

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 25-_____-PET

De Minimis Application of Bell Atlantic Mobile Systems,)
LLC d/b/a Verizon Wireless, for a Certificate of Public Good,)
pursuant to 30 V.S.A. § 248a, authorizing the modification)
of telecommunications equipment on an existing structure)
in Georgia, Vermont)

**PREFILED DIRECT TESTIMONY OF KRUPAKARAN KOLANDAIVELU, P.E.
ON BEHALF OF BELL ATLANTIC MOBILE SYSTEMS, LLC
d/b/a VERIZON WIRELESS**

December 3, 2025

Summary:

Mr. Kolandaivelu's testimony will describe the Project and address the Project's conformance with de minimis requirements.

Q1. Please state your name, employer and current position.

A1. My Name is Krupakaran Kolandaivelu. I am the Vice President - Engineering at Network Building + Consulting, where I have worked since 2012 which has provided engineering and consulting services to Verizon Wireless and its predecessors since 2012.

Q2. Please briefly state your professional background.

A2. See attached resume Exhibit KK-1.

Q3. Have you ever testified before the Public Service Board or Public Utility Commission?

A3. Yes, I provided pre-filed testimony in Case No. 25-2486-PET. In addition, I have testified as an expert witness numerous times at zoning and planning board meetings in New Jersey and Pennsylvania.

Q4. Please identify the location of the Project that is the subject to this § 248a filing.

A4. Verizon proposes to modify an existing wireless telecommunication facility located on a 83.3' above ground level ("AGL") silo ("Silo") located at 4653 Ethan Allen Highway in the Town of Georgia. Verizon refers to the Project as "Georgia 3". The coordinates of the Project are latitude 44.738991 North and longitude -73.115799 West. The location of the Project is shown on Exhibit KK-2 Permit Plans. The property owner has given Verizon permission to proceed with this application.

On October 23, 2017, the Public Utility Commission ("PUC") approved the Petition of Bell Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a Verizon Wireless in Case No. 17-3988-PET authorizing the co-location of Verizon's antennas and ancillary equipment on the existing Silo at the site. This project consists of modifications to the equipment installed within the Steeple pursuant to the Order and CPG.

Q5. Please describe, in detail, the design of the proposed Project.

A5. Verizon currently has twelve (12) antennas, six (6) Remote Radio Heads ("RRHS"), and

1 two (2) OVP distribution boxes installed on the Silo.

2 Verizon now proposes to remove three (3) antennas, which each measure 5.99 sq. ft, and
3 six (6) RRHs, three (3) of which each measure 1.81 sq. ft. and three (3) of which each
4 measure 2.15 sq. ft.

5 They will be replaced by three (3) antennas, which each measure 3.16 sq. ft., six (6) RRHs,
6 three (3) of which each measure 1.55 sq. ft. and three (3) of which each measure 2.62 sq.
7 ft., and three (3) NGOVP distribution boxes, which each measure 1.20 sq. ft. See Permit
8 Plans at Sheet A-2. The Antennas will be mounted at the same centerline as the existing
9 equipment, 77' AGL. The topmost height of the new Antennas will extend to 78.2' AGL.

10 The aggregate visible surface area of the existing equipment on the Silo is 87.90 square
11 feet. Following the proposed modification, the aggregate visible facial surface area will be
12 reduced to 83.66 square feet. Full and accurate specifications of the proposed Antennas,
13 RRHs, and OVP are detailed in Exhibit MM-1.¹

14 TKK Engineering prepared a Structural Certification Letter (See Exhibit KK-3) on behalf
15 of Verizon for this project dated October 20, 2025, which concluded that the Silo and
16 antenna mounts have sufficient capacity to support the proposed modifications.

17 Co-axial cable run from Verizon's equipment in the Shelter up a cable ladder to the
18 equipment on the Silo. Three (3) 3x6 hybrid cables will be added, following the existing
19 routing.

20 Verizon will gain access to the Silo using the existing access.

21 Existing on-site utilities will provide services to the site.

¹ From time to time, equipment manufacturers may slightly alter their products or Verizon Wireless may purchase from different suppliers. Therefore, there is a possibility that the actual antennas may differ slightly from what is described in the attached specifications.

1 No site clearing is necessary and there no new impervious surface area will be created.

2 There will be no changes to: (1) the property boundaries and setbacks, (2) utilities,
3 (3) wetlands, (4) drainage or erosion control, (5) screening, landscaping, ground cover,
4 fencing, exterior lighting and signage, or (6) access to the Silo.

5 **Q6. Will the installation increase the height or width of the support structure?**

6 A6. No. Excluding equipment, antennas and ancillary improvements, there will be no increase
7 to the height or width of the support structure.

8 **Q7. Will the addition of the antennas and improvements extend vertically above the**
9 **height of the support structure to which they are attached by more than ten feet?**

10 A7. No. No portion of any antenna will extend vertically more than 10' above the portion of the
11 Silo to which it will be attached. *See* Exhibit KK-2.

12 **Q8. Will the addition of the antennas and improvements extend horizontally from the**
13 **support structure or the facility by more than ten feet (10')?**

14 A8. No. The Antennas and RRHs will extend less than 10' horizontally from the Silo. *See*
15 Exhibit KK-2.

16 **Q9. Will the addition of the antennas and improvements on the support structure,**
17 **excluding cabling, increase the aggregate visible surface area of the faces of the**
18 **antennas on the support structure by more than 75 square feet?**

19 A9. No. The aggregate visible surface area of the faces of the Antennas following the modification
20 will *decrease* from 87.90 square feet to 83.66 square feet.

21 **Q10. Will there be any increase in the impervious surface area at this location?**

22 A10. No, this project will result in no additional impervious surface.

23 **Q11. Please identify all existing permits relating to the facility and any conditions contained**
24 **in those permits that could impact the proposed improvements.**

1 **A11.** As referenced above, on October 23, 2017, the PUC approved the Petition of Bell Atlantic
2 Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a Verizon Wireless in
3 Case No. 17-3988-PET authorizing the co-location of Verizon's antennas and ancillary
4 equipment on the existing Silo at the site. I am not aware of any conditions contained in
5 the permit which would impact the proposed improvements.

6 **Q12. Does this conclude your Prefiled Direct Testimony?**

7 A12. Yes

Exhibits to Prefiled Testimony of Krupakaran Kolandaivelu, P.E.

Exhibit KK-1	Resume
Exhibit KK-2	Permit Plans
Exhibit KK-3	Structural Certification Letter