Chapter 130. Zoning
Article XV. Battery Energy Storage Systems

§300-40. Authority

This Battery Energy Storage System Law is adopted pursuant to Article IX of the New York State Constitution, §2(c)(6) and (10), New York Statute of Local Governments, § 10 (1) and (7); sections 261-263 of the Town Law and section 10 of the Municipal Home Rule Law of the State of New York, which authorize the Town of Seneca Falls to adopt zoning provisions that advance and protect the health, safety and welfare of the community.

§300-141. Statement of Purpose

This Battery Energy Storage System Law is adopted to advance and protect the public health, safety, and welfare of the Town of Seneca Falls by creating regulations for the installation and use of battery energy storage systems, with the following objectives:

A. To provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of battery energy storage systems;

B. To protect the health, welfare, safety, and quality of life for the general public;

C. To ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems;

D. To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources; and

E. To create synergy between battery energy storage system development and the Town's Solar Energy, Wind Energy Conversion Systems, and Zoning Codes.

§300-142. Definitions

As used in this article, the following terms shall have the meanings indicated:

ANSI: American National Standards Institute

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 MANAGEMENT SYSTEM: An electronic system that protects batteries from operating outside their safe operating parameters and generates an alarm and trouble signal for off normal conditions.

BATTERY ENERGY STORAGE SYSTEM: A rechargeable energy storage system consisting of batteries, battery chargers, controls, power conditioning systems and associated electrical equipment. The system is typically used to provide standby or emergency power, an uninterruptable power supply, load shedding, load sharing, smoothing and dispatching of intermittent renewable energy sources, or similar capabilities. A battery energy storage system is classified as a Tier 1, Tier 2, or Tier 3 Battery Energy Storage System as follows:

A. Tier 1 Battery Energy Storage Systems include either:

    a) Battery energy storage systems for one to two family residential dwellings within or outside the structure with an aggregate energy capacity that shall not exceed:

        1. 40 kWh within utility closets and storage or utility spaces
        2. 80 kWh in attached or detached garages and detached accessory structures
        3. 80 kWh on exterior walls
        4. 80 kWh outdoors on the ground

b) Other battery energy storage systems with an aggregate energy capacity less than or equal to the threshold capacity listed in Table 1

Table 1: Battery Energy Storage System Tier 2 Threshold Quantities

Battery Technology	Capacity
Flow batteries	20 kWh
Lead acid, all types	70 kWh
Lithium, all types	20 kWh
Nickel cadmium (Ni-Cd)	70 kWh
Nickel metal hydride (Ni-MH)	70 kWh
Other battery technologies	10 kWh

B. Tier 2 Battery Energy Storage Systems include battery energy storage systems that are not included in Tier 1, have an aggregate energy capacity greater than the threshold capacity listed in Table 1, and have an aggregate energy capacity less than 600 kWh

C. Tier 3 Battery Energy Storage Systems include all the following:

a) Battery energy storage systems with an aggregate energy capacity greater than or equal to 600kWh

b) Battery energy storage systems with more than one storage battery technology is provided in a room or indoor area

COMMISSIONING: A systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

DEDICATED-USE BUILDING: A building that is built for the primary intention of housing battery energy storage system equipment and is classified as Group F-1 occupancy as defined in the International Building Code. It is constructed in accordance with the Uniform Code, and it complies with the following:

1) The building's only permitted primary use is for battery energy storage, energy generation, and other electrical grid-related operations.

2) Occupants in the rooms and areas containing battery energy storage systems are limited to personnel that operate, maintain, service, test, and repair the battery energy storage system and other energy systems.

3) No other occupancy types are permitted in the building.

4) Administrative and support personnel are permitted in incidental-use areas within the buildings that do not contain battery energy storage systems, provided the following:

a. The areas do not occupy more than 10 percent of the building area of the story in which they are located.

b. A means of egress is provided from the incidental-use areas to a public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy systems.

DWELLING UNIT: One or more rooms arranged for complete, independent housekeeping purposes with space for eating, living, and sleeping; facilities for cooking; and provisions for sanitation.

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.

FLOW BATTERY: A type of battery that uses typically large, separated liquid reservoirs of electrolytes that flow through a reaction zone to store, charge, and discharge energy, and include vanadium, zinc-bromine, polysulfide-bromide, and other flowing electrolyte type technologies. These electrolytes are typically non-flammable.

kWh: Abbreviation for kilowatt-hour, which is a measure of the energy capacity of a battery and a battery energy storage system.

LEAD-ACID BATTERY: A battery that is comprised of lead electrodes immersed in sulfuric acid electrolyte. These batteries may be flooded, vented, sealed, or may come in other configurations. They may produce hazardous gases during normal operations.

LITHIUM-ION BATTERY: A battery with lithium ions serving as the charge carriers of the battery. The electrolyte is typically a mixture of organic solvents with an inorganic salt and can be in a liquid or a gelled polymer form.

NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL): A U.S. Department of Labor designation recognizing a private sector organization to perform certification for certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards.

NEC: National Electric Code.

NFPA: National Fire Protection Association.

NICKEL-CADMIUM BATTERY: A rechargeable Battery in which the positive active material is nickel oxide and the negative active material contains cadmium (referred to as a Nickel-cadmium or Ni-Cd battery), and the electrolyte is potassium hydroxide.

NICKEL METAL HYDRIDE BATTERY: A rechargeable Battery in which the positive active material is nickel oxide and the negative active material contains hydrogen ions stored in a metal-hydride structure (referred to as a Nickel-metal hydride or Ni-MH battery), and the electrolyte is potassium hydroxide.

NICKEL ZINC BATTERY: A rechargeable Battery in which the positive active material is nickel oxide and the negative active material contains zinc (referred to as a Nickel-zinc or Ni-Zn batter) as the electrode, and the electrolyte is potassium hydroxide. A Nickel-zinc battery is considered an "other battery technology" for the purposes of Table 1.

NON-DEDICATED-USE BUILDING: All buildings that contain a battery energy storage system and do not comply with the dedicated-use building requirements, including all other occupancy types such as, but not limited to, commercial, industrial, offices, and multifamily housing.

NON-PARTICIPATING PROPERTY: Any property that is not a Participating property.

OCCUPIED COMMUNITY BUILDING: Any building in Occupancy Group A, B, E, I, R, as defined in the International Building Code, including but not limited to schools, colleges, daycare facilities, hospitals, correctional facilities, public libraries, theaters, stadiums, apartments, hotels, and houses of worship.

ONE-TO-TWO-FAMILY DWELLING: A building that contains not more than two dwelling units with independent cooking and bathroom facilities.

PARTICIPATING PROPERTY: A battery energy storage system host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the battery energy storage system owner (or affiliate) regardless of whether any part of a battery energy storage system is constructed on the property.

SPECIAL FLOOD HAZARD AREA: The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

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.

§300-143. Applicability

A. The requirements of this Local Law shall apply to all battery energy storage systems permitted, installed, or modified in Town of Seneca Falls after the effective date of this Local Law, excluding general maintenance and repair.

B. Battery energy storage systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law.

C. Modifications to, 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 Local Law.

§300-144. General Requirements

A. A building permit and an electrical permit shall be required for installation of all battery energy storage systems.

B. Issuance of permits and approvals by the Town of Seneca Falls Planning Board shall include review pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617 ("SEQRA")].

C. All Battery Energy Storage Systems, all Dedicated Use Buildings, and all other buildings or structures that (1) contain or are otherwise associated with a battery energy storage system and (2) subject to the Uniform Code and/or the Energy Code shall be designed, erected, and installed in accordance with all applicable provisions of the Uniform Code, all applicable provisions of the Energy Code, and all applicable provisions of the codes, regulations, and industry standards as referenced in the Uniform Code, the Energy Code, and the Town of Seneca Falls Town Code.

§300-145. Permitting Requirements for Tier 1 Battery Energy Storage Systems

A. Tier 1 Battery Energy Storage Systems shall be permitted in all zoning districts and shall be subject to the "Battery Energy Storage System Permit" and exempt from site plan review.

§300-146. Permitting Requirements for Tier 2 Battery Energy Storage Systems

A. Tier 2 Battery Energy Storage Systems shall be permitted in all zoning districts shall be subject to the "Battery Energy Storage System Permit," and are exempt from site plan review.

§300-147. Permitting Requirements for Tier 3 Battery Energy Storage Systems

Tier 3 Battery Energy Storage Systems are conditionally permitted within the Agricultural Districts A-1 and A-2, Industrial M-1 District and Refuse Disposal and Reclamation District M-2 through the issuance of a site plan review approval and special use permit approval by the Town of Seneca Falls Planning Board pursuant to this chapter and in accordance with Chapter 300, Article XIII of the Code of the Town of Seneca Falls, and subject to the site plan review application requirements set forth in this Section.

A. Applications for the installation of Tier 3 Battery Energy Storage System shall be:

1) Reviewed by the Code Enforcement Officer, Seneca Falls Planning Board and Zoning Board of Appeals, as needed for completeness. An application shall be complete when it addresses all matters listed in this Local Law including, but not necessarily limited to, (i) compliance with all applicable provisions of the Uniform Code and all applicable provisions of the Energy Code and (ii) matters relating to the proposed battery energy storage system and Floodplain, Utility Lines and Electrical Circuitry, Signage, Lighting, Vegetation and Tree-cutting, Noise, Decommissioning, Site Plan and Development, Special Use and Development, Ownership Changes, Safety, Permit Time Frame and Abandonment. Applicants shall be advised within 10 business days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.

2) Subject to a public hearing to hear all comments for and against the application. The Planning Board of the Town of Seneca Falls shall have a notice printed in a local newspaper of general circulation in the Town of Seneca Falls at least 5 business days in advance of such hearing. Applicants shall have delivered the notice by first class mail to adjoining landowners or landowners within 500 feet of the subject property at least 10 days prior to such hearing. Proof of mailing shall be provided to the Town of Seneca Falls Planning Board at the public hearing.

3) Referred to the Seneca County Planning Board pursuant to General Municipal Law § 239-m if required. Further coordination with Seneca County Emergency Management Office will also be required at the discretion of Seneca County Planning Board.

4) Upon closing of the public hearing, Seneca Falls Planning Board shall act on the application within 62 days of the public hearing, which can include approval, approval with conditions, or denial. The 62-day period may be extended upon consent by both the Seneca Falls Planning Board and Applicant.

B. Floodplain. The Applicant of battery energy storage systems shall obtain necessary local floodplain development permits if proposed within Special Flood Hazard Areas.

C. Utility Lines and Electrical Circuitry. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.

D. Signage.
1) The signage shall be in compliance with ANSI Z535 and shall include the type of technology associated with the battery energy storage systems, any special hazards associated, the type of suppression system installed in the area of battery energy storage systems, and 24-hour emergency contact information, including reach-back phone number.

2) As required by the NEC, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.

E. Lighting. Lighting of the battery energy storage systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.

F. Vegetation and tree-cutting. Areas within [10] feet on each side of Tier 3 Battery Energy Storage Systems shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt provided that they do not form a means of readily transmitting fire. Removal of trees should be minimized to the extent possible.

G. Noise. The 1 hour average noise generated from the battery energy storage systems, components, and associated ancillary equipment shall not exceed a noise level of 50 dBA as measured to the boundaries of all adjoining parcels of any Non-Participating Properties. Applicants may submit equipment and component manufacturers noise ratings to demonstrate compliance. The applicant may be required to provide Operating Sound Pressure Level measurements from a reasonable number of sampled locations at the perimeter of the battery energy storage system to demonstrate compliance with this standard.

H. Decommissioning.

1) Decommissioning Plan. The applicant shall submit a decommissioning plan developed in accordance with the Uniform Code, containing a narrative description of activities to be accomplished for removing the energy storage system form service, and from the facility in which it located. The decommissioning plan shall also include: (i) the anticipated life of the battery energy storage system; (ii) the estimated decommissioning costs; (iii) how said estimate was determined; (iv) the method of ensuring that funds will be available for decommissioning and restoration; (v) the method that the decommissioning cost will be kept current; (vi) the manner in which the battery energy storage system will be decommissioned, and the site restored; and (vii) a listing of any contingencies for removing an intact operational energy storage system from service, and for removing an energy system form service that has been damaged by a fire or other event.

2) Decommissioning Fund. The applicant, or successors, shall continuously maintain a fund or bond payable to the Town of Seneca Falls in a form approved by the Town of Seneca Falls Town Board for removal of the battery energy storage system, in an amount to be determined by the Town of Seneca Falls for the period of the life of the facility. This fund may consist of a letter of credit from a State of New York licensed financial institution. All costs of the financial security shall be borne by the applicant.

I. Site Plan application. The site development plan application shall include the following information:

1) Property lines and physical features, including roads, for the project site.

2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

3) A one- or three-line electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

4) A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

5) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system. Such information of the final system installer shall be submitted prior to the issuance of building permit.

6) Name, address, phone number, and signature of the project Applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the battery energy storage system.

7) Zoning district designation for the parcel(s) of land comprising the project site.

8) Commissioning Plan. Such plan, referenced in Appendix 1, shall document and verify that the system and its associated controls and safety systems are in proper working condition per requirements set forth in the Uniform Code. Battery energy storage system commissioning shall be conducted by a New York State (NYS) Licensed Professional Engineer or NYS Registered Architect after the installation is complete but prior to final inspection and approval. A corrective action plan shall be developed for any open or continuing issues that are allowed to be continued after commissioning. A report describing the results of the system commissioning and including the results of the initial acceptance testing required in the Uniform Code shall be provided to the Code Enforcement Officer prior to final inspection and approval and maintained at an approved on-site location.

   Energy storage system commissioning shall not be required for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.

9) Fire Safety Compliance Plan. Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with the Uniform Code .

10) System and Property Operation and Maintenance Manual. Such plan shall describe continuing battery energy storage system maintenance and property upkeep, as well as design, construction, installation, testing and commissioning information and shall meet all requirements set forth in the Uniform Code.

11) Erosion and sediment control and storm water management plans prepared to New York State Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board.

12) Prior to the issuance of the building permit or final approval by Code Enforcement Officer, but not required as part of the application, engineering documents must be signed and sealed by a NYS Licensed Professional Engineer or NYS Registered Architect.

13) An Emergency Operation Plan per requirements set forth in Appendix 2.

J. Site Development Plan Approval Standards.

1) Setbacks. Tier 3 Battery Energy Storage Systems shall comply with the setback requirements of the underlying zoning district for principal structures.

2) Height. Tier 3 Battery Energy Storage Systems shall comply with the building height limitations for principal structures of the underlying zoning district.

3) Fencing Requirements. Tier 3 Battery Energy Storage Systems, including all mechanical equipment, shall be enclosed by a 8-foot-high fence with a self-locking gate to prevent unauthorized access unless housed in a dedicated-use building and not interfering with ventilation or exhaust ports.

4) Screening and Visibility. Tier 3 Battery Energy Storage Systems shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area and not interfering with ventilation or exhaust ports.

K. Ownership Changes. If the owner of the battery energy storage system changes or the owner of the property changes, the site development plan approval shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the site development plan approval and decommissioning plan. A new owner or operator of the battery energy storage system shall notify the Code Enforcement Officer (CEO) of such change in ownership or operator within 30 days of the ownership change. A new owner or operator must provide such notification to the CEO in writing. The special use permit and all other local approvals for the battery energy storage system would be void if a new owner or operator fails to provide written notification to the CEO in the required timeframe. Reinstatement of a void site development plan approval will be subject to the same review and approval processes for new applications under this Local Law.

§300-148. Safety

A. System Certification. Battery energy storage systems and Equipment shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 or CAN 9540 (Standard for battery energy storage systems and Equipment) with subcomponents meeting each of the following standards that are applicable based on the storage type (electrochemical, thermal, mechanical):

1) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications),

2) UL 1642 (Standard for Lithium Batteries),

3) UL 1741 or UL 62109 (inverters and power converters),

4) Certified under the applicable electrical, building, and fire prevention codes as required.

5) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 and applicable codes, regulations and safety standards may be used to meet system certification requirements.

Lead-acid and nickel-cadmium battery systems installed in facilities under the exclusive control of communications utilities and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76 are not required to be listed.

B. Site Access. Battery energy storage systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if the Tier 3 Battery Energy Storage System is located in an ambulance district, the local ambulance corps.

C. Battery energy storage systems, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.

§300-149. Permit Time Frame and Abandonment

A. The Special Use Permit and site plan approval for a battery energy storage system shall be valid for a period of 24 months, provided that a building permit is issued for construction and/or construction is commenced. In the event construction is not completed in accordance with the final site plan. As may have been amended

and approved, as required by the Planning Board within 24 months after approval, the Applicant or the Town of Seneca Falls may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approvals shall expire.

B. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town of Seneca Falls may, at its discretion, utilize the available bond and/or financial security for the removal of a Tier 3battery Energy Storage System and restoration of the site in accordance with the decommissioning plan.

§300-150. Enforcement

Any violation of this Battery Energy Storage System Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the zoning or land use regulations of Town of Seneca Falls.

§300-151. Severability

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

APPENDIX 1: Commissioning Plan

The battery energy storage system commissioning plan shall comply with the Uniform Code and include, at a minimum, the following information:

1. A narrative description of the activities that will be accomplished during each phase of commissioning including the personnel intended to accomplish each of the activities.

2. A listing of the specific BESS and associated components, controls and safety related devices to be tested, a description of the tests to be performed and the functions to be tested.

3. Conditions under which all testing will be performed, which are representative of the conditions during normal operation of the system.

4. Documentation of the owner's project requirements and the basis of design necessary to under-stand the installation and operation of the BESS.

5. Verification that required equipment and systems are installed in accordance with the approved plans and specifications.

6. Integrated testing for all fire and safety systems.

7. Testing for any required thermal management, ventilation or exhaust systems associated with the BESS installation.

8. Preparation and delivery of operation and maintenance documentation.

9. Training of facility operating and maintenance staff.

10. Identification and documentation of the requirements for maintaining system performance to meet the original design intent during the operation phase.

11. Identification and documentation of personnel who are qualified to service, maintain and decommission the BESS, and respond to incidents involving the BESS, including documentation that such service has been contracted for.

APPENDIX 2: Emergency Operations Plan

An 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, and controls.

c. Procedures to be followed in response to notifications from the Battery Energy Storage Management System, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.

d. Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

e. Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

f. Procedures for dealing with battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged battery energy storage system equipment from the facility.

g. Other procedures as determined necessary by the Town of Seneca Falls to provide for the safety of occupants and emergency responders.

h. Procedures and schedules for conducting drills of these procedures.