

ATTACHMENT 16  
DECOMMISSIONING PLAN



# *Town of Manchester*

## **Attachment 16: Decommissioning Plan**

### **Manchester Public Library Battery Energy Storage System (BESS) Town of Manchester, Connecticut**

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#### **1. Purpose**

This Decommissioning Plan establishes the procedures for safely removing the Battery Energy Storage System (BESS) from service and from the Manchester Public Library (MPL) site in accordance with CSFSC §1207.2.3.

The plan ensures:

- Safe, orderly shutdown of all energy storage and electrical systems
- Protection of personnel, the public, and the environment
- Proper handling, transport, and disposal or recycling of system components

This plan addresses both:

- Removal of an intact operational system, and
- Removal of a system damaged by fire or other incident, including enhanced safety procedures, hazard assessment, environmental protection measures, and specialized handling requirements for compromised battery systems.

The Town of Manchester has developed this Decommissioning Plan to ensure that the proposed BESS can be safely removed at the end of its useful life or in response to an emergency event, consistent with applicable fire code requirements and without causing a substantial adverse environmental effect.

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#### **2. System Description**

The MPL BESS includes:

- Eaton xStorage system (~300 kW / ~1,119 kWh)
- Lithium-ion battery cabinets (LFP chemistry)
- Inverter and control systems
- Thermal management equipment

- Associated electrical and monitoring infrastructure

The system is installed outdoors and interconnected with the building electrical system and solar PV system.

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### **3. Notification Requirements**

Prior to initiating decommissioning:

- The Fire Marshal / Code Official will be formally notified
- The utility (Eversource) will be notified of disconnection
- The Connecticut Siting Council (if applicable) will be notified per approval conditions
- All relevant Town departments will be informed

No decommissioning activities will begin until authorization is confirmed.

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### **4. Qualified Personnel**

Decommissioning will be performed only by qualified personnel, including:

- Manufacturer-authorized service providers (Eaton or equivalent)
- Licensed electrical contractors
- Hazardous materials handling professionals (as required)

Personnel qualifications and service providers will be documented and maintained on record.

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## **5. Decommissioning Procedures – Intact System**

### **5.1 Pre-Decommissioning Preparation**

- Review system documentation and as-built drawings
- Confirm system status and operating conditions
- Establish site safety controls and exclusion zones
- Coordinate with emergency responders if required

### **5.2 System Shutdown and Isolation**

- Initiate controlled shutdown via BESS control system
- Open AC and DC disconnects

- Isolate system from grid and building loads
- Verify zero energy flow conditions
- Confirm battery system is in a safe state (low state of charge if required)

### **5.3 Electrical Disconnection**

- Disconnect all electrical feeders and control wiring
- Lockout/tagout all circuits
- Verify de-energization per NFPA 70 procedures

### **5.4 Equipment Removal**

- Remove inverter, transformer, and ancillary equipment
- Remove battery cabinets using manufacturer-approved procedures
- Maintain structural integrity of enclosures during removal

### **5.5 Transportation and Disposal**

- Transport batteries in accordance with:
  - U.S. DOT hazardous materials regulations
  - Manufacturer requirements
- Deliver batteries to:
  - Approved recycling facilities, or
  - Authorized disposal facilities

### **5.6 Site Restoration**

- Remove foundations or pads if required
- Restore site to original or approved condition
- Remove fencing, bollards, and associated infrastructure (as applicable)

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## **6. Decommissioning Procedures – Damaged or Compromised System**

In the event the BESS is damaged due to fire, thermal runaway, mechanical impact, or other incident, decommissioning will proceed under enhanced safety protocols to protect personnel, the public, and the environment.

### **6.1 Initial Site Stabilization and Coordination**

- Coordinate with Fire Marshal / AHJ and emergency responders
- Establish controlled perimeter and restrict access
- Confirm incident is fully mitigated (no active fire, re-ignition risk, or off-gassing hazard)
- Engage manufacturer (Eaton) and qualified hazardous materials professionals

## **6.2 Hazard Assessment**

- Evaluate condition of:
  - Battery modules and enclosures
  - Structural integrity
  - Potential for stranded energy or re-ignition
- Identify hazards including:
  - Toxic or flammable gases
  - Electrolyte leakage
  - Damaged energized components

## **6.3 System Isolation and De-Energization**

- Isolate all AC and DC sources
- Implement lockout/tagout per NFPA 70
- Verify de-energization
- Where required, perform controlled discharge per manufacturer procedures

## **6.4 Fire-Damaged Battery Handling**

- Remove damaged battery components in accordance with:
  - Manufacturer emergency procedures
  - Applicable NFPA 855 guidance
- Utilize appropriate PPE
- Place compromised batteries in approved containment

## **6.5 Environmental Protection Measures**

- Implement spill containment measures
- Prevent impacts to:

- Stormwater systems
- Soil and groundwater
- Coordinate with DEEP for reporting/remediation as required

#### **6.6 Transportation and Disposal**

- Transport materials per:
  - U.S. DOT hazardous materials regulations
- Dispose/recycle through:
  - Licensed handlers
  - Approved recycling facilities

#### **6.7 Site Remediation and Restoration**

- Remove damaged equipment and debris
- Remediate impacted areas if necessary
- Restore site to safe and stable condition

#### **6.8 Documentation and Reporting**

- Document:
  - Incident condition and damage
  - Decommissioning procedures
  - Disposal records
- Provide report to:
  - Fire Marshal / AHJ
  - Connecticut Siting Council (if required)

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### **7. Environmental Protection Measures**

During decommissioning:

- Prevent the release of hazardous materials
- Implement spill containment measures (if applicable)
- Comply with all DEEP and EPA requirements

- Avoid impacts to:
    - Stormwater systems
    - Groundwater
    - Adjacent properties
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## **8. Documentation and Recordkeeping**

The following will be documented and retained:

- Notification to code officials
  - Decommissioning procedures and timeline
  - Personnel and contractors involved
  - Waste transport and disposal records
  - Final site condition documentation
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## **9. Post-Decommissioning Verification**

Upon completion:

- Confirm all equipment has been removed
  - Verify the site is safe and stable
  - Provide final report to:
    - Fire Marshal / AHJ
    - Connecticut Siting Council (if required)
  - Update Town records
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## **10. Compliance Statement**

This Decommissioning Plan complies with:

- CSFSC §1207.2.3 – Decommissioning Requirements
- Applicable provisions of NFPA 70 (NEC)
- Manufacturer requirements and UL-listed system procedures

The plan ensures that the BESS can be removed from service and from the site in a safe, controlled, and environmentally responsible manner, without adverse impact to public safety or the environment.