

COMMONWEALTH OF MASSACHUSETTS
SUPERIOR COURT DEPARTMENT OF THE TRIAL COURT

FRANKLIN, ss.

Docket No. _____

THE TOWN OF SHUTESBURY,
MASSACHUSETTS,

Plaintiff,

v.

ANDREA JOY CAMPBELL,
ATTORNEY GENERAL FOR THE
COMMONWEALTH OF
MASSACHUSETTS,

Defendant.

FILED

DEC 26 2024

FRANKLIN SUPERIOR COURT

**COMPLAINT FOR JUDICIAL REVIEW
IN THE NATURE OF CERTIORARI
PURSUANT TO G.L. c. 249, § 4**

I. Nature of the Action

1. The within action seeks judicial review of a disapproval by the Attorney General of a certain general bylaw entitled “General Bylaw Regarding Energy Storage Systems” (the “ESS Bylaw”), approved by Shutesbury voters at the Town’s April 27, 2024 Annual Town Meeting. The ESS Bylaw establishes an Energy Storage System Licensing program whereby any potential operator of an Energy Storage System (“ESS”) must first apply for and obtain a license from a Licensing Board. An ESS is any mechanical, thermal, electrical, chemical, electrochemical or other device used for energy storage. Issuance of license under the ESS Bylaw requires proof that a facility will achieve full regulatory compliance; has a

comprehensive emergency response plan; satisfies certain design and performance standards; and, generally, “will not create an unreasonable or unacceptable risk to the health, safety and welfare [of] the residents of Shutesbury...”

2. In a letter dated November 25, 2024, the Attorney General disapproved the ESS Bylaw in its entirety (the “Disapproval Letter”). See Exhibit A.

3. As justification for the disapproval, the Attorney General states in the Disapproval Letter that the ESS Bylaw “is a by-law that regulates the use of land and therefore should have been adopted as a zoning by-law (rather than a general by-law)...” See Exhibit A.

4. Additionally, the Attorney General concludes that “[b]y extensively regulating [a] protected use through a general bylaw, the Town would impermissibly circumvent the protections of G.L. c. 40A, § 3.” See Exhibit A.

5. The Town of Shutesbury (the “Town”) rejects the Attorney General’s ruling that the ESS Bylaw is a zoning, not a general, bylaw; and, thus, disputes that its adoption was required to comply with G.L. c. 40A, § 5.¹

6. The Town likewise rejects the Attorney General’s ruling that the ESS Bylaw “attempts to impose extensive regulations on the construction and operation of ESS” in contravention of G.L. c. 40A, § 3.

7. For these reasons and those hereinafter stated, the Town now appeals the Disapproval Letter pursuant to G.L. c. 249, § 4.

¹ G.L. c. 40A, § 5 requires, *inter alia*, that zoning bylaws or amendments thereto be adopted only following a public hearing thereon before the planning board, and an ensuing report with recommendations by said board; and, further, only upon a two-thirds vote of town meeting.

II. Jurisdiction

8. The Superior Court has original, concurrent subject matter jurisdiction “to correct errors in proceedings... not otherwise reviewable by motion or by appeal... aris[ing] under or involv[ing]... by-law,” pursuant to the aforementioned G.L. c. 249, § 4. Certiorari is the proper means to seek review of the Attorney General’s disapproval of a bylaw. Reading v. Attorney General, 362 Mass. 266, 269-270 (1972).

9. The Superior Court likewise has personal jurisdiction over the Attorney General, per G.L. c. 223A, § 2.

10. Venue is proper in Franklin County, where the Town is located and where the ESS Bylaw was adopted by Town Meeting.

III. Parties

11. Plaintiff Town of Shutesbury is a municipal corporation with its principal office at One Cooleyville Road, Shutesbury, Massachusetts 01072.

12. Defendant Andrea Joy Campbell is the Attorney General for the Commonwealth of Massachusetts; and is named not individually, but in her capacity as such. The Office of the Attorney General has its principal office at One Ashburton Place, Boston, Massachusetts 02108.

IV. Statement of the Facts

13. Article 26 on the Town’s April 27, 2024 Annual Town Meeting warrant proposed the adoption of a general bylaw entitled “General Bylaw Regarding Energy Storage Systems.” See Exhibit B.

14. The ESS Bylaw defines ESS as “any mechanical, thermal, electrical, chemical, electrochemical, or other device that is used to store energy for use by the utility grid or to

serve as an onsite energy backup system...” See Exhibit B.

15. The ESS Bylaw applies “to all non-residential operations of Energy Storage Systems in the Town of Shutesbury.” See Exhibit B.

16. The ESS Bylaw establishes an Energy Storage System Licensing program whereby any potential operator of an Energy Storage System (“ESS”) must first apply for and obtain a license from a Licensing Board. Once issued, an ESS license is “in effect for a period determined by the Licensing Board of no less than ten years and no greater than twenty years,” subject to renewal. See Exhibit B.

17. Issuance of license under the ESS Bylaw requires proof that a facility will achieve full regulatory compliance, per Section 6 of the ESS Bylaw; has a comprehensive emergency response plan, per Section 7 of the ESS Bylaw; satisfies certain design and performance standards, per Section 8 of the ESS Bylaw; and, generally, “will not create an unreasonable or unacceptable risk to the health, safety and welfare [of] the residents of Shutesbury...” See Exhibit B.

18. Special licensing requirements exist for Lithium-Ion Energy Storage Systems (“LIESS”), due to the associated risk of a “rapid uncontrolled release of heat energy from a battery cell that may cause a chain reaction in neighboring battery cells and result in a larger battery fire or explosion.” See Exhibit B.

19. The ESS Bylaw also mandates insurance and incorporates requirements relative to the eventual discontinuance of operations. See Exhibit B.

20. The ESS Bylaw does not explicitly “zone” for ESS, nor does it identify zoning districts or overlays where ESS can or cannot be constructed. See Exhibit B.

21. While the ESS Bylaw does restrict the size of ESS to 10 MW or less, Section 14 thereof expressly authorizes the Licensing Board to “waiver or reduce any requirement of

this bylaw” upon certain writing findings, as specified therein. See Exhibit B.

22. Annual Town Meeting voters overwhelmingly passed Article 26, i.e. the ESS Bylaw.

23. Per G.L. c. 40, § 32, “before a by-law takes effect it shall be approved by the attorney general” following submittal by the municipal clerk of “a certified copy of such by-law with a request for its approval...” The Shutesbury Town Clerk made the requisite submittal(s) to the Office of the Attorney General shortly after the Annual Town Meeting.

24. As noted in Footnote 1 of the Disapproval Letter, by agreement with Town Counsel, the Attorney General’s 90-day deadline to act on the aforesaid submittal(s) was extended, as to Article 26, for an additional 90 days, to and through November 25, 2024.

25. The Attorney General issued the Disapproval Letter on November 25, 2024, rejecting the ESS Bylaw for the reasons specified above. See Paragraph Nos. 3 and 4, supra.

V. Cause of Action

26. The Plaintiff repeats and realleges Paragraph Nos. 1 through 25, above, and incorporates the same herein by reference.

27. Under the Home Rule Amendment, see Mass. Const. amend. art. LXXXIX, “[a]ny city or town may, by the adoption, amendment or repeal of local ordinances or by-laws, exercise any power or function which the general court has power to confer upon it, which is not inconsistent with the constitution or laws enacted by the general court...” G.L. c. 43B, § 13.

28. “[T]he Attorney General’s power to disapprove town by-laws is limited.” Town of Amherst v. Attorney General, 398 Mass. 793, 795 (1986).

29. “The Attorney General only may disapprove a by-law if it violates State

substantive or procedural law.” Id. (citing Concord v. Attorney General, 336 Mass. 17, 24 (1957)).

30. “[I]t is fundamental that every presumption is to be made in favor the validity of municipal by-laws.” Id. at 705-96 (citing Grace v. Town of Brookline, 379 Mass. 43, 49-50 (1979)).

31. The Attorney General’s conclusion in the Disapproval Letter that that the ESS Bylaw “is a by-law that regulates the use of land and therefore should have been adopted as a zoning by-law (rather than a general by-law),” see Exhibit A, is in error.

32. The ESS Bylaw’s impact on land use is secondary to its dominant purpose of protecting the health and safety of Shutesbury residents from the dangers that can be associated the ESS facilities.

33. Much of the ESS Bylaw is devoted to the creating and administering an Energy Storage System Licensing program.

34. The Town’s existing Zoning Bylaw regulates ground-mounted solar electric installations; but does not explicitly address ESS. The Disapproval Letter acknowledges that a prior effort to regulate ESS through amendment(s) to the Zoning Bylaw was rejected by the Attorney General, such that no history of such regulation exists in Shutesbury.

35. The Attorney General’s conclusion in the Disapproval Letter that “[b]y extensively regulating [a] protected use through a general bylaw, the Town would impermissibly circumvent the protections of G.L. c. 40A, § 3,” see Exhibit A, is also in error.

36. The ESS Bylaw creates an Energy Storage System Licensing program that is not at odds with the protection(s) afforded “solar energy systems” under G.L. c. 40A, § 3.

37. The ESS Bylaw’s regulation of ESS, albeit through the licensing thereof, is

nevertheless reasonable, as G.L. c. 40A, § 3 requires.

VI. Prayer for Relief

WHEREFORE, the Town respectfully requests that the Disapproval Letter be annulled and that the within matter be remanded to the Office of the Attorney General with an instruction to approve the ESS Bylaw.

Plaintiff Town of Shutesbury,
by its attorneys,

Date: December 26, 2024

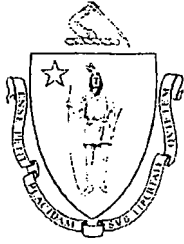
/s/ Adam J. Costa
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FRANKLIN SUPERIOR COURT

Exhibit A



ANDREA JOY CAMPBELL
ATTORNEY GENERAL

THE COMMONWEALTH OF MASSACHUSETTS
OFFICE OF THE ATTORNEY GENERAL

CENTRAL MASSACHUSETTS DIVISION
10 MECHANIC STREET, SUITE 301
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November 25, 2024

Grace Bannasch, Town Clerk
Town of Shutesbury
P.O. Box 264
Shutesbury, MA 01072

Re: Shutesbury Annual Town Meeting of April 27, 2024 -- Case # 11425
Warrant Articles # 27 and 28 (Zoning)
Warrant Articles # 11 and 26 (General)¹

Dear Ms. Bannasch:

Article 26 - Because Article 26 is a by-law that regulates the use of land and therefore should have been adopted as a zoning by-law (rather than a general by-law), we must disapprove it because it conflicts with G.L. c. 40A, § 5. By-laws that regulate the use of land, buildings and structures must comply with the Zoning Act, G.L. c. 40A ("Zoning Act"), including the Zoning Act's zoning protections given to certain uses and structures (G.L. c. 40A, § 3) and the Zoning Act's procedural requirements for adoption or amendment of zoning by-laws (G.L. c. 40A, § 5). Spenlinhauer v. Town of Barnstable, 80 Mass. App. Ct. 134, 137-38 (2010).

This decision briefly describes the by-law and the Zoning Act; discusses the Attorney General's standard of review of town by-laws under G.L. c. 40, § 32; and then explains why, governed as we are by that standard, we must disapprove the by-law adopted under Article 26 because it conflicts with the Zoning Act.

I. Summary of Article 26

Under Article 26, the Town voted to amend the general by-laws to add a new "General Bylaw Regarding Energy Storage Systems." Article 26 states that its purpose is to "protect the health, safety, and welfare of the residents of Shutesbury while supporting appropriately sited energy infrastructure." Section 1, "Purpose." In addition, Section 1 states "that residents of the Town rely upon private wells and therefore the Town wishes to protect "groundwater resources" and that the Town's "capacity to...respond to large-scale or complex industrial incidents is limited" and therefore certain facilities' fire potential "pose a heightened risk to public health and

¹ On August 9, 2024, by agreement with Town Counsel as authorized by G.L. c. 40, § 32, we extended the deadline for a decision on Article 26 for 90-days until November 25, 2024. In a decision issued August 26, 2024, we approved Articles 11, 27 and 28.

safety.” Id. Section 1 also states that the Town is comprised of 92% forested land that can increase the risk of wildfires “including those caused by industrial fire incidents.”

Section 2, “Definition,” defines the term “Energy Storage System (ESS)” as follows:

...any mechanical, thermal, electrical, chemical, electrochemical, or other device that is used to store energy for use by the utility grid or to serve as an onsite energy backup system. Technologies may include but are not limited to pumped hydro, compressed air, molten salt (thermal), solid state, lithium-ion battery, lead-acid battery, flow battery, hydrogen, or flywheel.

Section 3, “Applicability,” provides that the by-law “shall apply to all non-residential operations of Energy Storage Systems in the Town of Shutesbury. Subsequent references to ESS shall exclusively apply to non-residential uses of energy storage systems.” Section 4, “Energy Storage System Licensing,” requires a license “[t]o operate a non-residential energy storage system in the Town of Shutesbury.” The by-law establishes an “Energy Storage System Licensing Board” (“Licensing Board”) comprised of seven voting members as follows: (1) all three members of the Select Board; (2) one member appointed by the Conservation Commission; (3) one member appointed by the Board of Health; (4) one member appointed by the Planning Board; and (5) one member appointed by the Zoning Board of Appeals. Section 4.

Section 4 requires an “application” to be submitted to the Town Clerk by registered mail or hand-delivery, and provides that the Licensing Board will hold a public hearing on the license application within 65 days and will render a decision on the application within 60 days of the close of the hearing. The by-law authorizes the Licensing Board to require all documentation required by the by-law as well as any “additional data and documentation, at its discretion, to provide a basis for a decision.” Section 4. In addition, Section 4 requires a two-thirds vote of the Licensing Board to approve an ESS license and authorizes the Licensing Board “to approve, reject, or approve with conditions any application for an Energy Storage System License.” If the Licensing Board approve an ESS license, the Licensing Board will determine the period of time for which the license will be in effect, which will be “no less than ten years and no greater than twenty years.” Section 4. The by-law further establishes a license renewal process and requires compliance with Section 11, “Licensing Findings.”

Section 5, “Required Documentation,” specifies the documentation that must be submitted as part of a licensing application, including: (1) a project summary and site plan for the ESS; (2) material safety data sheets that include the fire suppression chemicals that would be used in the event of a fire; (3) a hazard mitigation analysis as required by the National Fire Protection Association standards; and (4) proof of regulatory compliance as outlined in Section 6 of the by-law. In addition, Section 5 imposes design specifications for “battery energy storage systems” including the spacing between containers and the specifications of structural support and foundations for the containers and fire and explosion prevention. Section 5 also imposes design specifications for “non-battery energy storage systems”² and provides that “[a]dditional specifications and details as determined by the Licensing Board” may be required. Further, Section 5 authorizes the Licensing Board to require “[o]ther analyses as may be requested by the

² The by-law does not define the term “non-battery energy storage systems.”

Licensing Board related to the public health, safety, or welfare and/or the operation of the proposed ESS equipment.”

Section 6, “Regulator Compliance for Energy Storage Systems,” requires compliance with “all applicable local, state and federal regulations” including the Massachusetts Endangered Species Act; Wetlands Act; Massachusetts Forest Cutting Practices; Shutesbury Board of Health regulations; and the United States Endangered Species Act. In addition, Section 6 provides that “[t]he construction and operation of an ESS shall be consistent with all applicable local, state, and federal safety, construction, electrical, and communications requirements” including National Fire Protection Association standards; the State Building Code; and the Massachusetts Electrical Code.

Section 7, “Emergency Response Requirements,” requires the applicant to provide an Emergency Operations Plan (EOP). In addition, Section 7 requires the owner or operator of an ESS to ensure that fire and other emergency personnel “are provided training and equipment sufficient to safely and effectively respond to an ESS emergency.” Section 8, “Design and Performance Standards,” imposes extensive requirements on an ESS, including that it must be “built and operated” in accordance with these standards. Specifically, Section 8 provides for three categories of licenses based on the size of an ESS, as follows: (1) a license is not required for an ESS with a net generation capacity of less than 1MW; (2) an ESS with a net generation capacity of greater than 1 MW and no more than 10MW requires a license approval from the Licensing Board; and (3) an ESS with a net generation capacity of greater than 10MW will not be licensed.

Section 8 further imposes specific design requirements, including requirements as follows: (1) noise mitigation requirements for noise generated during the construction and operation of an ESS; (2) minimize visual impacts; (3) vegetative screening of no less than 30 feet, composed of trees and shrubs, and staggered for height and density; (4) a prohibition against the use of “exotic or invasive” plants at an ESS; (5) landscaping requirements; (6) the use of reasonable efforts to place all utility connections underground; (7) prior to “any site disturbance and construction, the limits of the work shown on the approved site plan shall be surveyed and clearly marked by a Professional Land Surveyor”; (8) erosion and sedimentation controls must be used “during the entire construction process and maintained until the site is stabilized and a properly designed stormwater management system is installed and operational”; (9) minimize the use of concrete and other impervious materials; (10) clearing of natural vegetation is limited to only what is necessary for the “safe construction, operation, and maintenance of the ESS” and sites shall be selected “where construction may be accomplished with minimal earth work.”; (11) an ESS is prohibited from being located on sites with “original, pre-construction grades in excess of 15%”; (12) an ESS must be designed to minimize impacts to forested land and open agricultural land and fields (even if not in production); (13) prohibition on the use of PFAS materials for fire suppression or cooling; and (14) prohibition on ground alterations including stump removal, excavation, filling and grading, or the construction of drainage facilities, access driveways or other structural components of the ESS within 200 feet of a drinking water well or potable water supply.

Section 9, “Special Requirements and Standards for Lithium-Ion Energy Storage Systems (LIESS),” imposes additional requirements on LIESS including: (1) submitting a report prepared by a LIESS expert analyzing certain scenarios under both a “most-likely” and “worst case

scenario” related to thermal runaway, quantity of water needed for a thermal runaway event and sources of water sufficient to meet the emergency response needs; (2) a plan for how runoff water from an emergency response will be handled including the “location, design, capacity, and materials associated with any containment system”; and (3) an analysis regarding the effects of a thermal runaway event on an LIESS. In addition, Section 9 imposes operational standards on LIESS including that the LIESS is required to: (1) maintain a non-flammable buffer of no less than 100 feet with no trees or brush around it; (2) be designed to contain or filter noxious gases resulting from combustion in the event of a fire; (3) have ready access to a consistent and sufficient water supply either on-site or directly accessible to the ESS site for thermal runaway purposes; (4) have a containment onsite for any water runoff from firefighting or heat reduction efforts; and (5) not be located closer than 400 feet from a functional drinking water well.

Section 10 authorizes the Licensing Board to use independent consultants under G.L. c. 44, § 53G. Section 11, “Required Licensing Findings,” provides that a license to “construct and operate an ESS” shall not be issued unless the Licensing Board makes certain required findings, including: (1) the applicant has identified all hazards associated with the operation of the ESS and the mitigation proposed to address the hazards “is sufficient”; (2) the “location of the ESS will minimize disruption and harm to the natural resources of Shutesbury, especially in regard to the ecological integrity and carbon sequestration/storage associated with contiguous forestland”; (3) emergency response plans and available resources are sufficient to effectively address hazards associated with the ESS; and (4) that the operation of an ESS will not create an unreasonable or unacceptable risk to the health, safety, and welfare of the residents of the Town and will avoid or minimize adverse effects to the natural environment.

Section 12 imposes decommissioning, restoration and removal requirements and authorizes the “Special Permit Granting Authority”³ to take certain action, in relevant part as follows: “Restoration of the site to its natural preexisting condition, including stabilization or revegetation of the site as necessary to minimize erosion. The Special Permit Granting Authority may allow the owner or operator to leave landscaping or designated below-grade foundations and electric lines in order to minimize erosion and disruption to vegetation.” Section 13 imposes requirements regarding insurance and financial sureties, including (1) a requirement for liability insurance in an amount of \$25 million per occurrence/\$50 million total related to the “use or failure of any ESS operations”, that must be provided by “[a]ny applicant for a license to construct and operate an ESS” and (2) a financial surety that must be presented “prior to the commencement of construction.”

Section 14 authorizes the Licensing Board “to waive or reduce any requirement of this bylaw by the same majority vote required for the license itself” upon written findings. Lastly, Section 15 authorizes the Licensing Board to enforce the by-law and Section 16 contains a severability and conflicts clause, including that “[i]f any provisions of this bylaw are found to be in conflict with the provisions of other town bylaws, the provisions of this bylaw shall supersede the other bylaws.”

³ The term “Special Permit Granting Authority” (“SPGA”) is a zoning term typically not used in general by-laws. See G.L. c. 40A, § 1 defining “Special Permit Granting Authority” as “the board of selectmen, city council, board of appeals, planning board, or zoning administrators as designated by zoning ordinance or by-law for the issuance of special permits” and G.L. c. 40A, § 9 authorizing a SPGA to permit certain uses.

II. The Attorney General's Standard of Review and Constraints on the Town's Police Power

A. Standard of Review of General By-laws

Our review of Article 26 is governed by G.L. c. 40, § 32. The Attorney General is authorized to disapprove a by-law that conflicts with state law or the constitution. See Amherst v. Attorney General, 398 Mass. 793, 795-96 (1986) (requiring inconsistency with state law or the constitution for the Attorney General to disapprove a by-law). The Attorney General does not review the policy arguments for or against the enactment of a by-law. Id. at 798-99 (“Neither we nor the Attorney General may comment on the wisdom of the town’s by-law.”). Instead, when reviewing by-laws for consistency with the Constitution or laws of the Commonwealth, the Attorney General’s standard of review is equivalent to that of a court. Amherst, 398 Mass. at 795 (“The Attorney General is guided in the exercise of his limited power of disapproval by the same principles that guide us.”).

Because the adoption of a by-law by the voters at Town Meeting is both the exercise of the Town’s police power and a legislative act, the vote carries a “strong presumption of validity.” Durand v. IDC Bellingham, 440 Mass. 45, 51 (2003). However, a “municipality has no power to adopt a by-law that is “inconsistent with the constitution or laws enacted by the [Legislature].” Home Rule Amendment, Mass. Const. amend. art. 2, § 6. Therefore, a town’s general police power “cannot be exercised in a manner which frustrates the purpose or implementation of a general or special law enacted by the Legislature.” Rayco Inv. Corp. v. Selectmen of Raynham, 368 Mass. 385, 394 (1975) (quoting Board of Appeals of Hanover v. Housing Appeals Comm., 363 Mass. 339, 360 (1973)).

B. General By-laws Versus Zoning By-Laws

Zoning by-laws are those “by-laws, adopted by ...towns to regulate the use of land, buildings and structures to the full extent of the independent constitutional powers of ...towns to protect the health, safety and general welfare of their present and future inhabitants.” G.L. c. 40A, § 1A. “The zoning power is, of course, merely one category of the more general police power, concerned specifically with the regulation of land use.” Rayco, 368 Mass. at 392 n. 4. By-laws that regulate the use of land, buildings and structures must comply with the Zoning Act, G.L. c. 40A, including the Zoning Act’s limitations on the subject matter of zoning by-laws (G.L. c. 40A, § 3) and the Zoning Act’s procedural requirements for adoption or amendment of zoning by-laws (G.L. c. 40A, § 5). See Spenlinhauer, 80 Mass. App. Ct. at 137-38.

The distinction between a general by-law and a zoning by-law is an important one. “[V]alid zoning measures can be implemented only by following the procedures spelled out in G.L. c. 40A.” Spenlinhauer, 80 Mass. App. Ct. at 137. The Zoning Act’s procedural requirements for adoption or amendment of zoning by-laws are substantial, and include the following requirements: (1) prior to the adoption or amendment of a zoning by-law, the planning board must hold a public hearing, after giving due notice, and provide a report with recommendations to Town Meeting; (2) notice of the planning board hearing must also be provided to the Executive Office of Housing and Livable Communities (previously called the Department of Housing and Community Development), the regional planning agency, the Planning Boards of all abutting cities and towns, and all non-resident property owners (who have

filed a request with the Clerk for notice); (3) any motion to adopt or amend a zoning by-law must be approved by a two-thirds vote of Town Meeting (except for certain housing related provisions not applicable here that can be adopted by majority vote); and (4) if a proposed adoption or amendment fails to pass at Town Meeting, it cannot be revisited within two years (with one exception). See G.L. c. 40A, § 5.

In addition to the procedural requirements for adoption (or amendment) of a zoning by-law, “changes in zoning [by-laws] protect some prior existing uses, see G.L. c. 40A, § 6, but general [by-laws] typically do not.” Spenlinhauer, 80 Mass. App. Ct. at 137-38. Because of the procedural protections required for adoption (or amendment) of zoning by-laws, “[t]he distinction between zoning and other regulations is not an empty formality[.]” Id. at 137. When a town adopts a land use by-law as a general by-law rather than as a zoning by-law, these procedural safeguards are frustrated. Id. at 137-39 (ordinance limiting overnight off-street parking invalid exercise of general police power). See also Rayco, 368 Mass. at 393-94 (by-law limiting number of trailer park licenses invalid because town failed to adopt it as a zoning by-law).

III. Because Article 26 Seeks to Regulate the Use of Land, It Must be Adopted as a Zoning Article

A. Applicable Law

We have considered whether Article 26 regulates the use of land, building and structures, such that it must comply with the Zoning Act, G.L. c. 40A, § 5. We conclude that it does regulate the use of land, buildings, and structures and therefore must be adopted as a zoning by-law. We are guided in this determination by what courts have considered when deciding whether “the nature and effect of the [by-law] is that of an exercise of the zoning power.” Rayco, 368 Mass. at 392-93. Factors the courts consider include: whether the by-law is within the town’s zoning power; whether the town historically has regulated the subject at hand in its zoning by-law Id. (“There seems little doubt that the [general] by-law could be viewed as within the scope of the town’s zoning power...[and] prior to the adoption of the [general] by-law the town’s zoning by-law dealt specifically with the subject of trailer parks.”); and whether the by-law “prohibit[s] or permit[s] any particular listed uses of land or the construction of buildings or the location of buildings or residences in a comprehensive fashion,” or instead, require[s] that “permission be obtained...based on factual circumstances surrounding individual applications.” Lovequist, 379 Mass. at 13 (wetlands protection by-law, involving individual application process, not required to be adopted as a zoning by-law). See also Spenlinhauer, 80 Mass. App. Ct. at 141-42 (“The bylaw does not simply focus on individual applications for activities in which a landowner wishes to engage but instead regulates parking on all land in single-family residence zones” and thus should have been adopted under procedures for zoning by-laws).

In determining whether the Article 26’s adoption as a general by-law was proper, we also consider (as would a court): whether the by-law’s provisions “deny or invite permission to build any structure.” Lovequist, 379 Mass. at 13; whether the by-law seeks to manage the “typical concerns usually reflected in the zoning process” such as “air pollution, noise, demands for sewers and other municipal services or the character of the community and compatibility of nearby land uses” Id.; and whether the by-law’s impact on land use is secondary to its dominant purpose of protection of some other general concern, such as the protection of wetlands values

(as in Lovequist), the regulation of earth removal (Glacier Sand & Stone Co. v. Board of Appeals of Westwood, 362 Mass. 239 (1972)), or the regulation of signs (American Sign and Indicator Corp. v. Town of Framingham, 9 Mass. App. Ct. 66, 68-69 (1980)), all of which can be accomplished through either general or zoning by-laws.

In ruling that a trailer park general by-law manifested the “nature and effect” of a zoning by-law, the Rayco court found it “significant” that prior to the by-law at issue, the town had previously dealt with the issue of trailer parks in its zoning by-law rather than its general by-laws, and had done so comprehensively. Rayco, 368 Mass. at 393 (“It is evident that this portion of the zoning by-law purported to cover this subject in a comprehensive fashion....”). Similarly, the Town of Barnstable had thoroughly regulated off-street parking “at almost any conceivable location” through its zoning by-laws before adopting the general by-law which Spenlinhauer challenged. Spenlinhauer, 80 Mass. App. Ct. at 139-40 (“The bylaw as a whole...clearly evinces the town’s historical reliance on the zoning by-law to deal with parking.”). In Lovequist, by contrast, there was no evidence “that there is or ever has been a comprehensive zoning by-law governing the wetland activities proposed by the plaintiffs.” Lovequist, 379 Mass. at 14.

Within this framework, we analyze the amendments adopted under Article 26.

B. Article 26 Regulates the Use of Land

Although presented as a general “licensing” by-law, Article 26 establishes requirements and performance standards for the “construction and operation” of ESS. These requirements are wide-ranging and include, but are not limited to:

1. protecting the health, safety, and welfare of the Town’s residents by protecting groundwater resources and risk to forested land from industrial fire incidents (Section 1);
2. prohibiting an ESS with a net generation capacity over 10 MW and regulating where an ESS can be sited by prohibiting an ESS from being sited on parcels with original pre-construction grades in excess of 15% (Section 8);
3. imposing design requirements including spacing between containers and specifications for structural support and foundations; and requiring documentation including a project summary, material safety data sheets with fire suppression information, and a hazard mitigation analysis (Section 5);
4. requiring the construction and operation of all non-residential ESS to be in compliance with numerous requirements including those related to safety, construction, electrical and communication requirements (Section 6);
5. requiring compliance with all local, state and federal regulations including the Massachusetts Endangered Species Act; Wetlands Act; Massachusetts Forest Cutting Practices; Shutesbury Board of Health regulations; the United States Endangered Species Act; National Fire Protection Association standards; the State Building code; and the Massachusetts Electrical Code (Section 6);

6. requiring an ESS to be “built and operated” in accordance with substantial design and performance standards including standards related to: noise generated during the construction and operation of an ESS; prohibiting the use of exotic or invasive plants at an ESS; requiring the design to minimize the use of concrete and other impervious materials; requiring vegetative screening that is not less than 30 feet and is composed of trees and shrubs staggered for height and density; requiring that an ESS site will be “where construction may be accomplished with minimal earth work”; and requiring that the ESS will be designed to minimize impacts to forested land and open agricultural land and fields (Section 8);

7. requiring that prior to any site disturbance and construction, the ESS work will be shown on an approved site plan that is surveyed and marked by a Professional Land Surveyor (Section 8);

8. imposing setback requirements that prohibit ground alterations (including stump removal, excavation, filling and grading, or the construction of drainage facilities, access driveways or other structural components of the ESS) within 200 feet of a drinking water well or potable water supply (Section 8);

9. additional requirements for LIESS including those related to thermal runaway and water source and quantity in the event of a fire; requiring a non-flammable buffer zone that prohibits an LIESS within 100 feet of trees or brush; requiring an onsite containment system for water runoff; and prohibiting an LIESS from being sited closer than 400 feet from a functional drinking water well (Section 9); and

10. requiring the applicant to identify all hazards associated with the operation of the ESS and finding the mitigation proposed to address the hazards “is sufficient,” to minimize disruption and harm to the Town’s natural resources including the ecological integrity and carbon sequestration/storage associated with contiguous forestland, and that the operation of an ESS will not create an unreasonable or unacceptable risk to the health, safety, and welfare of the residents of the Town and will avoid or minimize adverse effects to the natural environment (Section 11).

The proposed by-law seeks to address and regulate “typical concerns usually reflected in the zoning process.” Lovequist, 379 Mass. at 13. As detailed above, the by-law imposes extensive regulations including prohibiting ESS over 10MW in size; prohibiting ESS on parcels with original pre-construction grades in excess of 15%; requirements that prohibit “ground alternation” for an ESS within 200 feet of a drinking water well or potable water supply; requiring an onsite containment system for LIESS; and setback requirements that prohibit an LIESS from being sited closer than 400 feet from a functional drinking water well. These are types of land use requirements that are imposed through zoning by-laws.

In addition, the by-law seeks to provide a method to “deny or invite permission to build any structure.” Lovequist, 379 Mass. at 13. The by-law requires that, before an ESS may be operated, the Licensing Board must first grant a license. Section 4. Moreover, the by-law requires that both the construction and operation of the ESS be consistent with the by-law, including all required design and performance standards. Section 8. In the absence of the Licensing Board granting a license, an ESS cannot be *constructed* or operated. This land use permit-granting authority is an emblematic exercise of the Town’s zoning power.

Further, the purposes of Article 26 mirror many of the purposes of the Town's zoning by-law regulating solar with or without accessory energy storage systems. For example, the proposed general by-law's purpose is to "protect the health, safety and welfare of the residents of Shutesbury" including groundwater resources, capacity to respond to industrial accidents, and risk to the Town's forested land. Section 1. The general licensing by-law imposes several requirements for the purposes of minimizing impacts to forested land (Section 8); protecting drinking water wells (Section 8); protecting the "environmental fate of any runoff water not contained" (Section 9); and ensuring that the operation of an ESS will not "create an unreasonable or unacceptable risk to the health, safety, and welfare to the residents of Shutesbury, and, to the greatest extent feasible, avoid or minimize adverse effects to the natural environment. (Section 11). Further, the by-law requires the location of an ESS to be sited such that it will "minimize disruption and harm to the natural resources of Shutesbury, especially in regard to the ecological integrity and carbon sequestration/storage associated with contiguous forestland." Section 11.

These purposes and requirements are "typical of the concerns usually reflected in the zoning process." Lovequist, 379 Mass. at 13-14. Indeed, the Town's existing zoning by-law, Article 8.10, regulating ground-mounted solar electric installations (that would encompass those that include an ESS) includes as its purpose "address[ing] public safety, protection and preservation of Town infrastructure (including roads), public nuisance...impacts upon environmental, scenic, and historic resources...; protecting large contiguous blocks of forest back-land based on the understanding that large unfragmented tracts provide many ecological benefits including improved water and air quality, sequestration of carbon, reduced movement of invasive species, provision of wildlife habitat..." Moreover, the Town's existing zoning by-laws as a whole include as their purpose "...the protection of large contiguous tracts of forest land to maintain commercial forestry as a viable agricultural activity; the protection of water in the watersheds that supply drinking water to Amherst, Massachusetts, the Boston metropolitan area, and the Town of Shutesbury;...the protection of significant wildlife habitat in a healthy forest ecosystem..." Zoning By-laws, Section 1.1, "Purpose." The preservation of "unique natural, ecological or other values" is a classic exercise of zoning power. Johnson v. Town of Edgartown, 425 Mass. 117, 119 (1997) (upholding Town's three-acre minimum lot requirement for residential uses in a certain district in order to protect the public health, water, water supply and water resources). These shared purposes of the new Article 26 and the Town's existing zoning by-laws weigh in favor of the conclusion that Article 26 demonstrates "the nature and effect" of a zoning by-law. Rayco, 368 Mass. at 392-93.

We have also considered whether the Town has previously regulated ESS through a zoning by-law. As the court in Spenlinhauer noted, one factor in determining whether a particular topic should be regulated by way of a zoning by-law, rather than a general by-law, is how the town has historically regulated the topic. Id. at 140 ("The bylaw as a whole, then, clearly evinces the town's historical reliance on the zoning bylaw to deal with parking."). See also Rayco, 368 Mass. 385 (holding that a trailer park regulation should have been adopted as a zoning by-law rather than a general by-law, in part because the town's zoning by-law had previously dealt specifically with trailer parks). Here, Shutesbury has a history of regulating ESS uses (and solar uses that include ESS) by way of a zoning by-law. See AGO decision in Case # 10856 disapproving a zoning by-law prohibiting ESS as a principal use because it conflicts with G.L. c. 40A, § 3 and disapproving amendments to Section 8.10, Ground-Mounted Solar Electric

Use Installations because the Planning Board hearing notice failed to comply with G.L. c. 40A, § 5 in that a map that was one of the subject matters of the proposed Article was not identified in the notice, and this omission was misleading to the voters⁴; see also AGO decision in Case # 9829 approving Article 15 that adopted a new “Ground-Mounted Solar Electric Installation by-law” that regulated solar installations and “related equipment.”⁵

Although the amendments to Section 8.10 adopted under Article 3 from the January 19, 2023 Special Town Meeting were disapproved by this office, it is important to note that those proposed amendments sought to regulate ESS in much the same manner as the Town now seeks to do under this general licensing by-law. For example, Section 8.10-6 (E) proposed to require: (1) “[s]pacing of energy storage units and other fire prevention installation measures for the ESS shall be designed and documented that follow current safety-related best practices to mitigate thermal runaway among energy storage units”; (2) “[o]n-site water storage shall be available for firefighting adequate to the needs to mitigate thermal runaway at the ESS as indicated in the hazard mitigation analysis”; (3) an “ESS shall be designed so that in the instance of fire, noxious gases resulting from combustion will be contained or filtered, to the maximum extent practicable, mitigating the direct venting into the environment from containers or storage units associated with the ESS;” and (4) that an ESS shall be sited no less than 400 feet from the nearest water well.

These same proposed zoning provisions are now incorporated into the Town’s proposed ESS licensing general by-law. See Section 9 (“[s]pacing of LIESS units and other fire prevention measures for the LIESS as established by NFPA-855 or its successor; “[t]he water supply shall be either on-site or directly accessible to the ESS site;” “[a]n LIESS shall be designed so that in the instance of fire, noxious gases resulting from combustion will be contained or filtered, to the maximum extent practicable, mitigating the direct venting into the environment, unless otherwise recommended by NFPA-855 or its successor;” and “[a]n LIESS shall not be located closer than 400 feet to a functional drinking water well.”) See also Section 9 related to requirements to mitigate thermal runaway.

Moreover, Section 8.10 of the Town’s current zoning by-law regulates solar uses and structures which includes related equipment such as ESS, imposes extensive zoning regulations including provisions regarding required setbacks and certain design, performance and environmental standards including minimizing visual impacts through vegetative buffers, prohibiting the use of exotic plants, a 30 foot vegetive screen, and a requirement that “[p]rior to any site disturbance and construction, the limits of the work shown on the approved site plans shall be surveyed and clearly marked by a Professional Land Surveyor.” See Sections 8.10.5, 8.10.6, and 8.10.7, respectively. These same zoning regulations are also imposed under the proposed general licensing by-law.

⁴ Article 3, disapproved by this Office in Case # 10856, sought to regulate both principal use ESS (Table Section 3.1-1) and accessory use ESS (Section 8-10.6 (E) regarding ESS regulations).

⁵ See Section 8.10-2, “Applicability,” Subsection B, that states “[t]his Section 8.10 also pertains to physical modifications that materially alter the type, configuration, or size of Ground-Mounted Solar Electric Installations or *related equipment*.” (emphasis added).

We note that the general licensing by-law includes other siting regulations that go beyond the Town's existing zoning requirements in Section 8-10. For example, Section 8 of the general by-law imposes an additional siting regulation that prohibits certain "ground alterations"⁶ of an ESS within 200 feet of a drinking water well. In addition, the Town's proposed general by-law would prohibit ESS over 10MW but the existing zoning regulations contain no such prohibition. Therefore, it is possible that an ESS allowed under the Town's zoning by-laws would be prohibited under the Town's general licensing by-law.⁷ A general by-law may not be effective to change earlier zoning by-law provisions governing a particular subject matter where, as here, the procedural requirements of Chapter 40A, the Zoning Act, have not been observed. See Rayco, 368 Mass. at 394 (concluding that by-law limiting trailer-park operator licenses was insufficient to amend town's previous zoning by-law regulating such parks where record did not demonstrate that license limitation had been enacted in accordance with the procedural requirements of Chapter 40A); see also Valley Green Grow, Inc. v. Town of Charlton, 2019 WL 1087930, at *1 (Mass. Land Ct. Mar. 7, 2019) (declaring invalid a general by-law prohibiting all commercial marijuana uses enacted by special town meeting several months after town had enacted zoning to govern these uses at its annual town meeting).

In addition, the general by-law does not merely supplement the regulation of a use already governed by the zoning by-laws. Rather, the general by-law seeks to impose extensive regulations, including prohibitions on ESS over a certain size (10 MW) or "ground alterations" of the ESS within 200 feet from drinking water wells, despite the use being otherwise allowed under the zoning by-laws without these siting requirements. Further supporting the conclusion that the general by-law provisions intend to regulate zoning matters, Section 12 of the general licensing by-law includes provisions related to decommissioning and removal requirements and authorizes the "Special Permit Granting Authority" to allow the owner or operator of the ESS to leave landscaping or designated below-grade foundations and electric lines in order to minimize erosion and vegetation disruption. The by-law's authorization to the "Special Permit Granting Authority" is a clear reference to zoning provisions.⁸ Where a town has enacted comprehensive zoning by-laws governing a particular use or activity within its borders, amendments to that regulation must occur within the zoning framework. Id. at 10 ("Having permitted marijuana use through its zoning bylaw, Charlton could only change or bar that use by amending the zoning bylaw. It could not do what it did here – bar the previously allowed zoning use by Warrant Article 2, a general bylaw.").

For these reasons, the general by-law proposed under Article 26 demonstrates "the nature and effect" of an exercise of zoning power, without complying with any of the procedural

⁶ Section 8 prohibits "ground alterations, such as stump removal, excavation, filling, and grading, or the construction of drainage facilities, access driveways or other structural components of the ESS, are prohibited within 200 feet of a drink water well or potable water supply."

⁷ The Town's zoning by-laws, Section 8.10-7 (D) prohibit "ground alterations" within 100 feet of any wetlands but have no setback requirement as it relates to drinking water wells.

⁸ Further, the Town's existing zoning by-laws, Section 8.10-9 (B), related to decommissioning contains the same authorization: "The Special Permit Granting Authority may allow the owner or operator to leave landscaping or designated below-grade foundations and electric lines in order to minimize erosion and disturbance to vegetation."

safeguards required by the Zoning Act, G.L. c. 40A, § 5. See Hancock Village I, LLC v. Town of Brookline, 2019 WL 4189357 (Mass. Land Ct. Sept. 4, 2019), citing Rayco, 368 Mass. at 385 (“A municipality cannot utilize its general police power to enact a bylaw which is, at its essence, a zoning regulation, if it does not resort to G. L. c. 40A; doing so would frustrate the purpose and implementation of the statute.”)). Because the Town did not comply with G.L. c. 40A, § 5, we must disapprove the proposed by-law.

IV. The Town Cannot Circumvent the Protections of G.L. c. 40A, § 3 for a Protected Use by Adopting the By-law as a General By-law

Solar energy facilities and related structures, such as ESS, are a protected use under G.L. c. 40A, § 3. By extensively regulating this protected use through a general by-law, the Town would impermissibly circumvent the protections of G.L. c. 40A, § 3. We disapprove Article 26 on this basis as well, as explained below.

Solar energy facilities and related structures have been protected under G.L. c. 40A, § 3 for almost 40 years, since 1985 when the Legislature passed a statute codifying “the policy of the commonwealth to encourage the use of solar energy.” St. 1985, c. 637, §§ 7, 8. Id. § 2. Section 3’s solar provision grants zoning protections to solar energy systems and the building of structures that facilitate the collection of solar energy as follows:

No zoning . . . bylaw shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

In adopting Section 3, the Legislature determined that certain land uses are so important to the public good that the Legislature has found it necessary “to take away” some measure of municipalities’ “power to limit the use of land” within their borders. Attorney General v. Dover, 327 Mass. 601, 604 (1950) (discussing predecessor to G.L. c. 40A, § 3); see Cnty. Comm’rs of Bristol v. Conservation Comm’n of Dartmouth, 380 Mass. 706, 713 (1980) (noting that Zoning Act as a whole, and G.L. c. 40A, § 3, specifically, aim to ensure that zoning “facilitate[s] the provision of public requirements”). To that end, the provisions of Section 3 “strike a balance between preventing local discrimination against” a set of enumerated land uses while “honoring legitimate municipal concerns that typically find expression in local zoning laws.” Trustees of Tufts Coll. v. City of Medford, 415 Mass. 753, 757 (1993). Over the years, the Legislature has added to the list of protected uses, employing different language—and in some cases different methods—to limit municipal discretion to restrict those uses.

In codifying solar energy and related structures as a protected use under Section 3, the Legislature determined that “neighborhood hostility” or contrary local “preferences” should not dictate whether solar energy systems and related structures are constructed in sufficient quantity to meet the public need. See Newbury Junior Coll. v. Brookline, 19 Mass. App. Ct. 197, 205, 207-08 (1985) (discussing educational-use provision of Section 3); see also Petrucchi v. Bd. of Appeals, 45 Mass. App. Ct. 818, 822 (1998) (explaining, in context of childcare provision, that Legislature’s “manifest intent” when establishing Section 3 protected use is “to broaden . . . opportunities for establishing” that use). Indeed, the fundamental purpose of Section 3 is to “facilitate the provision of public requirements” that may be locally disfavored. Cty. Comm’rs of

Bristol, 380 Mass. at 713.

The Supreme Judicial Court reaffirmed this principle in Tracer Lane II Realty, LLC v. City of Waltham, 489 Mass. 775 (2022). In ruling that Section 3's protections required Waltham to allow an access road to be built in a residential district for linkage to a solar project in Lexington, the Court explicitly noted that "large-scale systems, not ancillary to any residential or commercial use, are key to promoting solar energy in the Commonwealth." *Id.* at 782 (citing Executive Office of Energy and Environmental Affairs, Massachusetts 2050 Decarbonization Roadmap, at 4, 59 n.43 (Dec. 2020) ("the amount of solar power needed by 2050 exceeds the full technical potential in the Commonwealth for rooftop solar, indicating that substantial deployment of ground-mounted solar is needed under any circumstance in order to achieve [n]et [z]ero [greenhouse gas emissions by 2050]")). The Court explained that whether a by-law facially violates Section 3's prohibition against unreasonable regulation of solar systems and related structures will turn in part on whether the by-law promotes rather than restricts this legislative goal. *Id.* at 781. While municipalities do have some "flexibility" to reasonably limit where certain forms of solar energy may be sited, the validity of any restriction ultimately entails "balanc[ing] the interest that the . . . bylaw advances" against "the impact on the protected [solar] use." *Id.* at 781-82.

By statute, ESS qualify as "solar energy systems" and "structures that facilitate the collection of solar energy" and are protected by G.L. c. 40A, § 3. General Laws Chapter 164, Section 1, defines "energy storage system" as "a commercially available technology that is capable of absorbing energy, storing it for a period of time and thereafter dispatching the energy."⁹ See also NextSun Energy LLC v. Fernandes, No. 19 MISC 000230 (RBF), 2023 WL 3317259, at *14 (Mass. Land Ct. May 9, 2023), amended, No. 19 MISC 000230 (RBF), 2023 WL 4156740 (Mass. Land Ct. June 23, 2023), judgment entered, No. 19 MISC 000230 (RBF), 2023 WL 4145901 (Mass. Land Ct. June 23, 2023) (finding that battery energy storage system is entitled to Section 3 solar protections).

Solar uses, including ESS, are a use protected under G.L. c. 40A, § 3. The Town's general licensing by-law attempts to impose extensive regulations on the construction and operation of ESS, including a complete prohibition under the general by-laws of any ESS over 10MW. Certain requirements could potentially be an unreasonable regulation in violation of Section 3's zoning protections, even if they were properly adopted as a zoning by-law.¹⁰

⁹ The development of energy storage systems is critical to the promotion of solar and other clean energy uses. On August 9, 2018, An Act to Advance Clean Energy, Chapter 227 of the Acts of 2018 ("Clean Energy Act"), was signed into law by Governor Baker. Section 20 of the Clean Energy Act established a 1,000 MWh energy storage target to be achieved by December 31, 2025. The Clean Energy Act also required DOER to set targets for electric companies to procure energy dispatched from battery energy storage systems. <https://www.mass.gov/info-details/esi-goals-storage-target> (last visited November 12, 2024).

¹⁰ As part of this decision, we make no determination as to whether the amendments would be found consistent with the G.L. c. 40A, § 3 protections afforded to solar energy systems and related structures such as ESS, had the amendments been adopted in accordance with G.L. c. 40A, § 5 as a zoning by-law rather than under Article 26 as a general by-law. We note that the provisions of Article 26 contain extensive siting and operational requirements. If these extensive provisions were adopted as a zoning by-law and then used to deny an ESS, or are otherwise applied in ways that make it impracticable or

Therefore, the prohibitions, limitations and requirements on the construction and operation of ESS, through a general by-law would impermissibly circumvent the G.L. c. 40A, § 3 protections afforded to ESS uses. For this additional reason, and because the by-law regulates the use of land, buildings and structures for ESS, without complying with the Zoning Act, G.L. c. 40A, including G.L. c. 40A, § 3's limitations on the subject matter of zoning by-laws, we disapprove Article 26.

V. Conclusion.

The general by-law proposed under Article 26 demonstrates the "the nature and effect" of an exercise of zoning power. See Rayco, 368 Mass. at 392-93. Before imposing the zoning-like requirements found in the proposed by-law, the Town must comply with the procedural safeguards found in the Zoning Act, G.L. c. 40A, § 5. Because the Town did not comply with G.L. c. 40A, § 5, we must disapprove the proposed by-law. In addition, because the by-law would impermissibly circumvent the G.L. c. 40A, § 3 protections afforded to solar energy facilities and related structures such as ESS, without complying with the Zoning Act, G.L. c. 40A, including G.L. c. 40A, § 3's limitations on the subject matter of zoning by-laws, we disapprove Article 26.

Note: Pursuant to G.L. c. 40, § 32, neither general nor zoning by-laws take effect unless the Town has first satisfied the posting/publishing requirements of that statute.

Very truly yours,

ANDREA JOY CAMPBELL
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uneconomical to build solar energy systems and related structures (including ESS), such applications may run a serious risk of violating G.L. c. 40A, § 3. See Tracer Lane II, 489 Mass. at 781 (Waltham's prohibition on solar energy systems in all but one to two percent of its land area violates the solar energy provisions of G.L. c. 40A, § 3); see also PLH LLC v. Town of Ware, No. 18 MISC 000648 (GHP), 2019 WL 7201712, at *3 (Mass. Land Ct. Dec. 24, 2019), aff'd, 102 Mass. App. Ct. 1103 (2022) ("the review of the municipality conducted under the bylaw's special permit provisions must be limited and narrowly applied in a way that is not unreasonable, is not designed or employed to prohibit the use or the operation of the protected use, and exists where necessary to protect the health, safety or welfare."). Therefore, should the Town wish to revisit the requirements proposed under Article 26 as a zoning by-law amendment at a future Town Meeting, we encourage the Town to consult closely with Town Counsel to ensure that any proposed zoning by-law is consistent with G.L. c. 40A, § 3.

Exhibit B

7. Solicit or canvass or conduct any other activity at any residence where there is a sign posted prohibiting the same, without express prior permission of the occupant.
8. Solicit, canvass, or conduct any other activity at any residence without express prior permission of an occupant, before 9:00 am or after 9:00 pm, where there is no sign posted otherwise limiting solicitation or the hours of solicitation or such activities.
9. Utilize any form of endorsement from any department head currently employed or serving the Town of Shutesbury.
10. Solicit, canvass or conduct any other activity at any residence in a threatening, abusive, or illegal fashion.

Article 26.

Municipal Energy Storage General Bylaw

To see if the Town will vote to adopt the Municipal Energy Storage Systems Bylaw as a general bylaw for the Town of Shutesbury or take any other action related thereto.

Requires Majority Vote, Sponsor Selectboard

Note: The underlined sections are newly added to the

GENERAL BYLAW REGARDING ENERGY STORAGE SYSTEMS

1. Purpose

The purpose of this bylaw is to protect the health, safety, and welfare of the residents of Shutesbury while supporting appropriately sited energy infrastructure.

It is understood that:

- All residents of the Town of Shutesbury rely upon private wells for clean potable water. Given this, groundwater resources must be protected from contamination and disruption in order to meet current and future residential needs.
- Shutesbury is a small rural town and its emergency response system is staffed, trained, and equipped to respond to residential house fires, minor wild fires, traffic accidents, and similar-scale emergencies. The Town's capacity to effectively respond to large-scale or complex industrial incidents is limited. Surrounding rural towns capable of rendering mutual aid are similarly staffed and equipped. Therefore, industrial facilities with the potential to cause large or complex fires may pose a heightened risk to public health and safety.
- The Town of Shutesbury is approximately 92 percent forested and the

effects of climate change (e.g. increased frequency of drought conditions, decreased forest health, etc.) may increase the risk of catastrophic wildfires, including those caused by industrial fire incidents.

2. Definition

Energy Storage System (ESS) shall mean any mechanical, thermal, electrical, chemical, electrochemical, or other device that is used to store energy for use by the utility grid or to serve as an onsite energy backup system. Technologies may include but are not limited to pumped hydro, compressed air, molten salt (thermal), solid state, lithium-ion battery, lead-acid battery, flow battery, hydrogen, or flywheel.

3. Applicability

This bylaw shall apply to all non-residential operations of Energy Storage Systems in the Town of Shutesbury. Subsequent references to ESS shall exclusively apply to non-residential uses of energy storage systems.

4. Energy Storage System Licensing

To operate a non-residential energy storage system in the Town of Shutesbury, an Energy Storage System License shall be required.

The Energy Storage System Licensing Board (the Licensing Board) shall be the license granting authority for energy storage systems. The Energy Storage System Licensing Board shall consist of seven (7) voting members: All three members of the Select Board; one member appointed by the Conservation Commission; one member appointed by the Board of Health; one member appointed by the Planning Board; one member appointed by the Zoning Board of Appeals.

An application for an Energy Storage System shall be considered submitted to the Town of Shutesbury if it has been received by registered mail or hand delivered to the Town Clerk. The Licensing Board shall convene within 65 days after receipt of an Energy Storage System application the purpose of holding a public hearing regarding an application for an Energy Storage System License. The Licensing Board shall have up to 60 days from the close of the hearing to render a decision.

At its discretion the Licensing Board may create forms and procedures to apply to the energy storage system application and review process. The Licensing Board shall designate an individual to oversee and coordinate the application review process as defined in this bylaw or as determined by the Licensing Board.

The Licensing Board shall require all documentation established in this bylaw and may require additional data and documentation, at its discretion, to provide a basis for a decision. The Licensing Board is empowered to approve,

reject, or approve with conditions any application for a Energy Storage System License. Licensing approval shall require a two-thirds vote of the voting members of the Licensing Board. If approved, applicant will receive an Energy Storage System License from the Town of Shutesbury.

If approved, an ESS license shall be in effect for a period determined by the Licensing Board of no less than ten years and no greater than twenty years. Renewal of an ESS License shall require a process whereby the Licensing Board can meet the requirements set out in Section 11, Licensing Findings.

5. Required Documentation

To receive a license for operations from the Energy Storage System Licensing Board, an applicant shall submit an Energy Storage System application and the required documents. Two copies of each document shall be provided in hardcopy and one copy in digital form.

- A. An application for an Energy Storage System License shall be provided to the Town Clerk and shall include the following information:
 - Name, address, phone and email contact for the applicant.
 - Name, address, phone and email contact for the landowner.
 - Name, address, phone and email contact for the site operator.
 - Location of the proposed ESS storage system.
 - Nameplate power rating, storage capacity, and net generation capacity of the proposed ESS equipment.
- B. The following documentation is required for an ESS license application to be considered complete:
 1. A project summary and site plan for the ESS. Additional copies of the project summary shall be mailed or hand delivered to the Fire Chief, Police Chief, and the Emergency Management Director in addition to the ESSLB.
 2. Material Safety Data Sheets for the energy storage system unit and components, including but not limited to fire suppression chemicals that would be used in the case of a fire at the ESS.
 3. A Hazard Mitigation Analysis as required by the applicable National Fire Protection Association standards in effect at the time of application.
 4. If applicable, a completed MA DEP WPA Form 4a. Abbreviated Notice of Resource Area Delineation (ANRAD) that includes a wetland evaluation and map of the site. The ANRAD shall be submitted to the Conservation Commission, with copy to the ESSLB.
 5. Written proof of regulatory compliance as outlined in Section 6 and a cover letter signed and dated by the applicant attesting to said compliance.
 6. Design specifications including:
 - a. For Battery Energy Storage Systems
 - i. Energy storage units including cells, modules, and rack systems including manufacturer and model and unit levels of storage cells; pertinent UL test data.
 - ii. Energy storage containers including but not limited to the general physical layout relative to doors, access panels, vents;

- interior layout of cabinets, racks, ductwork, compartmentation; ventilation system; construction materials.
- iii. Exterior of containers including spacing between containers and the specifications of structural supports/foundations for the containers.
- iv. Fire and explosion prevention and mitigation information including venting system operation; location of detectors and types of detectors/sensors including manufacturer and model, accuracy, and sensitivity; suppression system design, including type of agent, system layout, application rate, source.
- b. For Non-Battery Energy Storage Systems
Additional specifications and details as determined by the Licensing Board.
- 7. Other analyses as may be requested by the Licensing Board related to the public health, safety, or welfare and/or the operation of the proposed ESS equipment.

6. Regulatory Compliance for Energy Storage Systems

- All ESS in the Town of Shutesbury shall be consistent with all applicable local, state and federal regulations, including but not be limited to:
- Massachusetts Endangered Species Act (321 CMR 10.00)
- Massachusetts Wetlands Protection Act (310 CMR 10.00)
- Massachusetts Environmental Policy Act (301 CMR 11.00)
- Massachusetts Forest Cutting Practices (302 CMR 16.00)
- Shutesbury General Wetlands Protection Bylaw
- Shutesbury Board of Health guidelines
- United States Endangered Species Act (16 U.S.C. §1531 *et seq.* (1973)
- National Historic Preservation Protection Act (6 U.S.C. §§ 470a *et seq.*)

No ESS License shall be issued until all local, state, and federal requirements have been met, all required approvals issued, and documentation provided to the Licensing Board according to the process established by this bylaw.

- The construction and operation of an ESS shall be consistent with all applicable local, state, and federal safety, construction, electrical, and communications requirements, including but not limited to: National Fire Protection Association (NFPA) "Standards for the Installation of Stationary Energy Storage Systems" (NFPA-855)
- Massachusetts State Building Code (780 CMR)
- Massachusetts Comprehensive Fire Safety Code (527 CMR 1.0)
- Massachusetts Electrical Code (527 CMR 12.00).

7. Emergency Response Requirements

- A. The applicant shall provide an Emergency Operations Plan (EOP) as specified in the applicable NFPA standards in effect at the time of construction. Subsequent owners or operators will update the EOP as emergency response standards and guidance evolve.
- B. The owner or operator shall ensure that Shutesbury fire, police, and emergency management personnel, as designated by the Licensing Board, are provided training and equipment sufficient to safely and effectively respond to an ESS emergency. The location of and access to equipment shall be determined by industry best practice for deployment in an emergency situation.
- C. The owner or operator will provide the Shutesbury Fire and Police Chiefs with the means to access the facility perimeter gate in case of emergency.
- D. Accurate and up-to-date 24-hour emergency contact information for ESS operators and all means of shutting down and/or disconnecting the ESS shall be clearly posted, where appropriate.
- E. Accurate and up-to-date 24-hour emergency contact information for ESS operators shall be provided to the Shutesbury Fire Chief, Police Chief, and Emergency Management Director.

8. Design and Performance Standards

Energy Storage Systems in the Town of Shutesbury shall be built and operated with the following design and performance standards.

A. Size

The U.S. Energy Information Administration defines small scale ESS as having less than 1 MW of net generation capacity. No license is required for an ESS with a net generation capacity of less than 1MW. Energy storage systems with a net generation capacity greater than 1MW and no more than 10 MW shall require license approval by the Shutesbury ESS Licensing Board. No ESS with a net generation capacity of greater than 10 MW shall be licensed.

B. Noise Mitigation

Noise generated during construction and operation of the ESS, either episodic or continual, shall be minimized and comply with local and state regulations, including Massachusetts Noise Control Regulation (310 CMR 7.10). Construction or maintenance activities shall be limited to Monday to Friday and shall not occur between the times of 7:00 p.m. and 7:00 a.m., except in case of an emergency that would affect public safety or the integrity of operations.

C. Visual Impacts

- i. An ESS shall be constructed in a manner to minimize visual impacts including preserving natural vegetation to the maximum extent practicable, blending in equipment with the surroundings, and adding vegetative buffers to provide an effective visual barrier from adjacent roads and driveways, and to screen abutting residential dwellings. A

vegetative screen shall be no less than 30 feet and will be composed of trees and shrubs staggered for height and density that shall be properly maintained.

- ii. When possible, plantings shall be a diversity of plant species, with a preference for species native to New England. Use of exotic or invasive plants at the ESS, as identified by the most recent copy of the "Massachusetts Prohibited Plant List" maintained by the Massachusetts Department of Agricultural Resources, is prohibited.
- iii. Landscaping shall be maintained and replaced as necessary by the owner or operator.

D. Utility Connections.

Every reasonable effort shall be made to place all utility connections underground, depending on appropriate soil conditions and topography of the site and any requirements of the utility provider, however electrical transformers, wires, or other utility interconnections may be above ground if necessary or as required by the utility provider.

E. Land Clearing, Soil Erosion, Stormwater, and Land Impacts

- a. Prior to any site disturbance and construction, the limits of the work shown on the approved site plan shall be surveyed and clearly marked by a Professional Land Surveyor. Upon completion of the survey, the Professional Land Surveyor shall verify to the Licensing Board, in writing, that the limit of work, as shown on the approved site plans, has been established on site.
- b. Erosion and sedimentation guidelines or "best management practices" will be implemented during the entire construction process and maintained until the site is stabilized and a properly designed stormwater management system is installed and operational. Applicants and/or owners and operators will ensure all applicable erosion control and stormwater management guidelines are strictly adhered to.
- c. The design of the ESS shall minimize the use of concrete and other impervious materials to the maximum extent practicable.
- d. Clearing of natural vegetation shall be limited to that necessary for the safe construction, operation, and maintenance of the ESS. Grading that substantially disturbs the existing soil profile and structure should be avoided; sites shall be selected where construction may be accomplished with minimal earth work.
- e. Locating ESS, including access driveways and any associated drainage infrastructure on original, pre-construction grades in excess of 15% is prohibited.
- f. ESS shall be designed to minimize impacts to forested land and open agricultural land and fields, even if not in production.

F. Water Supply and Stormwater Protection

- a. The use of agents containing per- and polyfluoroalkyl substances (PFAS) for fire suppression or cooling is prohibited.
- b. In order to provide an adequate intervening land area for the infiltration of stormwater runoff from an ESS, ground alterations, such as stump

removal, excavation, filling, and grading, or the construction of drainage facilities, access driveways, or other structural components of the ESS, are prohibited within 200 feet of a drinking water well or potable water supply.

- c. The Licensing Board may impose conditions to contain and control stormwater runoff that might negatively impact drinking water or related hydrologic features.

9. Special Requirement and Standards for Lithium-Ion Energy Storage Systems (LIESS)

Defective, mismanaged, or damaged, lithium-ion batteries can fail and undergo a process known as “thermal runaway,” which is the rapid uncontrolled release of heat energy from a battery cell that may cause a chain reaction in neighboring battery cells and result in a larger battery fire or explosion. In a commercial-scale LIESS, this may pose a risk to public health, safety, and welfare.

Background on Lithium-Ion Energy Storage Systems

- According to the International Association of Fire and Rescue Services, “Lithium-ion batteries are fire prone and are notoriously difficult to extinguish - the more lithium the larger the fire”.
- As reported by the Electric Power Research Institute, “fire management investigations have ... recommended large water densities on the order of 500 hundred gallons per minute for a 1MWh [energy storage] system.”
- The California Public Utility Commission states that “In practice, thermal runaway propagation in large stationary [energy storage] systems have not been successfully “extinguished” (a misleading fire-related term) by emergency responders once it starts. Limitations on exactly where water can be safely applied, coupled with the very large volumes of water needed, have made water spray as an emergency treatment of thermal runaway mostly ineffective with stationary energy systems in practice.”

Given the increased risk posed to public health, safety, and welfare, applications for a LIESS license shall require the following additional documents:

- a. A report prepared by an expert with relevant LIESS emergency response or industrial firefighting credentials analyzing, under both “most-likely” and “worst-case” scenarios, 1) the extent and effects of a thermal runaway event affecting the facility; 2) the quantity of water needed to effectively control a thermal runaway event and/or resultant fire or explosion, including the estimated application rate (gallons per minute) and duration (minutes, hours, days); and 3) potential sources of water sufficient to meet the needs identified above.
- b. A detailed plan for how runoff water from an emergency response action will be handled. This shall include information on:
 - i. the location, design, capacity, and materials associated with any

- containment system
- ii. the identification and likely concentrations of any potential contaminants in runoff water
- iii. the amount and percentage of runoff water likely to be contained.
- iv. analysis of the potential environmental fate of any runoff water not contained, especially in relation to groundwater resources and including the likely pathway for runoff
- v. information about the handling and removal process for any contained water.
- c. An analysis regarding the effects of a thermal runaway event on the LIESS

LIESS shall also have the following additional operational standards:

- a. To minimize the likelihood of forest fires, a non-flammable buffer of no less than 100 feet, with no trees or brush shall be maintained around the LIESS
- b. Spacing of LIESS units and other fire prevention measures for the LIESS as established by NFPA-855 or its successor.
- c. An LIESS shall be designed so that in the instance of fire, noxious gases resulting from combustion will be contained or filtered, to the maximum extent practicable, mitigating the direct venting into the environment, unless otherwise recommended by NFPA-855 or its successor.
- d. LIESS shall be required to have ready access to consistent and sufficient water supply to prevent or contain thermal runaway, in accordance with national or Massachusetts best practices. The water supply shall be either on-site or directly accessible to the ESS site. The supply and duration of water shall be consistent with the worst-case scenario identified in the report required in Section 9a of this bylaw
- e. Water runoff from firefighting and heat reduction efforts related to an LIESS emergency response shall be contained onsite to prevent, to the maximum extent practicable, potential contamination of surface or groundwater resources.
- f. To minimize the risk of contamination to public or private water supplies, an LIESS shall not be located closer than 400 feet to a functional drinking water well.

10. Licensing Board Use of Independent Consultants

The Licensing Board, at the expense of the applicant, may seek the services of an independent consultant to conduct a professional review and advise the Board on technical aspects of the applicant's proposal, in compliance with Mass. General Laws Chapter 44 Section 53G, or any amendments thereto.

11. Required Licensing Findings

No license to construct and operate an ESS shall be issued unless the Licensing Board finds that:

- A. All required documents were submitted for an application and the Licensing Board determines these provided sufficient data upon which to assess the proposed ESS.
- B. The applicant has adequately identified all hazards associated with the operation of the ESS, especially those related to potential fires, explosions, and groundwater contamination, and that mitigation proposed to address these hazards is sufficient.
- C. The location of the ESS will minimize disruption and harm to the natural resources of Shutesbury, especially in regard to the ecological integrity and carbon sequestration/storage associated with contiguous forestland
- D. Emergency response plans and available resources are sufficient to effectively address hazards associated with potential fires, explosions, or other incidents at the ESS.
- E. That the operation of the ESS will not create an unreasonable or unacceptable risk to the health, safety, and welfare to the residents of Shutesbury, and, to the greatest extent feasible, avoid or minimize adverse effects to the natural environment.

12. Discontinued Operations

When an ESS terminates operation, the following abandonment and decommissioning requirements shall be met.

A. Removal Requirements

- i. Any ESS which has discontinued operations because it has reached the end of its useful life, has been abandoned, or has been permanently taken offline, shall be removed.
- ii. The owner or operator shall physically remove the ESS no later than 150 days after the date of discontinued operations.
- iii. The owner or operator shall notify the Town by certified mail, of the proposed date of discontinued operations and plans for removal.

B. Removal shall consist of:

- i. Physical removal of all components of the ESS, including but not limited to structures, foundations, equipment, security barriers, and on-site above-ground transmission lines. Associated off-site utility interconnections shall also be removed if no longer needed.
- ii. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
- iii. Restoration of the site to its natural preexisting condition, including stabilization or re-vegetation of the site as necessary to minimize erosion. The Special Permit Granting Authority may allow the owner or operator to leave landscaping or designated below-grade foundations and electric lines in order to minimize erosion and disruption to vegetation.

C. Removal by the Town

If the owner or operator of an ESS fails to remove it in accordance with the requirements of this Bylaw within 150 days of discontinued

operations or abandonment, the Town may enter the property and physically remove the ESS at the owner's expense, drawing from the escrow account or upon the bond or other financial surety provided by the applicant.

13. Insurance & Financial Surety

Any applicant for a license to construct and operate an ESS shall provide the following:

- A. Proof of liability insurance in an amount of \$25 Million per occurrence/\$50M total, to cover loss or damage to person(s) and structure(s) occasioned by the use or failure of any ESS operations including coverage for fires, flooding, and well water contamination.
- B. A cash escrow account or other form of financial surety (e.g. a bond) acceptable to the Town of Shutesbury, pursuant to M.G.L. c. 44, §53G1/2 to be provided in the event of final licensing approval of the application and which shall be held by the Town, to cover the cost of removal, recycling, and disposal of the ESS and remediation and/or restoration of the site in the event the Town must remove the ESS and remediate and/or restore the site to its natural preexisting condition. The final amount and form of surety must be determined to be reasonable by the Licensing Board as the granting authority, but in no event should the amount exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein unless the Licensing Board makes a specific, documented finding that a higher amount is required to ensure removal and compliance for the ESS in question. The project applicant shall submit a decommissioning plan with a fully inclusive estimate of the costs associated with removal and site restoration, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal and site restoration costs due to inflation. Said estimated cost shall not deduct the value of material recycling given the potential expense and difficulty of recycling. Said surety in its full amount shall be presented to the Licensing Board prior to the commencement of construction. All legal documents required to enable the Town of Shutesbury to exercise the rights and responsibilities under the plan to enter the property, decommission the ESS, and physically remove it and restore the site to its natural condition shall be included in the decommissioning plan.

14. Waiver

Upon written request by the applicant, the Licensing Board may waive or reduce any requirement of this bylaw by the same majority vote required for the license itself, upon written findings included in the license if:

- A. Special circumstances of the site, its surroundings, or the proposal that negate the need for imposition of the requirement, or the objectives of this section may be met in alternative manner; AND
- B. That such a waiver or reduction will not derogate from the public purposes, protections, and intent of this bylaw.

Any waiver request must be made by the applicant at least 14 days prior to a public meeting of the Licensing Board where the waiver shall be considered. An affirmative or negative vote on a waiver shall not be construed as an approval or disapproval of the license sought.

15. Enforcement

The Licensing Board shall have the authority to enforce the provisions of this bylaw through the issuance of cease-and-desist orders, criminal court actions, or civil court actions.

16. Severability & Conflicts

The invalidity of any section or provision of this bylaw shall not invalidate any other section or provision thereof. If any provisions of this bylaw are found to be in conflict with provisions of other town bylaws, the provisions of this bylaw shall supersede the other bylaws.

Article 27.

Shutesbury Lighting Zoning Bylaw

To see if the Town will vote to amend the Town of Shutesbury Zoning Bylaw by adding Section 8.12 Lighting, or take any other action related thereto.

(Sponsor Planning Board) Requires 2/3rds Vote

8.12 Lighting

8.12-1. Purpose

It is the purpose of this section to encourage through the regulation of outdoor illuminating devices, lighting practices and uses, the minimization of light pollution, light trespass, unnecessary glare and sky glow in Shutesbury in order to preserve and enhance the natural, historical, and aesthetic character of the Town, while meeting the safety and welfare needs of residents.

8.12-2. Background

The Five Principals for Responsible Outdoor Lighting from the Illuminating Engineering Society (IES) and International Dark Sky Association (IDA) state that outdoor lighting should do the following:

1. Be useful. All light should have a clear purpose.
2. Be targeted. Light should be directed only where needed.
3. Provide low light levels. Light should be no brighter than necessary.
4. Be controlled. Lighting should only be used when it is useful.
5. Have a warmer color. Use warmer white or amber lights where possible.

8.12-3. Definitions

- A. Direct Light: Light emitted directly by a lamp, off a reflector, or through a refractor of an outdoor light fixture.
- B. Light Pollution: Excessive, misdirected, or obtrusive artificial (usually outdoor) light.
- C. Glare: Light emitted from a light fixture with intensity great enough to produce annoyance, discomfort, or a reduction in a viewer's ability to see.