address.
  - ii. An emergency contact phone number for a competent person who can be to the facility within one (1) hour or less notice. The individual shall have access to the facility gates, knowledge of the site and be able to quickly identify electrical disconnect locations.
  - iii. An emergency contact at the Utility Company associated with the L-BESS or U-BESS.
  - iv. Contact information for the company or individual responsible for regular maintenance and landscaping of the site.
2. Descriptions of continuing maintenance and upkeep for L-BESS or U-BESS, as well as design, construction, installation, testing and commissioning information and shall meet all requirements set forth in the Uniform Code and all applicable codes and the additional items below:
  - a. Procedure for how damaged or malfunctioning equipment shall be identified, isolated, removed, replaced, or repaired from the site within 30 days of discovery or notification of problem at the expense of the developer, ATIMA/ISAOA.
  - b. Description of internally located components for temperature monitoring, self-extinguishing fire system and off gassing monitoring. Method for how this equipment will be maintained, tested and inspected yearly or more frequently if required by the manufacturer.
  - c. System equipment, grounds, fencing and buffer areas shall be maintained in good condition by the operator.
  - d. Only DEC approved cleaning products applied by DEC approved applicators are allowed.
3. The Applicant shall prepare an Emergency Operations Plan in cooperation with Town emergency service providers, which will become part of the Operation, Safety and Maintenance Plan. A copy of the approved plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials and emergency responders. The emergency operations plan shall include the following information:
  - a. Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.

- b. Procedures for inspection and testing of associated alarms, interlocks, controls, temperature monitoring, self-extinguishing fire suppression system and off gassing monitoring.
- c. Procedures to be followed in response to notifications from the L-BESS or U-BESS that, when provided, could signify potentially dangerous conditions, including shutting down equipment, summoning service, and repair personnel, and providing agreed upon notification to fire company personnel for potentially hazardous conditions in the event of a system failure. All means of shutting down the L-BESS or U-BESS shall be clearly marked.
- d. The property must be inspected after a National Weather Service designation of a Severe Weather event to ensure that the property did not sustain damage. Reports of said inspection shall be filed with the Town Building Inspector.
- e. Emergency procedures to be followed in case of fire, explosion, release of liquids, oils, or vapors, damage to critical moving parts, or other potentially dangerous conditions.
- f. Response considerations similar to a material safety data sheet (MSDS) that will address response safety concerns and extinguishment when an MSDS is not required.
- g. Procedures for dealing with L-BESS or U-BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged equipment from the facility. System owner shall provide guaranteed non-emergency and emergency response times of a qualified subject matter expert to the DPW and local emergency responders.
- h. Other procedures as determined necessary by the Town to provide for the safety of occupants, neighboring properties, and emergency responders.
  - 1. Procedure to the Town officials and emergency responders on how to inspect components that perform the temperature monitoring, self-extinguishing fire suppression system and off gassing monitoring.
- i. Procedures and schedules for conducting drills of these procedures and for training local (all agencies within 15 miles) emergency responders on the contents of the plan and appropriate response procedures. Training shall be taught by a New York State certified instructor, performed annually, and shall include local and mutual aid emergency responders. Training and specialty equipment shall be paid for by the developer, ATIMA/ISAOA.
- j. The system owner shall notify the local fire department, County emergency management office and the Town building inspector at least one week prior to any scheduled maintenance or equipment swap out.

k. In the event of a fire, all contaminated soil must be removed and disposed of properly, in accordance with all applicable laws. After 72 hours and every month for a minimum of 12 months after an emergency event the test wells on the site shall be tested for contaminants. If contaminants are detected testing will continue until the test results return back to predevelopment test well levels.

B. Consultation with Town Emergency Services: The Applicant shall arrange an on-site meeting with the fire department having primary coverage of the project area and any other associated emergency service provider or Town department, to review the components of the system, safety issues and procedures for emergency response. This shall include details on the location of labeled warnings, access to the site, and emergency disconnection of the system. A draft version of the Operation, Safety and Maintenance Plan described above shall be made available to attendees of this meeting at least seven (7) calendar days before. The Applicant shall take feedback from attendees and amend the Operation, Safety and Maintenance Plan as needed.

C. Ownership Changes: If the owner or operator of the L-BESS or U-BESS changes or the owner of the property changes, all requirements of the permit or special use permit shall remain in effect. Approval to operate the system shall continue, provided that the successor owner or operator assumes in writing all the obligations of the special use permit, site plan approval, decommissioning plan, security, escrow, and any other binding agreements. Both the new owner or operator of the L-BESS or U-BESS and the preceding owner shall notify the Code Enforcement Officer and the Town Supervisor of such change in ownership or operator 30 days prior to the ownership change. All the terms set forth herein shall be binding on developers, ATIMA/ISAOA.

D. Annual Report/Inspection: On a yearly basis, the L-BESS or U-BESS owner shall provide the Town reports showing the following information: rated capacity of the energy charges and discharge (kWh) totals provided to the grid or end user and a report of the inspection of the components that perform the temperature monitoring, self-extinguishing fire suppression system and off gassing monitoring. The reports shall be submitted no later than 30 days after the end of the calendar year. Additionally, an Applicant/operator shall hire an independent, third-party engineer/inspector approved by the Town to oversee compliance with site and operational requirements and the ongoing obligation of the same for the lifetime of the project. The engineer/inspector shall perform a site inspection if a complaint regarding the U-BESS and any of its components is made to the Town of Rotterdam Code Enforcement Officer. Annual inspections of the completed U-BESS shall be performed at the expense of the developer, ATIMA, ISAOA.

E. Project Changes: Any changes and/or augmentation to the U-BESS that occur after final approval from the Planning Commission, except for immaterial modifications as defined herein, shall be done by amendment to the special use permit only and shall be subject to the requirements of this law.

Unless expressly limited by a condition imposed in the permit, the Code Enforcement Officer, or other Town designee may, during project construction, allow immaterial modifications to the design of the project as represented in the final set of site plans reviewed by the Planning Commission. Such immaterial modifications shall only be allowed in response to a written request by the Applicant. All such requests shall be addressed to the authorized Town designee, with copies to the Chairman of the Planning Commission, and the TDE.

F. Insurance:

1. Unless waived by the Town, the Applicant or facility owner shall agree to secure and maintain for the duration of the project, public liability insurance as follows:
  - a. Commercial general liability covering personal injuries, death and property damage: \$10,000,000 per occurrence, \$20,000,000 aggregate, which shall specifically include the Town and its officers, councils, employees, attorneys, agents and consultants as additional named insured;
  - b. Umbrella coverage: \$300,000,000.
2. Insurance Company: The insurance policies shall be issued by an agent or representative of an insurance company licensed to do business in the State and with at least a Best's rating of "A".
3. Insurance Policy Cancellation: The insurance policies shall contain an endorsement obligating the insurance company to furnish the Town with at least 30 days prior written notice in advance of cancellation.
4. Insurance Policy Renewal: Renewal or replacement policies shall be delivered to the Town at least 15 days before the expiration of the insurance that such policies are to renew or replace.
5. Copies of Insurance Policy: No more than 15 days after the grant of the permit and before construction is initiated, the permit holder shall deliver to the Town a copy of each of the policies or certificates representing the insurance in the required amounts.
6. Certificate of Insurance: A certificate of insurance that states it is for information purposes only and does not confer sufficient rights upon the Town shall not be deemed to comply with this law.
7. Construction Inspection: The escrow account required herein shall be used to provide inspection by a Town engineering consultant during construction of the U-BESS. Work shall remain accessible and exposed until inspected and accepted by the Town's consultant. After inspection, the work or a portion thereof shall be noted as satisfactory as completed, or the permit holder shall be notified as to how the work fails to comply with the Uniform Code or conditions of the special use permit.

Work not in compliance shall remain exposed until brought into compliance, reinspected, and found satisfactory as completed. During construction, the Town Building Inspector/Code Enforcement Officer can issue a stop order at any time for violations of the special use permit.

3. Operational Inspection: Upon 24 hours advance notice to the owner/operator or designated contact person, the Town of Rotterdam Code Enforcement Officer/Building Inspector or his or her designee may enter the U-BESS to verify compliance with any requirements or conditions. The U-BESS shall be inspected by a New York State licensed professional engineer, under contract with the Town and paid by the escrow account required herein, to ensure that it is operating according to the conditions of the special use permit. Such inspections shall be done annually, and at any other time, upon a determination by the Town's Building Inspector that damage may have occurred. The engineer shall file an inspection report with the Town Code Enforcement Officer/Building Inspector. All recommendations for maintenance and repair contained in said report shall be completed by the operator within a written schedule agreed on by the Code Enforcement Officer/Building Inspector.
4. Groundwater Testing: For U-BESS, Unadulterated soil samples shall be taken at 4 corners of the proposed site. Testing shall utilize 4-foot-deep holes, with testing at 2-foot increments. One monitoring test well hole shall be at the lowest elevation on the site. In the event groundwater contamination occurs because of the U-BESS, the operator, at its sole expense, shall provide a reliable alternative water source and address the contamination in accordance with all legal requirements.

## **XV. SECTION FIFTEEN – ABANDONMENT OR DECOMMISSIONING OF SYSTEMS**

The following applies to Utility-Scale Battery Energy Storage Systems (U-BESS). A proposed Decommissioning Agreement shall be provided by the Applicant and approved by the Town Board. No building permit shall be issued for a U-BESS until the Decommissioning Agreement has been executed and financial surety provided as set forth below.

### **A. Cause to implement decommissioning plan.**

1. If a U-BESS ceases to perform its originally intended function for more than 12 months or is considered abandoned by the Code Enforcement Officer for lack of maintenance and other provisions of this law, the Code Enforcement Officer shall notify the owner and/or operator of the facility to implement the decommissioning plan. Within 180 days of notice being served, the facility owner shall either restore operation or complete implementation of the decommissioning plan. If the owner and/or operator fails to fully implement the decommissioning plan within the 180-day time period and restore the site to original conditions as required, the Town may implement the decommissioning plan in accordance with the law, and recover

all expenses incurred for such activities from the financial surety described in other Sections of this law, and if required, from the defaulted facility owner.

2. If the Applicant begins and does not complete construction within eighteen (18) months after receiving final site plan approval, the decommissioning plan may be implemented unless the facility owner can show to the satisfaction of the Code Enforcement Officer good cause as to why this time should be extended for a maximum of 6 months. At which time if the facility is not fully constructed and operating, the Code Enforcement Officer may implement the decommissioning plan in accordance with this law.

**B. Decommissioning Plan:** The plan shall be submitted as part of the application to the Planning Commission. The decommissioning plan that ensures that the site will be restored to a useful, nonhazardous condition without delay, including but not limited to the following provisions:

1. The removal of the U-BESS within the from the Facility Area, including but not limited to all above and subsurface structures, electrical equipment, wires, footings, ground anchors, cables, utility poles, point of interconnection, concrete, switch gears, transformers, fencing, renewable energy electrical substations, inverters, roadways, stormwater management features, roadways, etc.
2. Compacted portions of the site shall be decompacted and excavations shall be backfilled to restore the site. Restoration of the original surface grade and topsoil installation after removal of the facility.
3. Revegetation of restored topsoil areas with native seed mixes, excluding any invasive species.
4. The cost of removing the entire U-BESS based upon prevailing wages and any other requirements applicable to municipalities under state or federal law.
5. No salvage value shall be attributed to any of the components of the U-BESS.
6. A schedule and methods for the removal of the U-BESS, including any ancillary structures.
7. A plan for restoring the property to its pre-installed condition, including grading and vegetative stabilization to eliminate any negative impacts to surrounding properties, and, where if it was previously used for farming, with vegetation suitable for farming purposes, i.e. a hay field, crops, or grazing.

**C. Financial Surety**

1. Financial Surety shall be in an amount sufficient to ensure the good faith performance of the terms and conditions of the permit issued pursuant hereto and to provide for the removal of the U-BESS and restoration of the site subsequent to removal.

2. Prior to the issuance of a building permit and every five (5) years thereafter, the U-BESS owner shall file with the Town evidence of financial security to provide for the full cost of decommissioning and removal of the U-BESS in the event the system is not removed by the system owner. Evidence of financial surety shall be in effect throughout the life of the system and shall be in the form of an irrevocable letter of credit or other security acceptable to the Town Board. The irrevocable letter of credit shall include an automatic extension provision, to be issued by an A-rated institution solely for the benefit of the Town, substantially in the form attached hereto as Exhibit A.
3. The amount of the financial surety shall be 150 percent of the estimated cost of removal of the U-BESS and restoration of the property, with an escalator of 2 percent annually (or Consumer Price Index change if more than the annual escalator of 2 percent) for the life of the Utility-Scale Battery Energy Storage Systems and shall not consider the net salvage value of any such project components. The financial surety established by the Agreement shall not be subject to disclaimer or rejection in a bankruptcy proceeding. The amount of the surety shall be determined and certified by the Applicant's engineer and shall be reviewed by the TDE. The amount of the surety may be adjusted by the Town during each five (5) year review as required.
4. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the security shall be forfeited to the Town, which shall be entitled to maintain an action thereon. The financial surety shall remain in full force and effect until 90 days after the restoration of the property, as set forth in the decommissioning plan, is completed.
5. Any cost incurred by the Town that exceeds funding available to them from financial surety, which cannot be recovered from the defaulted facility owner, shall be assessed against the property, in a manner appropriate by law, and in the form of tax, lien or other available method enforceable by the Town.

#### **XVI. SECTION SIXTEEN – PUBLIC USE**

A Battery Energy Storage System shall not be considered a Public Utility Use.

#### **SECTION SEVENTEEN - SEVERABILITY**

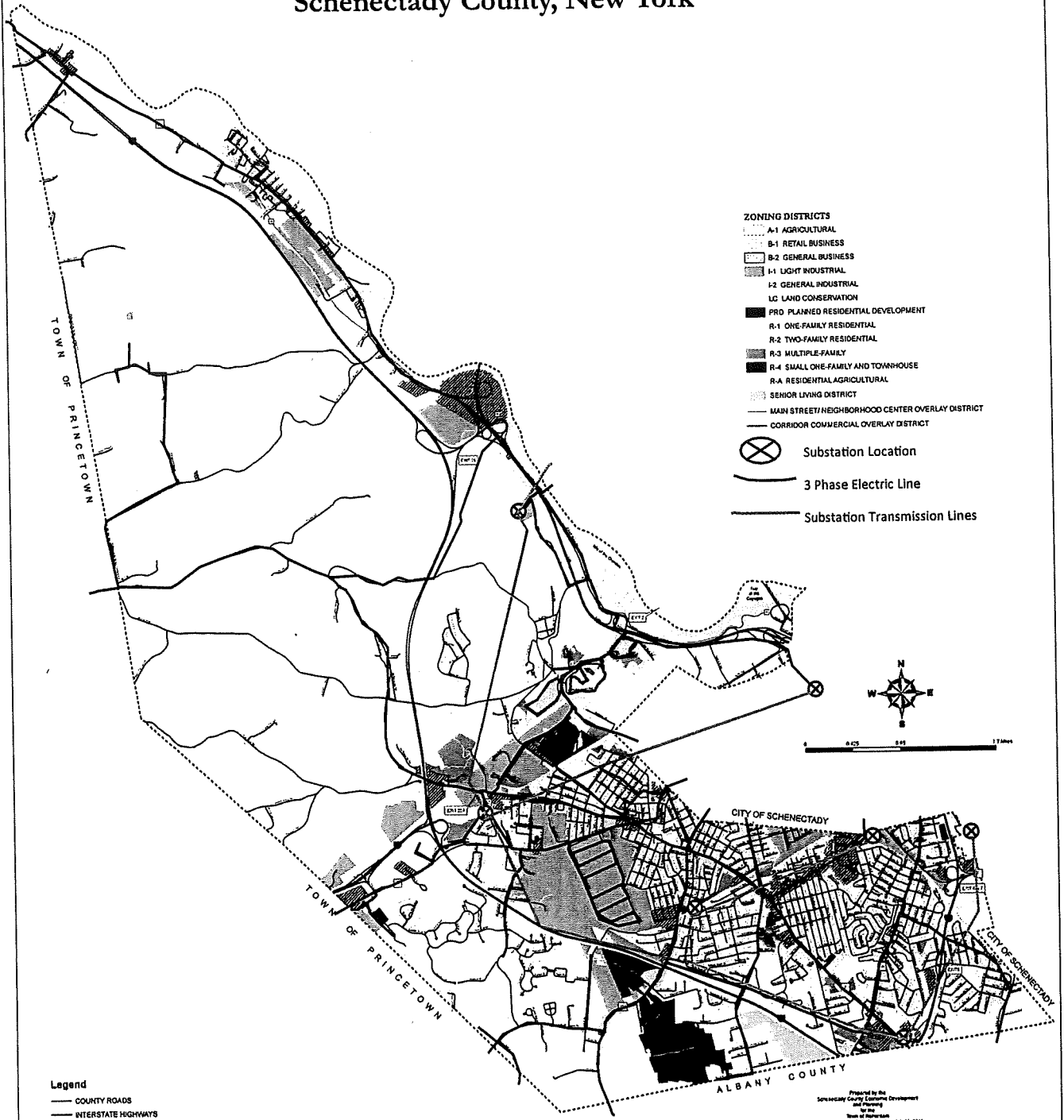
If a court determines that any clause, sentence, paragraph, subdivision, or part of this local law or the application thereof to any person, firm or corporation, or circumstance is invalid or unconstitutional, the court's order or judgment shall not affect, impair, or invalidate the remainder of this local law, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, or part of this local law or in its application to the person, individual, firm or corporation or circumstance, directly involved in the controversy in which such judgment or order shall be rendered.

**XVII. SECTION EIGHTEEN – EFFECTIVE DATE**

This Local Law shall take effect immediately upon the filing in the office of the New York State Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

# OFFICIAL ZONING MAP WITH 3 PHASE ELECTRIC LINE AND SUBSTATION LOCATIONS

## Town of Rotterdam Schenectady County, New York



- ZONING DISTRICTS**
- A-1 AGRICULTURAL
  - B-1 RETAIL BUSINESS
  - B-2 GENERAL BUSINESS
  - I-1 LIGHT INDUSTRIAL
  - I-2 GENERAL INDUSTRIAL
  - LC LAND CONSERVATION
  - PRO PLANNED RESIDENTIAL DEVELOPMENT
  - R-1 ONE-FAMILY RESIDENTIAL
  - R-2 TWO-FAMILY RESIDENTIAL
  - R-3 MULTIPLE-FAMILY
  - R-4 SMALL ONE-FAMILY AND TOWNHOUSE
  - R-A RESIDENTIAL AGRICULTURAL
  - SENIOR LIVING DISTRICT
  - MAIN STREET/NEIGHBORHOOD CENTER OVERLAY DISTRICT
  - CORRIDOR COMMERCIAL OVERLAY DISTRICT
- Substation Location  
 3 Phase Electric Line  
 Substation Transmission Lines



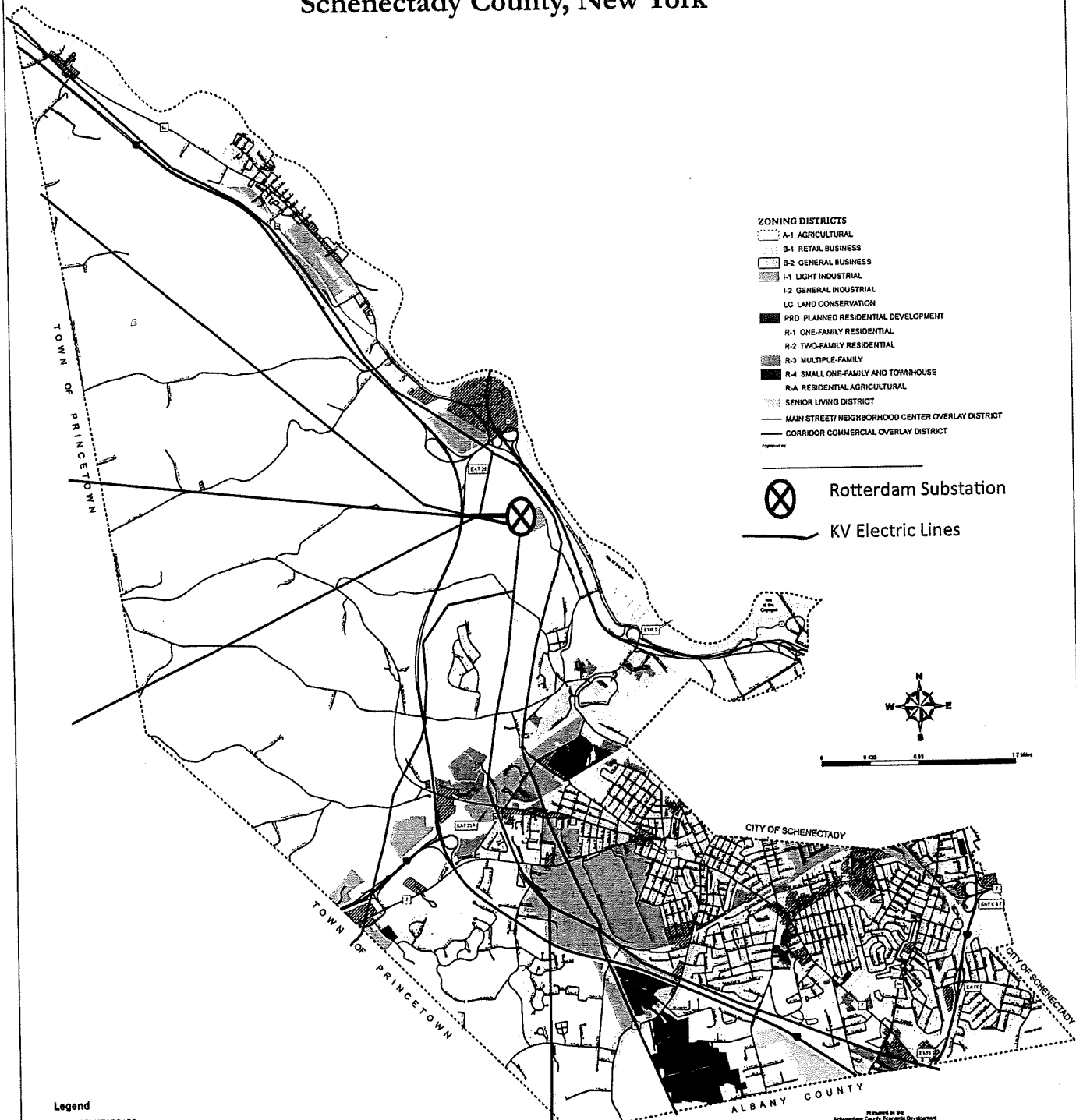
- Legend**
- COUNTY ROADS
  - INTERSTATE HIGHWAYS
  - PRIVATE DRIVES
  - STATE HIGHWAYS
  - TOWN ROADWAYS
  - BIKE TRAIL
  - STREAMS
  - PARCELS
  - LAKES, RIVERS AND PONDS

Prepared by the  
Schenectady County Economic Development  
for the  
Town of Rotterdam  
Local Law Number 8 (S) Adopted on July 11, 2011  
Updated October 4, 2002  
Updated February 24, 2004  
Updated June 26, 2004  
Updated January 10, 2007  
Updated March 28, 2008  
Updated July 27, 2010  
Updated February 2, 2011  
Updated August 2, 2011  
Updated December 2, 2012  
Updated January 1, 2013  
Updated December 11, 2015  
Updated December 11, 2017  
Updated December 11, 2018  
Updated March 1, 2020  
Updated August 1, 2020  
Updated December 11, 2022  
Updated February 28, 2022


Prepared by: Schenectady County Economic Development and Planning 2020  
Source: 2018 Aerials layer


OFFICIAL ZONING MAP WITH KV ELECTRIC LINE AND  
ROTTERDAM SUBSTATION OVERLAY

Town of Rotterdam  
Schenectady County, New York



- ZONING DISTRICTS**
- A-1 AGRICULTURAL
  - B-1 RETAIL BUSINESS
  - B-2 GENERAL BUSINESS
  - I-1 LIGHT INDUSTRIAL
  - I-2 GENERAL INDUSTRIAL
  - LC LAND CONSERVATION
  - PRD PLANNED RESIDENTIAL DEVELOPMENT
  - R-1 ONE-FAMILY RESIDENTIAL
  - R-2 TWO-FAMILY RESIDENTIAL
  - R-3 MULTIPLE-FAMILY
  - R-4 SMALL ONE-FAMILY AND TOWNHOUSE
  - R-A RESIDENTIAL AGRICULTURAL
  - SENIOR LIVING DISTRICT
  - MAIN STREET/NEIGHBORHOOD CENTER OVERLAY DISTRICT
  - CORRIDOR COMMERCIAL OVERLAY DISTRICT

 Rotterdam Substation

 KV Electric Lines



0 0.25 0.50 1.00 1.75 Miles

- Legend**
- COUNTY ROADS
  - INTERSTATE HIGHWAYS
  - PRIVATE DRIVES
  - STATE HIGHWAYS
  - TOWN ROADWAYS
  - BIKE TRAIL
  - STREAMS
  - PARCELS
  - LAKES, RIVERS AND PONDS

Prepared by the  
Schenectady County Economic Development  
and Planning

Town of Rotterdam  
Local Law Number 5 of 2010, July 11, 2010  
Updated October 1, 2002  
Updated January 24, 2004  
Updated May 26, 2006  
Updated January 19, 2007  
Updated March 26, 2008  
Updated June 25, 2010  
Updated August 25, 2011  
Updated February 15, 2012  
Updated January 4, 2013  
Updated December 21, 2013  
Updated December 21, 2013  
Updated December 21, 2013  
Updated August 1, 2015  
Updated August 1, 2015  
Updated December 21, 2015  
Updated February 26, 2017

Good afternoon Rotterdam Town Officials and Energy Advisory Committee,

It's clear that the Energy Advisory Committee has dedicated significant time and thought to developing this draft, and we appreciate the opportunity to offer feedback. As promised, we've reviewed the draft law and would like to share a few comments where we believe certain provisions may lead to unintended consequences.

As a general note, we recommend avoiding duplicating or modifying requirements already covered under the 2025 Fire Code of New York State (ESS part of Fire Code attached). Any changes to the Fire Code must be made through Executive Law § 379. Including such provisions in local law can create conflicts and would likely raise concerns with the Department of State. For example, requirements related to emergency personnel response times and recurring inspections are addressed in the Fire Code and may not be appropriate for a zoning law. However, we are not lawyers or giving official legal advice, so please rely on your municipal attorney for any final interpretations of law.

**Section 12A: Zoning Restrictions**

- Current Language: U-BESS is allowed by right in Zone I-2 (General Industrial).
- NYSERDA Comment: Battery storage projects must be sited near substations with sufficient capacity to handle the energy transmission. If a project is located too far from a substation, it can become economically and technically unfeasible. Based on the attached zoning map, there appear to be no I-2 zoned parcels located close to suitable substations. As written, this restriction may unintentionally prohibit BESS development within the Town.
- Recommendation: Consider allowing U-BESS in additional zoning districts using tools such as a BESS overlay district or floating zoning.

**Section 12E(12): Maximum Acreage**

- Current Language: U-BESS shall not exceed a maximum project size of 5 contiguous acres.
- NYSERDA Comment: Due to required setbacks, buffers, and fire safety considerations, a 5-acre cap may be too restrictive for responsible BESS development.
- Recommendation: Increase the maximum allowable size or remove the size cap to accommodate layout needs while still allowing the Town to control siting of the project in other ways.

**Section 13B: Performance Guarantees**

- Current Language: Requires a performance bond or cash escrow to ensure proper operation and maintenance.
- NYSERDA Comment: Performance bonds for project operations are not typically required. If a project is not operating properly or ceases operation altogether, it would typically be decommissioned, at which point the decommissioning bond would apply.
- Recommendation: Consider removing the performance bond requirement and instead rely on a decommissioning bond to address end-of-life responsibilities.

**Section 14A(1)(ii): Emergency Personnel**

- Current Language: An emergency contact phone number for a competent person who can be at the facility within one (1) hour or less notice. The individual shall have access to the facility gates, knowledge of the site, and be able to quickly identify electrical disconnect locations.
- NYSERDA Comment: This timeline is significantly shorter than what is required in the newly adopted 2025 New York State Fire Code.
  - *Section 1207.1.8.1* requires the system owner to be responsible for ensuring that one or more hazard support personnel dispatch within 15 minutes, and arrive to the premise within 4 hours, as required and approved. These personnel shall remain on duty continuously after the fire department leaves the premise until the damaged energy storage equipment is removed from the premises, or earlier if the fire code official indicates the public safety hazard has been abated.
- Recommendation: Remove this provision from local law entirely, and instead rely on compliance with the Fire Code.

**Section 14A(3)(h): System Inspection**

- Current Language: Procedure to the Town officials and emergency responders on how to inspect components that perform the temperature monitoring, self-extinguishing fire suppression system and off gassing monitoring.
- NYSERDA Comment: System inspections should be conducted only by licensed technicians or authorized representatives of the project owner. Allowing Town officials or emergency responders to enter an energized facility or inspect system components presents serious safety risks. Inspections of BESS components are already comprehensively addressed in the Fire Code and should not be duplicated or modified through local law. Specifically:
  - *Section 1207.13* requires BESS owners to develop a first responder pre-incident plan in consultation with the local fire department, to be approved before operation.
  - *Section 1207.13.1* mandates an annual site visit and review of the pre-incident plan by the local fire department unless the fire chief declines in writing.
  - *Section 1207.14* requires third-party fire safety inspections of BESS installations (above size thresholds in Table 1207.5) at least every 3 years. These inspections must be performed by a registered professional engineer or qualified expert and cover items such as system integrity, emergency operations, hazard mitigation analysis, monitoring procedures, and alarm history.
- Recommendation: Remove this provision from the local law. Instead, ensure coordination with local fire officials through the mechanisms already required in the Fire Code. Emergency personnel should be trained on appropriate procedures as outlined in the pre-incident plan and annual familiarization requirements.

**Section 14F: Insurance Requirements**

- Current Language: General liability insurance: \$10 million per occurrence / \$20 million aggregate, Umbrella coverage: \$300 million
- NYSERDA Comment: These levels of insurance coverage are unusually high for BESS projects and may prevent viable development. Most municipalities either set more moderate baseline requirements or assess insurance needs on a case-by-case basis.
- Recommendation: Consider revising this language to allow the Town to determine insurance requirements on a project-by-project basis in consultation with an advisor or assessor.

We hope these recommendations are helpful as you continue refining your BESS law. We're happy to answer any questions or provide additional information as needed.

Thank you for your time,

**Hannah Schanzer (she/her)**  
Project Manager



**NYSEDA**  
1359 Broadway, 19th Floor | New York, NY 10018-7842  
P: 212-971-5342 | F: 518-862-1091 | E: [Hannah.Schanzer@nyserda.ny.gov](mailto:Hannah.Schanzer@nyserda.ny.gov)  
[nyserda.ny.gov](http://nyserda.ny.gov)  
follow : friend : connect with NYSEDA

## Peter Comenzo

---

**From:** Patricia Matelitz <pmatelitz@gmail.com>  
**Sent:** Monday, August 25, 2025 10:15 AM  
**To:** Mollie Collins; Charles Jack Dodson; Ronald Schlag; Joseph Mastroianni; Teri Gallucci  
**Cc:** Bruce Bonacquist; Dan Brudos; calvin rugg; David Bills; JD Clairmont; Joe Miglucci; Kimberly Scannell; Peter Comenzo  
**Subject:** Energy Advisory Committee Feedback regarding NYSERDA Draft BESS Code Comments

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Town Board:

The Energy Advisory Committee met on 8/14/2025. There was a discussion regarding the NYSERDA comments regarding the draft BESS code. The EAC provides the following responses.

### From NYSERDA:Section 12A: Zoning Restrictions

- Current Language: U-BESS is allowed by right in Zone I-2 (General Industrial).
- NYSERDA Comment: Battery storage projects must be sited near substations with sufficient capacity to handle the energy transmission. If a project is located too far from a substation, it can become economically and technically unfeasible. Based on the attached zoning map, there appear to be no I-2 zoned parcels located close to suitable substations. As written, this restriction may unintentionally prohibit BESS development within the Town.
- Recommendation: Consider allowing U-BESS in additional zoning districts using tools such as a BESS overlay district or floating zoning.

EAC response: Utility scale battery energy storage systems do not fit the rural characteristics. The committee agreed that substations should be built or relocated in industrial zones.

### From NYSERDA: Section 12E(12): Maximum Acreage

- Current Language: U-BESS shall not exceed a maximum project size of 5 contiguous acres.
- NYSERDA Comment: Due to required setbacks, buffers, and fire safety considerations, a 5-acre cap may be too restrictive for responsible BESS development.
- Recommendation: Increase the maximum allowable size or remove the size cap to accommodate layout needs while still allowing the Town to control siting of the project in other ways.
- 
- EAC response: With increased acreage size, the risk of any type of failure, including thermal runaway, increases due to increased quantities of utility batteries. We are not saying more

batteries would have some type of group failure just that you are increasing the risk as you have more batteries. Having smaller areas we are trying to protect the people in the town of Rotterdam.

#### **From NYSERDA: Section 13B: Performance Guarantees**

- Current Language: Requires a performance bond or cash escrow to ensure proper operation and maintenance.
- NYSERDA Comment: Performance bonds for project operations are not typically required. If a project is not operating properly or ceases operation altogether, it would typically be decommissioned, at which point the decommissioning bond would apply.
- Recommendation: Consider removing the performance bond requirement and instead rely on a decommissioning bond to address end-of-life responsibilities.
- EAC response: The performance bond is meant to protect the town for issues that may arise that are not related to decommissioning. For example a fence requiring repair or mowing.

#### **From NYSERDA:Section 14A(1)(ii): Emergency Personnel**

- Current Language: An emergency contact phone number for a competent person who can be at the facility within one (1) hour or less notice. The individual shall have access to the facility gates, knowledge of the site, and be able to quickly identify electrical disconnect locations.
- NYSERDA Comment: This timeline is significantly shorter than what is required in the newly adopted 2025 New York State Fire Code.
  - *Section 1207.1.8.1* requires the system owner to be responsible for ensuring that one or more hazard support personnel dispatch within 15 minutes, and arrive to the premise within 4 hours, as required and approved. These personnel shall remain on duty continuously after the fire department leaves the premise until the damaged energy storage equipment is removed from the premises, or earlier if the fire code official indicates the public safety hazard has been abated.
- Recommendation: Remove this provision from local law entirely, and instead rely on compliance with the Fire Code.

EAC response: In the event of an emergency time is of the essence. The committee agreed that a time limit is important to protect our first responders and the people of the town. This is technology that first responders are not familiar with and would not be able to assist with controlling. There are 2 (two) first responders on the committee. JD Clairmont from Carmen and Dan Brudos from Plotterkill that provided valuable input in making this decision.

#### **From NYSERDA: Section 14A(3)(h): System Inspection**

- Current Language: Procedure to the Town officials and emergency responders on how to inspect components that perform the temperature monitoring, self-extinguishing fire suppression system and off gassing monitoring.
- NYSERDA Comment: System inspections should be conducted only by licensed technicians or authorized representatives of the project owner. Allowing Town officials or emergency responders

to enter an energized facility or inspect system components presents serious safety risks. Inspections of BESS components are already comprehensively addressed in the Fire Code and should not be duplicated or modified through local law. Specifically:

- *Section 1207.13* requires BESS owners to develop a first responder pre-incident plan in consultation with the local fire department, to be approved before operation.
- *Section 1207.13.1* mandates an annual site visit and review of the pre-incident plan by the local fire department unless the fire chief declines in writing.
- *Section 1207.14* requires third-party fire safety inspections of BESS installations (above size thresholds in Table 1207.5) at least every 3 years. These inspections must be performed by a registered professional engineer or qualified expert and cover items such as system integrity, emergency operations, hazard mitigation analysis, monitoring procedures, and alarm history.
- **Recommendation:** Remove this provision from the local law. Instead, ensure coordination with local fire officials through the mechanisms already required in the Fire Code. Emergency personnel should be trained on appropriate procedures as outlined in the pre-incident plan and annual familiarization requirements.
- **EAC response:** The committee did not intend that the town would be performing inspections. However, we feel it is important that people who either review inspections or perform inspections for other types of construction are aware of what goes into the inspection. Town code inspectors are required to do yearly training for any inspections performed. Code enforcement officers tend not to be specialists, but rather generalists. Having some knowledge of what the inspection process entails would help them to be generalists to make sure the inspection process appears to be correct.

#### **From Section 14F: Insurance Requirements**

- **Current Language:** General liability insurance: \$10 million per occurrence / \$20 million aggregate, Umbrella coverage: \$300 million
- **NYSERDA Comment:** These levels of insurance coverage are unusually high for BESS projects and may prevent viable development. Most municipalities either set more moderate baseline requirements or assess insurance needs on a case-by-case basis.
- **Recommendation:** Consider revising this language to allow the Town to determine insurance requirements on a project-by-project basis in consultation with an advisor or assessor.
- **EAC response:** We based these costs on similar expenses for water pollution that occurred in Hoosick Falls NY. This was put in place to help protect the residents if there were to be an incident. The thought was to have funding available to help them. Residents should not have to bear the burden of costs incurred by a BESS.

The balance of meeting energy needs, the community safety and community benefit is complex. Protecting the residents of Rotterdam and the aquifer are paramount. Towns across NY and the rest of the nation are implementing BESS moratoriums and adapting laws that ban industrial BESS. In June the Governor directed NYPA to develop and construct at least one nuclear power plant. With the changing

political climate and the advances in technology it may benefit Rotterdam to adapt this draft code with a plan to revisit as technology advances.

Respectfully submitted on behalf of the Energy Advisory Committee,

Patty Matelitz



ZENOBE

Zenobē Americas Inc.  
33 Irving Pl  
10th Floor, Suite #1085  
New York, NY 10003

August 8, 2025

**To the Town of Rotterdam Town Board:**

Zenobe Americas (Zenobe) is a developer, owner, and operator of utility-scale energy storage projects. Our mission is to make energy reliable and cost effective for communities through the deployment of energy storage projects. We are currently exploring the development of a project in the Town of Rotterdam, which we anticipate would bring approximately \$15M in construction contracts to the Town (where we would use local labor to the fullest extent possible), pay \$200,000 annually to local entities as part of the host community/PILOT agreement, as well as lower energy costs, and increased energy reliability and resiliency to the region.

Zenobe has reviewed the proposed Zoning Law Amendment related to battery energy storage systems, as included in the minutes of the Town Board's July 9, 2025 meeting. While the proposal is well crafted and comprehensive, we wanted to raise the below components of the current law amendment that could potentially make development in Rotterdam prohibitive:

- **Utility Substations Zoning** – in the current draft, large-scale battery storage (U-BESS) is limited to I-2 zones. However, there are no existing transmission-level substations located in I-2 zones. As a result, mandating that batteries be sited exclusively in I-2 zones would result in significant build-out of transmission lines between the batteries and existing infrastructure. This would make the cost of energy storage more expensive and would also potentially increase the overall impact of the projects due to the required transmission lines.
- **Five Acre Limitations on Development** – Five acres is not enough room for a typically sized energy utility-scale energy storage system, particularly when considering setbacks, auxiliary equipment/attachment facilities, and fire safety staging areas. We recommend that this number be expanded to at least 15 acres to allow for typical system sizes and equipment spacing.

We would appreciate the opportunity to present our concerns to the Town Board prior to finalization of the code amendment and encourage these changes (and others discussed in more detail in the attached) to the code before finalization. Thank you for your consideration, and we would be happy to discuss further at your convenience, or to submit them through the appropriate channels.

Best,  
James Robinson  
Head of Project Development  
Zenobe Americas



## ATTACHMENT A

### Zenobe Americas Comments to proposed Rotterdam Zoning Law Amendment

- **Location Restrictions**
  - VI A - In line with the Town's prior development allowing substations in Agricultural zones, we suggest U-BESS be allowed in A-1 zones with a Special Use Permit. Alternately, a procedure could be put in place for a "Storage Overlay District," similarly to what is done with solar. While we agree that not all locations are suitable for larger scale energy storage systems, we believe that limiting U-BESS to I-2 zones would effectively prevent energy storage development in the Town. Of note, the existing Gordon Road Substation and Central East Energy Connect transmission lines are not in I-2 zones.
  - Question on VI A – Are we understanding correctly that development is permissible in the Watershed Boundary (i.e. Zone 4 is allowed)?
  
- **Acreage Restrictions**
  - XII E 12 – the 5 acre site size limitation should be reconsidered, especially considering the attachment facilities and need for buffer, setbacks, etc. A more reasonable acreage limit is 15 acres, and no acreage limit is in the NY State model law. Note that the existing Gordon Road Substation is approximately 25 acres and is located in an agricultural zone.
  
- **Escrows, Bonds, Performance Guarantees, Insurance**
  - As proposed, there are overlapping and duplicative assurance, escrow, bond, and insurance requirements that could be streamlined for Town management's ease of review. We recommend the following:
  - *Escrow and Surety Account Streamlining* -
    - One escrow account, to cover all inspections deemed necessary by the Town (additional detail in the Inspections section below, and listed in the proposed law under XII-D, XII-E-17-B, and XIII-B)
    - One decommissioning surety to cover the amount required to safely decommission the system and restore the site (listed in the proposed law under XV-C)
  - *Insurance coverage* –
    - Adding the Town named as additional insured party.
    - Limits to be determined based on insurance industry standards. Insurance requirements are well defined by banks and insurance companies who have experience financing and insuring these types of projects. Policy limits are typically set by the overall project cost and size, and a blanket insurance requirement without taking into account project size could place an undue burden on smaller developers (listed in the proposed law under XIV-F)
  - *Performance Bond* is not standard and is not needed. A project's building permit would be contingent on the system being properly installed. Project will have to meet all permitting conditions, otherwise it can be shut down until conditions



are met. If conditions can't be met, then the system will be decommissioned, and the decommissioning bond can cover that process.

- **Inspections and Sign Off**

- XIV – With passage of the 2025 NY Fire Code, below are the areas in the Town law at odds with state code that we suggest aligning to state standards:
  - A1a-ii – response time requirement is significantly shorter than state code requirements
  - A3h – inspection should only be conducted by licensed technicians and approved counterparties. Having Town officials enter an energized facility can be extremely dangerous and should be avoided at all costs.
    - the Fire Code now includes a requirement that a third-party subject matter expert review the application and provide comments to the Town.
    - the Code also requires a site inspection by this independent Subject Matter Expert, results of which will also be presented to the Town.
  - A3j - scheduled maintenance will be outlined in the O&M manual. We recommend striking the requirement of notice of maintenance, which is not included in NY State's model law and could place undue burden on town officials and delay necessary maintenance.
  - D - projects should have scheduled and annual maintenance according to their operational dates and not on a calendar year basis. Additionally, annual inspections are carried out by approved O&M providers so it would be duplicative for the Town to require an independent third party to do the same which may not be as qualified.
  - E - Immaterial changes are the normal course of any construction project and should not be subject to another layer of approval from the Town. Requiring written approval from the Town for immaterial changes would slow down necessary repair and maintenance processes.

- **Interconnection Requirement**

- XII-E7 – requirement should be for interconnection application to have been submitted, not for interconnection agreement to be signed



# Battery Energy Storage Systems: Main Considerations for Safe Installation and Incident Response

## Battery Energy Storage Systems Overview

Battery energy storage systems (BESS) stabilize the electrical grid, ensuring a steady flow of power to homes and businesses regardless of fluctuations from varied energy sources or other disruptions. However, fires at some BESS installations have caused concern in communities considering BESS as a method to support their grids. BESS fires pose challenges to first responders due to the:

- Difficulty in putting out lithium-ion battery fires.
- Potential health impacts from emissions.
- Need to clean up and properly dispose of burned or impacted batteries.

Communities should consult BESS safety experts when considering and designing installations. Communities should also note that despite some high-profile incidents, improvements in BESS quality and design have led to a decrease in the number of failure incidents per gigawatt hour deployed (Figure 1).

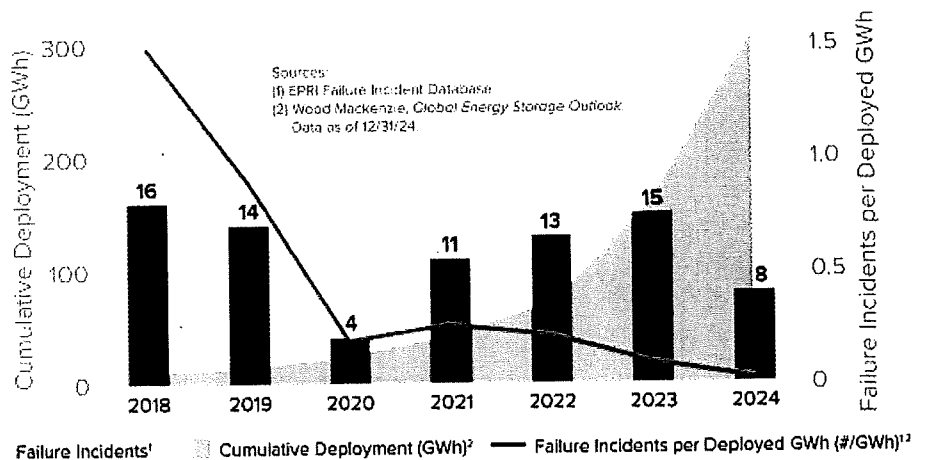
In recent years, first responder and industry associations have developed guidance to help communities identify focus areas when planning a BESS, including how to work with local responders to improve incident preparedness. This document is a non-comprehensive collection of existing research and guidance.

This document includes information from first responder and industry guidance as well as:

- Background information on BESS, including challenges and recent fires
- BESS installation considerations
- BESS incident response considerations
- Resources for fire planning and response
- Standards and links to additional resources .

## Facts about Recent Fires

Since 2020, BESS failure incidents have decreased, but some recent fires have gained attention in the media. On May 15, 2024, Gateway Energy Storage Facility in San Diego, California, experienced a BESS fire with continued flare-ups for seven days following the fire. The facility held about 15,000 nickel manganese cobalt lithium-ion batteries. Following the incident, EPA has required the Gateway facility to conduct extensive environmental monitoring during battery handling and disposal operations and submit detailed work plans and progress reports.<sup>1</sup>



**Figure 1. Global grid-scale storage deployment and failure statistics. Source: Electric Power Research Institute (EPRI), 2024.**

<sup>1</sup> U.S. Environmental Protection Agency. (n.d.). *Site profile: Gateway Energy Camino lithium-ion battery fire.* [https://response.epa.gov/site/site\\_profile.aspx?site\\_id=16485](https://response.epa.gov/site/site_profile.aspx?site_id=16485).

On January 16, 2025, a BESS fire broke out at the Moss Landing site in Monterey County, California, resulting in a 24-hour evacuation of about 1,200 residents. A joint effort among company personnel and the North County Fire Department kept the fire contained to one building, though with one notable flare-up. Air quality monitoring and sampling occurred during and after the fire and found no risks to public health. Following the incident, EPA continues to work with other regulators to ensure the safe storage, handling, and transportation of undamaged batteries remaining at the Moss Landing site.<sup>2</sup>

Clear and comprehensive incident response plans are critical when managing BESS sites to ensure preparedness in the event of a battery fire.

## Installation Considerations

Proactive safety measures can be included in a BESS site design to minimize the risk of a BESS fire. Consider the following before installing a BESS:

- Comply with state and local siting, zoning, marking, and permitting requirements to ensure site suitability.
- Consider the design of BESS units (battery chemistry, manufacturing quality assurance/quality checks, unit design, battery management system analytic capabilities, and system integration) and consult the most recent industry safety standards.
- Include remote sensors and monitoring (e.g., infrared, thermal, fire detection).
- Communicate with local first responders to develop emergency response plans for incidents.

## Incident Response Considerations

Consider the following when developing an incident response plan for BESS:

- Ensure use of Personal Protective Equipment (PPE) including self-contained breathing apparatuses to protect against hazardous air emissions.
- Set an isolation zone for large commercial BESS that is at least 330 feet, depending on the site.
- Position responders upwind and uphill.
- Evaluate the need for community shelter-in-place or evacuation, depending on the incident and site.
- Current guidance is to focus the response on preventing the spread of fire.
  - Direct fire crews to let the fire burn itself out and to use water to prevent the spread of fire to neighboring batteries or other structures.<sup>3</sup>
- Assess hazardous air emissions:
  - Use modeling to guide on-site decision making and initially monitor for hydrogen, carbon monoxide, hydrogen fluoride, hydrogen cyanide, and hydrogen chloride.
  - As an incident extends, sample air for metals and other combustion byproducts of burning plastics.
- Minimize, contain, and/or redirect runoff from water application, to the extent possible.
- Package contents safely for transport and disposal after the event, considering Department of Transportation and EPA requirements.

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<sup>2</sup> Vistra. (n.d.). *Moss Landing response*. Moss Landing Response. <https://www.mosslandingresponse.com>.

<sup>3</sup> Research is ongoing into the most effective method of water application to prevent spread.

# Resources for Fire Planning and Response at BESS Installations

In addition to adhering to existing standards, communities and operators of BESS sites should reference existing resources to enhance fire preparedness and response plans. Table 1 includes a list of trainings, standard operating procedure (SOP) guides, toolkits, emergency response plans, and research for BESS sites.

## Relevant BESS Standards

**National Fire Protection Association (NFPA) Standard 855:** Standards detailing the requirements for mitigating the hazards associated with energy storage systems (ESS). First edition 2020; current edition 2023; next update 2026.

**Underwriters Laboratory (UL) 9540 and 9540A:** Standards for energy storage systems and equipment: charging and discharging procedures, fire protection, and test methods for BESS. First edition 2016, current edition revised 2025.

Table 1. Additional resources for BESS sites

Resource (Linked)	Description
<a href="#">EPA On-Scene Coordinator Lithium-Ion Battery Outreach Page</a>	<ul style="list-style-type: none"> <li>• <b>Outreach:</b> The EPA On-Scene Coordinators are available to provide training to city and county fire fighters, Local Emergency Planning Committees (LEPCs), and conference audiences. Contact information is available on the Outreach page.</li> <li>• <b>Resources:</b> Resources for pre-planning with local responders, sample standard operating procedures, presentations, and worksheets.</li> <li>• <b>Web-based:</b> Remote training that covers battery basics, hazards, transport and disposal concerns, and air monitoring (coming soon).</li> </ul>
<a href="#">NFPA ESS Safety Fact Sheet</a>	<ul style="list-style-type: none"> <li>• Fact sheet outlining ESS advantages, hazards, and safety measures.</li> </ul>
<a href="#">San Diego Fire Department Toolkit</a>	<ul style="list-style-type: none"> <li>• Collection of resources on lithium-ion battery fire response, incident reports, research, and public safety education.</li> </ul>
<a href="#">Tennessee Emergency Management Agency (TEMA) Toolkit</a>	<ul style="list-style-type: none"> <li>• Collection of fact sheets and presentations on BESS fire hazards and prevention.</li> </ul>
<a href="#">International Association of Fire Chief (IAFC) Fact Sheet</a>	<ul style="list-style-type: none"> <li>• Fact sheet covering recommended fire department ESS pre-planning and incident response.</li> </ul>
<a href="#">Electric Power Research Institute (EPRI) Research Hub</a>	<ul style="list-style-type: none"> <li>• Collection of energy storage research, including information about EPRI's <a href="#">database of BESS failures and root cause categorizations</a>.</li> </ul>
<a href="#">Fire Protection Research Foundation Website</a>	<ul style="list-style-type: none"> <li>• Information about an ongoing research project examining hazards and mitigation for BESS units.</li> </ul>
<a href="#">New York Battery and Energy Storage Technology Consortium Library</a>	<ul style="list-style-type: none"> <li>• Library of systems safety and best practices resources from various associations and fire codes.</li> </ul>

**DPW Comments**  
**September 16, 2025**

1. **The Crossings at Helderberg Meadows – 3379 Guilderland Avenue.** The applicants request a Waiver of Site Plan review for modifications to building footprints and easements, on an approved Site Plan (July 19, 2022) to construct 124 condominium units on a ±67.95-acre portion of the Helderberg Meadows Planned Residential District (PRD) located on the northwest side of Guilderland Avenue. Engineer: Steenburgh Consulting Engineering, PLLC.
  1. Applicant has requested permission to eliminate the proposed community pool to be located behind the clubhouse and replace it with a dog park and two (2) pickleball courts located along Crossings Boulevard.
  1. It was discovered that the existing town-owned force main is not located in the assumed location. This has necessitated the adjustment of several proposed building locations in Phase II currently under construction.
  2. Final approval is conditioned on DPW and TDE approvals of the relocated easement location and final grading for the site of the relocated buildings and improvements.

## WAIVER OF SITE PLAN REVIEW

**Date:** September 16, 2025

PC2025-W42

The Town Planning Commission Office has received the attached application and accompanying documents. The below-identified applicant requests a waiver of Article XVII "Site Plan Approval", stating that a site plan review and approval is unnecessary and would not serve the purpose of the Article.

**APPLICANT:** Pigliavento Builders, LLC

**ADDRESS:** 151 Von Roll Drive  
Schenectady, NY 12306

**PROJECT ADDRESS:** 3379 Guilderland Avenue – Development at Helderberg Meadows LLC

**APPLICANT IDENTIFIED AS:** Owner      Lessee      Contract Vendee X

**REQUEST:** The applicant requests modifications to previously approved Site Plan, July 19, 2022 for building location along Carriage Loop to accommodate the location of the sewer force main. Engineer: Brett Steenburgh

**Action Taken by Commission:**

In accordance with Chapter 270 of the Town of Rotterdam Zoning Ordinance, Article XVII, "Site Plan Approval", Section 270-130(C) the Planning Commission waives the requirements set forth in said Article, conditionally. Conditions imposed, if any, are as follows:

1. All previous conditions of approval shall apply - Planning Commission Resolution Nos. PC36-2022 and PC37-2022.
2. Grading of all lots shall be consistent with the approved Site Plan known as Site Plan Helderberg Meadows LLC dated April 16, 2020 and approved by the Planning Commission July 19, 2022.
3. Final approval is conditioned on DPW and TDE approvals of the relocated easement location and final grading for the site of the relocated buildings.

The Commission action on the Waiver application took place at the Planning Commission meeting of September 16, 2025 and authorized the Commission Chairman to execute the Waiver. The issuance of this Waiver is contingent upon the applicant complying with all conditions as stated above. Failure to adhere to conditions may result in revocation of Waiver by the Town of Rotterdam Planning Commission and requirement of a full Site Plan.

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Peter J. Comenzo  
Senior Planner

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Kimberly Ricker-Scannell, Chairman  
Planning Commission

RECEIVED

SEP 12 2025

TOWN OF ROTTERDAM  
PUBLIC WORKS



Town of Rotterdam  
Waiver of Site Plan Review Application

The following applicant requests a Waiver of Site Plan Review. The following documentation is required for Planning Commission review:

1. Copy of Deed and/or executed lease agreement or contract to purchase.
2. Copy of Site Plan that identifies:
  - All structures on site.
  - All parking areas on site (parking spaces 9' x 18').
  - Handicap parking and accessibility as required by New York State Building Code.
  - Interior floor plan of usable area by applicant.
  - Proposed site improvements including parking, structural additions, landscaping and other pertinent information as identified in Section 270-132 of Town Code.
3. On a separate sheet of paper provide a descriptive narrative of use and activity occurring on the site including but not limited to the number of employees, exact nature of business, hours of operation and expected customers to the site daily.
4. A completed Commercial or Residential Building Permit Application.
5. \$100.00 application fee (cash or check – payable to the Town of Rotterdam). Fee in lieu of parkland for residential developments: \$600 per dwelling unit.
6. Does any Town officer, employee or family member thereof have a financial interest (as defined by General Municipal Law Section 809) in this application? YES \_\_\_ NO \_\_\_. If yes, a statement disclosing the name, residence, nature and extent of this interest must be filed with this application.

PRESENT OWNER(S): Development at Helderberg Meadows LLC

APPLICANT(S)/LESSEE: Pigliavento Builders LLC

MAILING ADDRESS: 151 Von Roll Dr., Schenectady

CITY: Schenectady STATE: NY ZIP: 12306

DAYTIME TELEPHONE: (518) 356-4550 EMAIL ADDRESS Mike@PigliaventoBuilders.com

PROJECT ADDRESS: 3383 Guilderland Avenue

APPLICANT IDENTIFIED AS: Owner \_\_\_ Lessee \_\_\_ Contract Vendee X

REQUEST: Modify the building locations on the previously approved site plan. Buildings along Carriage Loop have been adjusted to accomodate the current location of the force

By signing the application, it is understood by the applicant that he/she must fully comply with the Town Code <sup>Main</sup> and obtain any required permits.

SIGNATURE OF APPLICANT [Signature] DATE 9/12/2025

\* The Planning Commission meets on the first and third Tuesday of each month. All pertinent information and fee(s) must be submitted to the Planning Commission Office at least ten (10) days prior to the meeting.

\*\* All businesses located in the Town of Rotterdam must receive Planning Commission approval and a Certificate of Compliance issued by Building Inspector prior to occupancy.

