COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

)

)

)

)

Petition of Moraga Storage, LLC Pursuant to G.L. c. 40A § 3 for an Exemption From the Zoning By-law of the Town of Oakham, MA

EFSB 25-07

PETITION OF MORAGA STORAGE, LLC PURSUANT TO G.L. c 40A § 3, FOR AN EXEMPTION FROM THE TOWN OF OAKHAM ZONING BYLAW

Table of Contents

I.	INTROD	UCTION	1
II.	PROJEC	T SITE DESCRIPTION	1
III.	PROJEC	T DESCRIPTION	6
	А.	Battery Energy Storage System	9
	B.	Proposed Project Substation	9
	C.	Proposed Transmission Interconnection	11
	D.	Anticipated Project Schedule and Construction Hours	11
	E.	Project Permitting Overview	11
IV.	BATTER	Y SAFETY STANDARDS	13
V.	SITE SEI	LECTION	15
	А.	Site Selection Process	15
	B.	Evaluation of Candidate Sites	16
	1.	Candidate Site 1 - 0 Crawford Road, Oakham	16
	2.	Candidate Site 2 - 0 Wauwinet Road, Barre, MA	17
	3.	Candidate Site 3 - 1675 Main Street, Leicester, MA	18
	4.	5 /	
	-	Oakham, MA	
	С.	No Build Alternative	
VI.		NMENTAL IMPACTS AND MITIGATION MEASURES	
	А.	Air Quality/Emissions	
	B.	Water Resources/Supply	
	C.	Wetlands	
	D.	Stormwater	
	E.	Solid and Hazardous Waste	
	F.	Visual	27
	G.	Noise	28
	H.	Electric and Magnetic Fields	29
	I.	Cultural Resources	29
	J.	Protected Species	30
	К.	Traffic	30
VII.	REQUES	T FOR ZONING EXEMPTIONS	30
	A.	Standard of Review for Zoning Exemptions	30

B.	Moraga Storage Qualifies as a Public Service Corporation	31
C.	Moraga Storage Requires Exemptions from the Town of Oakham Zoning Bylaw	32
1.	Specific Zoning Exemptions Required	33
D.	The Project Is Reasonably Necessary For The Public Convenience Or Welfare	38
E.	The Project Will Further Important Policies Of The Commonwealth	40
А.	Grant of Comprehensive Zoning Exemption Is Warranted	43
COMMU	NITY OUTREACH	44
A.	Website	47
B.	Project Email	47
C.	Phone Number	47
D.	Construction Community Outreach Plan	47
E.	Contractor Training	47
CONCLU	SION	48
	C. 1. D. E. GRANT O THE MO A. COMMU A. B. C. D. E.	 C. Moraga Storage Requires Exemptions from the Town of Oakham Zoning Bylaw 1. Specific Zoning Exemptions Required D. The Project Is Reasonably Necessary For The Public Convenience Or Welfare E. The Project Will Further Important Policies Of The Commonwealth GRANT OF A COMPREHENSIVE ZONING EXEMPTION IS APPROPRIATE FO THE MORAGA STORAGE PROJECT A. Grant of Comprehensive Zoning Exemption Is Warranted COMMUNITY OUTREACH A. Website B. Project Email C. Phone Number D. Construction Community Outreach Plan

Figures

Figure 2-1	USGS Locus Map
Figure 2-2	Aerial Locus Map (Tax Parcels)
Figure 2-3	Existing Conditions
Figure 3-1	Project Plan Overlay
Figure 3-2	Project Plan Overlay – Environmental Constraints
Figure 3-3	Project Substation Layout
Figure 3-4	Project Substation Cross-Section
Figure 5-1	Candidate Sites

Attachments

Attachment A:	Project Plans
Attachment B:	Stormwater Management Report
Attachment C:	Sound Level Assessment Report
Attachment D:	MHC Project Notification Form
Attachment E:	Visual Assessment Report/Simulations
Attachment F:	Fisher Report
Attachment G:	TUV Rheinland Report
Attachment H:	Oakham Zoning Bylaws
Attachment I:	Electric and Magnetic Fields Assessment Report

<u>Exhibits</u>

Exhibit MS-BB	Testimony of Brian Benito
Exhibit MS-JS	Testimony of Joseph Stanek
Exhibit MS-MB	Testimony of Marc Bergeron
Exhibit MS-CR	Testimony of Chris Rodstrom
Exhibit MS-RC	Testimony of Ryan Callahan
Exhibit MS-CG	Testimony of Casey Grant
Exhibit MS-BC	Testimony of Benjamin Cotts
Exhibit MS-DG	Testimony of Daniel Guralchuk

I. INTRODUCTION

Now comes Moraga Storage LLC ("Moraga", "Petitioner," or the "Company"), a Delaware limited liability company duly registered to do business in Massachusetts with a principal place of business at 800 N. King Street, Suite 304, Wilmington, Delaware 19801, to request that, pursuant to the provisions of G.L. c. 40A, § 3, the Energy Facilities Siting Board (the "Siting Board" or "EFSB")¹ grant individual and comprehensive zoning exemptions from the Town of Oakham Zoning Bylaw (the "Oakham Zoning Bylaw")² to construct a 180 megawatt ("MW"), four-hour duration, Battery Energy Storage System ("BESS") and related electrical infrastructure (collectively, the "Project") on a 42.9 acre parcel of land off Coldbrook Road in Oakham, Massachusetts (the "Project Site").

The Oakham Zoning Bylaw does not allow for the construction and operation of the Project as-of-right on the Project Site. Thus, Moraga respectfully requests individual exemptions and a comprehensive exemption from the operation of the Oakham Zoning Bylaw for the Project, as set forth in this Petition.

II. PROJECT SITE DESCRIPTION

The Project Site is approximately 42.9 acres in size as shown in the Town of Oakham Assessor's map and is comprised of one parcel of land (Parcel 406-106.3) on the east side of

¹ On November 20, 2024, Governor Maura Healy signed into law *An Act Promoting a Clean Energy Grid*, *Advancing Equity and Protecting Ratepayers*, Chapter 239 of the Acts of 2024 ("2024 Climate Act"). Section 37 of the 2024 Climate Act, effective February 18, 2025, moved the authority to grant zoning exemptions from the Department of Public Utilities to the Siting Board. *See* St. 2024, c. 239, § 37. Pursuant to Section 118 of the 2024 Climate Act, a battery energy storage developer must first obtain a comprehensive zoning exemption from the Commonwealth of Massachusetts by a date certain before it can seek a certificate of environmental impact and public interest ("a Certificate" or "CEIP") from the EFSB. As explained in detail herein, the Company intends to seek a Certificate from the EFSB and therefore, respectfully requests the approval of the G.L. 40A § 3 petition on or before February 28, 2026.

² Attachment H is a copy of the Oakham Zoning Bylaw.

Coldbrook Road. The Project Site was formerly an auto salvage and recycling facility. Currently, the property contains a garage/office building and concrete truck scale that were associated with the auto salvage and recycling facility.

The Project Site is accessible via an existing paved driveway from Coldbrook Road in Oakham, MA. The existing paved driveway from Coldbrook Road within the Project Site at the existing garage/office building. There are no existing engineered stormwater management features on the Project Site.

Beyond the garage/office building to the east, the Project Site contains areas that were previously occupied by the salvaged automobiles, and which contains a network of gravel/dirt access roads and parking areas. Forested areas on the Project Site beyond these areas contain overgrown access roads, tire ruts, and abandoned cars.

The entire Town of Oakham, including the Project Site, is designated as an agricultural and rural zoning district ("A&R district"). Figure 2-1 provides a site locus map (USGS base) for the Project Site, and Figure 2-2 presents the Project Site parcel and adjacent parcels with existing local tax parcel identifiers on an aerial photo base map. Figure 2-3 presents the existing environmental conditions on the Project Site as per the most current Massachusetts Geographic Information System ("MassGIS") datalayers.

As shown, the Project Site contains a mix of bordering and isolated vegetated wetland areas on the western half of the Project Site, with another bordering vegetated wetland located in the southeastern corner. The western half of the Project Site is within areas mapped as a Surface Water Protection Area (Zones A and C) for the Ware River Watershed.

There are no Massachusetts Department of Environmental Protection ("MassDEP") Interim, Zone I, or Zone II Wellhead Protection Areas on the Project Site. In addition, the Project Site does not contain any mapped floodplains, estimated or priority habitat for state-listed rare species, certified or potential vernal pools, areas identified as Areas of Critical Environmental Concern ("ACEC"), or protected open space.

Land uses immediately surrounding the Project Site include the following: residential homes along Coldbrook Road³ to the west; mixed agricultural and undeveloped forested areas to the south; undeveloped forested areas owned and managed by the Massachusetts Department of Conservation and Recreation Division of Water Supply Protection to the north and east; and a high voltage overhead electric transmission corridor crossing the northeast corner of the Project Site.

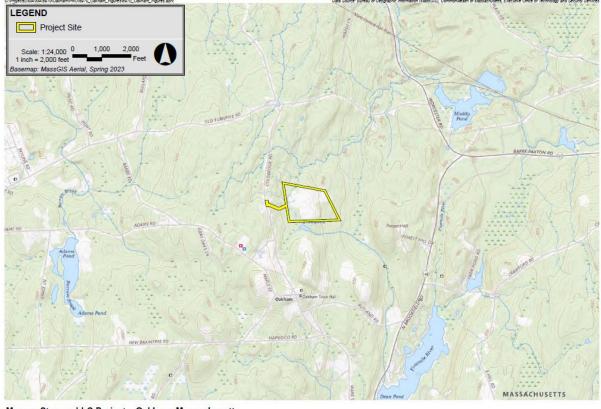








Figure 2-1 USGS Locus

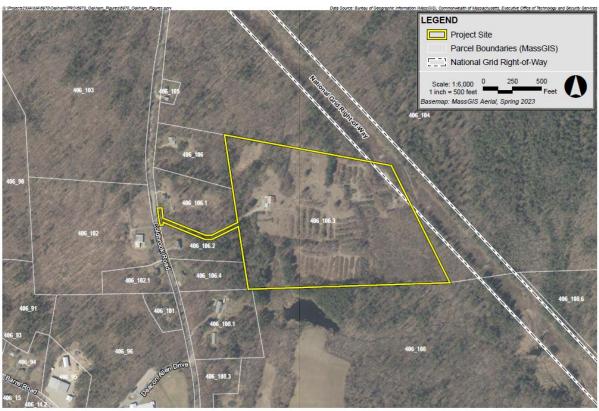


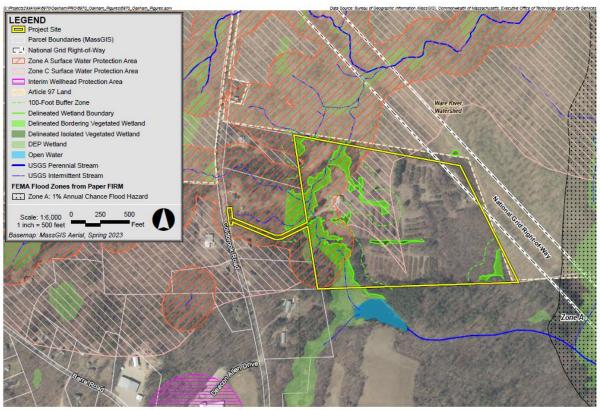
Figure 2-2 – Aerial Locus Map (Tax Parcels)

Moraga Storage LLC Project Oakham, Massachusetts

Epsilon

Figure 2-2 Aerial Locus

Figure 2-3 – Existing Conditions



Moraga Storage LLC Project Oakham, Massachusetts

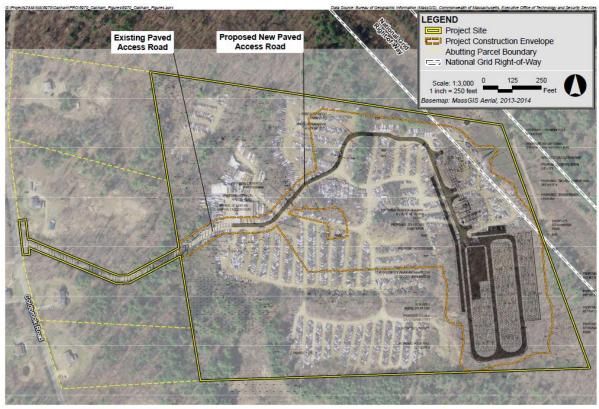
Epsilon

Figure 2-3 Existing Conditions

III. PROJECT DESCRIPTION

Construction of the Project will require the use of an approximately 18-acre portion of the Project Site, identified herein as "the Project Construction Envelope." The Project Construction Envelope is shown in the Project Plans in Attachment A and on Figure 3-1, below. Activities necessary within this 18-acre area will include installation of proposed access roads and associated grading, installation of the BESS facility and associated features, installation of the proposed substation and transmission interconnection, equipment and materials storage and staging, and construction laydown areas. The final "Project Footprint" will be approximately 10.8 acres in size located entirely within the 18-acre Project Construction Envelope and will include areas occupied by access roads, the BESS facility, the substation, and the transmission interconnection, inclusive of all limits of grading associated with these features. Portions of the remaining 7.2 acres within the Project Construction Envelope that may be utilized and/or disturbed during the construction phase will be loamed and seeded upon the completion of construction.

Figure 3-1 Project Plan Overlay



Moraga Storage LLC Project Oakham, Massachusetts

Epsilon

Figure 3-1 Project Plan Overlay

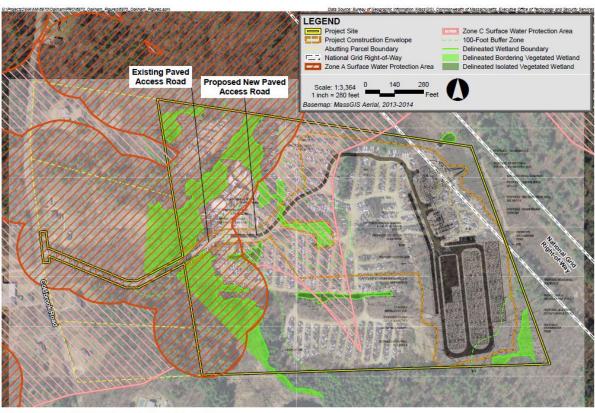


Figure 3-2 Project Plan Overlay – Environmental Constraints

Moraga Storage LLC Project Oakham, Massachusetts

Epsilon

Figure 3-2 Project Plan Overlay

A. Battery Energy Storage System

The BESS includes approximately 296 lithium-ion battery enclosures that are approximately 28.8 feet long, 5.5 feet wide, 9.1 feet tall, and will arrive at the site pre-assembled with an estimated maximum weight of 84,000 pounds. The BESS units will be arranged in a back-to-back orientation with all setbacks and clearances between units compliant with the manufacturer's installation requirements. Each BESS unit will be set on concrete pads and surrounded by a concrete curb. The concrete pads will be surrounded by crushed stone and/or gravel. Each BESS unit will be thermally managed by an integrated cooling and heating system and will contain sensors supporting embedded monitoring and controls as well as electrical interface equipment including industry-standard breakers for alternating current protection. The Project will also include power conversion systems, medium-voltage transformers on concrete slabs, medium voltage cables, and other electric infrastructure (collectively, the "Collection System").

The BESS will have a stormwater management system, security fencing, and an access road. The security fencing will be at least 8 feet tall, and multiple locked security access gates will restrict access to the site. In addition to the security fencing, sound attenuation barriers will abut portions of the Project. Attachment A contains the Project Plans showing the location and details for the BESS Facility.

B. Proposed Project Substation

The Project will include one new electric substation located on the Project Site and within the Project Footprint (the "Project Substation"). The Project Substation will take the routed power output from the BESS units to a collection switchgear and step it up to a transmission voltage of 115 kV that allows the power from the Project to interconnect with the existing transmission line. The Project Substation will also take the routed power from the transmission line and step it down to allow the

Project to store the power. The Project Substation will include the substation equipment, graveled yard area, and surrounding security fencing. Project Substation equipment will include a main power transformer, switchgear, circuit breakers, disconnect switches, and low- and high-voltage buses. The Project Substation will be up to 85 feet high at its tallest point, *i.e.*, static masts. Figure 3-3 shows the proposed Project Substation layout and Figure 3-4 provides a cross-section depiction of the proposed Project Substation. Attachment A contains the Project Plans showing the location and details of the Project Substation. Figure 3-1 shows the location of the Project Substation on the Project Site on an aerial photo base.

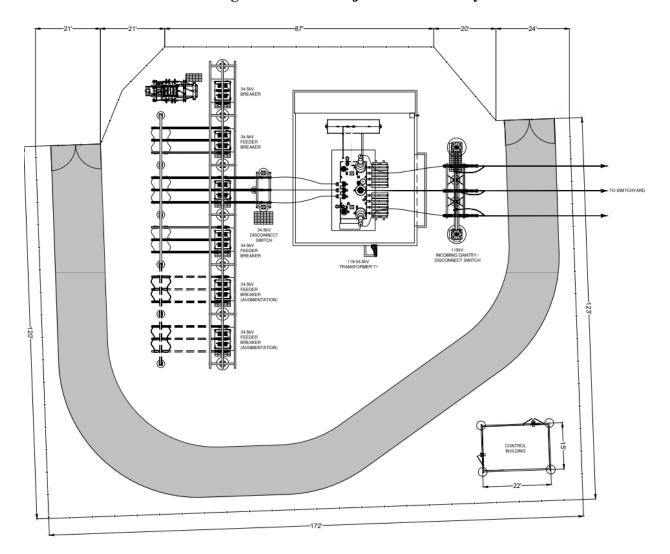
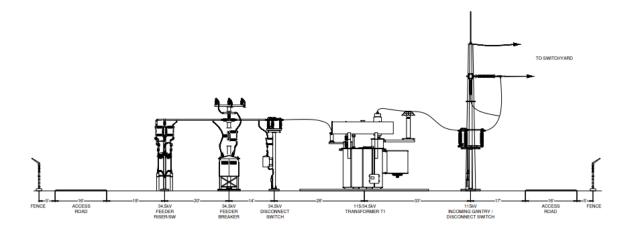


Figure 3-3 of the Project Substation Layout





C. Proposed Transmission Interconnection

The Project will interconnect by means of a line tap on the Project Site with an on-site air insulated substation ("AIS"), connected with a loop-in-loop-out, new 3-breaker ring bus and taps to 115 kV Line A127-4 owned by Massachusetts Electric Company d/b/a National Grid ("National Grid").

D. Anticipated Project Schedule and Construction Hours

The Company intends to obtain all necessary permits in or before Q4 2026 and commence construction immediately thereafter. The Town of Oakham does not have a local noise ordinance that dictates prescribed hours or days for construction activities. Any construction hours or time of day/week restrictions will be developed in coordination with the Town of Oakham.

E. Project Permitting Overview

Based on the current project design, the required permits are presented below in Table 3-1.

Regulatory Authority	Permit/Review/Approval	Status and Anticipated Timeframe			
FEDERAL					
Environmental Protection Agency	NPDES Construction General Permit for Stormwater	Anticipate filing Notice of Intent approximately 45 days prior to the start of construction			
Army Corps of Engineers	Self-Verification Notification Filing under Massachusetts General Permit of Section 404 Federal Clean Water Act	Anticipate filing Q2 2026			
STATE					
Massachusetts Energy Facilities Siting Board	Moraga Storage, LLC, Petition Pursuant to G.L. Chapter 40A§ 3 for Individual & Comprehensive Zoning Exemptions from the Town of Oakham	On April 1, 2025, the Company submitted this filing to the EFSB			
Massachusetts Energy Facilities Siting Board	Certificate of Environmental Impact and Public Interest pursuant to Section 118 of the 2024 Climate Act	Anticipate filing petition on or before March 1, 2026			
Oakham Conservation Commission	Massachusetts Wetlands Protection Act Order of Conditions	Anticipate filing Q2 2026			
Department of Conservation and Recreation	Massachusetts Watershed Protection Act Determination of Applicability	Anticipate filing by June 1, 2025			
Massachusetts Department of Environmental Protection	Individual Water Quality Certification	Anticipate filing Q2 2026			
Massachusetts Historic Commission	Section 106 of the National Historic Preservation Act Project Notification Form	Filed March 26, 2025			

Table 3-1: List of Permits/Regulatory Reviews Required

LOCAL					
Oakham Inspectional Services Department	Building Permit Electrical Permit Mechanical Permit Demolition Permit	Anticipate filing Q3/Q4 2026			
Oakham Fire Department	Massachusetts Fire Code, Fire Safety Permit, 527 CMR 1.00 <i>et seq</i> .	Anticipate filing Q3/Q4 2026			

IV. BATTERY SAFETY STANDARDS

The proposed BESS was designed in strict conformance with all relevant codes and standards to ensure it is constructed and operated in a manner that remains safe to the public, emergency responders, and operators. This includes a series of redundant safeguards built into the hardware and management systems of the BESS that mitigate the risk of fire and thermal events (both creation of and response to). In addition, the design, construction, installation, commissioning, operation, maintenance, and decommissioning of stationary ESS will conform to National Fire Protection Association's NFPA 855, Standard for the Installation of Stationary Energy Storage Systems.

The BESS will adhere to international, national, and state safety requirements and standards, including but not limited to:

- "Massachusetts Comprehensive Fire Safety Code", 527 CMR 1.00, Massachusetts Board of Fire Prevention Regulations, Stationary Storage Battery Systems.
- "NFPA 1, Fire Code", National Fire Protection Association, Quincy MA.
- "NFPA 855, Standard for the Installation of Stationary Energy Storage Systems", National Fire Protection Association, Quincy MA.
- o "UL 9540, Safety of Energy Storage Systems and Equipment", Edition 3.
- "UL 9540A, Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems", Edition 4.

Moraga proposes to install the Tesla Megapack 2 XL as its BESS units. The Tesla Megapack 2 XL underwent vigorous testing that demonstrated no fire propagation occurred. During the test, the internal safety protections, the Battery Management System ("BMS"), and the Thermal Management System ("TMS") were disabled. As such, the test can be considered a worst-case scenario. The unit level test scenario is fully documented in the TUV report (Attachment G) and the Fisher Report (Attachment F).

As detailed in those reports, an induced thermal runaway did not propagate thermal runaway throughout the battery module. Moreover, no flaming was observed outside of the unit during the test. And, importantly, the testing demonstrated that any gases released during the induced thermal runaway would not pose a health risk.

The Megapack 2 XL has built-in safety features including a BMS that tracks the performance, voltage, current and state of charge, among other data points. Each battery module has its own BMS, and the Megapack 2 XL itself has a bus controller supervising the output of all battery modules including over-temperature, loss of communication, and over-voltage.

A detailed Emergency Response Plan and Hazardous Materials Assessment will be provided in coordination with local emergency response resources prior to facility operation. The Company will work collaboratively with the Oakham Fire Department to develop these documents, including providing training for the firefighters.

V. SITE SELECTION

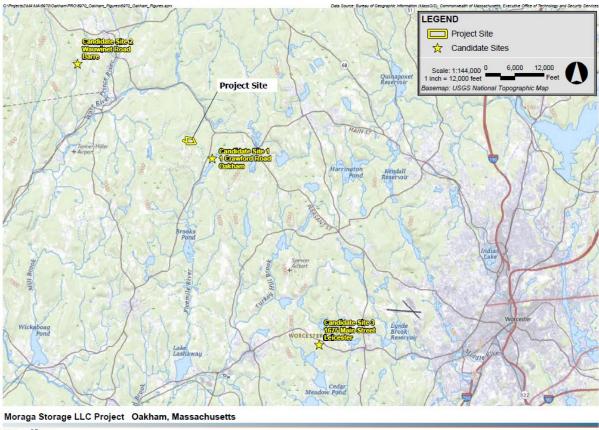
A. Site Selection Process

The Company identified and evaluated potential sites for the Project based on the following criteria:

- proximity to existing transmission lines and their associated rights-of-ways;
- distance to nearest residential abutters;
- existing access from a public roadway;
- compatibility with surrounding land uses; and
- avoidance or minimization of environmental and ecological impacts.

Using the above criteria, the company identified four potential sites for the Project and performed a more detailed evaluation of these sites using the same criteria. The four sites ("Candidate Sites") are: 0 Crawford Road, Oakham, MA (Candidate Site 1); 0 Wauwinet Road, Barre, MA (Candidate Site 2); 1675 Main Street, Leicester, MA (Candidate Site 3); 358 Coldbrook Road, Oakham, MA (Candidate Site 4/the Project Site). These Candidate Sites are shown on Figure 5-1.

Figure 5-1 – Candidate Sites



Epsilon

Figure 5-1 Candidate Sites

B. Evaluation of Candidate Sites

1. Candidate Site 1 - 0 Crawford Road, Oakham

Candidate Site 1, Parcel ID 405-145.2, is an approximately 31-acre parcel on the southwestern side of Crawford Road in Oakham. Based upon a review of existing mapping resources, this site is entirely undeveloped forested land with the exception of an existing electric transmission corridor that bisects the parcel. Other than the existing electric transmission corridor, this candidate site has not been previously disturbed for development purposes. It has access from a public roadway (Crawford Road). The closest residence is 160 feet from this candidate site's property line. This Candidate Site has existing frontage on Lake Dean and is

situated across the water from Lake Dean Campground (a seasonal RV park and campground) with other surrounding land uses primarily residential in nature.

Based on a review of current mapping, this Candidate Site has no state-listed rare species, certified or estimated potential vernal pools, ACECs, FEMA floodplains, wellhead protection areas, surface water protection areas, or protected open space areas. However, there is an existing forested wetland that borders on Lake Dean, which bisects the site close to Crawford Road. The immediately available upland area from Crawford Road is only 3.0 acres in size, which is not sufficient for a 180 MW BESS facility. There is a substantial amount of upland on the southern portion of this candidate site, however, it would require an approximately 100-foot long crossing of the forested wetland resulting in permanent wetland impacts.

After consideration, Candidate Site 1 was eliminated for the following reasons: (1) its proximity to the recreational campground; (2) the lack of available sufficient uplands from the public roadway access point; (3) the lack of previously developed areas other than an electric transmission corridor; and (4) the potential permanent impacts to forested wetlands to gain access to additional available upland areas.

2. Candidate Site 2 - 0 Wauwinet Road, Barre, MA

Candidate Site 2, Parcel ID E-59, is an approximately 36-acre parcel located southeast of Moose Brook Wildlife Management Area on the southern side of Wauwinet Road in Barre. Based upon a review of existing mapping resources, this site consists of a combination of active agricultural and undeveloped forested areas with an existing electric transmission corridor that bisects the parcel. It has access from a public roadway (Wauwinet Road). The closest residence is 110 feet from this candidate site's property line. Based on a review of current mapping, there are no state-listed rare species, certified or estimated potential vernal pools, ACECs, FEMA

floodplains, surface water protection areas, wellhead protection areas, or protected open space areas on this candidate site. The site appears to contain enough accessible upland area for a 180 MW BESS Project. However, all but six acres of this candidate site are covered by prime farmland soils and/or wetlands. Other than active agriculture and the existing electric transmission corridor, no portions of this candidate site have been previously disturbed for development purposes. After consideration, Candidate Site 2 was eliminated because it did not contain any previously developed areas other than the existing electric transmission corridor.

3. Candidate Site 3 - 1675 Main Street, Leicester, MA

Candidate Site 3, Parcel ID 18 A7 0, is an approximately 21-acre parcel located on the southern side of Main Street (Route 9) in Leicester. Based upon a review of existing mapping resources, this site contains features associated with a drive-in theater business and undeveloped forested areas. This candidate site has access from a public roadway (Main Street). The closest existing electric transmission corridor is approximately 8,000 feet from the property boundaries. The closest residence appears to be 50 feet from this candidate site's property line. Based on a review of current mapping, there are no state-listed rare species, certified or estimated potential vernal pools, ACECs, FEMA floodplains, surface water protection areas, or protected open space areas on this candidate site. There is an existing mapped Zone I wellhead protection area associated with a Transient Non-Community well associated with the drive-in facility on the Candidate Site. The site appears to contain enough accessible upland area for a 180 MW BESS Project. This candidate site is surrounded by a number of multi-family residential developments and commercial properties. After consideration, Candidate Site 3 was eliminated due to its excessive distance to existing transmission corridors and close proximity to existing multi-family residential units.

4. Candidate Site 4 (Preferred Project Site) - 358 Coldbrook Road, Oakham, MA

The Preferred Site, Parcel ID 406-106.3, is an approximately 42.9-acre parcel located to the east of Coldbrook Road in Oakham. This site contains a former auto salvage and recycling facility and existing wetland resource areas, forested areas, and an existing electric transmission corridor in the northeast corner of the site. This candidate site is accessible from a public roadway (Coldbrook Road). Based on a review of current mapping, there are no state-listed rare species, certified or estimated potential vernal pools, ACECs, FEMA floodplains, wellhead protection areas, or protected open space areas on this candidate site. The western half of the site is within areas mapped as a Surface Water Protection Area (Zones A and C) for the Ware River Watershed. The site also contains wetland resource areas primarily located on the western portions of the site. The site has enough accessible upland area for a 180 MW BESS Project. Land uses immediately surrounding the site include residential, agricultural, and undeveloped forested areas.

After consideration, the Preferred Site was selected due to its immediate proximity to an existing electric transmission corridor and the sufficient available upland area that has been previously developed and which is not within any mapped environmental areas.

C. No Build Alternative

In addition to evaluating the four Candidate Sites to construct the Project, the Company considered a No-Build Alternative. Under such a scenario, the Project would not be constructed. The Company determined that a No-Build Alternative is not viable. Foregoing the Project would negatively impact the Commonwealth's ability to reach its climate goals and would make it more difficult for Massachusetts to reach its emission-reduction goals and/or its energy storage targets.

VI. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The Project has been sited and designed to avoid and/or minimize impacts to environmental resources and to provide sufficient mitigation for any unavoidable environmental impacts. The following sections discuss environmental factors including: (A) air quality/emissions; (B) water resources/supply; (C) wetlands; (D) stormwater; (E) solid and hazardous waste; (F) visual; (G) noise; (H) cultural resources; (I) protected species; and (J) traffic.⁴

A. Air Quality/Emissions

Normal operations of the BESS will not produce harmful air pollutants. In fact, the Commonwealth has found that BESS projects will provide important benefits to "achiev[ing] net zero carbon emissions in the Commonwealth by 2050." <u>Medway Grid, LLC</u>, D.P.U. 22-18/22-19 at 40 (2023).

The following best management practices ("BMPs") will be implemented related to dust control and air quality during construction of the Project. To minimize the potential for airborne dust from earth-disturbing activities, the Company will require its contractors to place water trucks with misters in or near the work areas during construction activities and utilize them as appropriate when conditions require. In addition, if it is necessary to stockpile excavated soil on the site for a prolonged period of time, it will be covered with plastic sheeting or a similar barrier to minimize the potential for the release of dust and for soil migration from the work area. The Project will also install antitracking pads at construction entrances and will conduct regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for construction

⁴ An Environmental Justice analysis is not required for this Project. An Environmental Justice Community analysis is required if a project is within 1 mile of an EJ population or within 5 miles of an EJ community if the project has air emissions. The closest Environmental Justice Community is in North Brookfield, MA, approximately 5.8 miles from the Project Site.

traffic to kick up dust and particulate matter. To minimize air emissions from construction equipment, the Company will comply with state law (M.G.L. c. 90, § 16A) and MADEP regulations (310 CMR 7.11 (1)(b)), which limit vehicle idling to no more than five minutes except for vehicles being serviced, vehicles making deliveries that need to keep their engines running, and vehicles that need to run their engines to operate accessories. In addition, contractors who enter into an agreement with the Company will be contractually obligated to comply with the most current EPA emission standards for construction equipment at the time of construction.

B. Water Resources/Supply

The Project does not generate any process-related wastewater and will not require any sanitary sewer connection. As previously identified, there are no areas on the Project Site within a MassDEP Approved Zone I or Zone II Wellhead Protection Area. The Town of Oakham has no public water department and only a limited number of public, non-community groundwater wells. The closest public, non-community groundwater well is approximately 1,600 feet away from the Project Site.

The entire Project Site is located within the Chicopee River Watershed but is split between the Ware River and the Quabog River sub-watersheds. Approximately 17.0 acres of the 42.9-acre Project Site are located within a Surface Water Protection Area (Zones A and C) for the Ware River Watershed. Zone A represents the land area within 400 feet of the bank of a Class A surface water and Zone C represents the land area not within Zone A but within the mapped watershed of a Class A surface water source. In this case, and as shown on Figure 2-3, the intermittent streams on the Project Site are tributaries to the Ware River, which is identified as a Class A Water for public water supply as per 310 CMR 22.00, the Massachusetts Drinking Water Regulations. The remaining

approximately 25.9 acres of the Project Site is located within the Quabog River Watershed and is not within any areas mapped as Surface Water Protection Areas.

The Project has been designed to ensure that all Project infrastructure is located outside of the Ware River Surface Water Protection Area to the maximum extent practicable. As shown in Figure 3-2, Project components within the Surface Water Protection Area are limited to the existing paved access road from Coldbrook Road, approximately 708 feet of proposed new paved access road and 1.46 acres of the Project Construction Envelope. The new paved access road will be located predominantly along existing gravel roadways previously utilized by the auto salvage facility. As outlined in Attachment B, the new paved access road will be designed to comply with all applicable standards in the Massachusetts Stormwater Management Standards. All runoff from the new paved access road is being directed to appropriate treatment and discharge locations that are outside of the surface water protection area of the Ware River Watershed and onto portions of the Project Site within the Quabog River Watershed.

To further ensure that there are no potential adverse impacts from the Project to the surface waterbodies within the Ware River Watershed, and as required by various applicable state regulations, the Company will develop and implement construction phase pollution prevention plans and erosion and sediment control plans, and will identify post-construction drainage system owners and parties responsible for operations and maintenance prior to the commercial operations date. A draft post-construction Stormwater Operation and Maintenance ("O&M") Plan, which identifies required inspection and maintenance activities for structural stormwater Best Management Practices, is provided in Appendix J of the Stormwater Management Report (Attachment B).

Lastly, as noted in Table 3-1, because of its location within the Ware River Watershed, the construction of the Project will require consultation with and filing with the MA DCR under the

Massachusetts Watershed Protection Act and is associated regulations (310 CMR 11.00). The Company plans to consult with MA DCR and expects that the Project can proceed through the filing of a Request for Watershed Determination of Applicability. The Company expects that, given the current design and measures to be implemented, the MA DCR will be able to issue an Applicability Decision that confirms the Project as proposed, and which may include conditions imposed by MA DCR, will not result in water quality degradation or harm the public good.

C. Wetlands

The Massachusetts Wetlands Protection Act ("WPA"), G.L. c. 131 § 40 and accompanying regulations at 310 CMR 10.00 *et seq.*, protect water-related lands including but not limited to wetlands, rivers and streams, floodplains, ponds, and estuaries, and establishes performance standards by which work is conducted in these resource areas. The implementation of the WPA wetlands regulations is delegated, in part, to local Conservation Commissions. Any proposed activity that will remove, fill, dredge, alter, or build upon a protected area or activities within 100 feet (the Buffer Zone) that are determined to alter a protected resource(s), requires the filing of a Notice of Intent and subsequent Order of Conditions issued to the Company by the Oakham Conservation Commission. An Order of Conditions ensures that the proposed Project will contribute to the protection of the interests of the WPA and includes conditions under which work will be carried out to minimize impacts to wetland resource areas.

The wetland resource area boundaries on the Project Site, and shown on all plans and figures provided herein, have been verified and approved by the Oakham Conservation Commission through an Order of Resource Delineation ("ORAD") issued in December 2024 in response to the Company's Abbreviated Notice of Resource Area Delineation ("ANRAD") filing.

The Town of Oakham does not have a local wetland bylaw. State wetland resource areas located on or near the Project Site include Bordering Vegetated Wetlands ("BVW") and their associated 100-foot buffer zone. There are Isolated Vegetated Wetland ("IVW") areas on the Project Site that do not qualify for state jurisdictional status, as confirmed by the ORAD. These IVW areas along with the BVW areas do qualify for protection under the federal wetland regulations. The BVW areas on the western portion of the Project Site are associated with intermittent streams that are tributaries to the Ware River and are designated as Outstanding Resource Waters as per the Massachusetts Surface Water Quality Standards (314 CMR 4.00). Any proposed direct alteration of these BVW areas will require the filing of an Individual Water Quality Certification application to the MassDEP as per the Water Quality Certification Regulations (314 CMR 9.00). The location of wetland resource areas on the Project Site is presented on Figures 2-3, 3-1, and 3-2 and in the Project Plans in Attachment A.

The Project has been sited and designed to maximize the use of previously developed and disturbed areas on the Project Site and to avoid and minimize activities within all wetland areas and their buffers to the extent practicable. The Project design presented in Attachment A will result in approximately 385 square feet of permanent impact and an additional 800 square feet of temporary impact to BVW from the proposed new paved access road. This BVW is adjacent to an intermittent stream that is a tributary to the Ware River and is designated as an Outstanding Resource Water. This wetland impact area will occur along a previously disturbed gravel roadway that now contains wetland vegetation and hydric soil conditions since the auto salvage facility operation has suspended operations on the Project Site. The Company is currently exploring alternative alignments to the proposed new paved access road within the Project Construction Envelope to eliminate this wetland impact.

The Project will be designed to comply with all applicable state and federal regulatory performance standards related to wetland resource areas. All proposed work within the 100-foot Buffer Zone will include the use of Best Management Practices ("BMPs") such as erosion control barriers to establish limits of work and to ensure that there are no short- or long-term impacts to adjacent wetland resource areas. The Project will require the development of a Stormwater Pollution Prevention Plan ("SWPPP") that will identify controls to be implemented to mitigate the potential for erosion and sedimentation from soil disturbance during construction. Similarly, the Massachusetts Stormwater Management Standards require the development of a construction phase Soil Erosion and Sediment Control Plan. In addition, all stockpiles (if necessary) will be located outside of the 100-foot Buffer Zone and refueling or storage of equipment—except for those that cannot be moved due to safety or operational requirements—will not be permitted within 100 feet of wetland resource areas.

D. Stormwater

The Project Site itself is mostly an unmaintained developed area that was previously the location of an automobile salvage and storage facility with no existing engineered stormwater management features that meet current Massachusetts Stormwater Standards. The Project will result in a total of 117,065 square feet of impervious area, which is an increase over existing conditions.

MassDEP has issued the Massachusetts Stormwater Handbook, as well as Stormwater Management Standards pursuant to the WPA, G.L. c. 131 § 40, and the Massachusetts Clean Water Act, G.L. c. 21, §§ 26-53, to promote increased stormwater recharge, the treatment of more runoff from polluting land uses, low impact development ("LID") techniques, pollution prevention, the removal of illicit discharges to stormwater management systems, and improved operation and maintenance of stormwater BMPs. The Company has completed a Stormwater Management Report

for the Project (Attachment B). The Report presents the engineering calculations completed to design the stormwater management system, a detailed description of the proposed stormwater system, and an explanation of how the system complies with the applicable standards of the MassDEP Stormwater Management Standards.

In summary, the stormwater management system for the Project has been designed with a conventional drainage system. Existing and new impervious surfaces will be directed to a series of catch basins and manholes which capture and convey stormwater runoff via an underground pipe system which is conveyed to two proposed proprietary treatment devices for pre-treatment. Additional treatment filters will be used downstream of the pre-treatment devices to meet the required water quality standards. Much of the stormwater collected will then be discharged into two dry detention basins to capture and attenuate peak flows prior to discharge. These dry detention basins have been designed without an infiltration component due to the presence of high groundwater and low permeability soils and will include an impermeable liner. Please refer to the Stormwater Management Report in Attachment B for more details regarding stormwater.

E. Solid and Hazardous Waste

All waste generated during demolition, site preparation, construction, and operation of the Project will be transported offsite in accordance with local, state, and federal guidelines and regulations. During the construction phase of the Project, solid waste such as metal, scrap wood, asphalt, brick, and concrete are anticipated due to the historical site usage as an auto salvage junkyard. The Project will implement measures to minimize the generation of solid and other waste. Any non-recyclable solid waste will be transported to a licensed solid waste facility.

During the course of the remainder of the design phase and prior to and throughout the construction phase of the Project, the Company will continue to consult with a Licensed Site

Professional to ensure that no contaminated soil, groundwater, or media within the jurisdiction of G.L. c. 21E (if applicable, G.L c. 21C) and OSHA is excavated, removed, handled, or disposed of without proper notification to and coordination with the MassDEP Bureau of Waste Site Cleanup. If an oil and/or hazardous materials spill releases to the environment and "Reportable Conditions" as defined in the Massachusetts Contingency Plan ("MCP") are met, then a notification to the MassDEP within a specified timeframe would occur. If a notification to MassDEP is required, the Company would conduct additional assessment activities and, if necessary, remedial or cleanup activities until the risk to human health and the environment are below acceptable standards. If the construction phase results in the removal of topsoil from the Project Site, it would be tested as required and removed for off-site disposal at an appropriate receiving facility. Any solid waste encountered or generated during construction of the Project will be transported offsite in accordance with local, state, and federal guidelines and regulations.

During operation of the BESS, no solid or hazardous waste stream will be generated on a regular basis. However, because lithium-ion batteries currently have a useful life of approximately ten years, it is assumed they will need to be replaced throughout project operation. Any used batteries will be removed from the site, transported, and managed in accordance with all local, state, and federal guidelines and regulations.

F. Visual

The Company completed a visual assessment that included a viewshed analysis, line-of-sight profiles, and photo simulations that identify the degree and character of potential visibility of the Project from off-site vantage points. The results of this assessment indicate that due to dense intervening woodland vegetation, the proposed Project will be screened from view from all nearby residential properties and public roadways. The proposed BESS will have little to no visual impact

on the visual character of the surrounding landscape. The complete Visual Assessment report is included as Attachment E.

As for visual impacts that could result from construction and operational-related lighting, temporary lighting due to construction is not anticipated as construction will happen during the daylight hours. During operation, the Project will not be lit. There will be security lighting at the facility that complies with local lighting standards, but it will remain off unless lights need to be manually turned on for occasional maintenance visits.

G. Noise

The Company has completed a Sound Level Assessment Report for the proposed Project, attached hereto as Attachment C. The sound level assessment includes an ambient sound level measurement program to document the existing conditions in the vicinity of the Project and computer modeling to predict sound levels from the proposed Project. Results from the measurement program and the modeling were used to evaluate compliance with the MassDEP Noise Policy which limits the increase over ambient to 10 dBA or less and prohibits creation of new 'pure tone' conditions.

Existing-condition sound levels were continuously measured for eight days at two locations on the site. Supplemental short-term measurements were also performed at three additional locations near the site during both a daytime and a nighttime period. The eight-day average sound level using the lowest hourly L₉₀ sound levels measured during each daytime and nighttime period of the program was used to establish representative daytime and nighttime background (ambient) sound levels at each location.

Noise controls necessary to meet the requirements of the MassDEP Noise Policy were implemented and are discussed in the Sound Level Assessment Report. Mitigation was applied in the

acoustic model including utilizing low noise equipment, fan throttling of equipment, and sound barriers.

At residential locations, predicted sound level increases range from 3 to 10 dBA above the nighttime ambient. In addition, the Project will not create any new pure tones. Therefore, with the noise mitigation measures described in the Sound Level Assessment Report (Attachment C), or equivalent design changes, the proposed Project will meet the requirements set forth in the MassDEP Noise Policy at all residential locations. The predicted sound level increases are based on low ambient sound levels derived from the quietest nighttime hours. During the majority of time, background sound levels are expected to be higher than those assumed in this evaluation and the resulting sound level impacts will be less.

H. Electric and Magnetic Fields

All the Project facilities being installed are more than 1,000 feet from the nearest residential property and EM fields from Project-related facilities at these distances are expected to be low and within the range of background EM fields. At these distances, Project-related EM field levels also are projected to be significantly lower than EMF levels recommended in health-based exposure guidelines for the general public established by the International Commission on Non-ionizing Radiation Protection and the International Committee on Electromagnetic Safety (ICNIRP, 2009, 2010; ICES, 2019). Please see Attachment I for the full EMF report.

I. Cultural Resources

The Company has completed a cultural resources due diligence review and archaeological sensitivity assessment for the Project Site. There are no listed historic properties, historic districts, historic archaeological sites, and/or pre-contact archaeological sites on or within ¼ mile of the Project Site. The entire Project Site is assessed as having low sensitivity for cultural resources. The

Company has filed a Project Notification Form ("PNF") with the Massachusetts Historical Commission ("MHC") and is currently waiting for a response from MHC. The filed PNF is attached as Attachment D.

J. Protected Species

According to Massachusetts Natural Heritage and Endangered Species Program ("NHESP") Atlas (August 1, 2021, 15th Edition), the Project Site is not located within an area of Estimated Habitats of Rare Wildlife or an area of Priority Habitats of Rare Species. There are no mapped certified or potential vernal pools located on or near the site.

K. Traffic

Traffic impacts due to the construction of the Project and occasional on-site maintenance visits during operations will all be minimal. No delays to local traffic should be experienced except where the delivery vehicles may need to travel on narrow roadways, or when there is an occasional oversized vehicle. Construction personnel parking is anticipated to be established either in a designated area on the site with access/egress via the existing driveway of 358 Coldbrook Road or at a remote location where workers can be shuttled to the Project Site. Any remote parking areas and/or contractor staging/laydown areas will be located within previously developed and disturbed areas in proximity to the Project Site. Once operational, the Project will be remotely monitored; any traffic to the Project Site will be limited to periodic site inspections and maintenance visits.

VII. REQUEST FOR ZONING EXEMPTIONS

A. Standard of Review for Zoning Exemptions

The standard of review for requests for relief from local zoning restrictions is set forth in G.L. c. 40A, § 3, para. 2, which provides in relevant part, that:

Lands or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or by-law if, upon petition of the corporation, the department of telecommunications and cable or the energy facilities siting board shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public...⁵

In numerous longstanding decisions interpreting the foregoing requirement, the

Department and courts have determined that a petitioner seeking exemption from a local zoning bylaw under G.L. c. 40A, § 3 must meet three criteria. <u>NSTAR Electric Company</u>, D.P.U. 11-80, at 4-7 (2012) ("<u>NSTAR Plympton 2012</u>"); <u>NSTAR Electric Company</u>, D.P.U. 07-60/07-61, at 2-6 (2008) ("<u>NSTAR Carver 2008</u>"). First, the petitioner must qualify as a public service corporation. <u>Save the Bay</u>, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975) ("<u>Save the Bay</u>"). Second, the petitioner must establish that it requires a zoning exemption. *See*, e.g., Boston Edison Company d/b/a NSTAR Electric, EFSB 04-1/D.T.E. 04-5/04-7, at 147 (2005) ("<u>Boston Edison 2005</u>"). Third, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the public convenience or welfare. *See*, e.g., Boston Edison 2005, at 147.

B. Moraga Storage Qualifies as a Public Service Corporation

Pursuant to Section 36 of the 2024 Climate Act⁶, the General Laws c. 40A, § 1A, defines "public service corporation" as:

⁵ As amended by St. 2024, c. 239, § 37 (effective Feb. 18, 2025). In pertinent part, pursuant to Section 118 of the 2024 Climate Act, an energy storage system that is not less than 100 MWhs and has received a comprehensive exemption from the zoning by-laws pursuant to G.L. c. 40A § 3, may petition the EFSB to obtain a certificate of environmental impact and public interest.

⁶ Section 36 of the 2024 Climate Act took effect on February 18, 2025.

(i) a corporation or other entity duly qualified to conduct business in the commonwealth that owns or operates or proposes to own or operate assets or facilities to provide electricity, gas. telecommunications, cable, water or other similar services of public need or convenience to the public directly or indirectly, including, but not limited to, an entity that owns or operates or proposes to own or operate electricity generation, storage, transmission or distribution facilities, or natural gas facilities including pipelines, and manufacturing and storage facilities; (ii) any transportation company that owns or operates or proposes to own or operate railways and related common carrier facilities; (iii) any communications company, including a wireless communications company or cable company that owns or operates or proposes to own or operate communications or cable facilities; and (iv) any water company that owns or operates or proposes to own or operate facilities necessary for its operations.

(Emphasis added.) Moraga Storage is a Massachusetts-registered foreign limited liability company duly qualified to do business in the Commonwealth. Moreover, Moraga proposes to own and operate an electric storage facility in Massachusetts. Therefore, the petitioner qualifies as a public service corporation.

C. Moraga Storage Requires Exemptions from the Town of Oakham Zoning Bylaw

In determining whether an exemption from a provision of a zoning bylaw is "required," the Commonwealth looks to whether the exemption is necessary to allow construction or operation of the petitioner's project as proposed. <u>NSTAR Electric Company d/b/a Eversource</u> <u>Energy</u>, EFSB 14-02/D.P.U. 14-73/14-74, at 93 (2017) ("<u>Eversource Walpole-Holbrook</u>"); <u>NSTAR Electric Company d/b/a Eversource Energy</u>, EFSB 15-03/D.P.U. 15-64/15-65, at 80 (2017) ("<u>Eversource Mystic-Woburn</u>"); <u>NSTAR Electric Company d/b/a Eversource Energy</u>, D.P.U. 15-85, at 6 (2016) ("<u>Eversource Woburn</u>"). The petitioner must identify the individual zoning provisions applicable to its project and establish that an exemption from each of the provisions is required. <u>Eversource Walpole-Holbrook</u> at 9; <u>Eversource Mystic-Woburn</u> at 81 n. 71; Eversource Woburn at 6.

1. Specific Zoning Exemptions Required

i. Use

According to the Zoning Map of Oakham, Massachusetts (the "Zoning Map"), the entire Town of Oakham is designated as an agricultural and rural residential district ("A&R district"), and therefore the Project Site is in the A&R district. The Zoning Bylaw of the Town of Oakham (the "Zoning Bylaw") prohibits battery energy storage systems throughout the Town. Section 4.1.1 of the Zoning Bylaw provides that no use may be made in the Town "other than as permitted" in Sections 3 and 4 of the Zoning Bylaw. Under Section 4.4, Prohibited Uses, subsection 4.4.4 prohibits battery energy storage systems which are not "located on the site of, and specifically appurtenant to, a permitted Large Scale Solar Installation..." Because the Project will not be located on the site of and appurtenant to a large-scale solar installation, the Company's proposed use is prohibited in Oakham. Therefore, to construct the Project on the Project Site, an exemption from the operation of the prohibitions in Sections 4.1.1 and 4.4.4 is *per se* required from the Siting Board.

ii. Dimensions

Section 5 of the Zoning Bylaw sets dimensional requirements for structures throughout Oakham, some of which will preclude the development of the Project.

Section 5.2 of the Zoning Bylaw limits the height of all structures to 35 feet. Some components of the Project and its substation which are considered "structures" will exceed this height limit. For instance, and without limitation, the Incoming Gantry/Disconnect Switch included in the substation, including the attached cables, will exceed 55 feet in height. Therefore,

an exemption from the operation of this section is required.

Section 5.3 of the Zoning Bylaw prohibits structures from being erected within 50 feet of any side lot line. The proposed noise walls and some battery containers will encroach on the 50foot setback along the southerly and easterly lot lines. Specifically, the noise wall along the eastern edge of the Project will lie approximately 34.4 feet from the eastern lot line, and the noise wall along the southern edge of the Project will lie approximately 43.7 feet from the southerly lot line. Battery storage containers behind the eastern noise wall will also fall within the 50-foot setback. Therefore, because the Project and its components, including the substation and interconnection structures, must be built within the 50-foot setback area, an exemption from the operation of this section is required.

Section 5.5 of the Zoning Bylaw prohibits a building inspector from issuing building permits for lots shown on approval not required ("ANR") plans and Definitive Subdivision plans if said plans do not meet the requirements of Section 5.5.1. The lot on which the Project Site is located may not have been created in conformance with the requirements of Section 5.5.1. Therefore, an exemption from the operation of Section 5.5 is required.

Section 5.6 prohibits construction on "hammerhead lots" and lots which do not meet a strict "proportion factor." It also requires the lot depth perpendicular to the frontage to be at least 50 feet. Because the Site is located on a lot which constitutes a "hammerhead lot" which does not meet the "proportion factor" requirement, and which has a depth of 30 feet along the frontage line, Section 5.6 prohibits construction at the Site. Therefore, an exemption from the operation of Section 5.6 is required for the Project.

Because of the constraints imposed by Section 5 of the Zoning Bylaw, exemptions from the operation of Sections 5.2, 5.3, 5.5, and 5.6 are *per se* required from the Siting Board.

iii. Soil Removal

Section 4.2.11 of the Zoning Bylaw requires a special permit from the planning board for any commercial operation which removes more than 500 cubic yards of soil. Additionally, Section 6.3 of the Zoning Bylaw requires a special permit from the planning board prior to the removal of more than 500 cubic yards of soil for *any* purpose. Section 6.3 imposes a number of additional restrictions on soil removal, including requiring the posting of performance bonds prior to "any activity related to the removal of soil, including site preparation." Section 6.3 also prohibits excavation below existing grade within two hundred feet of any abutting property line without a super-majority vote of the planning board and written permission of an abutter, unless an applicant constructs a visual barrier, in which case the setback may be 100 feet.

Section 6.3 also requires approval by the conservation commission prior to any excavation within 100 feet of a water course or wetland resource. The Project may involve the removal of more than 500 cubic feet of soil removal as part of site preparation. The limit of disturbance of the Project will extend into the 100-foot setback area on the northerly, easterly, westerly, and southerly borders and in some cases (such as on the southerly and easterly borders) extend up to the property line. Additionally, the proposed access road, and portions of the proposed sound wall, battery storage containers and related drainage infrastructure, which may require some excavation, will fall within the 100-foot wetland setback area.

Section 4.2.11 grants the Town of Oakham planning board broad discretion to impose "any other conditions...to ensure public safety and the general welfare of the town."

Special permits are a discretionary type of zoning relief which require a supermajority vote of the special permit granting authority (unanimous vote of a three-member board, 4/5 of a five-member board, and 2/3 of a more than five-member board). Special permit proceedings

require a public hearing that typically take at least three to four months. Further, special permits are subject to appeal in Land Court or Superior Court. Resolution of special permit appeals in the trial court would take eighteen to twenty-four months. Special permits can be further appealed in the Appeals Court after resolution in the trial court, leading to two additional years of litigation. A battery project subject to a special permit appeal cannot obtain construction financing until the appeal is fully resolved.

Several components of the project, including the sound wall, battery storage containers, the access road, interconnection equipment, fencing, and drainage infrastructure will fall within the 100-foot setback area; these project elements cannot be authorized by special permit. Other work within the 200-foot setback require a special permit for soil removal, which, as noted, would require a super majority vote and permission of an abutter. Accordingly, exemptions from Sections 4.2.11 and 6.3 of the Zoning Bylaw are *per se* required from the Siting Board for the Project to proceed.

Provision	Description	Zoning Relief	Rationale for Seeking Exemption
§4 Regulation of a Business, Subsections 4.1.1 and 4.4.4	Proposed use prohibited in Town	None Available	Section 4.1.1 provides that "[n]o building, structure or land shall be used for any purpose or in any manner other than as permitted and set forth in Section 3 and Section 4 of this bylaw" Section 4.4.4 prohibits Battery Energy Storage Systems (BESS) which are not located on the site of and specifically appurtenant to a permitted Large Scale Solar Installation. The Zoning Bylaw therefore expressly prohibits the proposed BESS and an exemption from the operation of the Zoning Bylaw is required.

LIST OF ZONING EXEMPTIONS SOUGHT

85	Ducie et vuill	Variance	Section 5.2 provides that structures in the
§5 Dimensional	Project will	Variance	Section 5.2 provides that structures in the
	exceed height		Town may not exceed 35' in height,
Requirements	limits, may		calculated from the average grade around
	exceed		the perimeter of the structure. There are
	setback limits,		some components of the project
	and lot will		substation, such as the Incoming
	not meet		Gantry/Disconnect Switch, that are
	buildability		considered structures and may exceed
	requirements		this height limit. Therefore, an
			exemption from the operation of this
			section is required.
			Section 5.3 limits structures from being
			erected within 50 feet of any side lot line,
			including the frontage. The project and
			some of its components including noise
			walls, battery storage containers, and
			associated infrastructure, may be
			constructed within 50 feet of the side lot
			lines. Therefore, an exemption from the
			operation of this section is required.
			Sections 5.5 and 5.5.1 prohibits the
			building inspector from issuing building
			permits for lots shown on ANR plans and
			Definitive Subdivision Plans if said plans
			1
			do not meet the requirements of Section
			5.5.1. If the subject lot was not created in strict conformance with the
			requirements of Section 5.5.1, then the
			project may not be issued a building
			permit. Therefore, an exemption from
			the operation of this section is required.
			Section 5.6 prohibits construction on lots
			which are narrow, including hammerhead
			lots, and lots which do not meet a
			"proportion factor." It also requires lots to
			have a depth of at least fifty feet
			perpendicular to the frontage. The subject
			lot is a hammerhead lot and does not
			have the required depth along the
			frontage with a depth of thirty feet.
			Thus, the lot is not buildable under
			Section 5.6. Therefore, an exemption
			from the operation of this section is
			required.
			In all cases, it is difficult/impossible to
			demonstrate the existence of unique

			conditions for grant of a variance and even if granted they are susceptible to appeal. To avoid the legal uncertainty, potential for adverse interpretations, delay, burden and undue expense associated with obtaining a variance, the Company requests an exemption.
§ 4.2.11 and 6.3 Removal of Soil	Removal of soil more than 500 cubic yards requires a Special Permit	Special permit from Planning Board	Section 4.2.11 requires a special permit from the Planning Board for soil removal of more than 500 cubic yards. Section 6.3 also requires a Special Permit from the Planning Board prior to the removal of more than 500 cubic yards of soil. Any excavation within 100 feet of a water course or wetlands requires prior approval by the Conservation Commission, and no excavation below the existing grade is permitted within 100 feet of any abutting property line. A bond is also required. The Project may involve more than 500 cubic feet of soil removal, a special permit would be required from the Town of Oakham Planning Board, which has broad discretion to impose "any other conditions to ensure public safety and the general welfare of the Town." An exemption from the operation of this section is required. No excavation is permitted within 100 feet of a property line. Certain project elements will be within 100 feet of a property line and therefore require an exemption from the operation of Sections 4.2.11 and 6.3.

D. The Project Is Reasonably Necessary For The Public Convenience Or Welfare

When making a determination as to whether a petitioner's present or proposed use is reasonably necessary for the public convenience or welfare, the Siting Board examines (1) the present or proposed use and any alternatives or alternative sites identified; (2) the need for, or public benefits of, the present or proposed use; and (3) the environmental impacts or any other impacts of the present or proposed use. <u>Cranberry Point Energy Storage, LLC</u>, D.P.U. 22-59, at 40 (2023); <u>Medway Grid, LLC</u>, D.P.U. 22-18/22-19, at 34 (2023); <u>SouthCoast Wind Energy</u> <u>LLC</u>, EFSB 22-04/D.P.U. 22-67/D.P.U. 22-68 at 212 (2024). The Commonwealth then balances the interests of the general public against the local interest and determines whether the present or proposed use of the land or structures is reasonably necessary for the convenience or welfare of the public. <u>Cranberry Point Energy Storage</u>, LLC, D.P.U. 22-59, at 40 (<u>citing Boston Gas</u> <u>Company</u>, D.T.E. 00-24, at 2-6 (2001); <u>Tennessee Gas Pipeline Company</u>, D.T.E. 01-57, at 5-6 (2002)); <u>Medway Grid, LLC</u> D.P.U. 22-18/22-19, at 34 (<u>citing</u>, e.g., <u>NSTAR Electric Company</u> d/b/a Eversource Energy, D.P.U. 17-147, at 8 (2019)).

First, the Company has demonstrated that its proposed use is consistent with the public convenience or welfare and that it has evaluated alternatives before choosing the Preferred Site. BESS facilities are an integral component of the electrical infrastructure needed to meet the Commonwealth's emission goals and energy policy. The Project will further important energy policies of the Commission, as set forth below. Furthermore, the Project considered reasonable alternatives before choosing the Project Site, as discussed above in Section V.

Second, the Company has demonstrated the need for the Project's proposed use and the public benefit that results from meeting the need. The proposed BESS will play a critical role in transitioning to the energy grid to accommodate increasing penetration of renewable resources, and therefore, provides important public benefits.

Finally, any environmental impacts from the Project will be mitigated, as discussed above in Section VI. For all these reasons, the Project is reasonably necessary for the public convenience or welfare.

E. The Project Will Further Important Policies Of The Commonwealth

Approval of the Project would contribute to the Commonwealth's achievement of important health, environmental, and energy policies, including the Commonwealth's statewide net zero emissions target for 2050 as adopted by the Secretary of the Executive Office of Energy and Environmental Affairs pursuant to the Global Warming Solutions Act ("GWSA") (St. 2008, c. 298) as amended.⁷ Massachusetts has aggressive energy storage goals, including a goal of 1,000 MWh by December 31, 2025 (St. 2018, c. 227, § 20) and an ambitious 5,000 MW energy storage procurement target for 2030 pursuant to the recently enacted 2024 Climate Act (St. 2024, c. 239, § 98). These targets evince the Commonwealth's robust commitment to energy storage and its goal of supporting intermittent renewable generation resources such as solar and wind with ample energy storage.

The Project is also consistent with the Commonwealth's Energy Storage Initiative, which the Commonwealth launched to: (1) attract, support and promote storage companies in Massachusetts; (2) accelerate the development of commercial storage technologies; (3) expand markets for storage technologies and value storage benefits to clean energy integration, grid reliability, system wide efficiency, and peak demand reduction; and (4) recommend the developing policies, regulations and programs that help achieve those objectives.

Moreover, as part of the Energy Storage Initiative, the Department of Energy Resources ("DOER") and Massachusetts Clean Energy Center ("MassCEC") partnered to conduct energy storage studies, including the State of Charge report⁸ in 2016 and the Charging Forward: Energy

⁷ EEA, Determination of Greenhouse Gas Emissions Limit for 2050 (April 2020) available at https://www.mass.gov/doc/final-signed-letter-of-determination-for-2050-emissions-limit/download

⁸ State of Charge: A Comprehensive Study of Energy Storage in Massachusetts, Emerging Technology Division available at <u>https://www.mass.gov/service-details/energy-storage-study</u>) (last accessed September 23, 2024).

Storage in a Net Zero Commonwealth report ("Charging Forward") in 2023. These studies reviewed the storage industry landscape, economic development and market opportunities for energy storage, and evaluated potential policies and programs to support energy storage development in Massachusetts. DOER has implemented many of the State of Charge report's recommendations to promote energy storage in the state.

The State of Charge report identified ratepayer cost benefits of energy storage associated with "reduced peak demand, deferred transmission and distribution investments, reduced GHG emissions, reduced cost of renewables integration, deferred new capacity investments, and increased grid flexibility, reliability and resiliency."⁶ The report also identified near and long term economic and workforce benefits to Massachusetts by implementing energy storage. Following the State of Charge report, in 2018, the Commonwealth set a 1,000 MWh energy storage target for December 31, 2025 (St. 2018, c. 227, § 20). Likewise, the Commonwealth discussed the importance of flexibility in a deeply decarbonized grid in its Clean Energy and Climate Plan for 2050 ("2050 CECP").⁹

Recognizing the changing energy storage landscape, Section 80(a) of *An Act Driving Clean Energy and Offshore Wind* (St. 2022, c. 179, § 80) authorized the DOER and the MassCEC to conduct a follow-on energy storage study to the State of Charge report, which resulted in the Charging Forward report.¹⁰ The Charging Forward report re-affirmed many of the findings in the State of Charge report and found that the "deployment and use of energy storage systems is a critical and cost-effective strategy for the Commonwealth to encourage in meeting

⁹ Massachusetts Clean Energy and Climate Plan for 2050 at p. 73 (Dec. 2022) (*available at* <u>https://www.mass.gov/doc/2050-clean-energy-and-climate-plan/download</u>) (last assessed Mar. 22. 2025).

¹⁰ Charging Forward: Energy Storage In a Net Zero Commonwealth (dated Dec. 31, 2023), *available at* <u>https://www.mass.gov/doc/charging-forward-energy-storage-in-a-net-zero-commonwealth-report/download</u> (last visited Mar. 21, 2025).

its goals under the 2050 CECP."

1. Clean Peak Energy Standard

The Project is also consistent with the Massachusetts Clean Peak Standard ("CPS"). The CPS is designed to provide incentives to clean energy technologies that can supply electricity or reduce demand during seasonal peak demand periods established by DOER. According to the DOER, Clean Peak Resources contribute to the Commonwealth's environmental protection goals concerning air emissions, including those required by the GWSA, discussed above, by displacing non-renewable generating resources while reducing peak demand and system losses and increasing grid reliability.

Similar to the Massachusetts Renewable Portfolio Standard, the CPS requires a percentage of electricity delivered during peak hours to come from certain eligible Clean Peak Resources. To show that the CPS is met, Retail Electricity Suppliers must acquire Clean Peak Energy Credits ("CPECs") that are generated by Clean Peak Resources to offset a certain percentage of their load (the "CPS Minimum Standard"). Clean Peak Resources include Qualified Renewable Portfolio Standard Resources, Qualified Energy Storage Systems, or Demand Response Resources that generate, dispatch, or discharge electricity into the electric distribution system during certain peak periods, or alternatively, reduce load on the system during those periods. Retail Electricity Suppliers that do not acquire enough CPECs for a given year to meet their CPS Minimum Standard are required to pay an Alternative Compliance Payment based on the amount of their deficiency.

Currently, there is a critical undersupply of CPECs being generated each year to meet the Commonwealth's Retail Electricity Suppliers' CPS Minimum Standards. In fact, the DOER commenced a series of emergency rulemakings in 2025 decreasing the 2024 CPS Minimum

Standard to shelter ratepayers from the impacts of high Alternative Compliance Payment collection during anticipated CPEC market undersupply conditions.¹¹

The Project is uniquely positioned to support the CPS and help remedy the undersupply of CPECs. One of the many benefits of the Project is that it is "fully dispatchable," capable of providing an energy source directly to the transmission system during peak load and storing electricity during off peak periods. Moreover, fully dispatchable BESS installations like the Project can perform additional grid services such as frequency and voltage support, fast frequency response and virtual inertia to prevent catastrophic failure or restart after an outage. Standalone BESS, like the Project, are the ideal clean facilities to achieve the objectives of the CPS because they displace non-renewable generating sources, thereby reducing air emissions, while reducing peak demand and increasing reliability.

2. Environmental Justice Policy

There are no mapped Environmental Justice ("EJ") populations within 1 mile of the proposed Project. The closest mapped EJ population is approximately 5.8 miles south of the Project in the Town of North Brookfield. Moreover, the Project will not impact air quality or have other environmental impacts that would disproportionately affect these populations.

VIII. GRANT OF A COMPREHENSIVE ZONING EXEMPTION IS APPROPRIATE FOR THE MORAGA STORAGE PROJECT

A. Grant of Comprehensive Zoning Exemption Is Warranted

The Commonwealth has recognized that comprehensive zoning relief is necessary in circumstances where, as in this case, numerous individual exemptions are required and the

¹¹ DOER, CPS Programmatic Review (available at <u>https://www.mass.gov/info-details/cps-programmatic-review#:~:text=CPS%20Emergency%20Rulemaking%20July%2012%2C%202024,-</u> PLEASE%20NOTE%3A%20The&text=The%20emergency%20rulemaking%20changes%20the,anticipated%20CP EC%20market%20undersupply%20conditions)(last accessed Mar. 22, 2025).

issuance of a blanket exemption could avoid substantial public harm by serving to prevent delay in the construction and operation of the proposed use. <u>New England Power Company d/b/a</u> <u>National Grid</u>, D.P.U. 09-136/09-137, at 49 (2011); <u>Boston Edison Company d/b/a NSTAR</u> <u>Electric</u>, EFSB 04-1/D.T.E. 04-5/04-7, at 147 (2005) ("<u>Boston Edison 2005</u>").

In accordance with this standard, numerous exemptions are required here as set forth above. Moreover, without comprehensive zoning relief, there is a likelihood of significant delay of the Project. Town leaders have been reticent to meet with Company representatives to discuss the Project given their understanding that the Project is not permitted pursuant to the Town ordinances. Those same leaders have indicated their opposition to the Project, which would undoubtedly cause delay to the Project despite the Company's collaborative attempts to work with Town leaders to ensure the Project is constructed and operated safely and efficiently. Therefore, the probability of local opposition causing a delay of the Project presents a significant risk to the Project. Accordingly, a comprehensive zoning exemption is warranted. *See* <u>Cranberry</u> <u>Point Energy Storage, LLC,</u> D.P.U. 22-59, at 128; <u>Medway Grid, LLC,</u> D.P.U. 22-18/22-19, at138; <u>Boston Edison 2005</u>, at 162.

IX. COMMUNITY OUTREACH

The Company first approached the Town to discuss this Project on December 1, 2022, by introductory email to the Chairman of the Town of Oakham Planning Board. Emails with the Chairman exchanged but no substantive discussions occurred until February 25, 2025, when the Company met with numerous local officials, including the Police Department, Fire Department, the Wiring Inspector, members of the Conservation Commission, and members of the Board of Selectman. At that meeting, the Town reiterated that zoning ordinances precluded the construction and operation of the proposed Project but agreed to continue discussions.

On March 27, 2025, the Company held an Open House inviting business owners and residents within one-half mile of the Project Site to meet with representatives from Moraga and learn more about the Project. Approximately 150 attended that meeting, over three hours.

The Company also launched a Project website.¹² The Project website provides information on the Project's engineering and design, development timeline, and contracting and procurement. Further, the website contains information on the Company and the Project's development team. The website also enables interested persons to reach out to message the Company directly with concerns or inquiries.

Table 10-1 outlines Community Outreach activities to date including the groups, regulatory agencies, and other officials contacted.

Date	Group(s)/Local Officials	Торіс
12/01/2022	Chairman of the Town of Oakham Planning Board	Formal Introductory email regarding the Project and Moraga Energy Storage, LLC
01/13/2023	Chairman of the Town of Oakham Planning Board	Presentation to Chairman Warbasse on the Project
1/18/2023 – 02/7/2023	Chairman of the Town of Oakham Planning Board	Follow up email correspondence with Chairman Warbasse regarding the Project and certain zoning bylaw.
9/17/24	Chairman of Town of Oakham Planning Board	Follow up email to update Chairman Warbasse on the Company's intent to develop the Project in Oakham, MA (additional follow-up on 9/30/24)
10/29/24	Town of Oakham Fire Department	Introduction to the Project and Moraga Energy Storage, LLC
2/25/25	Town of Oakham Fire Department (Chief Howe);	Company presentations providing a review of the Project, the Project's site plan, and an overview of the

Table 10-1: Project Outreach Meetings

¹² The Project website is available at the following link: <u>https://www.moragaenergystorage.com/</u>

	Members of the Town of Oakam Planning Board (Chairman Philip Warbasse, and Board Member Thomas Hughes);	Project's draft Emergency Response Plan and Hazard Mitigation Analysis
	Members of the Town of Oakham Board of Selectmen (Lucy Tessnau, Michael Brunelle, and Don Haapakoski);	
	Town of Oakham Conservation Commission Member (Lucy Tessnau);	
	Town of Oakham Wiring Inspector (Dennis Bergin); and	
	Town of Oakham Police Chief Gehring.	
2/28/25	Town of Oakham Fire Department.	Copies of 2/25/25 fire safety presentation and applicable NFPA code provisions sent from Energy Safety Response Group to Town of Oakham Fire Department
3/19/25	Invitation to Open House	Invitations to an open house event to learn about the Project were mailed t neighbors within a half mile of the Project, including Oakham Town Hall. The invitations stated the name of the Project, and the time and location of the open house.
3/27/25	Public Open House	Company hosted an open house in Allen Hall at the Woods Memorial Library in Barre, Massachusetts from 4-7 P.M. 150 people attended the meeting.
3/19/25	Website Published	

In addition, Petitioner has engaged in the following activities.

A. Website

As noted above, the Company has a Project website that provides information on the Project's engineering and design, development timeline, and contracting and procurement and allows users to contact the Company.

B. Project Email

Petitioner established a dedicated email address to communicate with property owners and other stakeholders regarding the Project. This email address is listed in all Project outreach materials, including mailings, the website, and community events.

C. Phone Number

Phone numbers for communicating with the Project team were given to all stakeholders during meetings and speaking with neighbors.

D. Construction Community Outreach Plan

The Project will develop a Construction Community Outreach Plan to keep stakeholders informed of construction activities.

E. Contractor Training

In advance of construction, the Outreach Team will reinforce the importance of contractors working responsibly and respectfully in the community and adhering to commitments and permitted work hours established with the Town.

X. CONCLUSION

WHEREFORE, Moraga Energy Storage, LLC respectfully requests that the Energy Facilities Siting Board approve this Petition and grant the Company individual and comprehensive zoning exemptions to allow the construction of the Project in the Town of Oakham.

Respectfully submitted,

Moraga Energy Storage LLC By its attorney,

Andrew O. Kaplan Eben Albert Nicholas Salalayko Pierce Atwood LLP 100 Summer Street Boston, Massachusetts 02110

Dated: March 31, 2025