

*NYSERDA Presents:  
Battery Energy Storage Systems –  
Key Considerations for Local Governments*

# **Webinar #3: Permitting and Zoning**



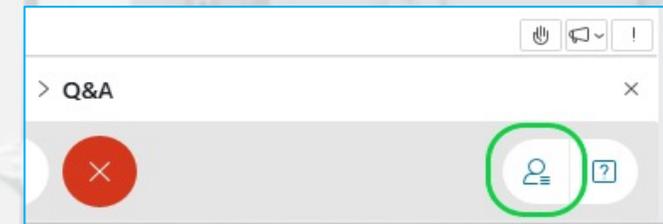
**NYSERDA**

**June 2, 2021**

# Meeting Procedures:

- Members of the public are muted upon entry
- Questions and comments may be submitted in writing through the Q&A feature at any time during the event
- The chat feature is disabled
- Today's materials, along with a recording of the webinar, will be posted to [www.nyserda.ny.gov/StorageGuidebook](http://www.nyserda.ny.gov/StorageGuidebook)
- If technical problems arise, please contact [Sal.Graven@nyserda.ny.gov](mailto:Sal.Graven@nyserda.ny.gov)

You'll see  when your microphone is muted



# Coming Webinars:

**Wednesday, June 16<sup>th</sup>: Decommissioning and End-of-Life Considerations**

Featured Speakers: DNV; Li-Cycle

**Wednesday, June 30<sup>th</sup>: Taxation and Assessments**

Featured Speakers: Hodgson Russ LLP

# Agenda:

- **Recap: Energy Storage in NYS**
- **Energy Storage Guidebook for Local Governments:**
  - Model Zoning Law
  - Model Permit & Inspection Checklist
  - 2020 NYS Uniform Code
- **Q&A**

# Speakers:

- **Jennifer Manierre**  
Program Manager, Clean Energy Siting
- **Candace Rossi**  
Project Manager, Clean Energy Siting & NY-Sun
- **Bill Oberkehr**  
Project Manager, Clean Energy Siting



# Recap: Energy Storage in NYS

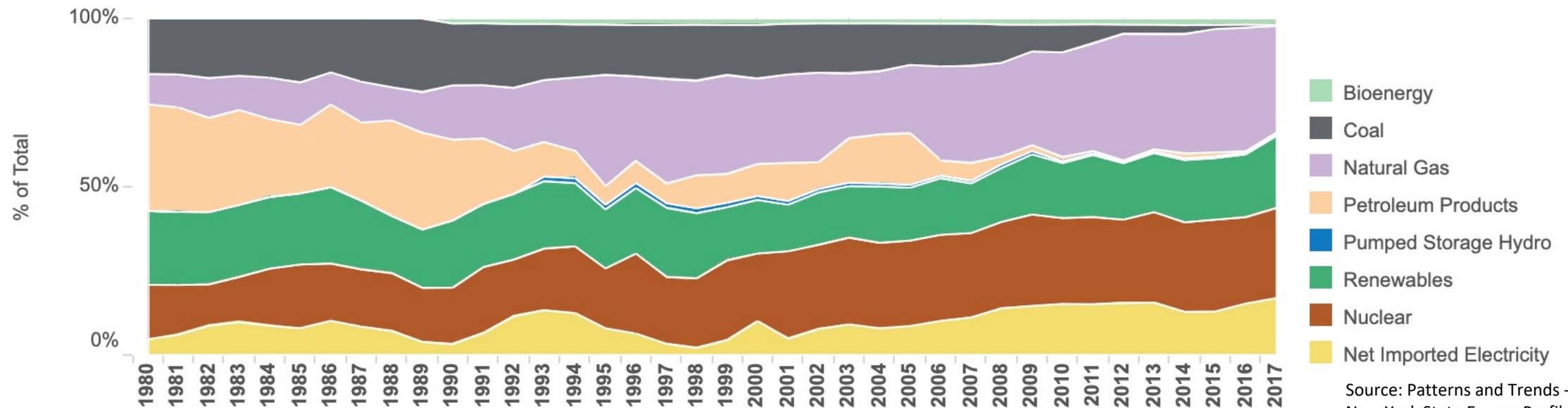
# The Climate Leadership and Community Protection Act (Climate Act)

## Electricity Sector Goals:

- 70% Renewable Electricity by 2030
- 100% Emissions-Free Grid by 2040

## Technology-Specific Goals:

- 6,000 MW Distributed Solar by 2025
- 9,000 MW Offshore Wind by 2035
- **1,500 MW Energy Storage by 2025;**  
**3,000 MW by 2030**



# Energy Storage Systems (ESS) 101

- ESS store energy for conversion to electrical energy
- Batteries (chemical → electrical energy) are the most common + flexible ESS
- Lithium-ion batteries are the prevailing chemistry for ESS
- ESS components include:
  - Cells → Modules → Racks
  - Battery Management System (BMS)
  - Monitoring, Safety, and Balance of System Equipment



Residential (kWh)



Commercial (kWh - MWh)

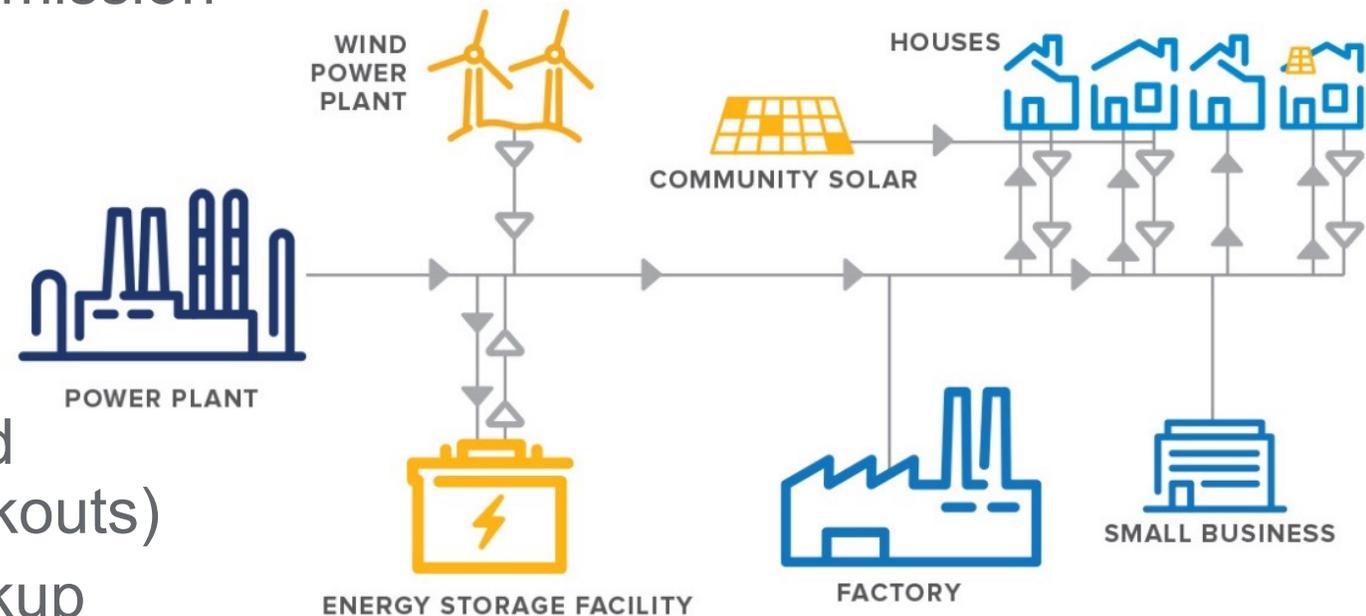


Utility-Scale (MWh – GWh)

# Use Cases for Energy Storage

**Battery Energy Storage Systems can serve a variety of important roles, including these more common:**

- Defer costly upgrades to transmission and distribution infrastructure
- Provide key grid services
- Support integration of renewable energy generators, including solar and wind
- Alleviate congestion in the grid (reducing brownouts and blackouts)
- Electric bill management, backup power for homes and businesses



# NYSERDA Energy Storage Initiative

Provides incentives & technical assistance to support deployment of advanced energy storage technologies

- **Retail Energy Storage Incentives:**
  - For residential through commercial-scale storage projects < 5 megawatts (MW)
  - Incentives vary based on region and megawatt-hour (MWh) block allocation
  - Over \$161 million allocated; \$16.4 million remaining for residential, commercial projects on Long Island and Con Edison
- **Bulk Energy Storage Incentives:**
  - For storage projects > 5 MW
  - Incentives vary based on project size and year of interconnection
  - Funding is fully allocated

[www.nyserda.ny.gov/EnergyStorage](http://www.nyserda.ny.gov/EnergyStorage)

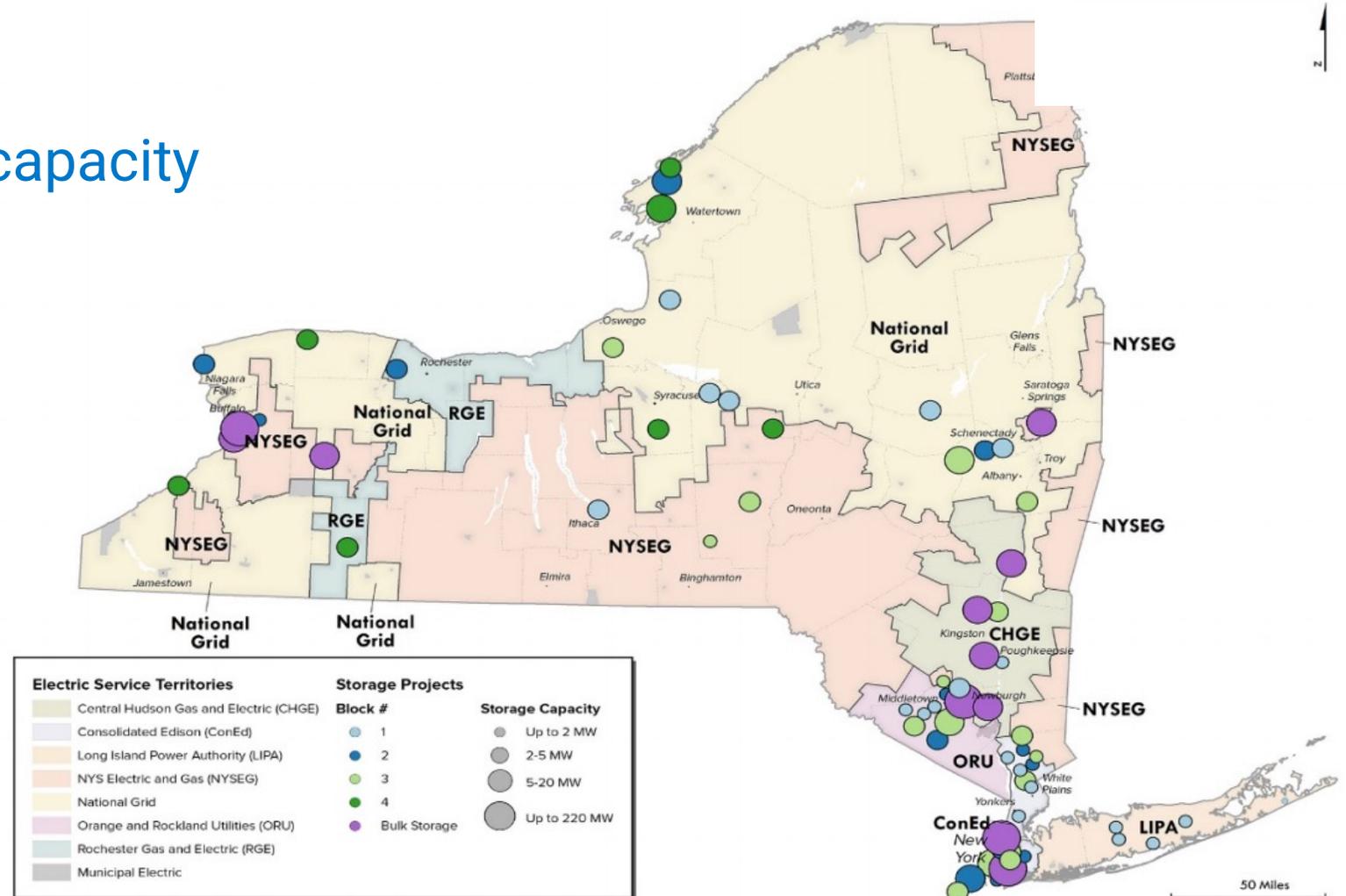
# Energy Storage Deployment in NYS

**As of October 31, 2020:**

- 96.43 MW of installed capacity
- 561 projects

**As of April 30, 2021:**

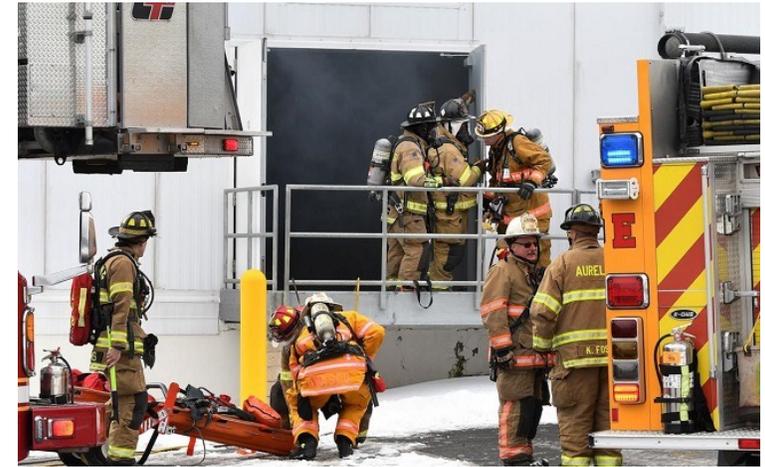
- 1,027 MW contracted, under development
- Over 100 commercial and bulk projects



# Fire Safety

## Key Takeaways:

- **Codes and Standards:** Requirements for BESS have evolved with the technology; robust requirements are already in place under the 2020 NYS Uniform Code.
- **Fire Testing:** Systems are required to complete large-scale fire testing to ensure installation safety.
- **Trainings:** NYS Office of Fire Prevention and Control, NYSERDA, and subject matter experts (SMEs) are partnering to ensure training and information reaches critical audiences.



# Model Zoning Law

A row of white electrical enclosures, likely for solar inverters, mounted on a gravel pad. The enclosures are arranged in a line, receding into the distance. Each enclosure has a door with a handle and a lock. The background shows a clear blue sky and some greenery in the distance.

# Regulatory Framework for Permitting Clean Energy Projects

**Processes for regulating/permitting clean energy development will vary based on size and type of the installation.**

## **For solar/wind:**

- **Projects < 25 MW:** Permitted at local level (SEQR, municipal requirements)
- **Projects > 25 MW:** Permitted at State level (Article 10, Office of Renewable Energy Siting [ORES])
- **Projects between 20 – 25 MW:** May opt-in to State-level siting process through ORES

## **For energy storage:**

- **Projects paired (or “co-located”) with large-scale renewable generators:** Permitted at State level
- **Projects not paired with large-scale generators:** Permitted at local level



# BESS Model Law

## Intentions & Instructions:

- Akin to the Model Solar Law; serves as a comprehensive, customizable template law
- Establishes procedural & substantive requirements for BESS
- Addresses systems of all sizes/uses (residential, commercial, and utility-scale installations)
- Reflects the process for compliance with SEQR
- Municipalities are encouraged to modify it as needed/appropriate based on local priorities, concerns, and zoning.
- Consider the comprehensive plan!

## Battery Energy Storage System Model Law

For local governments to utilize when drafting local laws and regulations for battery energy storage systems.

# BESS Model Law

## Model Law Contents:

**Section 1:** Authority

**Section 2:** Statement of Purpose

**Section 3:** Definitions

**Section 4:** Applicability

**Section 5:** General Requirements

**Section 6:** *Permitting Requirements for Tier 1 Battery Energy Storage Systems*

**Section 7:** *Permitting Requirements for Tier 2 Battery Energy Storage Systems*

**Section 8:** Safety

**Section 9:** Permit Time Frame and Abandonment

**Section 10:** Enforcement

**Section 11:** Severability

# BESS Model Law

## Section 1: Authority

### 2. Model Law

#### 1. 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); [Select one: sections 261-263 of the Town Law / sections 7-700 through 7-704 of the Village Law / sections 19 and 20 of the City Law and section 10 of the Municipal Home Rule Law] of the State of New York, which authorize the [Village/Town/City] to adopt zoning provisions that advance and protect the health, safety and welfare of the community.

#### 2. Statement of Purpose

This Battery Energy Storage System Law is adopted to advance and protect the public health, safety, and welfare of [Village/Town/City] 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 [other stated goals of the community pursuant to its Comprehensive Plan].

#### 3. Definitions

**ANSI:** American National Standards Institute

**BATTERY:** 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 storage 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 electrochemical storage batteries, battery chargers, controls, power conditioning systems, and associated electrical equipment designed to provide electrical power to a building. The system is typically used to provide standby or emergency power, an uninterruptible power supply, load shedding, load sharing, 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

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); [Select one: sections 261-263 of the Town Law / sections 7-700 through 7-704 of the Village Law / sections 19 and 20 of the City Law and section 10 of the Municipal Home Rule Law] of the State of New York, which authorize the [Village/Town/City] to adopt zoning provisions that advance and protect the health, safety and welfare of the community.

# BESS Model Law

## Section 2: Statement of Purpose

This Battery Energy Storage System Law is adopted to advance and protect the public health, safety, welfare, and quality of life of [Village/Town/City] 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 ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems;
- C. To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources; and
- D. To create synergy between battery energy storage system development and [other stated goals of the community pursuant to its Comprehensive Plan].

### Key Takeaways:

- Should reflect local priorities and concerns (benefits and concerns may vary by community)
- Can encourage alignment with local, county, regional, and state goals

# BESS Model Law

## Section 3: Definitions

**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 or an electric motor vehicle. A battery energy storage system is classified as a Tier 1 or Tier 2 Battery Energy Storage System as follows:

- A. Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 600kWh and, if in a room or enclosed area, consist of only a single energy storage system technology.
- B. Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 600kWh or are comprised of more than one storage battery technology in a room or enclosed area.

# BESS Model Law

## Examples of Tier 1 BESS:



# BESS Model Law

## Examples of Tier 2 BESS:



# BESS Model Law

## Section 5: 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 [Reviewing 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 [Village/Town/City] Code.

## Key Takeaways:

- Establish baseline requirements for BESS
- Ensure alignment with SEQRA, NYS Uniform Code, and other applicable codes/standards

# BESS Model Law

## Sections 6-7: Permitting Requirements for Tiers 1 and 2

### Section 6: Tier 1 Battery Energy Storage Systems

- Battery Energy Storage System Permit
- Exempt from Site Plan Review
- Allowable in all zoning districts

### Section 7: Tier 2 Battery Energy Storage Systems

- Special Use Permit
- Site Plan Review
- Allowable in designated zoning districts

# BESS Model Law

## Section 7: Permitting Requirements for Tier 2 BESS

### Process for Approval:

- Choose which zoning district(s) to permit systems.
- Applications shall be reviewed for completeness within [10 business days].
- Applications shall be subject to a public hearing and a notice shall be published in the official newspapers 5 days in advance.
- Referred to the [County Planning Department] pursuant to General Municipal Law § 239-m as required.
- Upon closing the public hearing, the reviewing board shall have 62 days to take action on the application. The 62-day period may be extended.

### Requirements for Approval:

- B. Utility Lines and Electrical Circuitry
- C. Signage
- D. Lighting
- E. Vegetation and Tree-cutting
- F. Noise
- G. Decommissioning
- H. Site Plan Application
- I. Special Use Permit Standards
- J. Ownership Changes

# BESS Model Law

## Section 7: Permitting Requirements for Tier 2 BESS

### G. Decommissioning

#### 1. Decommissioning Plan:

- Narrative description of system removal and disposal
- Anticipated life of system
- Estimated cost of decommissioning
- Description of restoration activities

2) Decommissioning Fund. The owner and/or operator of the energy storage system, shall continuously maintain a fund or bond payable to the [Village/Town/City] in a form approved by the [Village/Town/City] for the removal of the battery energy storage system in an amount to be determined by the [Village/Town/City], 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.

# BESS Model Law

## Section 7: Permitting Requirements for Tier 2 BESS

### H. Site Plan Application

- 4) Equipment specification sheet for the proposed battery energy storage system components
- 8) Commissioning Plan
- 9) Fire Safety Compliance Plan
- 10) Operations and Maintenance Manual
- 11) Erosion, sediment control, and stormwater plans
- 12) Emergency Operations Plan

# BESS Model Law

## Section 7: Permitting Requirements for Tier 2 BESS

### I. Special Use Permit Standards:

- 1) Setbacks. Tier 2 Battery Energy Storage Systems shall comply with the setback requirements of the **underlying zoning district for principal structures.**
- 2) Height. Tier 2 Battery Energy Storage Systems shall comply with the building height limitations for **principal structures of the underlying zoning district.**
- 3) Fencing Requirements. Tier 2 Battery Energy Storage Systems, including all mechanical equipment, shall be enclosed by a **[7-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 2 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.

# BESS Model Law

## 8. Safety

- Adherence to applicable UL listing standards
- Safety of site access
- Working space and weatherproof enclosures

## 9. Permit Timeframe and Abandonment

## 10. Enforcement

## 11. Severability

A row of white electrical cabinets, likely for power distribution, is shown on a gravel pad. The cabinets are arranged in a line, and the background shows a clear blue sky and some greenery. The text "Model Permit & Inspection Checklist" is overlaid in a large, bold, blue font.

# Model Permit & Inspection Checklist

# BESS Model Permit

## Intentions & Instructions:

- Akin to the Unified Solar Permit; serves as a comprehensive, dedicated permit for residential/small commercial BESS
- Helps municipalities establish minimum submittal requirements for electrical and structural plan review
- Intended to make BESS permitting increasingly streamlined and predictable
- In NYSERDA Model Law, this serves as the primary requirement for permitting Tier 1 BESS

## Battery Energy Storage System Model Permit

Understanding the permitting requirements of residential and small commercial battery energy storage systems.

# BESS Model Permit

## PERMIT APPLICATION

### Battery Energy Storage System Model Permit

Note: Language in [ALL CAPS] below indicates where local jurisdictions need to provide information specific to the jurisdiction. Language in italics indicates explanatory notes from the authors of this document that may be deleted from the distributed version.

#### SUBMITTAL INSTRUCTIONS

This application and the following attachments will constitute the Battery Energy Storage System Permitting Package.

- This application form, with all fields completed and bearing relevant signatures.
- Permitting fee of \$[ENTER FEE HERE], payable by [ENTER VALID PAYMENT METHODS, if checks are allowed INCLUDING WHO CHECKS SHOULD BE MADE PAYABLE TO]
- Required Construction Documents for the battery energy storage system being installed, including required attachments.

Completed permit applications can be submitted electronically to [EMAIL ADDRESS] or in person at [BUILDING DEPARTMENT ADDRESS] during business hours [INDICATE BUSINESS HOURS].

#### APPLICATION REVIEW TIMELINE

Permit determinations will be issued within [TIMELINE] calendar days upon receipt of complete and accurate applications. The municipality will provide feedback within [TIMELINE] calendar days of receiving incomplete or inaccurate applications.

#### FOR FURTHER INFORMATION

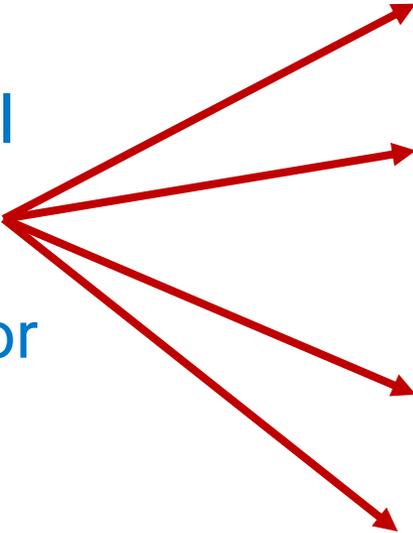
Questions about this permitting process may be directed to [MUNICIPAL CONTACT INFORMATION].

Customize based on municipality's existing or new fee schedule and payment requirements

Set expectations for application submission process and timelines

# BESS Model Permit

Key details which will shape applicable requirements in the NYS Uniform Code for BESS



## EXISTING USE

Residential       Commercial

## PROVIDE THE TOTAL SYSTEM CAPACITY RATING

Total System Capacity Rating: \_\_\_\_\_ kWh      Power Rating: \_\_\_\_\_ kW (Select One)  AC or  DC

## SELECT SYSTEM CONFIGURATION

AC Coupled     DC Coupled     Standalone

## SELECT BATTERY TYPE

Lithium-ion, all types     Lead-acid, all types     Nickel-cadmium (Ni-Cd)     Flow batteries     Other: \_\_\_\_\_

## SELECT INSTALLATION TYPE

Indoor     Outdoor     Attached/Detached/Open Garage     Rooftop     Dedicated Use Building

## BATTERY ENERGY STORAGE SYSTEM INSTALLATION CONTRACTOR

Contractor Business Name

Contractor Business Address      City      State      Zip

Contractor Contact Name      Phone Number

Contractor License Number(s)      Contractor Email

# BESS Model Permit

## Application Requirements Sections:

- General Requirements
  - Document submission requirements
- Site Plan and Floor Plan Requirements
- Electrical Requirements
  - Compliance with BESS Electrical Checklist
  - 1- or 3-line diagram
  - Spec sheets & installation instructions
- Fire Requirements
  - Adherence to applicable NYS Uniform Code sections

### PERMITS AND APPROVALS REQUIRED

The following permits are the minimum requirements for battery energy storage systems installed with an aggregate energy capacity less than or equal to 600kWh and, if in a room or indoor area, where only a single energy storage system technology is provided.

1. Battery Energy Storage System Permit
2. [LIST TYPE OF PERMIT(S) REQUIRED BY THE LOCAL JURISDICTION, i.e., ELECTRICAL OR BUILDING PERMIT].

### SUBMITTAL REQUIREMENTS

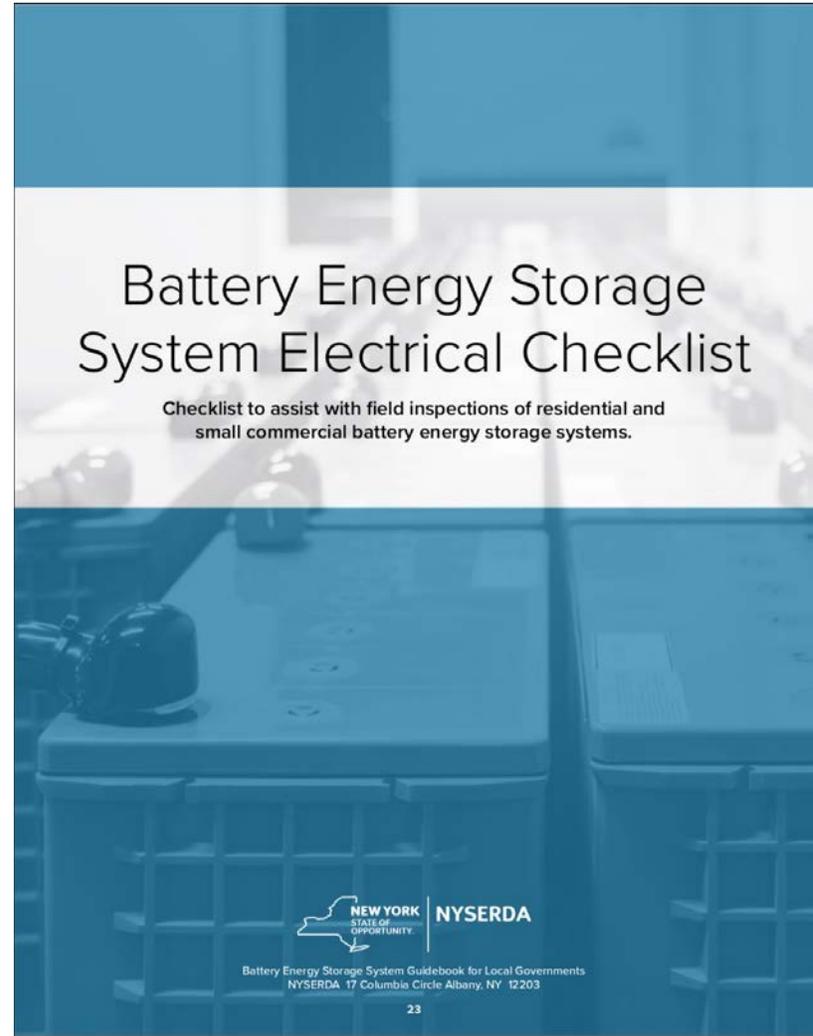
In order to submit a complete permit application for a new battery energy storage system, the applicant must include:

- a) Completed Application form.
- b) Construction Documents, with listed attachments. Construction Documents must be stamped and signed by a New York State Licensed Professional Engineer.

# BESS Electrical Checklist

## Intentions & Instructions:

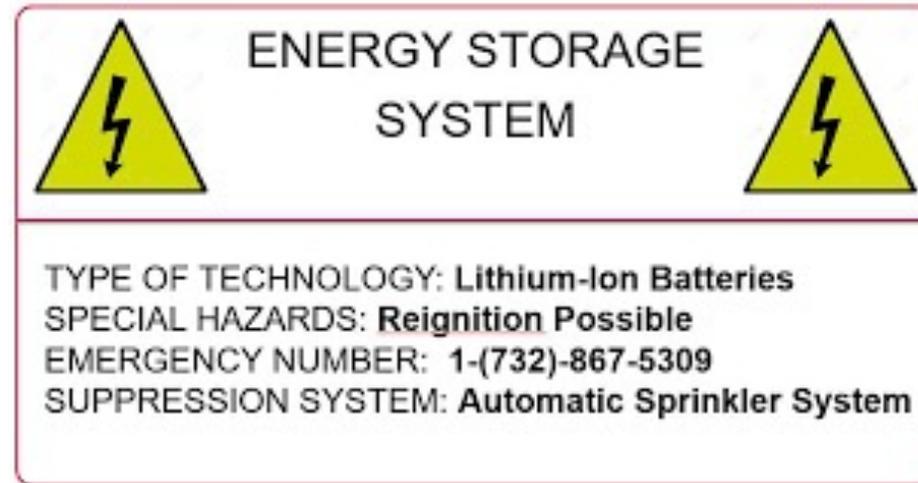
- Acts as a guideline for field inspections of residential and small commercial BESS
- Can be used by municipal staff or provided to 3<sup>rd</sup> party inspection service
- Incorporates up to date electrical codes for NYS
- Pairs with the BESS Model Permit to provide Code Enforcement and Building officials with the tools to approve projects.



# BESS Electrical Checklist

## Checklist Sections:

- General
- Equipment
- Grounding
- Main Electric Service
- Ventilation
- Connections and Terminations
- Monitoring and Charge Control
- Disconnecting Means
- Interconnection
- Signage



A row of white electrical enclosures, likely for power distribution, is shown on a gravel pad. The enclosures are arranged in a line, and the background shows a clear blue sky and some distant structures. The text "2020 NYS Uniform Code" is overlaid in a large, bold, blue font across the center of the image.

# 2020 NYS Uniform Code

# Codes and Standards

## Evolution of ESS Codes and Standards:

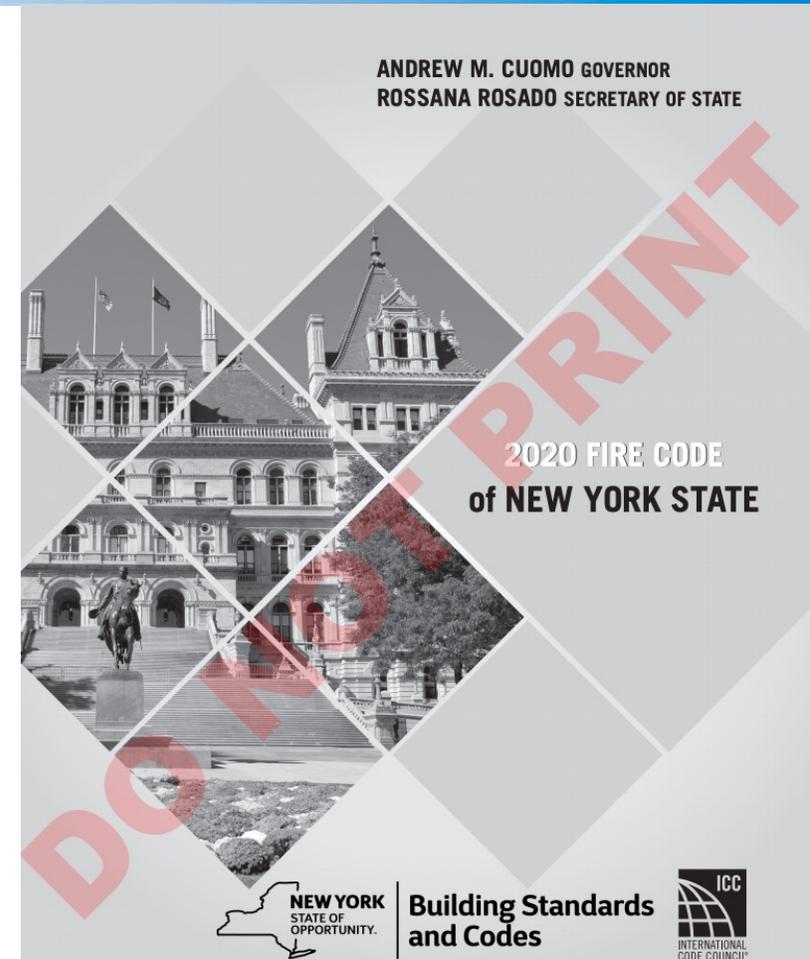
- **2016:** Underwriters Laboratory (UL) publishes 1<sup>st</sup> ed. of UL 9540 (listing standard for ESS)
- **2017:** UL publishes 1<sup>st</sup> ed. of UL 9540A (test method to evaluate system safety and inform installations)
- **2018:**
  - International Code Council (ICC) introduces Chapter 12, Energy Storage Systems to International Fire Code (IFC)
- **2019:**
  - National Fire Protection Association (NFPA) releases *NFPA 855*
  - UL publishes 4<sup>th</sup> ed. of UL 9540A
  - ICC introduces draft 2021 IFC & IRC



# NYS Uniform Code

## Energy Storage in the NYS Uniform Fire Prevention and Building Code (Uniform Code):

- **2019:** NYS Uniform Code Council adopts the *2019 Energy Storage System Supplement*
  - **2020:** 2020 Uniform Code cycle goes into effect; codifies requirements for ESS in multiple codes:
    - 2020 Residential Code
    - 2020 Building Code
    - 2020 Fire Code
- Applicable across NYS without need for local adoption



# NYS Uniform Code

## 2020 NYS Residential Code

- **Size, Location, and Separation requirements**
  - 20 kWh per unit
  - Allowable in attached/detached garages, on exterior walls, within utility closets and storage/utility spaces
  - Up to 40 or 80 kWh in aggregate depending on location of installation(s)
  - Minimum separation of 3 feet from other units, as well as doors, windows, etc.
- **Fire-Resistance Rating requirements**
  - For walls/ceilings of rooms and areas containing ESS
- **Protection from Impact**

Certain requirements may be modified by the AHJ based on large-scale fire testing



# NYS Uniform Code

## 2020 NYS Fire Code:

- **Hazard Mitigation Analysis**
  - Required for larger commercial/grid-scale systems (>600 kWh)
  - Evaluates consequences of ESS failure modes
  - Approval contingent on demonstration that consequences of ESS failure (fires, toxic or flammable gases) will be contained, controlled, or limited by system protections
- **Large-Scale Fire Testing**
  - Conducted in accordance with UL 9540A or approved equivalent
  - Demonstrates that fire will not spread to adjacent systems/areas
  - Testing results will inform necessary protections and requirements
  - Required for systems >600 kWh; may also be utilized to seek exception from certain requirements

# NYS Uniform Code

## 2020 NYS Fire Code (cont.):

- **Fire Remediation**
  - ESS owner required to provide a fire remediation team to relieve first responders, notify FD as needed.
- **Peer Review**
  - As required by the AHJ, ESS owner required to retain and fund services of an approved peer reviewer.
- **Commissioning, Decommissioning, Operations & Maintenance Plans:**
  - Operations & Maintenance Manual
    - Provided prior to commencing operation
    - Maintained at onsite location
  - Commissioning and Decommissioning Plans
    - Should account for removal at end-of-life, or in the event of fire or other damage

# NYS Uniform Code

## 2020 NYS Fire Code (cont.):

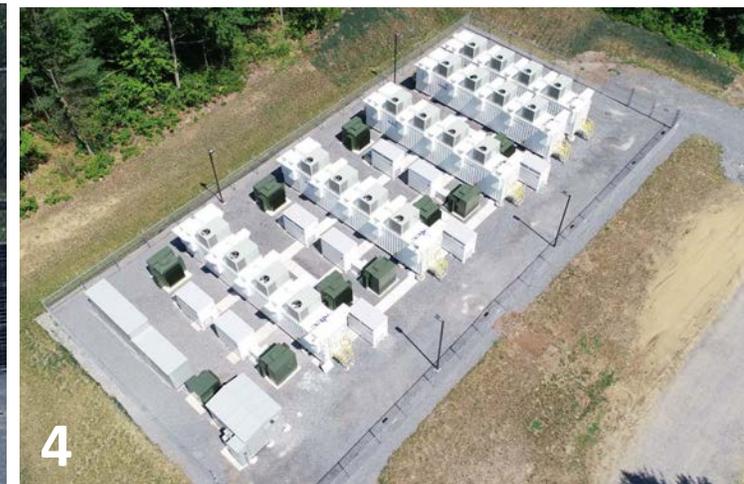
- Technology-Specific Requirements
  - Establishes safety and mitigation requirements based on risks associated with different ESS technologies

Compliance Required	Battery Technology				Other Energy Storage System and Battery Technologies	Capacitor Energy Storage System
	Lead-acid	Ni-Cad and Ni-MH	Lithium-ion	Flow		
1206.13.1. Exhaust ventilation	Yes	Yes	No	Yes	Yes	Yes
1206.12.2 Spill control and neutralization	Yes <sup>c</sup>	Yes <sup>c</sup>	No	Yes	Yes	Yes
1206.12.3 Explosion control	Yes <sup>a</sup>	Yes <sup>a</sup>	Yes	No	Yes	Yes
1206.12.4 Safety caps	Yes	Yes	No	No	Yes	Yes
1206.12.5 Thermal Runaway	Yes <sup>d</sup>	Yes	Yes <sup>e</sup>	No	Yes <sup>e</sup>	Yes

# NYS Uniform Code

## 2020 NYS Fire Code (cont.):

- Location-Specific Requirements
  - Indoor Installations:
    1. Dedicated-Use
    2. Non-Dedicated-Use
  - Outdoor
    3. Outdoor Near Exposures
    4. Outdoor Remote



# NYS Uniform Code

## 2020 NYS Fire Code (cont.):

- Location-Specific Requirements: Indoor Installations

Compliance Required	Dedicated Use Buildings	Non-Dedicated Use Buildings
1206.11 General Installation Requirements	Yes	Yes
1206.12.1 Size and separation	Yes	Yes
1206.12.2 Maximum allowable quantities	No	Yes
1206.12.3 Elevation	Yes	Yes
1206.12.4 Smoke and automatic fire detection <sup>e</sup>	Yes <sup>c</sup>	Yes
1206.12.5 Fire suppression systems	Yes <sup>d</sup>	Yes
1206.14.3 Dwelling units and sleeping units	NA	Yes
1206.14.4 Fire-resistance rated separations	Yes	Yes
1206.13 Technology specific protection	Yes	Yes

# NYS Uniform Code

## 2020 NYS Fire Code (cont.):

- Location-Specific Requirements: Outdoor Installations

Compliance Required	Remote Installations	Installations Near Exposures
1206.11 General Installation Requirements	Yes	Yes
1206.12.1 Size and separation	No	Yes <sup>c</sup>
1206.12.2 Maximum allowable quantities	No	Yes
1206.12.4 Smoke and automatic fire detection	Yes	Yes
1206.12.5 Fire suppression systems	Yes <sup>d</sup>	Yes
1206.12.6 Maximum enclosure size	Yes	Yes
1206.12.7 Vegetation control	Yes	Yes
1206.12.8 Means of egress separation	Yes	Yes
1206.15.3 Clearance to exposures	Yes	Yes
1206.13 Technology specific protection	Yes	Yes

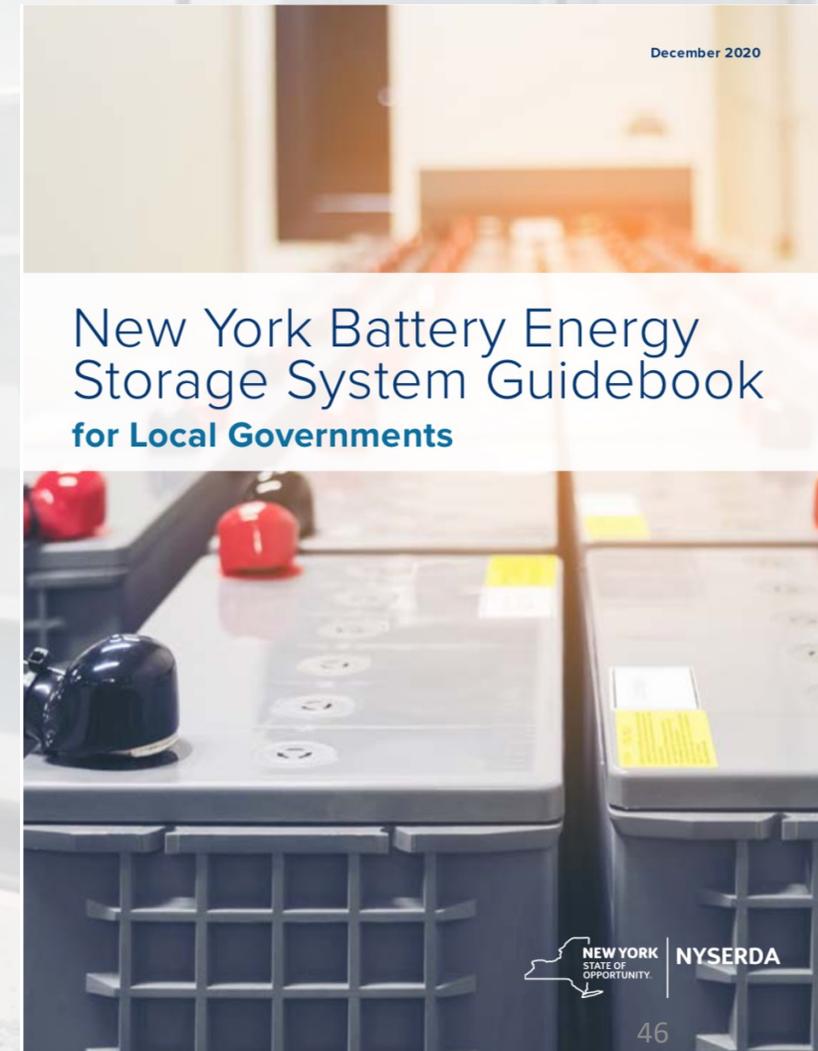
# NYSERDA Resources for Local Governments

## NY Battery Energy Storage System Guidebook:

- Model Zoning Law
- Model Permit + Inspection Checklist
- 2020 NYS Uniform Code References

## NYSERDA Clean Energy Siting Team

- Work one-on-one with municipal boards & local officials to provide free technical assistance
- Offer free accredited trainings for code enforcement officials or planning/zoning board members



# Q&A

## Helpful links:

- [Energy Storage Guidebook for Local Governments](#)
- [NYSERDA Energy Storage Program](#)

For additional assistance, reach out to [cleanenergyhelp@nyserda.ny.gov](mailto:cleanenergyhelp@nyserda.ny.gov)



**NYSERDA**

# Next Webinar in Series:

# Decommissioning and End-of-Life Considerations (Wednesday, June 16<sup>th</sup>)

Questions?  
Email [cleanenergyhelp@nyserda.ny.gov](mailto:cleanenergyhelp@nyserda.ny.gov)

## Battery Energy Storage Systems: Key Considerations for Local Governments



NYSERDA is pleased to host a series of webinars intended to equip local governments across New York State – including municipal board members, first responders, code enforcement officers, and other community stakeholders – with the knowledge and resources required to ensure responsible battery energy storage system development.

This webinar series, featuring presentations from NYSERDA staff as well as external subject matter experts, will cover a range of key topics related to battery energy storage systems which are particularly important for communities and local governments.

Events in this series will be held biweekly on Wednesdays from 5:30 p.m. to 6:45 p.m. ET.

Register for each session of interest using the registration links.

**Questions?** Email NYSERDA's Clean Energy Siting Team: [cleanenergyhelp@nyserda.ny.gov](mailto:cleanenergyhelp@nyserda.ny.gov)

### Battery Energy Storage Systems 101

**Date: Wednesday, May 5, 2021**

*Featured Speakers: Dr. Stanley Whittingham, 2019 Nobel Laureate for Chemistry; Distinguished Professor of Chemistry, SUNY Binghamton*

Gain an introduction to key concepts and technologies associated with battery energy storage systems, as well as an overview of relevant New York State (NYS) goals, policies and programs.

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### Fire Safety

**Date: Wednesday, May 19, 2021**

*Featured Speakers: NYS Office of Fire Prevention and Control (OFPC), Energy Safety Response Group (ESRG)*

Learn about key fire safety considerations for battery energy storage systems, including a discussion of best practices for first responders, as well as a review of important regulations found in the 2020 NYS Uniform Fire Prevention and Building Code.

[REGISTER HERE](#)

### Zoning and Permitting

**Date: Wednesday, June 2, 2021**

*Featured Speakers: NYSERDA Clean Energy Siting Team*

Dive into the valuable resources available to local governments in NYSERDA's Battery Energy Storage System Guidebook. These tools are designed to assist municipalities in implementing zoning, permitting, and inspection processes for battery energy storage installations.

[REGISTER HERE](#)

### Decommissioning and End-of-Life Considerations

**Date: Wednesday, June 16, 2021**

*Featured Speakers: DNV and Li-Cycle*

Explore best practices for the treatment of battery energy storage systems at the end of their useful life – including system recycling and disposal – as well as an introduction to decommissioning plans for energy storage installations.

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### Taxation and Assessments

**Date: Wednesday, June 30, 2021**

*Featured Speaker: Hodgson Russ, LLP*

Learn about New York State and local tax treatment of battery energy storage systems, including information regarding assessments and payments-in-lieu-of-taxes (PILOT) agreements.

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