COMMONWEALTH OF MASSACHUSETTS
LAND COURT
DEPARTMENT OF THE TRIAL COURT

PLYMOUTH, ss. 23 MISC 000643 (LER)

DUXBURY ENERGY STORAGE, LLC,

Plaintiff,

v.

TOWN OF DUXBURY ZONING BOARD OF APPEALS, JUDITH BARRETT, EMMETT SHEEHAN, FREEMAN BOYNTON JR., PHILIP THORN, and TANYA TREVISAN, as they are members of the TOWN OF DUXBURY ZONING BOARD OF APPEALS,

Defendants.

MEMORANDUM AND ORDER
ON CROSS-MOTIONS FOR SUMMARY JUDGMENT

INTRODUCTION

In this G.L. c. 40A, § 17 appeal, plaintiff Duxbury Energy Storage, LLC ("Duxbury Energy") challenges a decision of the Town of Duxbury Zoning Board of Appeals (the "Board"), which concluded that a "standalone" battery energy storage facility falls outside the solar energy protections afforded by the ninth paragraph of G.L. c. 40A, § 3 (certain provisions of which are commonly known as the "Dover Amendment"). The Board's decision upheld the Duxbury building commissioner's denial of a building permit for the facility on this basis, determining it was not a permitted use in any zoning district in the Town.

Duxbury Energy seeks to build its battery energy storage facility on a ~5.8-acre site in Duxbury's residential compatibility district. Although the facility will not be connected to any

solar panels or a solar energy generation source, Duxbury Energy asserts its project is entitled to the statutory protections because it "facilitates the collection of solar energy." G.L. c. 40A, § 3, ninth par. The Board maintains that a standalone battery energy storage facility, as a matter of law, does not qualify for protections aimed at solar energy projects, and that Duxbury's zoning bylaw's prohibition of such facilities is permissible. Relying on the Supreme Judicial Court's holding in *Tracer Lane II Realty, LLC v. Waltham*, 489 Mass. 775, 779 (2022) (*Tracer Lane*), Duxbury Energy challenges the Duxbury zoning bylaw's complete prohibition, seeking to annul the Board's decision and compel the Town to issue its building permit.

Before the court are the parties' cross-motions for summary judgment. For the reasons detailed below, the court finds that the proposed battery energy storage facility is protected by the ninth paragraph of G.L. c. 40A, § 3 as "the building of structures that facilitate the collection of solar energy." Accordingly, the court **ALLOWS** Duxbury Energy's motion for summary judgment and **DENIES** the Board's cross-motion.

PROCEDURAL HISTORY

The Parties' Cross-Motions for Summary Judgment

Duxbury Energy's single-count complaint, filed November 28, 2023 and brought under G.L. c. 40A, § 17, seeks to annul the Board's decision upholding the building commissioner's denial of an application for a permit to build a battery energy storage facility on a leased site within Duxbury's residential compatibility district. The Town of Duxbury was dismissed from the case via stipulation on April 17, 2024. Following a brief discovery period, on July 1, 2024, Duxbury Energy filed its motion for summary judgment, supporting memorandum, statement of undisputed material facts, and record appendix. After an allowed extension, on August 7, 2024, the Board filed its summary judgment opposition and cross-motion, along with supporting

memorandum, response to Duxbury Energy's statement of undisputed material facts, and record appendix. Concurrently, the Board also filed a motion to strike portions of Duxbury Energy's record appendix.

On September 6, 2024, with corrected versions filed on September 9, 2024, Duxbury Energy filed a reply in support of its summary judgment motion and opposition to the Board's cross-motion, along with an opposition to the Board's motion to strike. On October 21, 2024, the Board filed a reply in support of its cross-motion.

With these motions pending, the case was reassigned to the undersigned justice and a hearing was scheduled for February 4, 2025.[1] On January 6, 2025, Duxbury Energy moved for leave to file a supplemental brief concerning recent legislation.[2] The court allowed this motion and permitted the Board to respond. Duxbury Energy filed its supplemental brief on January 8, 2025, and the Board filed its response on January 28, 2025.

During oral arguments held on the cross-motions, plaintiff's counsel used two demonstrative chalks, represented to be part of the summary judgment record. It was later learned that one of the chalks, depicting a standalone battery energy storage facility connected to the energy grid, was not part of the existing summary judgment record, though it had been produced in discovery. To ensure a complete record, the court instructed plaintiff's counsel to supplement the record with the material, which occurred on February 10, 2025, and allowed the Board the opportunity to move to strike the chalk. The Board moved to strike this chalk on February 14, 2025, and Duxbury Energy opposed on February 18, 2025. Subsequently, the court

[1] The court acknowledges the parties' consideration in providing a "consolidated" statement of material facts along with paper courtesy copies of all briefs and the summary judgment record appendices.

[2] "An Act Promoting a Clean Energy Grid, Advancing Equity, and Protecting Ratepayers," St. 2024, c. 239, § 23, enacted November 21, 2024, and effective February 19, 2025.

took the pending cross-motions for summary judgment and the two pending motions to strike under advisement.

The Board's Motions to Strike

Upon consideration, the court **ALLOWS in part** the Board's first motion to strike the July 1, 2024 affidavit and accompanying letter of Michael Conway, P.E., as well as the August 4, 2023 letter to the Board from Duxbury Energy's legal counsel. The portions of these materials containing legal opinions or conclusions on the ultimate issues in this case are improper for the court to consider. *See Greenspun v. Boghossian*, 95 Mass. App. Ct. 335, 340 (2019) ("[A]n opinion of law is generally not a proper subject for expert testimony.") (internal quotation omitted). Accordingly, the court will disregard the document portions containing legal opinions included in plaintiff's Record Appendix ("RA") at 065-66 (Affidavit of Michael Conway, P.E., dated July 1, 2024, attaching an undated "To Whom It May Concern" letter), RA110-11 (the same undated letter), and RA088-99 (plaintiff's counsel's August 4, 2023 letter to the Board). These materials remain included in the summary judgment record only to show what was presented to the Board during Duxbury Energy's appeal.

The court also **ALLOWS** the Board's second motion to strike the second affidavit of Michael Conway, P.E., and the attached demonstrative chalk. Plaintiff's counsel used and referenced this chalk, comprised of two images, during argument presented at the February 4, 2025 summary judgment hearing. Although the images included in this chalk were presented to the Board during its public hearing, they were not included in the summary judgment record appendix submitted to the court, rendering their use and inclusion at the oral argument untimely. Additionally, defense counsel has argued the chalk images are prejudicial, misleading, incomplete, or irrelevant because they depict a hypothetical battery energy storage facility rather

than a specific plan for Duxbury Energy's project and depict only the enclosed container portions of a battery facility rather than a complete project site. The court agrees the chalk carries no weight under these circumstances. Defense counsel was prejudiced by the belated and unexpected use of this chalk at the hearing. Accordingly, the court **STRIKES** from the record the chalk used at the February 4, 2025 summary judgment hearing, attached to the Second Affidavit of Michael Conway, P.E., filed February 14, 2025, and will not consider its content in this decision.

Limitation of Issues before the Court on Summary Judgment

During oral argument at the summary judgment hearing, the court expressed concern that the Board disputed numerous facts in Duxbury Energy's motion while simultaneously arguing their immateriality to the cross-motions. These disputed facts primarily concerned two issues: Duxbury Energy's alleged eligibility for or participation in the Commonwealth's "Clean Peak Standard" program,[3] and how energy storage facilities influence the broader economics of energy markets. However, plaintiff's counsel agreed on the record that these disputed facts were not material to resolving the cross-motions, asserting the court could determine whether the project qualified for the solar energy protections under the ninth paragraph of G.L. c. 40A, § 3 without them. The court has proceeded on this basis, making no judicial determination on these disputed issues.

[3] The "Clean Peak" Standard was established by Chapter 227 of the Acts of 2018, "An Act to Advance Clean Energy," available at https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227 (excerpts included at RA738-40). The Department of Energy Resources (DOER) has established Clean Peak Energy Portfolio Standard Regulations at 225 CMR 21.00, which include regulations governing qualified energy storage systems (RA068-80).

UNDISPUTED MATERIAL FACTS

The following material facts are found in the record for purposes of Mass. R. Civ. P. 56 and are undisputed for purposes of the pending cross-motions for summary judgment.[4]

The Parties and Property

1. The plaintiff Duxbury Energy Storage, LLC ("Duxbury Energy") is a limited liability company organized under the laws of Delaware, with a business address of 55 Technology Drive, Suite 102, Lowell, MA, 01851. Compl. Parties ¶ 1. Consolidated Statement of Material Facts[5] ("CSMF") ¶ 1.

2. The defendants, members of the Duxbury Zoning Board of Appeals (the "Board"), serve as the Town's duly constituted board of appeals pursuant to G.L. c. 40A, with offices at 878 Tremont Street, Duxbury, MA 02332. Compl. Parties ¶ 2. CSMF ¶ 2.

3. The property at issue in this appeal is currently an undeveloped 5.82-acre parcel of land located at 0 West Street, Duxbury, MA (the "Property"), Assessor's parcel No. 053-001-100. The Property is located in the Residential Compatibility District of Duxbury, and a portion is overlaid by Duxbury's Planned Development District 2. Compl. ¶¶ 2, 5, 7. *See* CSMF ¶¶ 3, 4, 5, 6.

4. Adjacent to the Property is a 4.75-acre parcel of land improved with a single-family home and two sheds, located at 711 West Street, Duxbury, MA (the "Adjacent Parcel"), Assessor's parcel No. 054-001-115. Compl. Facts ¶¶ 4, 5. CSMF ¶¶ 6, 7.

5. Duxbury Energy claims to have acquired rights to develop the Property, and to access the Property from the Adjacent Parcel, from each property's respective owners. Compl. Facts ¶¶ 6, 7; Deposition of Erin Kendrick ("Kendrick Depo.") 11:18-19 (RA004). *See* CSMF ¶¶ 3, 9, 11.

6. The Property is located directly next to an Eversource electric distribution line ("distribution line") and within one mile of the Duxbury Eversource substation.

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[4] Responses to statements of undisputed material fact that included qualifications such as "admitted for purposes of summary judgment" or "admitted ... however, this fact is not material to summary judgment," and were unsupported by further record citations, are deemed admitted. *See* Rules of the Land Court (2005) ("Any response other than 'admitted' to a statement of fact made by the moving party, and any statement of additional material fact, must include page or paragraph references to supporting pleadings, depositions, answers to interrogatories, admissions and affidavits, or else the facts described by the moving party as undisputed shall be deemed to have been admitted.").

[5] For ease of reference, the court refers to the Consolidated Statement of Material Facts, filed on September 9, 2024, as it contains all facts submitted by both parties and their corresponding responses numbered sequentially.

Compl. ¶ 3; Affidavit of Marissa Grenon Gutierrez ("Grenon Gutierrez Aff.") Ex. A (RA039); Kendrick Depo. 14:10-12 (RA005), 39:22-40:4 (RA011). CSMF ¶¶ 12, 14.

Duxbury Energy's Project

7. Duxbury Energy proposes to build a "standalone" 5-Megawatt battery energy storage facility ("ESF") on the Property that connects to the adjacent distribution line (the "Project"). Kendrick Depo. 11:22-12:2 (RA004). CSMF ¶ 10.

8. Definitionally, a "standalone" battery ESF is not associated with or accessory to a specific solar energy generation system. Kendrick Depo. 15:16-24 (RA005). CSMF ¶ 49.

9. The ESF will provide storage capacity to the grid. It will operate by drawing an unsegregated mix of energy (the "grid mix") from the distribution line to charge its battery units. Once charged, the battery units hold and store that energy until it is later discharged back to the grid through the same distribution line. Compl. ¶¶ 10, 29; Kendrick Depo. 22:13-23:11 (RA007) and 29:15-23 (RA009). *See* CSMF ¶¶ 17, 20, 76-77.

10. The ESF will be capable of storing approximately 20 Megawatt hours ("MWh") of electricity. Kendrick Depo. 17:10-11 (RA006). CSMF ¶ 18.

11. The Project site will include modular containers or cabinets, approximately 10-feet-tall, housing the lithium-ion battery units. These containers will be affixed to the ground via a concrete foundation. Compl. ¶ 9; Kendrick Depo. 74:4-10, 75:2-6 (RA020). CSMF ¶¶ 16, 75.

12. Additionally, the Project site will include a bidirectional inverter, a thermal management system, and other safety control equipment required by utilities. Kendrick Depo. 75:2-6 (RA020). *See* CSMF ¶¶ 15, 75.

13. Except for the batteries, the other equipment will be located outdoors. The facility will be enclosed by a fence and will also require new overhead and underground wiring. Kendrick Depo. 12:10-13:23, 75:7-9 (RA004-05 and RA020). CSMF ¶ 75.

The Composition of Massachusetts' Energy Grid Mix

14. The Commonwealth's current "grid mix" comprises energy generated from a variety of sources, including, for example, wind, solar, fossil fuels or hydroelectric power, none of which can be distinguished by their generation source. Kendrick Depo. 29:15-30:5 and 55:2-5 (RA009 and RA015). CSMF ¶ 77.

15. As of 2021, solar energy accounted for 20 percent of Massachusetts' in-state net electricity generation. Compl. ¶ 23; Grenon Gutierrez Aff. Ex. G (RA090). CSMF ¶ 32.

16. Solar energy currently accounts for approximately 20 to 25 percent of electricity on the Massachusetts grid. Deposition of Michael Conway ("Conway Depo.") 23:13-21 (RA046). CSMF ¶ 33.

17. Duxbury Energy's ESF Project will be located in the southeastern Massachusetts electrical region ("SEMA"), within which there are several solar energy generation systems adding solar energy onto the grid, including in Carver, Plympton, Plymouth, and Wareham. Conway Depo. 31:4-22 (RA048). CSMF ¶ 34.

The Role of Energy Storage in Massachusetts Energy Policy

18. An energy "surplus" occurs when supply exceeds demand, meaning more energy is generated than consumed. There is already a midday surplus of solar energy on the Massachusetts grid. Conway Depo. 28:10-15 (RA047). CSMF ¶ 36.

19. The electric grid does not store energy. Thus, when there is a midday surplus of solar energy, that surplus energy is wasted (i.e., "curtailed"). Conway Depo. 26:19-27:24 (RA047); Kendrick Depo. 33:12-19 (RA010), 69:5-7 (RA019). CSMF ¶¶ 37, 41.

20. Energy storage can maximize the amount of renewable energy that can be added to the grid by charging at times when renewable generation is highest and load (i.e., use of electricity) is low, and then discharging electricity back onto the grid when load is higher but renewable energy generation is lower. Kendrick Depo. 19:14-21 (RA006). CSMF ¶ 38.

21. The addition of ESFs – like the Project – to the electric grid helps to reduce the waste ("curtailment") of solar energy that results from the misalignment of peak solar energy production (when the sun is shining strongest) and peak energy demand (often in the evenings). Conway Depo. 26:14-27:24 (RA047); Kendrick Depo. 33:12-19, 34:3-5 (RA010). CSMF ¶ 39.

22. Many existing and proposed solar energy generating projects do not have on-site, "accessory" energy storage. Conway Depo. 29:22-30:3 (RA048). CSMF ¶ 44.

23. Standalone ESFs – like the Project – provide different benefits than accessory ESFs connected to solar energy generating systems because they can be placed next to areas of high load that do not have space for a solar installation of the same capacity. Kendrick Depo. 15:20-16:5, 24:20-25:13 (RA005, RA007-008); Conway Depo. 18:7-19 (RA045). CSMF ¶ 48.

24. In recent years, Massachusetts has enacted legislation setting renewable energy and carbon emissions reduction targets that rely on increasing the percentage of energy generated from renewable sources, including solar. Kendrick Depo. 27:20-22, 54:13-18 (RA008, RA015); Conway Depo. 34:17-22 (RA049). CSMF ¶ 35.

25. Additionally, Massachusetts has adopted a target of adding 1,000 MWh of energy storage capacity by 2030. Conway Depo. 30:4-7 (RA048); Kendrick Depo. 31:16-24 (RA009). CSMF ¶ 47.

26. Without energy storage, Massachusetts will not be able to build enough solar energy systems to reach the Commonwealth's carbon neutrality and renewable energy goals. Conway Depo. 17:13-22 (RA045). CSMF ¶ 50.

Duxbury's Relevant Bylaw Provisions

27. Duxbury's Zoning Bylaw (the "Bylaw") states that "[a] building, use, or structure not specifically permitted shall be deemed prohibited." Bylaw § 401.4(3) (RA427).

28. The Bylaw defines "structure" as "[a] combination of material assembled at a fixed location to give support or shelter, such as a building, tower framework, platform, or the like." Bylaw § 302 (RA424).

29. An ESF is not specifically permitted under any provision of the Bylaw. Compl. ¶ 19; Duxbury Board Admissions at ¶ 1 (RA143). CSMF ¶ 55.

30. An ESF does not qualify under the Bylaw as a residential, religious, or educational use, or a structure customarily incidental to a single-family residence. Compl. ¶ 11. CSMF ¶ 53.

31. An ESF also does not fit within any of the use categories listed in Bylaw § 410.3 (RA429) as permissible by special permit in a Residential Compatibility District. Compl. ¶ 18. CSMF ¶ 54.

32. The Board maintains that the Bylaw prohibits the construction and operation of a standalone ESF within Duxbury, contending that only ESFs that are part of a solar photovoltaic installation are permitted. Duxbury Board Admissions at ¶ 2 (RA143); Duxbury Board Ints. at ¶ 5 (RA395). CSMF ¶¶ 56, 57.

Duxbury Energy's Permit Application and Denial

33. On May 4, 2023, Duxbury Energy asked the Duxbury building commissioner for a determination that G.L. c. 40A, § 3, ninth par., applies to the proposed ESF. Compl. ¶ 40. CSMF ¶ 58.

34. On May 8, 2023, the building commissioner replied, instructing Duxbury Energy to submit a building permit application. Compl. ¶ 41. CSMF ¶ 59.

35. On June 6, 2023, Duxbury Energy applied for a building permit for its Project through the Town's online permit application platform. Grenon Gutierrez Aff. Ex. E (RA398-405). CSMF ¶ 60.

36. On July 6, 2023, the building commissioner responded to Duxbury Energy stating that he was "unable to issue a permit at this time for reasons, including, but not limited to": (1) "the Project is a use that is not allowed in a Residential Compatibility district"; and (2) "the Project cannot be built on the Property because there is no single-family dwelling (i.e., primary structure) to which it would be accessory." Grenon Gutierrez Aff. Ex. F (RA406-07). CSMF ¶ 61.

37. On August 3, 2023, Duxbury Energy timely appealed the building commissioner's building permit denial ("Denial") to the Board. Grenon Gutierrez Aff. Ex. G (RA081-133). CSMF ¶ 62.

38. Duxbury Energy's application to the Board was limited to the issue of whether the proposed ESF is a structure that facilitates the collection of solar energy. Kendrick Depo. 46:20-23 (RA013) and 64:18-65:9 (RA017-18). CSMF ¶ 80.

39. After a public hearing on September 28, 2023, two members of the Board voted to uphold the Denial, and three members voted to overturn it. Compl. ¶ 45. CSMF ¶ 66.

40. Where G.L. c. 40A, § 15 requires a concurring vote of four out of five members to overturn an administrative official's decision, the Denial was upheld. Compl. ¶ 46. CSMF ¶ 67.

41. On November 9, 2023, the Board filed its written decision (the "Decision") with the Town Clerk. Compl. Attachment 1 (RA408-12). CSMF ¶ 68.

DISCUSSION

"'Summary judgment is appropriate when, viewing the evidence in the light most favorable to the nonmoving party, all material facts have been established and the moving party is entitled to a judgment as a matter of law.'" *Aquino v. United Prop. & Cas. Co.*, 483 Mass. 820, 825 (2020), quoting *Surabian Realty Co. v. NGM Ins. Co.*, 462 Mass. 715, 718 (2012); *see* Mass. R. Civ. P. 56(c). "The moving party bears the burden of affirmatively demonstrating that there is no triable issue of fact." *Ng Bros. Constr. v. Cranney*, 436 Mass. 638, 644 (2002). In viewing

the factual record presented with the motion, the "court makes 'all logically permissible inferences' in favor of the nonmoving party." *Carroll v. Select Bd. of Norwell*, 493 Mass. 178, 192 (2024), quoting *Willitts v. Roman Catholic Archbishop of Boston*, 411 Mass. 202, 203 (1991).

In these cross-motions for summary judgment, the court must resolve a novel issue: Does a standalone battery ESF, connected solely to the Commonwealth's energy grid and not directly to any solar panels or solar energy generating systems, qualify for the solar energy protections provided in the Dover Amendment, G.L. c. 40A, § 3, ninth paragraph? That provision reads:

> No zoning ordinance or by-law 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.

G.L. c. 40A, § 3, ninth par. (hereinafter, the "Solar Energy Provision"). To receive protection, the ESF must involve either "the installation of solar energy systems" (the "systems phrase") or "the building of structures that facilitate the collection of solar energy" (the "structures phrase"). As Duxbury Energy does not argue its project constitutes a "solar energy system," the central question is whether the Project qualifies as "the building of structures that facilitate the collection of solar energy."

Significantly, neither the parties' nor this court's research reveals any direct interpretation or application of the Solar Energy Provision's structures phrase by a Massachusetts court.[6] The

[6] In *NextSun Energy LLC v. Fernandes*, affirmed by *Cogliano v. Planning Bd. of Norton*, the Land Court and Appeals Court addressed whether a lithium-ion battery energy storage system, integrated into a solar energy generation project, fell within the scope of uses allowed as-of-right under a local zoning bylaw. Although G.L. c. 40A, § 3, ninth par. was discussed, these decisions were predicated on the local bylaw provisions permitting solar energy systems. The decisions did not consider or apply the structures phrase of the Solar Energy Provision. Consequently, while the case offers some instruction, its direct applicability to the issues in this case is limited. *See NextSun Energy LLC v. Fernandes,* 31 LCR 323 (2023) (Case Nos. 19 MISC 000230, 19 MISC 000564) (Foster, J.), 2023 WL 3317259, as amended by *NextSun Energy LLC v. Fernandes,* 31 LCR 394 (2023), 2023 WL 4156740,

court is thus presented with a matter of first impression, requiring careful consideration of the statutory language, legislative intent, and the broader context in which the Solar Energy Provision was adopted. Both parties offer competing views on the appropriate breadth and meaning of this provision and its application to modern energy infrastructure like standalone ESFs. Accordingly, the court will begin with a review of the principles of statutory construction and the legal background of the Solar Energy Provision before turning to its analysis and interpretation of the statutory language.

Statutory Construction Principles

"A statute must be interpreted according to the intent of the Legislature ascertained from all its words construed by the ordinary and approved usage of the language, considered in connection with the main cause of its enactment, the mischief or imperfection to be remedied and the main object to be accomplished, to the end that the purpose of its framers may be effectuated." *Outfront Media LLC v. Bd. of Assessors of Boston*, 493 Mass. 811, 818 (2024), quoting *Reuter v. Methuen*, 489 Mass. 465, 470 (2022) (alteration and citation omitted).

The court's "primary duty in interpreting a statute is to effectuate the intent of the Legislature in enacting it." *Williams v. Bd. of Appeals of Norwell*, 490 Mass. 684, 690 (2022) (internal quotation omitted); *Bellalta v. Zoning Bd. of Appeals of Brookline*, 481 Mass. 373, 378 (2022) ("'As with all matters of statutory interpretation,' a court construing a zoning act must 'ascertain and effectuate legislative intent,' as expressed in the statutory language." (citations omitted)). The court should "begin with the language of the statute itself and presume, as [it]

affirmed by *Cogliano v. Planning Bd. of Norton*, 105 Mass. App. Ct. 1116 (2025), 2025 WL 655093 (Rule 23.0 decision), review denied, 496 Mass. 1101 (May 15, 2025).

must, that the Legislature intended what the words of the statute say." *Williams*, 490 Mass. at 690 (alterations added).

To ascertain the meaning of a statute or a zoning ordinance or bylaw, the court must turn to "'ordinary principles of statutory construction,' beginning with the plain language of the bylaw." *Id*. at 693, citing *Shirley Wayside Ltd. P'ship v. Bd. of Appeals of Shirley*, 461 Mass. 469, 477 (2012) (*Shirley Wayside*).

> When a statute does not define its words we give them their usual and accepted meanings, as long as these meanings are consistent with the statutory purpose.... We derive the words' usual and accepted meanings from sources presumably known to the statute's enactors, such as their use in other legal contexts and dictionary definitions. To the extent that the meaning of a statute remains unclear, we seek to ascertain the intent of a statute from all its parts. [W]e look to the language of the entire statute, not just a single sentence, and attempt to interpret all of its terms harmoniously. Where the language is not conclusive, we may turn to extrinsic sources, including the legislative history and other statutes, for assistance in our interpretation.

Id. at 693-94 (internal quotation marks and citations omitted). *Accord Bellalta*, 481 Mass. at 378 ("Specific provisions of a statute are to be 'understood in the context of the statutory framework as a whole, which includes the preexisting common law, earlier versions of the same act, related enactments and case law, and the Constitution.'").

The court must be cautious not to interpret statutory language "so as to render it or any portion of it meaningless." *Williams*, 490 Mass. at 690. "A reviewing court's interpretation must be reasonable and supported by the ... history of the statute. Ultimately, [the court] must avoid any construction of statutory language which leads to an absurd result, or that otherwise would frustrate the Legislature's intent." *Bellalta*, 481 Mass. at 378 (internal quotation marks omitted; alteration added). The court should not ascribe a "construction of a statute which leads to a determination that a piece of legislation is ineffective ... if the statutory language 'is fairly

susceptible to a construction that would lead to a logical and sensible result.'" *Williams*, 490 Mass. at 690, quoting *Adamowicz v. Ipswich*, 395 Mass. 757, 760 (1985) (internal quotation omitted).

Legal Background of the Solar Energy Provision

Although it was enacted in 1985, the Supreme Judicial Court had its first occasion to interpret the Solar Energy Provision just three years ago in *Tracer Lane*, 489 Mass. at 779. In *Tracer Lane*, the plaintiff sought to build an access road on a residential parcel in Waltham, leading to its solar energy generation project located in neighboring Lexington. Waltham's building inspector concluded the access road was not permitted because the city's zoning code only permitted solar energy systems (and their accessories) in industrial zones. The plaintiff challenged this restriction under G.L. c. 240, § 14A, arguing it ran afoul of the protections afforded by G.L. c. 40A, § 3, ninth par. Ruling on cross-motions for summary judgment, the Land Court (Speicher, J.) agreed and found that Waltham's zoning code violated the Solar Energy Provision. *Tracer Lane II Realty, LLC v. Waltham*, 29 LCR 90, 93 (2021) (Case No. 19 MISC 000289) (Speicher, J.), 2021 WL 861157, *6-7. The court noted that confining solar energy systems to industrial zones, which constituted only 1-2% of the city's land area, amounted to an impermissible prohibition of such facilities under the Solar Energy Provision. *Id.*

On appeal, the Supreme Judicial Court acknowledged it had not previously analyzed or applied the ninth paragraph of G.L. c. 40A, § 3. To aid its statutory analysis, the Court began by detailing the Legislature's objectives and intent in enacting the Solar Energy Provision:

> The Legislature demonstrated its intent to protect solar energy systems from local regulation when it passed "An Act promoting solar energy and protecting access to sunlight for solar energy systems." St. 1985, c. 637.... When interpreting this paragraph, we keep in mind that it was enacted to help promote solar energy generation throughout the Commonwealth.

Tracer Lane, 489 Mass. at 779 (citations omitted).

Reciting its established analysis for other Dover Amendment-protected uses, the Court stated that evaluating a bylaw's validity under G.L. c. 40A, § 3 requires balancing "the interest that the ordinance or bylaw advances and the impact on the protected use." *Id.* at 781. This requires assessing whether a restriction genuinely furthers a legitimate municipal interest and is rationally related to it, or if it impermissibly restricts the establishment of uses protected by the provision, and so is unreasonable. *Id.*, citing *Rogers v. Norfolk*, 432 Mass. 374, 379 (2000).

Applying this standard, the Court held that, while Waltham's interest in preserving each zoning district's characteristics is legitimate, its zoning code "unduly restricts" solar energy systems by imposing a near-total ban on their establishment. *Id.* at 781. Citing the Massachusetts 2050 Decarbonization Roadmap,[7] the Court stated that "standalone, large-scale [solar energy] systems, not ancillary to any residential or commercial use, are key to promoting solar energy in the Commonwealth." *Id.*, citing the 2050 DECARBONIZATION ROADMAP, at 4, 59 n.43 ("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]" (alterations in original)) (RA649, RA705). Given the importance of these large-scale standalone systems to promoting the Legislature's solar energy goals, the Court found that "[n]othing in the record suggests" that limiting such projects to only 1-2% percent of the city's land area "is 'necessary to protect the public health, safety or welfare.'" *Tracer Lane*, 489 Mass. at 781, quoting G.L. c. 40A, § 3, ninth par. The Supreme Judicial Court affirmed the Land

[7] Executive Office of Energy and Environmental Affairs, MASSACHUSETTS 2050 DECARBONIZATION ROADMAP (Dec. 2020), available at https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download [https://perma.cc/J593-CVNM] (RA646-737) (hereinafter, the "2050 Decarbonization Roadmap").

Court's ruling that Waltham's zoning code violates the Solar Energy Provision, concluding that "[a]n outright ban ... restricts rather than promotes the legislative goal of promoting solar energy. In the absence of a reasonable basis grounded in public health, safety, or welfare, such a prohibition is impermissible under the provision." *Id.* at 782.

Interpretation and Application of the Solar Energy Provision

Against this backdrop, the court must determine whether the Solar Energy Provision applies to a novel context: a standalone battery energy storage facility. The court begins, as it must, with the statutory language:

> No zoning ordinance or by-law 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.

G.L. c. 40A, § 3, ninth par. The parties focus on whether the ESF Project qualifies for protection under the phrase, "the building of structures that facilitate the collection of solar energy." No court has interpreted or applied the structures phrase and G.L. c. 40A offers no definition for it or its component terms. The parties fundamentally disagree on its meaning. Accordingly, the court will assess the parties' arguments guided by familiar principles of statutory construction and with the "principal objective ... to ascertain and effectuate the intent of the Legislature in a way that is consonant with 'common sense and sound reason.'" *Blake v. Hometown Am. Cmtys., Inc.*, 486 Mass. 268, 273 (2020) (citation omitted).

1. "the building of structures"

A. Statutory Interpretation

The parties first disagree on whether the ESF qualifies as "the building of structures." While G.L. c. 40A is silent on these terms, Duxbury's Bylaw defines "structure" as a

"combination of material assembled at a fixed location to give support or shelter, such as a building, tower framework, platform, or the like." Bylaw § 302 (RA424). The parties also point the court to two legal dictionary definitions and the definition contained in G.L. c. 143, § 1, which addresses terminology for the inspection and regulation of buildings:

1. Black's Law Dictionary defines "structure" as "[a]ny construction, production, or piece of work artificially built up or composed of parts purposefully joined together <a building is a structure>."[8]

2. The Law Dictionary defines "structure" as "[a] framework or construction with elements identifiable giving stability and form and able to resist strains and stresses."[9]

3. General Laws c. 143, § 1 defines "structure" as "a combination of materials assembled at a fixed location to give support or shelter, such as a building, framework, retaining wall, tent, reviewing stand, platform, bin, fence, sign, flagpole, recreational tramway, mast for radio antenna or the like. The word 'structure' shall be construed, where the context allows, as though followed by the words 'or part or parts thereof.'"

The court concludes that the Bylaw's definition of structure applies. As the Supreme Judicial Court held in *BAK Realty, LLC v. Fitchburg*, 495 Mass. 587, 595 (2025), where the fourth paragraph of G.L. c. 40A, § 3 "does not define 'family' or 'families,' nor are those terms defined elsewhere in G.L. c. 40A," the Legislature intended to leave it "to each municipality to define the term 'family' for purposes of its own zoning code," consistent with its general delegation of zoning authority. The court sees no reason this principle would not extend to undefined terms used in the ninth paragraph of G.L. c. 40A, § 3. Resort to the alternative

[8] BLACK'S LAW DICTIONARY (11th ed. 2019) (RA431).

[9] THE LAW DICTIONARY (2nd ed.) (Defendants' Summary Judgment Record Appendix, Exhibit 1, Tab 3), available at https://thelawdictionary.org/structure/

definitions of structure contained in G.L. c. 143, § 1, Black's Law Dictionary, or The Law Dictionary, is therefore unnecessary.[10]

The Board next argues that for the Solar Energy Provision's protection to apply, the entire ESF, not merely its individual features or components, must meet the definition of "structure." The Board contends that "[a]t most, the cabinets [holding the batteries] alone are a structure" under this definition, but the "entire" ESF is not.[11]

This claim, however, finds no support in the plain language of the statute.[12] The Solar Energy Provision specifically protects "***the building of structures*** that facilitate the collection of solar energy" (emphasis added). This means any aspects of a project that involve building qualifying structures gain the statute's protection.[13] This interpretation aligns with how appellate courts have construed other provisions of the Dover Amendment. For instance, in *Watros v. Greater Lynn Mental Health & Retardation Assoc., Inc.*, 421 Mass. 106, 114 (1995), the Supreme Judicial Court held that where G.L. c. 40A, § 3, second par. explicitly exempted "land or structures" from certain zoning regulations, an accessory structure intended for educational use qualified for protection, even though it shared a lot with other unprotected residential structures. Thus, even if only the battery cabinets are considered structures – a point the Board

[10] The court nonetheless observes that the definitions of structure in these sources do not markedly differ from the Bylaw's definition, although they may be broader. While a detailed examination of each definition is deemed unnecessary, it is improbable their application would substantially narrow the scope of the structures phrase or disturb the court's findings.

[11] Defendant's Memorandum of Law in Support of Its Summary Judgment Opposition and Cross Motion at 5-6.

[12] No deference is due to the Board's interpretation where its claim concerns the application and scope of the statute and not its own Bylaw. *Cf. Shirley Wayside*, 461 Mass. at 475.

[13] And, perhaps, any aspects of the project that are "ancillary" or accessory to those structures, *see Tracer Lane,* 489 Mass. at 779 ("we have considered ancillary structures to be part of the protected use at issue"), or "a necessary and integral part" of them, *see Cogliano,* 2025 WL 655093 at *4.

concedes and cannot reasonably dispute – building such structures at the Project site would be protected from prohibition or unreasonable regulation, provided they "facilitate the collection of solar energy."

Nor is the court persuaded by the Board's argument that classifying the proposed ESF as a structure rather than an "entire system," where the ESF does not qualify as a "solar energy system" under G.L. c. 40A, § 1A,[14] would collapse the two statutory categories. Calling the ESF a "system,"[15] does not mean it must meet the specialized definition of G.L. c. 40A, § 1A, to receive the statute's protection.[16] The argument elevates labels over substance. The Legislature established two distinct protected categories in the Solar Energy Provision. For the systems phrase, the Legislature used the term "solar energy systems" and defined it in G.L. c. 40A, § 1A, creating a term of art. *See King v. Town Clerk of Townsend*, 480 Mass. 7, 11 (2018) ("Providing definitions of the terms used in a statute is a way to narrow or expand the reach of that statute."). The Legislature designated "the building of structures" as a separate, protected category, and that choice must be given effect. The law can protect each category independently, even if some projects could arguably fit both, provided the interpretation does not cause one category to swallow the other.

[14] The definition for "solar energy system" in G.L. c. 40A, § 1A, is "a device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generating, or water heating."

[15] Several materials in the summary judgment record use the term "system" when describing battery energy storage projects. The proposed battery storage at issue in the *NextSun/Cogliano* case discussed *supra* note 6, was also referred to by the parties and courts as an energy storage system (ESS) or a battery energy storage system (BESS).

[16] It is not a foregone conclusion that a standalone ESF cannot qualify as a "solar energy system." Because the parties have not raised that issue in this case, the court does not determine whether an ESF might qualify under the systems phrase and the definition of "solar energy system" from G.L. c. 40A, § 1A. The question remains open.

B. Application to the Project

Turning to the facts of this case and applying the Bylaw's definition of structure as a "combination of material assembled at a fixed location to give support or shelter, such as a building, tower framework, platform, or the like," the court finds that Duxbury Energy's Project would qualify as "the building of structures." *See* Bylaw § 302 (RA424). Duxbury Energy proposes to construct a standalone 5-Megawatt ESF at the Property. This includes building several 10-foot-tall cabinets housing lithium-ion battery units at the Project site. These battery cabinets undeniably provide shelter for the batteries and qualify as structures, as the Board concedes. Additionally, Duxbury Energy will install a bidirectional inverter, a thermal management system, overhead and underground wires, and additional safety control equipment at the site. These components and equipment connect to the batteries and constitute a "combination of materials assembled at a fixed location" on the Project site. While they may not give shelter or be sheltered within any buildings, collectively they "give support," both physically and operationally, to the ESF Project.

The court therefore concludes that Duxbury Energy's Project – composed of several structures (such as the battery cabinets) and a "combination of materials assembled at a fixed location" – sufficiently meets the Bylaw's definition of a structure. Accordingly, the court finds that the proposed ESF Project qualifies as "the building of structures" under the Solar Energy Provision.

2. "facilitate the collection of solar energy"

Having found that the proposed ESF involves the "building of structures," the court must next determine if these structures "facilitate the collection of solar energy." Neither this phrase nor its component terms are expressly defined in any chapter of the General Laws cited by the

parties nor in Duxbury's Bylaw. Duxbury Energy contends the court should employ a general, common parlance definition of the verb "collect," meaning "to bring together into one body or place"[17] and "facilitate," meaning "[t]o make the occurrence of (something) easier; to render less difficult."[18] The Board offers no alternative dictionary definitions but contends the term "collect" should be interpreted in a more specific, technical sense common in the solar energy context: equating it with "generating" or "producing" solar energy—for example, "collecting" the sun's light. Both readings of "collection" are plausible as a matter of grammar and plain meaning; the crucial question is which meaning the Legislature intended, or if both were contemplated? *Williams*, 490 Mass. at 690. "Where, as here, 'the meaning of [the] statute is not clear from its plain language, well-established principles of statutory construction guide [the court's] interpretation.'" *Bellalta*, 481 Mass. at 378.

The Board advances three main arguments for its position that collection must be associated directly with generation. First, it highlights the distinct uses of the terms "collection" and "storage" within the definition of "solar energy systems." *See* G.L. c. 40A, § 1A ("a device or structural design feature, a substantial purpose of which is to ... provide for the ***collection***, ***storage*** and distribution of solar energy...."). The Board reasons that where the ESF undeniably qualifies as "storage," classifying its function as "collection" would conflate these distinct statutory terms. Second, the Board points out that the structures phrase in G.L. c. 40A, § 3 lacks the "substantial purpose" qualifier incorporated in the definition of "solar energy systems." The Board contends that, without such a qualifier to broaden the scope of the structures phrase to include non-solar energy collection, the phrase must only protect structures ***exclusively*** dedicated

[17] THE MERRIAM WEBSTER DICTIONARY (11th ed. 2022) (RA432).

[18] BLACK'S LAW DICTIONARY (11th ed. 2019) (RA433).

to collecting solar energy. Third, the Board argues that extending solar-specific statutory protections to an ESF drawing from a mixed energy supply stretches the Legislature's intent to an absurd degree. It contends that Duxbury Energy's interpretation would unreasonably classify "the entire electric grid" as protected "structures that facilitate the collection of solar energy."

A. Statutory Interpretation

Starting with the statute's plain language and bearing in mind the legislative intent behind the Solar Energy Provision, the court concludes that the Legislature did not depart from the ordinary and well-understood meanings of "facilitate" (to make easier) and "collection" (bringing together). The court finds these definitions to be in harmony with the text of the Solar Energy Provision and other sections of chapter 40A and align best with the Legislature's purpose and objectives in adopting the provision. *Williams*, 490 Mass. at 693.

The court finds no textual support within chapter 40A for the Board's reading of "collection" to mean "generation."[19] Though "it could have said so simply and unambiguously" had this been what it meant, the Legislature did not say "structures that ***generate*** solar energy" or "structures that facilitate the ***generation*** of solar energy." *See Geezil v. White Cliffs Condo. Four Ass'n*, 105 Mass. App. Ct. 103, 108 (2024) (citation omitted). The Legislature knows how to say "generate" when it means to. *Id.* While pointing to the definition of "solar energy systems" found in G.L. c. 40A, § 1A to distinguish "collection" from "storage," the Board overlooks that the same § 1A definition uses the term "generating" as well:

[19] While the court acknowledges that "collect" can mean "generate" or "produce" in the solar energy context, as the Board has urged, it finds this specialized meaning to be a subset, not the sole definition, of the term used in the statute.

> a device or structural design feature, a substantial purpose of which is to ... provide for the ***collection***, ***storage*** and distribution of solar energy for space heating or cooling, electricity ***generating***, or water heating.

G.L. c. 40A, § 1A (emphases added).[20] Where the Legislature uses two distinct terms within the same sentence, it is improbable they carry the same meaning. *See Tamulevich v. Robie*, 426 Mass. 712, 713-14 (1998); *see also Matter of Expungement*, 489 Mass. 67, 75 (2022).

Applying the usual and accepted meaning of "collect" as "to bring together in one place" does not conflate collection with storage or render any terms within chapter 40A redundant. The terms "collection, storage and distribution" each retain distinct meanings even when considering an ESF's operations. As the undisputed facts show, the ESF *collects* energy by drawing it together from the grid over a distribution line to charge its lithium-ion battery units. It *stores* the collected energy in those battery units for later use. It then *distributes* the energy by later discharging it from the battery units back to the grid over the distribution line. Each term used in chapter 40A retains its distinct meaning when "collection" is given its usual and accepted definition.[21]

The court also must reject the Board's contention that "collection" is necessarily linked to "generation" because it would render the Solar Energy Provision's structures phrase largely, if not entirely, redundant of its systems phrase. *Williams*, 490 Mass. at 690. The systems phrase

[20] The fact that the Legislature defined the phrase "solar energy systems," creating a term of art, while not defining "structures that facilitate the collection of solar energy," itself suggests the Legislature intended the words of this second phrase to simply carry their ordinary meanings.

[21] This reasoning is not meant as a determination that the ESF meets the definition of "solar energy system" from G.L. c. 40A, § 1A. The court merely aims to illustrate that the ordinary meaning of each term yields a construction that is consistent and harmonious throughout the provisions of chapter 40A. *See Williams*, 490 Mass. at 694.

already protects devices that generate solar energy and their ancillary structures or accessories.[22] *Tracer Lane*, 489 Mass. at 779. The Legislature's inclusion of the structures phrase establishes a separate, broader category of structures entitled to protection, and this legislative choice must be given effect. *Williams*, 490 Mass. at 690. Only by applying the usual and accepted meaning of "collect" does that phrase begin to reach structures not already protected as solar energy systems.

The Board also contends that the absence of the "substantial purpose" qualifier[23] in the structures phrase limits statutory protections to structures dealing *exclusively* with solar energy. The court disagrees. Had the Legislature intended that limitation, it would have used words like "only" or "exclusively." *See Ret. Bd. of Somerville v. Buonomo*, 467 Mass. 662, 672 & n.12 (2014) ("We will not add words to a statute that the Legislature did not put there, either by inadvertent omission or by design."). Instead, "facilitate" serves as the intended qualifier.[24] To be protected, structures need only "facilitate [make easier] the collection of solar energy." G.L. c. 40A, § 3, ninth par. This qualifier provides the structures phrase with both flexibility and longevity—enabling protection for various kinds of structures, with differing levels of involvement and evolving technologies and innovations not yet conceived. *See Comm. v. Tilley*, 306 Mass. 412, 415-16 (1940) ("Statutes framed in general terms commonly look to the future

[22] As noted in *supra* note 6, the Land Court and Appeals Court have held that a battery storage facility included in a solar energy generation project was "a necessary and integral part" of the protected solar energy system. *See Cogliano*, 2025 WL 655093 at *4, citing *Tracer Lane*, 489 Mass. at 779.

[23] *See* G.L. c. 40A, § 1A (defining "Solar energy system" as "a device or structural design feature***, a substantial purpose of which*** is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generating, or water heating." (emphasis added)).

[24] The legislative history of the Solar Energy Provision appears consistent with the Legislature making a conscious selection of the term "facilitate" from a variety of proposals. For example, one House bill would have protected only "solar energy systems." 1985 H.B. 3910 (RA438). Other bills omitted the phrase "solar energy systems," instead focusing on "the installation of solar energy collection units or the building of structures that accommodate the collection of solar energy." 1985 H.B. 106 and 1985 H.B. 767 (RA446, RA454). *See Bellalta*, 481 Mass. at 378.

and may include conditions as they arise from time to time not even known at the time of enactment, provided they are fairly within the sweep and the meaning of the words and falling within their obvious scope and purpose." (internal quotation omitted)). Adopting the Board's exclusivity requirement would render the word "facilitate" meaningless. *See Williams*, 490 Mass. at 690.

Moreover, legislative intent would be frustrated if the court adopted the Board's view. While solar energy is undoubtedly the provision's sole focus, it is illogical to conclude the Legislature intended to withhold solar protections from a project that meets the statute's provisions simply because another energy source might also incidentally benefit. Such a self-defeating and "constrictive result is neither required by the language of the statute nor consistent with its purpose." *Watros*, 421 Mass. at 114.[25] Given the Legislature's intent to promote solar energy, and because a narrower reading would significantly limit protections or entirely eliminate the structures phrase from the statute, the court will not presume the Legislature's specific aim to protect solar energy implicitly excludes projects that also involve or incorporate other energy sources.[26] *See Williams*, 490 Mass. at 690, quoting *Adamowicz*, 395 Mass. at 760.

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[25] The Supreme Judicial Court's reasoning in *Watros* undercuts the Board's argument that the Solar Energy Provision should be interpreted to require every aspect of a project to be dedicated exclusively to the protected use. In that case, the court below had concluded that the Dover Amendment's protections did not apply, even though the structure at issue would host an educational use. This was because the applicant had leased only a single accessory structure (a garage) rather than the entire lot, which already contained a pre-existing nonconforming two-family dwelling. The Supreme Judicial Court rejected this narrow interpretation, emphasizing that the provision applies to qualifying structures regardless of the presence of other non-protected uses or structures on the property. *Watros*, 421 Mass. at 114. *Accord Hume Lake Christian Camps, Inc. v. Planning Bd. of Monterey,* 492 Mass. 188 (2023).

[26] Even if a literal reading of the Solar Energy Provision supported the Board's exclusivity interpretation, "it is a well-established canon of statutory construction that a strictly literal reading of a statute should not be adopted if the result will be to thwart or hamper the accomplishment of the statute's obvious purpose, and if another construction which would avoid this undesirable result is possible." *Watros,* 420 Mass. at 113. The Board's narrow interpretation – that protections only apply to structures dedicated exclusively to solar energy – would frustrate the Legislature's broader, beneficial purpose to promote solar energy in the Commonwealth, a result this court must avoid. *See Bellalta*, 481 Mass. at 378.

Finally, the court finds the Board's "slippery slope" fears unfounded and speculative. The Board offers no examples of how adopting the plain meaning of the terms facilitate and collection would extend the Solar Energy Provision's protections to the entire electric grid, and the court cannot envision such a scenario. Grid components like wires, towers, and transformers are used for transmission and distribution, not for the collection of electricity, solar or otherwise. Even when carrying solar energy, they simply do not meet the dictionary definition of "collection."

B. Application to the Project

Applying the usual and accepted dictionary meanings of "facilitate" and "collection," the court concludes that Duxbury Energy's Project in this case will "facilitate [make easier] the collection [bringing together in one place] of solar energy." The undisputed facts show the ESF Project will operate by drawing energy from the grid and consolidating it, "bring[ing it] together" into compact storage units by charging its onsite lithium-ion batteries. The battery units will store up to 20 MWh of that energy, holding it in a stable, usable form until it is needed for later discharge to the grid when demand calls for it. By drawing from the grid, the ESF Project will collect and store the regional "grid mix" of wind, solar, fossil fuel and hydroelectric power. While the energy gathered will not be exclusively solar and individual sources cannot be distinguished once on the grid, it is certain that, in the aggregate, some portion of the energy collected and stored will be solar, given that solar currently comprises 20-25% of the Massachusetts grid mix. Accordingly, the court finds that the ESF will make it easier to gather and bring together ("facilitate the collection of") solar energy for storage and later distribution to the grid, particularly during periods of high demand and low solar supply.

Beyond this, the Project will also facilitate the expansion of solar energy generation in a systemic way. The Massachusetts grid already experiences a midday surplus of solar energy. As the grid lacks innate storage capacity, this surplus solar energy is routinely wasted or "curtailed." By charging when solar generation is highest and demand is low, and then discharging when demand peaks but solar generation is reduced, ESFs like Duxbury Energy's Project expand the amount of solar energy that can be integrated into the grid by reducing curtailment. Without such storage, solar energy that could otherwise power homes and businesses is simply lost, undermining the likelihood that new solar energy generation projects will be built.

Furthermore, while some solar projects include on-site energy storage, many existing and proposed solar installations do not. Standalone ESFs, like Duxbury Energy's Project, fill this gap, offering distinct advantages over accessory storage by being strategically located near high-demand areas where large-scale solar installations may be infeasible.

Ultimately, Massachusetts has enacted ambitious renewable energy and carbon emissions reduction targets, which fundamentally rely on increasing solar generation. *See Tracer Lane*, 489 Mass. at 781. These targets align with the goals the Legislature sought to advance in enacting the Solar Energy Provision. St. of 1985, c. 637, § 8 (declaring it "the policy of the commonwealth to encourage the use of solar energy"); *Tracer Lane*, 489 Mass. at 779 (Solar Energy Provision "was enacted to help promote solar energy generation throughout the Commonwealth"). The Commonwealth has also explicitly recognized the necessity of energy storage on the path to achieving these goals, setting a specific target of adding 1,000 MWh of storage capacity by 2030. The undisputed facts establish that without energy storage, Massachusetts cannot build enough solar energy systems to achieve its carbon neutrality goals. Thus, the ESF Project, by directly addressing solar curtailment and enabling greater solar

integration on the grid, also "facilitates the collection of solar energy" by supporting the Commonwealth's decarbonization objectives.

The ESF Project is Protected by the Solar Energy Provision, G.L. c. 40A, § 3, ninth par.

Based on the findings above and applying the Bylaw's definition of structures and the usual and accepted meanings of facilitate and collection, the court concludes that Duxbury Energy's ESF Project involves "the building of structures that facilitate the collection of solar energy." Accordingly, the Project is protected by the Solar Energy Provision and cannot be prohibited or unreasonably regulated except where necessary to protect the public health, safety or welfare.

This construction not only comports with the plain language used by the Legislature in the Solar Energy Provision, but is also consistent with legislative intent and best effectuates the purposes and the main object to be accomplished by the legislation.[27] In 1985, the Legislature declared it "the policy of the commonwealth to encourage the use of solar energy." St. of 1985, c. 637, § 8. At that time, it adopted the Solar Energy Provision "to help promote solar energy generation throughout the Commonwealth," and to protect "solar energy systems" and "structures that facilitate the collection of solar energy" from undue local regulation. *Tracer Lane*, 489

[27] Duxbury Energy has cited interpretations from the Attorney General and the Department of Public Utilities, along with recent legislation specifically addressing energy storage facilities, to support its arguments regarding the Legislature's intent to confer protections to ESFs under the Solar Energy Provision. *See, e.g.*, St. 2024, c. 239, § 23, "An Act Promoting a Clean Energy Grid, Advancing Equity, and Protecting Ratepayers"; Letter from Maura Healey, Attorney General, Commonwealth of Massachusetts, to Cara Dahill, Town Clerk, Town of Carver, Massachusetts (Nov. 14, 2022) (RA124); Letter from Andrea Campbell, Attorney General, Commonwealth of Massachusetts, to Anna Wetherby, Town Clerk, Town of Wendell (Mar. 1, 2023) (RA134, RA138-41); Letter from Andrea Campbell, Attorney General, Commonwealth of Massachusetts, to Jacklyn Morris, Town Clerk, Town of Sherborn (Apr. 2, 2024) (RA755); D.P.U. 22-18/22-19, Final Order, Petition of Medway Grid, LLC (June 30, 2023) (RA149, RA271-72); D.P.U. 22-59, Final Order, Petition of Cranberry Point Energy Storage, LLC (June 30, 2023) (RA273, RA387-89). The Massachusetts appellate courts debate the weight to be accorded such "subsequent" sources of statutory meaning or legislative intent, and this court does not rely on them. *See, e.g.*, *Briggs v. Comm.*, 429 Mass. 241, 255 (1999), citing 2B Singer, Sutherland Statutory Construction § 49.11, at 83-84 (5th ed. 1992).

Mass. at 779. As the Supreme Judicial Court recognized in *Tracer Lane*, the Legislature's goals of promoting solar energy forty years ago are naturally and directly tied to the Commonwealth's current decarbonization and net-zero targets. *See id.* at 781, citing the 2050 DECARBONIZATION ROADMAP. By freeing solar energy-related projects from undue local interference, they come online faster, in greater numbers, and more widespread, advancing the Commonwealth's decarbonization efforts.

Drawing from the 2050 Decarbonization Roadmap cited in *Tracer Lane*, "grid-scale battery storage," much like standalone ground-mounted solar energy systems, is "key to promoting solar energy in the Commonwealth." *Tracer Lane*, 489 Mass. at 781.[28] The 2050 Decarbonization Roadmap illustrates the close relationship between these technologies. Because solar energy generation is time- and weather-dependent and typically peaks during limited daytime hours, ESFs enable greater use of solar energy specifically. *See* 2050 DECARBONIZATION ROADMAP at 59 ("Higher amounts of solar require deployment of more storage to better utilize those resources....") (RA703).

ESFs can essentially time-shift the use of solar energy, collecting the peak of the sun's daytime output and storing it for later use when the sun is not shining. This facilitates solar energy's usefulness beyond its immediate generation window. ESFs also promote grid reliability and can serve as a replacement for higher-carbon, fossil fuel-based energy generation sources, like gas-fired thermal power plants, used to address the natural variations in renewable energy

[28] The Board contends that even if battery storage is necessary for the Commonwealth's decarbonization goals, it need not be accomplished through standalone facilities. While this might be true, the court's task is not to determine the optimal type of facility to achieve the Commonwealth's goals. The sole question before the court is whether a battery ESF like Duxbury Energy's Project qualifies as the "building of structures that facilitate the collection of solar energy." This statutory language does not distinguish whether the structures being built are "standalone" or interconnected with a solar generation project.

generation. *See id.* at 63-64 (RA707). To reduce our reliance on these plants while ensuring grid stability, the Commonwealth must deploy substantial "grid-scale battery storage as well as ... significant[ly] increase ... new clean generation – mainly low-cost ground-mounted solar – needed to charge it." *Id.* at 64 (RA708). By making the grid capable of absorbing excess solar production and reliable enough to integrate higher percentages, ESFs maximize and promote the utilization and generation of solar energy, consistent with the Legislature's intent and goals for the Solar Energy Provision.

The Board's Decision is Legally Untenable and Must Be Annulled

When reviewing an appeal pursuant to G.L. c. 40A, § 17, the court "must affirm the board's decision unless it finds that denial of the application was 'based on a legally untenable ground, or [was] unreasonable, whimsical, capricious or arbitrary.'" *Sedell v. Zoning Bd. of Appeals*, 74 Mass. App. Ct. 450, 453 (2009) (internal quotation omitted). Here, Duxbury Energy's application to the Board was limited to the issue of whether the proposed ESF qualified as "the building of structures that facilitate the collection of solar energy" under G.L. c. 40A, § 3, ninth par. The Board determined the Project was not protected. Where the court has reached the opposite conclusion, the Board's Decision is based on a "legally untenable ground."

The court accepts that the Town has a legitimate municipal interest in mitigating any serious health and safety risks that lithium-ion batteries and other equipment used in ESF projects pose. Under the Solar Energy Provision of G.L. c. 40A, § 3, "municipalities have more flexibility in restricting solar energy systems than they do, for instance, in the context of education, religion, or child care." *Tracer Lane*, 489 Mass. at 781. But this does not leave the Town free to preemptively ban statutorily protected systems and structures, simply because they may pose risks implicating public health, safety or welfare. Duxbury "[l]ike all municipalities ...

maintains the discretion to reasonably restrict the magnitude and placement" of solar energy projects, but an "outright ban ... restricts rather than promotes the legislative goal of promoting solar energy." *Id.* at 782; *see also Summit Farm Solar v. Planning Bd. for Town of New Braintree*, 30 LCR 61, 67 (2022) (Case No. 18 MISC 000367) (Speicher, J.), 2022 WL 522438, *10 ("[L]ocal regulation of solar energy facilities allowed by G.L. c. 40A, § 3 ... may not extend to prohibition except under the most extraordinary circumstances...."). Because G.L. c. 40A, § 3, ninth par., prohibits Duxbury from banning the ESF Project, the Board's Decision must be annulled.

Ordinarily, when a permit denial is based on improper grounds, the court will remand the matter to the Board for further proceedings consistent with the court's ruling. However, the Bylaw at issue here prohibits standalone battery ESFs anywhere in Duxbury. Duxbury has not adopted any form of zoning review standards or regulations for evaluating standalone (or any other) ESFs.[29] While a municipality may reasonably regulate structures protected by G.L. c. 40A, § 3, ninth par., "where necessary to protect the public health, safety or welfare," Duxbury has failed to adopt such regulations. *See Tracer Lane*, 489 Mass. at 782. This raises a critical question: What standard of review would the Board apply if this matter were remanded?

Faced with a similar issue in *Tracer Lane*, the Land Court (Speicher, J.) found that, without appropriately circumscribed standards defined in the zoning bylaw, any review on remand "would be necessarily and by definition ad hoc, arbitrary and subject to no appropriate limitations." *Tracer Lane*, 29 LCR at 94, 2021 WL 861157 at *8. Consequently, the court

[29] At least as far as the court knows. Neither party submitted the complete Bylaw into the summary judgment record, instead providing only selected excerpts. *See Warren v. Bd. of Appeals of Amherst*, 383 Mass. 1, 8 (1981) (zoning bylaw is not appropriate subject of judicial notice).

entered judgment ordering the building inspector to allow construction of the proposed access road, notwithstanding the zoning code's prohibition. *Id.*

The same reasoning applies here.[30] The Board's suggestions that on remand it could now conduct an *ad hoc* health, safety and welfare review, or that Duxbury Energy could seek a variance, are at odds with the caselaw and would vitiate the protections of G.L. c. 40A, § 3. "[R]equiring every desired expansion of solar use to obtain discretionary zoning relief is exactly the local interference that G.L. c. 40A, § 3, ninth par., is designed to prevent." *See, e.g.*, *Kearsarge Walpole LLC v. Zoning Bd. of Appeals of Walpole*, 104 Mass. App. Ct. 1119 (2024), 2024 WL 3896619, *3 (Rule 23.0 decision). The absence of any legislatively adopted standards applicable to a battery ESF precludes a meaningful remand in these circumstances.

CONCLUSION

For the reasons stated above, plaintiff's motion for summary judgment is **ALLOWED** and the defendants' cross-motion for summary judgment is **DENIED**.

Judgment shall enter in accordance with this decision.

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[30] The court acknowledges that this case's procedural footing differs from *Tracer Lane*, which proceeded as a G.L. c. 240, § 14A declaratory claim rather than a G.L. c. 40A, § 17 appeal. Tracer Lane's claim ripened after the Waltham building inspector issued a requested opinion to plaintiff. *See Tracer Lane,* 29 LCR at 91, 2021 WL 861157 at *2. Here, Duxbury Energy, seeking a similar opinion, was instead directed to submit a building permit application. This procedural difference is not critical, as the parties agree that Duxbury Energy's application to the Board was limited to whether the Project qualified for the protections of the Solar Energy Provision, making the substantive issue and circumstances in this case nearly a complete parallel to *Tracer Lane*.

Moreover, where Duxbury has no Bylaw provisions applicable to ESFs, this case is not akin to other Land Court decisions where remand was deemed appropriate in municipalities that had adopted site plan review standards applicable to solar energy systems. *Contrast, e.g.*, *Kearsarge Walpole, LLC vs. Lee*, 30 LCR 589, 593-94 (2022) (Case No. 21 MISC 000449) (Smith, J.), 2022 WL 4938498, *8; *NextSun Energy*, 31 LCR at 333, 2023 WL 3317259 at *16.

By the Court (Reznick, J.)
/s/ Lauren E. Reznick

Attest:

/s/ Deborah J. Patterson
Deborah J. Patterson, Recorder

Dated: June 23, 2025