

State of Rhode Island
RENEWABLE ENERGY GUIDELINES:
Battery Energy Storage Systems
Model Ordinance Templates

DRAFT FOR PUBLIC COMMENT



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Rhode Island Office of Energy Resources

Abstract

In 2024, the Rhode Island General Assembly passed the Energy Storage Systems Act (2024 -- S 2499 *SUBSTITUTE A*) into law. It mandates a series of benchmarks for the state to procure set energy storage capacities—90 MW, 195 MW, and 600 MW by 2026, 2028, and 2033, respectively. As of December 2025, there is 18.69 MW of capacity across residential, commercial, industrial and utility scale storage projects. 3 MW of this is owned and operated in the Clear River Electric and Water District for use in three towns in Northern Rhode Island. Various factors influence the speed at which these projects are developed, including the availability of financial incentives, interconnection rules, and local regulations.

Standards for both wind and solar energy have previously been developed by the Office of Energy Resources and Statewide Planning. The draft ordinance presented herein is voluntary guidance, developed with research and the input of state and local officials. Nothing in this guidance is recommended to supersede or diminish any existing regulatory or planning authority delegated by state or federal statute. The recommendations set forth within are responsive to the fact that the state should advance new technologies and plans to ensure the availability of clean, affordable, and reliable energy for all residents.

This document is one of three resources concerning the development and siting of energy storage systems, particularly battery energy storage systems (BESS) in Rhode Island. These resources should be reviewed together in their entirety; starting with the spreadsheet listing the adopted measures by town, then, the whitepaper on the state of energy storage ordinances and opportunities in the region, and, finally, this report, which contains a template for municipal zoning, safety, and taxation ordinances. The three documents are:

- 1.) Inventory of Municipal Solar Ordinances (Including BESS)
- 2.) Energy Storage Ordinances and Opportunities in New England - Publication Date TBD
- 3.) Renewable Energy Guidelines: Battery Energy Storage Systems—Model Ordinance Templates—March 2026

Contained in this document are two templates for municipalities interested in regulating energy storage systems; 1.) zoning, and 2.) fire safety. The zoning template offers guidance for navigating typical siting and permitting issues relevant to clean energy and energy storage. The model tax ordinance mirrors those developed earlier for other renewable energy systems. The guidance provided herein is intended to equip local leaders to fairly balance the interests of all stakeholders in considering energy storage projects.

Current Status of Energy Storage Projects in Rhode Island

Rhode Island has aggressive energy storage goals outlined in the Energy Storage Act. These include 90MWs by 2026, 195MWs by 2028 and 600MWs by 2033. The goals establish cumulative energy storage goals to help improve grid resilience. As of October 31, 2025, there are 1483 interconnected BESS projects, totaling 18.69 MW. This includes over 1468 residential systems, 14 commercial systems, and 1 utility-scale installation located in Clear River Electric and Water (CREW) service territory in Pascoag, RI.

Rhode Island Principles for Renewable Energy Siting

In March of 2018, an advisory stakeholder group to the Office of Energy Resources and Division of Statewide Planning worked together to develop the model template solar ordinance that some

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municipalities have chosen to adopt. These draft energy storage ordinances were developed with the same goals in mind, to provide useful and consistent language for adoption. OER seeks input from state and local officials, renewable energy developers, residents, property owners, businesses and utilities, and non-governmental organizations. **OER will accept feedback on these templates and the draft version will be posted in Summer 2026.**

Energy Storage Systems Zoning Ordinance Template

[The use of italics in gray boxes indicates commentary and guidance. These sections are not meant to be included in ordinances, rather, they provide suggestions for how the template may be adapted for different contexts.]

Zoning is authorized in Rhode Island by Rhode Island General Law § 45-24. Town / City Councils are given authority by the Statute to adopt zoning and zoning is required to be consistent with the comprehensive community plan. Zoning Ordinances are typically written by the Planning Board/Commission (without or without technical assistance) and recommended to the Council for adoption. The Council must hold a public hearing before it can adopt or change a zoning ordinance. If requested by a Council and/or Planning Boards/Commissions, the Office of Energy Resources and Division of Statewide Planning will provide technical assistance on adopting for the first time, or updating, solar siting or taxation ordinance(s).

*Communities should address battery energy storage systems (abbr. BESS) as a form of land use in their zoning ordinances. These systems are a form of development and ordinances must consider the variety of forms taken by these developments. These regulations can help alleviate uncertainty and prevent conflicts with community wishes and character. **Rhode Island State Statute leaves energy storage development regulations to local governments; the State does not pre-empt or guide energy storage development except for enabling local governments to regulate through development regulations that must be consistent with their community comprehensive plan.** Various planning and review concerns are discussed herein and include recommendations such as defining energy storage related terms, determining what types of BESS systems are appropriate for the community, stating where BESS will be allowed as either primary or accessory use by zoning district, and setting construction standards such as height, buffers, noise reduction, stormwater control, and more. The standards should relate to the context of siting BESS in relation to existing residential development, farms (as classified as Farmland recognized through the RI DEM Farm, Forest, and Open Space Program (RIGL 44-27), commercial, industrial, other nonresidential uses, protected open space, unprotected natural resource areas, future capacity for other development, infill development, or redevelopment when establishing such standards.*

Municipalities, based on input from residents, businesses, community organizations, and energy storage developers may decide which standards of review are desirable, with consideration for staff capabilities, land use, and natural and built resources. Urban communities where the primary form of BESS development is likely to be small—on open lots, or industrial parks, may have significantly different ordinances than rural communities, where BESS development is more likely to be co-located with other utility facilities or on undeveloped land. The suggestions contained in this template are for informational purposes only and are not intended to constitute any legal advice. Municipalities should always consult with their legal staff/solicitors before enacting or amending any ordinances. Nothing in this guidance is construed to supersede or diminish any regulatory or planning authority granted or delegated to a municipality by state or federal statute.

The purpose of this guidance is to assist municipalities in the regulation of battery energy storage systems and to promote the development of small and large, grid-interconnected BESS systems by ensuring that adopted ordinances properly address standards for the placement, design, construction, operation, monitoring, and maintenance of such facilities. Standards should address public safety and

incorporate public input, preservation of scenic, natural, and historic resources, and minimization of effects on abutting properties. Standards should also ensure the compatibility of BESS systems with the area in which they are located, along with the general consistency with the goals and policies of the comprehensive plan for the community in which they are located.

1. Purpose and Consistency with Comprehensive Plan

This is a required provision of an ordinance per § 45-24-32 (the Zoning Enabling Act). It is the citation of the basic police power of the community to adopt zoning. This is where the intent and the “why” (protecting public, health, welfare, etc.) of the municipality adopting the ordinance should be described. Simply put, the purpose of this section in an ordinance is to describe the reasons for the ordinance. The statute empowers each town and city to establish and enforce standards and procedures for the management and protection of land, air, and water as natural resources, and to employ contemporary concepts, methods, and criteria in regulating the type, intensity, and arrangement of land uses, and provides authority to employ new concepts as they may become available and feasible. Solar energy systems are an example of a new land use that municipalities may choose to regulate.

The Town/ City Council finds that it is in the public interest and will ensure the health, safety, and welfare of the community through the safe, effective and efficient use of battery energy storage systems (BESS) that minimize impacts on scenic, natural, cultural resources, increase resiliency, reduce the use of and reliance on fossil fuels for power production, reduce carbon and other greenhouse gas emissions of utility-supplied electric energy, and provide clean, domestically-sourced alternatives to our existing energy supply. This law meets the needs and interests of the community through the following objectives:

- To preserve the health, safety, and welfare of the Town’s/City’s citizens by promoting the safe, effective, and efficient use of battery energy storage systems to reduce the consumption of fossil fuels, increase resiliency and mitigate climate change.
- To improve the resiliency and economic strength of and assist homeowners, local businesses, commercial/industrial users, and farms with options for improving resiliency, economic strength, and environmental sustainability.
- To spur effective investment in and management of energy infrastructure systems to support existing and future development.
- To reduce dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources.
- To upgrade and enhance the reliability and power quality of the power grid.
- To encourage local economic development.
- To offer additional energy choice to local consumers, improve competition in the electricity supply market, and empower residents, businesses, and farms) to have more control over their respective energy supplies.
- To incorporate local renewable energy resources in such a manner as to be consistent with and provide for orderly growth and development that recognizes the goals and patterns of land use contained in the comprehensive plan of the Town/City of _____.
- To generate local tax revenue.

- To protect the natural resources of [the Town/City](#), including forests and other valuable habitats, by siting battery energy storage systems in locations that minimize environmental impacts, and discourages the loss of natural areas with substantial value for reducing greenhouse gas emissions.

2. Definitions

This is the section where terms that will appear in the ordinance are explained. This part or the ordinance should include specific definitions that have meanings only for this use (battery energy storage systems). Any specific or technical terms related to the review of BESS should be explained here. This can be a standalone section or incorporated into the overall general definition section of the zoning ordinance. Many people prefer to keep it within the section on solar energy systems, so all information related to the topic is found in one place. This is the most user-friendly way. It is not necessary to repeat any items already contained in the general definition section of the zoning ordinance. Include only those terms used in the ordinance.

ANSI- American National Standards Institute

Battery Energy Storage System (BESS)- An electrochemical device consisting of a single cell or group of cells connected in series, in parallel, or in a combination of both, which can charge, discharge, and store energy. For the purposes of this section, batteries utilized in consumer products, car batteries, and electric vehicles are excluded from these requirements.

Battery Energy Storage Management System- An electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

Cell/ Cells- The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

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 complies with the following: 1) The building's only use is battery energy storage, energy generation, and other electrical grid-related operations. 2) No other occupancy types are permitted in the building. 3) 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. 4) Administrative and support personnel are permitted in areas within the buildings that do not contain battery energy storage system, 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 administrative and support use areas to the public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy system equipment.

NEC- National Electrical Code (same as NFPA-70).

NFPA- National Fire Protection Association

3. Permits Required

All battery energy storage systems shall require reviews, and approvals as outlined in this Ordinance. BESS must be consistent with all applicable State and Federal fire and electrical safety

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codes and shall obtain all necessary statewide energy storage, building, and electrical permits from the Building Official prior to commencement of construction.

[Insert here appropriate review authorities to be to be consulted, based upon;

- the various staff and boards/commissions available in the city/town,

- the distinction between types (primary, commercial, accessory uses) for the systems and,

- the types of reviews deemed necessary for each.]

4. Applicability

A. The requirements of this Local Law shall apply to all battery energy storage systems permitted, installed, or modified in [Town/City] 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.

5. District Use Regulations

Municipalities should review each of their districts (including special districts such as historic, aquifer, and/or other overlay districts) and determine whether BESS will be permitted or prohibited within each district. Careful consideration should be given to preferred areas in the community where BESS are desirable versus areas which are not a preferred location. Special consideration should be given to the questions posed by the Lawrence Berkeley National Laboratory factsheet "Best Practices and Considerations for Siting Battery Storage Systems" (see Appendix-1.) For Commercial-Scale systems: Siting BESS should also be done with efforts to co-locate with or near existing ISO-New England grid infrastructure, specifically multi-level kV substations, as this helps minimize connection costs and improve efficiency of commercial scale systems (see appendix-2.) Once the decision to permit or exclude BESS is made by district, then communities should determine the best review process based upon where various BESS types will be allowed. The regulatory options which municipalities should consider for approving BESS under zoning enabling in Rhode Island are:

- *Not a permitted use.*
- *Allowed as a permitted use- no additional review beyond Building/Zoning Officials.*
- *Allowed by a Special Use Permit from the Zoning Board/Commission in all or only some districts with siting standards to be met.*
- *Allowed in all or some districts but Development Plan Review is required by the Planning Board/Commission.*
- *Allowed in all or some districts but Major Land Development Review is required by the Planning Board/Commission.*
- *Allowed within an Overlay District with siting standards to be met:*
- *An Overlay can be floating or mapped to limit overlay to certain districts or other defined areas.*
- *Review can be either Special Use Permit, Development Plan Review, or Major Land Development.*

A zoning ordinance must contain a table describing which uses are allowed within the different zoning districts of the municipality, and what permits and review process(es) will be required for the uses. An illustrative table follows. Municipalities should amend their own use table reflecting their own zoning districts with their desired types and locations for different types of BESS. The table

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illustrates how different types of BESS and opportunities for varying types of BESS could be located somewhere in a community within differing zoning districts. The consensus of the Advisory Stakeholder Group was that planning boards/commissions have the land use knowledge to review the siting of BESS, and thus, BESS should be reviewed by planning boards/ commissions as opposed to zoning boards/commissions.

*The following Table includes a range of recommendations to consider. It is **not** a state directive to permit or prohibit, BESS in any way. Permitting or prohibiting BESS is the responsibility and authority of local officials in each of the State’s municipalities. Nothing in this guidance is construed to supersede or diminish any regulatory or planning authority granted or delegated to a municipality by state or federal statute. The table does not attempt to describe all potential options but rather provides the most common and simple methods as guidance. It is possible that some of these review processes can be combined and used together, but the zoning and land development laws are complex, so it is suggested that municipalities craft a permitting system that works for them with the advice of their municipal solicitor. Each community must make land use policy decisions as they see fit, consistent with their adopted community comprehensive plan.*

Illustrative Battery Energy Storage System Siting for a Zoning Use Table

Types of Permits required; P = Permitted Use; D = Development Plan Review; M = Major Land Development Review; N = Not Permitted

BESS Type	Zoning Districts							Comments
	Residential, low density	Residential, medium-high density	Mixed Use	Commercial	Light Industrial	Heavy Industrial	Open Space	
Residential (≤ 25 kW)	P	P	D	P	P	P	P	
Small Commercial (≤1 MW)	D	D	D	D	P	P	D	
Medium Commercial (1-5 MW)	N	N	D	D	P	P	D	
Large Commercial (5+ MW)	N	N	N	N	D	D	N	Large scale BESS projects may require undeveloped land. Municipalities may consider proposing a change in zoning map to accommodate for such instances.
Industrial	N	N	N	N	D	P	N	

** For illustrative purposes only. Actual districts will differ in number and complexity by municipality, and each existing use table will need to be tailored to address locating BESS as desired. If a unique overlay district is preferred, then it should also be included in the zoning use table. ** Minimum lot sizes vary in residential districts. ***Historic and or other regulations may apply. This is the column to cross reference with other portions of the Ordinance that may be relevant. ****Development Plan Review (DPR)- The purpose of development plan review is to ensure that the best design and planning practices, as well as best available technology are used by applicants to avoid or minimize impacts of development on the natural and manmade environment. In addition, it ensures that an application for a proposed use demonstrates consistency with the local comprehensive community plan and the design standards of the Subdivision and Land Development Regulations of the community. Communities are authorized and have broad authority to set specific and objective guidelines, standards and minimum requirements for DPR by Rhode Island General Law § 45-24-49. DPR is not a required review under the Statute, but it is recommended that municipalities consider using it as a tool to provide streamlined reviews for Level 2 BESS. DPR means essentially that a use may be a permitted use but it is subject to siting standards for the location, setbacks, buffers, landscaping, signage, safety, and other requirements. In addition, all environmental impacts must be addressed for approval. If the standards are not met, applications can be denied approval. Some communities may not choose this option for reasons specific to the locality. That is a local land use policy: the decision must be made at the local level. Larger BESS should be subject to a public meeting with notice to abutters, especially in residential districts.*

6. General Requirements

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This is where the general standards for reviews should be delineated. The standards to be applied to every BESS application should be outlined here. These standards should be used by local officials to establish a basis for the findings of fact needed for approval. It is way for a municipality to make clear what is valuable and important to the community. In setting the standards, develop the general principles which would apply to all BESS first, then, add requirements for specific types of systems and what tiered review requirements need to be applied.

- A. Battery energy storage systems shall be manufactured and designed to comply with applicable industry standards, as may amended for time to time, including but not limited to, the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), and other appropriate certifying organizations as may be required by Federal, or State Laws or utility regulations.
- B. Battery energy storage systems shall be located, constructed, installed, and operated to minimize potentially adverse impacts to nearby properties, natural resources, and or individuals.

Any potential impacts to water quality and/or wetlands should be addressed through the required state permits of the Department of Environmental Management (DEM) for wetlands and the Rhode Island Pollution Discharge Elimination System (RIPDES) for storm water. Require these permits for BESS within the review process in the same way they are required for other land uses subject to development plan review and/or major land developments requirements.

- C. Natural vegetation or additional landscape screening shall be provided as determined by the Planning Board/Commission depending upon the existing land use on the site and the adequacy of the site's natural vegetation or lack thereof to mitigate impacts to public views, scenic roads, and abutters. The Board /Commission shall have the authority to set site specific width of buffers, height of plants at planting, and to require an opaque screen to adjacent properties and/or public roads.
- D. Pollinator- friendly seed mixtures shall be used along with native plants to the maximum extent possible. All plants and seeds should be native to the greatest extent practicable, and no plants known or suspected (e.g. aggressive spreading non-natives) to be invasive should be used.
- E. Battery energy storage systems shall be constructed to be safe and secure. This includes fencing which allows for the passage of small terrestrial animals. Barbed wire fences shall not be permitted.

Fence construction is a standard item regulated by most zoning ordinances in Rhode Island in some way for many types of land uses. Check to see what fencing requirements already exist. Fence construction requirements can depend on the location of the property, proposed use, abutting uses, the location of the fence, height, and construction materials. Consult with the Building Inspector and local fire department/district when adding other special fencing requirements for BESS. Consider if the fence elevation requirement for small terrestrial animals may be waived by the Planning Board/Commission for sites within urban areas without such wildlife.

- F. For installations on agricultural lands, the entire lot should be examined by the Planning Board/Commission and farm owner with areas designated within the total acreage for farming use, buffers, and BESS should be located as to minimize impact to prime agricultural soils or soils of statewide importance wherever possible. No topsoil or prime agricultural soil shall be removed from the site for installation of the facility. All soils retained should be reused in the landscaping/ vegetative plan for the site.
- G. Battery energy storage systems connecting directly to a distribution or a transmission system must submit a copy of the preliminary interconnection study with the electric distribution company. Any off-site impacts or infrastructure upgrades necessary to enable the BESS shall be identified, especially any impacts to existing street trees within the connection and/or affected municipal rights-of-way. Where such street trees may be impacted, the local Tree Warden shall

submit an advisory opinion on the extent of the off-site impacts and a recommendation for mitigation of the impacts.

- H. All BESS are subject to the town/ city soil erosion and sediment control provisions of this ordinance as well as the storm water control provisions of the Subdivision and Land development regulations.
- I. Any power and communication lines, including those to an off-site electric distribution system or interconnections with buildings onsite excepting, the poles owned by the electric distribution company which are typically required to be above ground, shall be buried underground. Exemptions may be granted by the Planning Board/Commission in instances where written documentation for shallow bedrock, a high groundwater table, prior environmental contamination or other elements of the natural landscape interfere with the ability to bury lines.
- J. Exterior lighting within the BESS shall be the minimum necessary. All fixtures shall be full-cut off fixtures approved by the International Dark Sky Association and correlated color temperatures $\leq 3000\text{K}$ for bulbs.
- K. A BESS shall not be located on any lot or portion of a lot that is protected from development by a conservation easement, preservation easement, and or deed restriction.
- L. Nothing herein shall preclude the town / city of XX from installing SES on any town-owned or controlled property regardless of the zoning district.

7. Permitting/ Review Requirements

For all BESS, the following requirements supplement the individual application requirements for Development Plan Review (DPR) and or Major Land Development Review (MLD) applications contained in other sections of this Ordinance and or the Town/City Subdivision and Land Development Regulations.

This is where the development criteria for approval of all BESS should be spelled out. Applicants should be able to use this section as an additional checklist to prepare the required information they need to submit for review and approval. Based on the various types of systems defined, the municipality should consider differing review requirements and standards to address the anticipated level of impact from the various systems. These requirements would be unique to BESS in addition to the normal standards and requirements for applications for Development Plan and/or Major Land Development Review.

The DPR and MLD processes in most communities already have detailed application submission and public notice requirements and should cover the range of general siting conditions that BESS should address. There is no need to repeat the same requirements in this portion of the ordinance. It is recommended that if an existing DPR process does not have a notice provision for an informational hearing for items reviewed by the Planning Board, such a procedure be added to the existing process.

8. Permitting Requirements for Small, Medium, and Large Commercial BESS

These battery energy storage systems are permitted through the issuance of a [special use permit] within the [XXXXXXXXXXXXXXXX, XXXXXXXXXXXX, XXXXXXXXXXXX] zoning districts, and shall be subject to the Uniform Code and the site plan application requirements set forth in this Section.

A. Applications for the installation of these BESS types shall be:

- 1. Reviewed by the [Code Enforcement/Zoning Enforcement Officer or Reviewing Board] 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

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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, and 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 [Reviewing Board] of the [Village/Town/City] shall have a notice printed in a newspaper of general circulation in the [Village/Town/City] at least [5] days in advance of such hearing. Applicants shall have delivered the notice by first class mail to adjoining landowners or landowners within [200] feet of the property at least [10] days prior to such a hearing. Proof of mailing shall be provided to the [Reviewing Board] at the public hearing.
3. Upon closing of the public hearing, the [Reviewing Board] shall take action 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 [Reviewing Board] and Applicant.

B. Narrative Report—the applicant shall provide a summary narrative report containing:

1. Name, address and contact information for proposed system installer, system operator, landowner, applicant, and designated agents representing the project.
2. A project construction schedule.
3. An operation and maintenance plan.
4. A rendering or photo simulation showing the proposed completed project with landscaping.
5. Evidence of compliance with any applicable state environmental regulations and state permits.
6. An emergency response plan for public safety officials.
7. A decommissioning /restoration plan and proposed financial security (with supporting calculations).
8. A landscape plan showing seeding / vegetation plan for the project and maintenance schedule.
9. Evidence that a preliminary interconnection feasibility study is underway and a copy of the application with the electric distribution company.
10. An estimation of annual taxation revenue.

C. 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.

D. Vegetation and Tree-Cutting

Areas within [10] feet on each side of 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 if they do not form a means of readily transmitting fire. Removal of trees should be minimized to the extent possible.

E. 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 [60] dBA as measured at the outside wall of any non-participating residence or occupied community building. 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.

9. Abandonment and Decommissioning

An abandoned small, medium, large commercial, or industrial ground mounted BESS shall be removed within 180 days from the date of discontinued operations and the owner shall send notice by certified mail, of the proposed date that the site will be restored to the town/city zoning enforcement official. A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation, and a financial security ensuring financial resources will be available to fully decommission the site. Decommissioning shall consist of:

- a. Physical removal of all BESS structures, equipment, security barriers and transmission or other electrical project lines from within the site to the point of interconnection. The electric distribution company to which the system is interconnected to must be contacted within 180 days of system de-energization to schedule removal of the interconnection lines to the site. The schedule shall be submitted to the Zoning Official.
- b. Disposal of all solid and hazardous waste in accordance with all federal, state and local laws, regulations and ordinances.
- c. Disposal of all components, wiring, and/or foundations in accordance with the provisions of the town/city solid waste ordinance.
- d. Stabilization or revegetation of the site as necessary to minimize erosion and in compliance with all state and local laws, regulations and ordinances. Final site conditions shall be set in a restoration plan by the Planning Board/Commission and/or Planning Staff through the Development Plan Review or Major Land Development Review approval for the BESS. Compliance with the approved restoration plan shall be inspected and enforced by the town/city zoning enforcement official.
- e. The property owner or company running the system shall remove the system and all associated structures and components and restore the property in accordance with the approved restoration plan as soon as possible within 180 days of the notice to the town/city zoning enforcement official.
- f. The applicant shall submit a decommissioning / restoration plan, a detailed estimate and explanation of the cost of removal and restoration with the application. The Administrative Officer or other designated official shall recommend to the Planning Board/Commission the amount of the financial security the applicant must provide to ensure facility removal and site restoration. The Planning Board/Commission shall set the amount of the financial security.

If specialized knowledge or experience is deemed necessary to evaluate the BESS application and/or the accuracy of the cost estimate or the restoration plan, the Planning Board/Commission or Administrative Officer may refer the matter to one of the municipality's consulting professional engineers for review and comment. Ensure that the checklists used state that the applicant shall be responsible for the cost of any such review. This is a standard peer review best practice for other types of major land developments conducted by the municipality.

g. Before the Permit is issued, the applicant shall submit the financial guarantee to the finance director. The finance officer/director shall approve the form and duration of the guarantee in one acceptable to the municipality.

h. If the owner and or operator fail to remove the ground mounted BESS in accordance with the provisions of this Section, the town/ city may enter the property and physically remove the BESS. The cost of such removal shall be the responsibility of the owner and operator of the BESS and the town /city will have all rights associated in compliance with the decommissioning agreement, including the recording of a municipal lien against the system owner and the landowner of record in the land evidence records for all costs associated therewith.

10. Violations

It shall be unlawful for any person or entity to construct, install, operate, or substantially modify a BESS that is not in compliance with the provisions of this ordinance or with any condition contained in a permit issued pursuant to this ordinance.

11. Severability

The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

Note on Enforcement: Anyone who fails to comply with an applicable provision of a zoning ordinance or an approval issued pursuant to a zoning ordinance is subject to enforcement and penalties as stipulated in that zoning ordinance. The zoning ordinance is enforced in most areas by the Building / Zoning or Code Enforcement Officials. R.I. General Law § 45-24-60 provides the procedure and penalties for addressing violations including, provisions for legal action for assistance with enforcement. Municipalities may request court actions or injunctions. In extreme cases, municipalities may pursue criminal actions with fines or imprisonment as penalties in court.

Model Ordinance No. 2

Ordinances of the town/ city of

Fire and Safety

**

Article XX

§XXXX. Purpose and Authority.

As of December 2025, the Rhode Island Electrical Code has adopted the 2023 National Electric Code, to supersede any related laws in the state. The Rhode Island Electrical Code is promulgated by the Building Code Standards Committee pursuant to the authority granted in R.I. Gen. Laws §§

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23-27.3-100.1.5 and 23.27.3-109.1. Similarly, BESS are pursuant to section 23-28.1-2 of the Rhode Island General Laws, known as the Rhode Island Fire Safety Code.

The Rhode Island General Laws widely adopt the NFPA 1 2021 NFPA 72 2022 NFPA 101 2021 as of March 1, 2026.

§XXXX. General Provisions

Battery energy storage systems shall comply with the latest published version of the National Fire Protection Association (NFPA) 855, Standard for Installation of Stationary Energy Storage Systems, at the date of the submission of the application.⁸ Compliance with NFPA 855 Chapters 7 (Operations and Maintenance) and 8 (Decommissioning) shall not be necessary for issuance of a building permit, but required for the commissioning plan. Corresponding plans and procedures are to be reviewed and verified prior to closing of a building permit. Prior to issuance of a building permit, battery energy storage system Applicants are required to:

1. Submit a draft emergency response plan as an appendix to the project building permit application, per NFPA 855 Section 4.3.2.1.4(4).
2. Submit a plan as an appendix to the project building permit application for offering site-specific training to the fire service and emergency personnel of jurisdiction prior to commencing commercial operations.
3. Conduct and submit documentation of hazard mitigation analyses as required by NFPA 855.

Appendix

1. Watson, K. (2022). *Best practices and considerations for siting battery storage ...* lbl.gov. https://eta-publications.lbl.gov/sites/default/files/battery_siting-sein-factsheet_052522.pdf
2. ISO-New England Geographical Transmission System map. <https://www.iso-ne.com/about/key-stats/maps-and-diagrams>
3. *NFPA 855 Standard for the Installation of Stationary Energy Storage Systems*. nfpa.org. (2026). <https://www.nfpa.org/codes-and-standards/nfpa-855-standard-development/855>
4. Rhode Island Electrical Code. 510-RICR-00-00-5. (2025). <https://rules.sos.ri.gov/Regulations/part/510-00-00-5>
5. Inventory of solar + storage ordinances in Rhode Island.

This document can be viewed at: <https://energy.ri.gov/renewable-energy/solar/solar-guidance-and-model-ordinance-development>

