

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 24-3345-PET

Petition of Bell Atlantic Mobile Systems, LLC and)
Vertex Towers, LLC requesting a certificate of)
public good, pursuant to 30 V.S.A. § 248a,)
authorizing the installation of wireless)
telecommunications equipment at)
410 Hunter Park Road in Manchester, Vermont)

**CONSOLIDATED RESPONSE OF
BELL ATLANTIC MOBILE SYSTEMS, LLC
AND VERTEX TOWERS, LLC TO
TO THE PUBLIC UTILITY COMMISSION’S REQUEST
FOR A RESPONSE TO COMMENTS**

Petitioners Bell Atlantic Mobile Systems, LLC, d/b/a Verizon Wireless (“Verizon”) and Vertex Towers, LLC (“Vertex”) (collectively, the “Petitioners”), by their counsel, MSK Attorneys, submit this Consolidated Response to the Public Utility Commission’s (“PUC”) request for response to comments dated December 16, 2024, with respect to the December 6, 2024 Comments filed by the Vermont Department of Public Service (“DPS”), the November 11, 2024 Comments filed by the Town of Manchester (the “Town”) and comments filed by various members of the public.

A. RESPONSE TO DPS COMMENTS.

Contrary to the statement of DPS that the “petition still does not explain why co-location on the closest tower to the proposed site would not enable Petitioner to meet its coverage goals”, the Petition clearly explains why co-location on the closest tower would not enable Verizon Wireless to meet its coverage objective. As was stated in the Pre-filed Direct Testimony of Martin Lavin at page 3 and supported by the accompanying propagation plots (Exhibit ML-2), “[t]he closest existing facility suitable for a wireless installation (#3 in Exhibit ML-3) is approximately

1.3 miles from the Proposed Facility **and Verizon is already installed on that tower.** (emphasis added). Moreover, Mr. Lavin states that “the existing facilities both within the Town of Manchester and within a radius of ten (10) miles from the proposed site cannot provide adequate coverage to the area being served by this project. They are much too far away to provide coverage to the identified gap.” *Id.* As the propagation maps (Exhibit ML-2) clearly indicate, Verizon is experiencing a gap in coverage, notwithstanding already co-locating on the nearest existing tower, in and around:

- Route 7A (Main Street) from Manchester Center north into Dorset;
- Route 30 (Bonnet Street) from Manchester Center north into Dorset;
- Hunter Park;
- Thompson Park;
- Manchester Town Hall and Public Safety Complex;
- Manchester Center; and
- The surrounding roads, neighborhoods, businesses, and shopping areas in the proximity of the proposed site.

The Application identifies 14 previously existing tower locations within 10 miles of the proposed Facility, and provides more than adequate testimony to confirm that there are no co-location alternatives to the proposed Facility.

The DPS claims that the Petition insufficiently addresses the “towers on Skyline Drive” for potential co-location. As is shown on Exhibit ML-3, the Skyline Drive towers are 3.7 miles and 4.0 miles away from the proposed Facility, and are approximately 3 to 6 miles from the gap in coverage as shown on the propagation plots (Exhibit ML-2). As the DPS is aware, cell sites are

heavily regulated by the Federal Communications Commission (“FCC”) with respect to frequency bands and power output. Accordingly, Verizon cannot just “turn up the power” at a distant site to provide coverage to a targeted area. The size of the area potentially served by each cell site depends on several factors including the number of antennas used, the height at which the antennas are deployed, the topography of the surrounding land, vegetative cover, and natural or man-made obstructions in the area. The actual service area at any given time also depends on the number of customers who are using the network in range of that cell site. As customers move throughout the service area, the transmission from the phone or other device is automatically transferred to the Verizon facility with the best reception, without interruption in service, provided that there is overlapping coverage between the cells.

Each cell site must be primarily designed to strike a balance between the overall geographic coverage area it will serve and the site’s capacity to support the usage within the coverage footprint. In more densely populated suburban and urban environments such as downtown Manchester, the capacity to handle calls and data transmissions is of increasing concern, and cell sites must limit their coverage footprint to an area where the offered network traffic can be supported by the radio equipment and resources. Due to the aggressive historical and projected growth of mobile usage, particularly for mobile data (which doubled in usage from 2021 to 2023 and now exceeds 100 trillion MB of data in the U.S. annually)¹, instances arise where the usage demand can no longer be supported by the site(s) serving an area, and new facilities must be integrated to provide capacity relief to the overloaded sites.

¹ “2024 Annual Survey Highlights”, Sept 10, 2024, CTIA.
<https://www.ctia.org/news/2024-annual-survey-highlights>

Again, the “Skyline Drive” (Equinox Mountain) towers are 3.7 miles and 4.0 miles away from the proposed Facility, and approximately 3 to 6 miles from the coverage objective. The existing towers on Skyline Drive are shorter (60’ – 80’ tall) towers at a ground elevation of over 3,800’ above mean sea level (“AMSL”), more than 3,000’ above the AMSL of the proposed Facility and were clearly designed for other forms of radio and wireless technology (i.e. point to point transmissions, that must be above all terrain and topographical obstruction, and AM/FM radio transmissions, which are higher powered, lower band, one-way transmissions designed to broadcast over a much greater geographical distance). Verizon provides two-way digital voice and data communications services using 4th Generation (4G) and 5th Generation (5G NR) technology in the 700 MHz, PCS (1900 MHz), AWS (2100 MHz) and C-Band frequency bands. These 4G and 5G networks are used to provide high-speed wireless connections used by mobile devices for fast web browsing, media streaming, video conferencing, and other applications that require broadband connections. The mobile devices that benefit from these advanced networks include typical smartphones, tablets, laptops, and Wi-Fi hotspots. With the continual advancement of its networks, Verizon customers will enjoy even faster connections to people, information, and entertainment in a day and age when reliable wireless connectivity is an indispensable part of daily personal and business life. However, the Skyline Drive towers are much too far away and are much too high in elevation to satisfy the targeted gap in Manchester identified by Verizon and to be served by the proposed Facility.

Accordingly, Petitioners' Application provides sufficient analysis regarding the inability of Verizon to co-locate on existing facilities.²

B. RESPONSE TO TOWN COMMENTS

Contrary to the statements of the Town, the proposed Facility does comply with the Town Plan. Section 1.1 of the Town Plan regarding Economic Development states that its mission is to “[c]reate a vibrant economic environment that encourages people to both live and work in Manchester.” Moreover the Town’s Northshire Economic Development Strategy (NEDS) report which is discussed in the Town Plan identified several goals to support this mission:

- (1) Improve the economic development environment,
- (2) Cultivate tourism, food, arts and culture industries,
- (3) Support entrepreneurship and business development, and
- (4) Enhance the quality of life for residents and workers.

The proposed Facility will enhance wireless telecommunications coverage in the Town for both customers of Verizon as well as customers of other telecommunications carriers who will co-locate on the proposed Facility in the future. Enhancing wireless telecommunications coverage in the Town is desirable to the public convenience for personal use of wireless services and for community safety in times of public crisis and natural disaster. Wireless telecommunications service also provides a convenience to residents and is an attractive feature and service to businesses. The proposed Facility will preserve and increase the amenities of the Town by

² The DPS also raises issue with compliance with the Manchester Town Plan, which will be addressed in Section B below.

enhancing telecommunications services for the tourism, food, arts and culture industries, and will also facilitate the adequate provision of transportation by improving mobile telecommunications for business, personal and emergency uses.

Wireless service is important to public safety and convenience. As of the end of 2021 there were an estimated 457 million mobile wireless subscribers in the United States. *See FCC's 2022 Communications Marketplace Report*, p. 56 (December 31, 2022). There are now more wireless subscriptions than landline telephone subscriptions in the United States, and the number of landline telephone subscribers across the nation is declining each year while the number of wireless users increases. Moreover, it is forecasted that wireless connections will become more significant as network service providers facilitate increased connectivity directly between devices, sensors, monitors, etc., and their networks. *Id. at 56-57.*

For many Americans, wireless devices have become an indispensable replacement for traditional landline telephones. Even when Americans maintain both types of telephone service, Americans are opting increasingly to use wireless devices in place of their landline telephones. For Americans living in "wireless-only" homes and for those others while away from their homes, cell phones are often their only lifeline in emergencies. Over 98% of Americans now own a cellphone of some kind, and more than 91% own smartphones and 15% of adults are "smartphone-only" internet users – meaning they own a smartphone, but do not have traditional home broadband service. <http://www.pewinternet.org/fact-sheet/mobile/> More importantly, more than 76% percent of American adults live in wireless only households for voice connectivity, and 80% of the estimated 240 million 911 calls made annually in the U.S. are placed are made from wireless devices. <https://www.ctia.org/the-wireless-industry/infographics-library>. To improve the

effectiveness and reliability of wireless 911 services, the FCC's Phase II wireless enhanced 911 (E911) rules require wireless service providers to transmit the location of a wireless 911 call within very strict accuracy requirements. <https://www.fcc.gov/general/enhanced-9-1-1-wireless-services>

Section 3.3 of the Town Plan regarding Power and Telecommunication Facilities states the following mission: "Manchester recognizes the importance of efficient and functioning electrical power and telecommunications facilities, and will work with utility providers to ensure that siting of facilities is accomplished in a manner that protects the scenic, cultural and natural resources of the town." The Town Plan further specifies that:

In order to enhance aesthetics and visual character **of the downtown area**, public utilities (including ... telecommunications facilities) should be relocated from public view along main streets wherever possible. This may include behind buildings, **away from the street**, along streets, or underground. Where this is not possible, these should be screened from adjacent properties with dense coniferous plantings. Town Plan Section 3.3, pp. 38 (emphasis added)

As is shown by Prefiled Direct Testimony of David Archambault and accompanying photos from the Visibility Demonstration and photo simulations showing the proposed Facility (Exhibit DA-2), the proposed Facility will have minimal visual impact. Moreover, Petitioners have agreed to mitigate the minimal visual impact of the proposed Facility by camouflaging the tower as a "monopine" style tower with tree branches hiding the mounting platforms, brown antenna "socks" and a brown Corten steel "trunk".

The most visible location of the proposed Facility (photo location 1) is taken at the driveway on the landowner's property (who has not only consented to the proposed Facility, but

has entered into a lease agreement with Vertex to locate the proposed Facility on its property). Photo location 2 is also on the same landowner's property, but visibility is even more muted by the proposed monopine design which will blend in with the existing vegetation. There is only minimal and distant visibility from photo locations 6, 12 and 26, each showing the proposed Facility against a vegetated backdrop and not above the distant ridgeline. The remainder of the photos clearly show that the location of the proposed Facility and the substantial existing vegetative buffer and area topography effectively screens the proposed Facility from nearby main roads as well as downtown Manchester.

As sited, the proposed Facility will be (i) approximately .33 miles from the nearest portions Routes 7A (Main Street) and Route 30 (Bonnet Street) and minimally visible from these roads generally, (ii) behind a very large building (ice rink) and screened from adjacent properties with dense coniferous plantings and (iii) more than 1 mile (and not visible from) the intersection of Routes 7A and 30. *See Exhibit DA-2, Page 2.* The proposed Facility has been designed and sited in a manner that protects the scenic, cultural and natural resources of the Town in accordance with the Town Plan.

With respect to location of telecommunications towers, the Town Zoning Ordinance³ provides that

³ Because the proposed Facility is subject to the jurisdiction of the PUC under 30 V.S.A. § 248a., it is not regulated by the Town's Zoning Ordinance: "No permit shall be required for a wireless telecommunication facility that is subject to or has received a Certificate of Public Good under 30 VSA §248(a)." Town Zoning Ordinance Section 7.1.1. However, because the Town raised issues with respect to compliance with the Town's Zoning Ordinance, Petitioners have responded herein.

7.1.7 Location

Telecommunications towers and associated equipment, buildings, and infrastructure shall not be located:

- (1) On undevelopable land;*
- (2) In historic districts as defined in this ordinance;*
- (3) In residential zoning districts as defined in this ordinance;*
- (4) Within 300 feet of any residence, residential zoning district or school; or*
- (5) Within the approach or departure routes or patterns of an approved airstrip.*

As designed, the proposed Facility:

- will BE on land previously developed (and also immediately adjacent to a previously approved large solar panel installation as well as a very large industrial sand and gravel facility;
- will NOT be in or anywhere near a historic district;
- will BE in the MU2 (Mixed Use 2) Zoning District, which encourages the development of public infrastructure and light industrial uses (and will be immediately adjacent to the OI (Office Industrial) Zoning District⁴;
- will NOT be within 300 feet of any residence, residential zoning district or school⁵;
- and
- will NOT be within the approach or departure routes or patterns of an approved airstrip.

⁴ The Table of Uses in the Town's Zoning Ordinance PERMITS Communication Antennas in the MU2 Zoning District, but restricts Communication Towers to only the OI (Office Industrial), RA (Rural Agricultural) and FC (Forest Conservation) Zoning Districts.






The nearest residence to the proposed Facility is over 900 feet away, the nearest residential zoning district is over 1,800 feet away, and the nearest school is over 1,100 feet from the proposed Facility, all more than 3 times the applicable setbacks set forth in the Town's Zoning Ordinance.

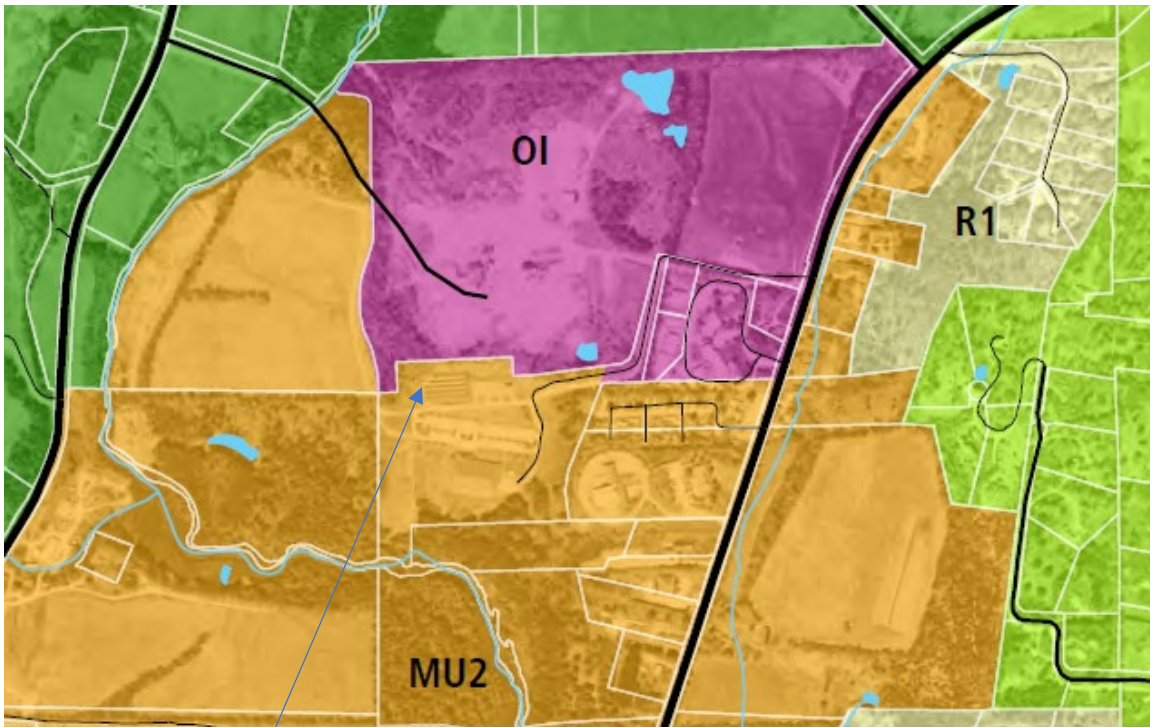


Moreover, although a Communications Tower is a permitted use in the OI Zoning District (subject to a Conditional Use Permit from the Town Development Review Board), location of a tower in the nearby OI district would be much closer and much more visible from Main Street and Bonnet Street due to previous vegetation removal, and would also much closer to nearby residential uses and the R1 (Residential 1) and RR (Rural Residential) Zoning Districts.

TOWN OF MANCHESTER
OFFICIAL ZONING DISTRICT MAP
Adopted on October 12, 2021 and effective on November 2, 2021

Proposed Zoning Districts

 Downtown (DN)	 Town Center (TC)	 Residential 1 (R1)
 Mixed Use 1 (MU1)	 Office Industrial (OI)	 Rural Residential (RR)
 Mixed Use 2 (MU2)	 Residential 10 (R10)	 Rural Agricultural (RA)
 Mixed Use 3 (MU3)	 Residential 4 (R4)	 Forest Conservation (FC)



Proposed location.

Accordingly, although the proposed Facility is not regulated by the Town's Zoning Ordinance, the proposed Facility has been designed and sited to address the purpose and intent as well as the specific requirements and restrictions of the Town Zoning Ordinance as much as possible.

C. RESPONSE TO PUBLIC COMMENTS

The public comments raise duplicative and/or overlapping issues raised by the Town and the DPS, mainly pertaining to three general topics:

- The alleged non-compliance of the proposed Facility with the Town Plan and/or the Town Zoning Ordinance (discussed above); and
- The alleged visual impact of the proposed Facility (discussed above); and
- The perceived health effects of the proposed Facility (discussed below).⁶

As the PUC is aware, Section 332(c)(7) of the Telecommunications Act of 1996, 47 U.S.C. § 332(c), governs federal, state, and local government regulation of the siting of "personal wireless service facilities" such as the Facility proposed by the Petitioners. It provides, in relevant part, that:

- (iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the

⁶ By commenting on the distance of the proposed Facility from nearby residences, schools or recreational uses, (notwithstanding that the proposed Facility is over three times the applicable restrictions from these uses delineated by the Town Zoning Ordinance), public commentators are at least implicitly if not explicitly commenting on the perceived health effects of the proposed Facility, which are outside of the jurisdiction of the PUC.

environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC's] regulations concerning such emissions.

As the Court in *T-Mobile v. Town of Ramapo* explained, “a state or local government cannot base a decision to regulate a wireless facility on the “environmental effects” of that facility's radio frequency emissions, if the facility is in compliance with FCC standards.” *T-Mobile v. Town of Ramapo*, 701 F.Supp.2d 446, 460 (S.D.N.Y. 2009). Further, “[e]nvironmental effects within the meaning of the provision include health concerns about the biological effects of RF radiation.” *Id.* (citing *Freeman v. Burlington Broadcasters, Inc.*, 204 F.3d 311, 325 (2d Cir.2000); *Cellular Telephone Co. v. Town of Oyster Bay*, 166 F.3d 490, 494 n. 3 (2d Cir.1999)). As the *Town of Ramapo* court concluded, “the better and more straightforward reading of the provision—which does not contain a qualifying word like ‘solely’— is that any decision actually based on environmental effects is a violation, whether other legitimate reasons factored into the decision or not.” *Id.*

Accordingly, the issue is preempted by Federal law, and the PUC cannot regulate the placement, construction, and modification of proposed Facility on the basis of the environmental effects of radio frequency emissions.

Dated: December 31, 2024
Burlington, Vermont

Respectfully submitted,

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