The Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Fire Prevention Regulations Appeals Board
P.O. Box 1025 ~ State Road
Stow, Massachusetts 01775
(978) 567-3181 Fax: (978) 567-3121

MAURA T. HEALEY
GOVERNOR

KIMBERLEY DRISCOLL
LIEUTENANT GOVERNOR

TERRENCE M. REIDY
SECRETARY

LARRY S. FISHER
CHAIRMAN

Docket # 2025-03
9 Thomas Street
Burlington, Massachusetts

FIRE PREVENTION REGULATIONS APPEALS BOARD DECISION

A) Statutory and Regulatory Framework

This matter is an administrative appeal filed in accordance with Massachusetts General Laws Chapter 22D, section 5. The Appellant is seeking the Board of Fire Prevention Regulations' review of a determination of the Burlington Fire Department to reject a proposal for the installation of a solar panel array on a residential, single-family home located at 9 Thomas Street, Burlington, Massachusetts. The appeal was filed by Steve Connolly, Project Manager for Tesla Energy Systems (hereinafter referred to as the Appellant).

B) Procedural History

By notice dated February 18, 2025 and issued by the Burlington Fire Department, the Department rejected a proposal for the installation of a solar panel array on a residential, single-family home located at 9 Thomas Street, Burlington, Massachusetts. The Burlington Fire Department determined that as proposed, the rear of the house would not have a 36 in. access pathway and cited 527 CMR 1.00, Chapter 11, specifically sections 11.12.3.1.1 and 11.12.3.1.2 and incorporated section 11.12.3.2.3.3.

On March 7, 2025, the Appellant filed a timely appeal of the Burlington Fire Department's determination with the Fire Prevention Regulations Appeals Board. The Board held a hearing relative to this appeal on April 10, 2025, via video conference.

Appearing on behalf of the Appellant were: Steve Connolly, Project Manager for Tesla Energy Systems. Appearing on behalf of the Burlington Fire Department was Lt. Peter A. McAnespie, Sr. Present for the Board were: Chief Richard Arruda, Presiding Chair; Patricia Sheehan; and Keith Pogarian. Rachel E. Perlman was the Attorney for the Board.

C) Issue(s) to be Decided

Whether the Board should affirm, reverse or modify the determination of the Burlington Fire Department regarding the proposed solar array installation in accordance with 527 CMR 1.00, Chapter 11?

D) Evidence Received

1. Application for Appeal filed by Appellant (dated 3/7/2025)
2. Statement in Support of Appeal from Appellant (Undated)
3. Correspondence to Lt. McAnespie of Burlington Fire Department from Steve Connolly, Project Manager, Tesla Energy (Undated)
4. Order of Notice from the Burlington Fire Department (dated 2/18/2025)
5. Photographs of the property at 9 Thomas Street, Burlington
5A. Exterior back of home
5B. Exterior front of home
6. Site plan of home showing PV Array and Energy Storage System (dated 10/25/2024)
7. Burlington Fire Department – Additional Submission detailing 'Firefighting Roof Ventilation and its Importance'

E) Subsidiary Findings of Fact

1. The Appellant sought this Board's review of the Burlington Fire Department's rejection of a proposal for solar panel installation plan for a single-family home located at 9 Thomas Street, Burlington, Massachusetts. The appeal was filed pursuant to the provisions of M.G.L. c. 22D, s. 5.

2. The Appellant, Mr. Connolly, testified that the Burlington Fire Department's concern with the proposed plan is the fire setbacks and access pathways to the roof. Mr. Connolly stated that, if approved, the solar installation would be installed on the rear roof planes of the home. Specifically, 19 solar panels would be located on the MP2 rear roof plane with 2 additional solar panels to be located on the MP4 rear roof plane, with an energy storage unit on the rear outside of the subject property. The total array area would cover 455 s.f. of the roof, or approximately 15.76% of the total roof area (2,889 s.f.) (see Exhibit 6).

3. Mr. Connolly testified that the submitted site plan shows two (36 in.) access pathways provided on the front roof planes of the home, from gutter to ridge, allowing access to the back of the house on both sides and that each access pathway is free of obstructions.

4. Mr. Connolly stated that the system and plan are compliant with the requirements of the Massachusetts Fire Safety Code, specifically 527 CMR 1.00, 11.12.3.2.3.3[1], which allows access pathways to those mounting planes through adjacent pathways.

5. In support of the Burlington Fire Department's determination, Lt. Peter A. McAnespie, Sr. testified that it is the department's position that they want to have access to **each** roof plane with a PV array. Accordingly, the proposed plan submitted by Tesla energy was rejected as "the rear of the house does not have a 3-foot access pathway" (see Exhibit 4).

6. Lt. McAnespie further explained that if a fire were to occur at this property in the rear of the home, the department would not be able to access that area and cut the required ventilation holes due to the solar array.

7. Lt. McAnespie further stated that when conducting ventilation operations, the department aims to get onto the roof with a ladder directly over the seat of the fire to cut a 4x4 foot

[1] 527 CMR 1.00, 11.12.3.2.3.3 was not cited in the Burlington Fire Department rejection, but reference to the requirements of this section are incorporated in their order.

ventilation hole in the roof, allowing heat and toxic gases to escape. He stated that ventilation solely through the front access pathways, would not be ideal as the department could be spreading the fire and toxic gases throughout the home.

8. When questioned by the Board about what difficulties the Burlington Fire Department would have using the proposed access pathways on the front of the home, Lt. McAnespie testified that if firefighters can't get a roof ladder up and onto the roof, they would be forced to operate from the top and work downward, which he said is something they do not want to do.

9. Lt. McAnespie stated that as the authority having jurisdiction, the Burlington Fire Department can request the plan to be reduced or modified and that in this case, their request is not unreasonable. He stated that if the fire department could have three-foot access pathways on all roof planes, the plan would be an "acceptable design."

F) Ultimate Findings of Fact and Conclusions of Law

1. The applicable sections of 527 CMR 1.00, Chapter 11 to the subject property are as follows:

11.12.3.1.1 Access pathways, setbacks and space requirements shall be required to provide emergency access to the roof, provide pathways to specific areas of the roof, provide for smoke ventilation areas, and to provide emergency egress from the roof.

11.12.3.1.2 The AHJ shall be permitted to reduce or modify roof access based upon fire department ventilation procedures or alternative methods that ensure adequate fire department access, pathways and smoke ventilation.

11.12.3.2.3.3 For each roof plane with a PV array, a 36 in. (914 mm) wide access pathway from gutter to ridge shall be provided on the same roof plane as the PV array, on an adjacent roof plane, or straddling the same and adjacent roof planes.

2. While the Burlington Fire Department outlined the importance of access to roofs for ventilation, the Board finds that the proposed plan meets the minimum requirements of the Code. More specifically, two 36 in. access pathways are provided for – on separate roof planes, from gutter to ridge – on the home. Those access pathways are located on adjacent (front) roof planes to those containing PV arrays.

3. While the Board understands the department's desire to have additional access to all areas of the roof and has the authority in 11.12.3.1.2 to reduce or modify roof access based upon fire department ventilation procedures or alternative methods to ensure access, the Appellant's plan does not require such modifications. The Board finds that the Appellant's plan meets the requirements as set forth in 527 CMR 1.00, 11.12.3.2.3.3 which specifically states "for each roof plane with a PV array, a 36 in. (914 mm) wide access pathway from gutter to ridge shall be provided on the same roof plane as the PV array, on an adjacent roof plane, or straddling the same and adjacent roof planes."

4. The Board finds that there is no unusual circumstance or condition either in the property's layout or in the fire department's ventilation procedures which would limit and/or otherwise prevent the Department from accessing the roof and would otherwise warrant the reduction or modification of the roof access, as indicated in 11.12.3.1.2.

G) Decision and Order

Based upon the forgoing reasons, this Board **reverses** the written determination of the Burlington Fire Department to require rear access pathways at the property located at 9 Thomas Street, Burlington, Massachusetts.

H) Vote of the Board

Chief Richard K. Arruda, Presiding Panel Member	In Favor
Patricia Sheehan	In Favor
Keith Pogarian	In Favor

I) Right of Appeal

You are hereby advised you have the right, pursuant to section 14 of chapter 30A of the General Laws, to appeal this decision, in whole or in part, within thirty (30) days from the date of receipt of this order.

SO ORDERED,

_____
Chief Richard K. Arruda, Presiding Panel Member
Fire Prevention Regulations Appeals Board

Dated: April 16, 2025

A COPY OF THIS DECISION AND ORDER WAS FORWARDED BY E-MAIL AND CERTIFIED MAIL, RETURN RECEIPT REQUESTED TO:

Steve Connolly, Tesla Energy
240 Ballardvale Street, Unit A
Wilmington, Massachusetts 01887
SConnolly@tesla.com

Lt. Peter A. McAnespie, Sr.
Burlington Fire Department
21 Center Street
Burlington, Massachusetts 01803
pmcanespie@burlington.org