# DRAFT

Petition No. 1639 T-Mobile Northeast LLC 323 Route 81 Killingworth, Connecticut

> Staff Report January 17, 2025

#### **Notice**

On September 5, 2024, the Connecticut Siting Council (Council) received a petition from T-Mobile Northeast LLC (T-Mobile) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k for the proposed modifications to an existing telecommunications facility located at 323 Route 81, Killingworth, Connecticut (Petition or Project). Specifically, T-Mobile proposes to co-locate antennas on the existing monopole and install ground equipment within an expanded compound at the site.

Pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40, on or about August 26, 2024, T-Mobile provided notice of the proposed Project to abutting property owners and Town of Killingworth (Town) officials. No comments from the Town or abutting property owners were received.

On September 5, 2024, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by October 5, 2024. No comments were received.

The Council issued interrogatories to T-Mobile on November 21, 2024. T-Mobile submitted responses to the Council's interrogatories on January 3, 2025.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take an action on a petition for a declaratory ruling within 60 days of receipt. During a regular meeting held on October 24, 2024, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than February 2, 2025, which is within the 180-day statutory deadline for a final decision under CGS §4-176(i) and is the 150-day decision deadline for a modification to an existing telecommunications facility under Federal Communications Commission (FCC) regulations.

# **Existing Facility**

The Council issued a Certificate of Environmental Compatibility and Public Need to SNET Cellular, Inc. for this facility on May 15, 1989 in Docket No. 104.

The existing facility is owned by Valley Shore Emergency Communications and consists of a 140-foot self-supporting lattice tower located on an approximately 42.5-acre town-owned parcel that is developed with several buildings, a driveway and parking lot. The host parcel is zoned residential and hosts the Town Hall, Fire Department, and Town garages. The parcel is bounded by Higganum Road (Route 81) to the west and Wolf Hollow Lane to the north, and by residential properties to the east and south.

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The facility is located in the northern portion of the parcel and is enclosed within an irregularly shaped 2,925 square foot fenced compound.

The tower hosts AT&T at the 133-foot level and Cellco at the 123-foot level. The fenced equipment compound consists of one existing storage room, two existing equipment shelters and an existing equipment pad, which support cabinets and associated ground equipment of the telecommunications carriers.

# **Proposed Facility Modifications and Associated Equipment**

The Project is needed to provide wireless service to Route 81 and the surrounding area.

T-Mobile proposes to install six 600/700/1900/2100/2500 MHz antennas and six remote radio units on a three sector antenna mount at a centerline height of 113 feet above ground level (agl). The proposed antennas would be capable of providing 5G services.

T-Mobile also proposes to expand the existing compound 18-feet by 25-feet (approximately 450 square feet) and install two equipment cabinets and other ground level associated equipment on a new 8-foot by 10-foot concrete pad. T-Mobile would also install a 48 kW diesel-fueled backup emergency generator on a new 5- foot by 10-foot concrete pad. The compound expansion would be a rectangle-shaped area in the northeastern part of the compound and would be enclosed by a fence that matches the existing fence. A 3-foot 6-inch high retaining wall would be installed on the north and east sides of the expanded equipment area.

T-Mobile would install a 48 kW diesel-fueled emergency backup generator on a new 5-foot by 10-foot concrete pad. The generator would have a 240-gallon double walled fuel tank with fuel sensor. The generator run time under emergency conditions would be 48 to 72 hours before refueling is required. A biweekly 12-minute run cycle is required.

T-Mobile would also install a battery cabinet within which would be capable of supplying power for approximately 6 to 8 hours before recharging is necessary.

Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the FCC. At present, no standards for backup power for CMRS providers have been promulgated by the FCC.

The estimated cost of the Project is \$150,000.

Neither the Project, nor any portion thereof, is proposed to be undertaken by state departments, institutions or agencies, or funded in whole or in part, by the state through any contract or grant. T-Mobile is a private entity.

The Project would take approximately three weeks to complete. Typical construction hours and workdays of the week are Monday through Friday, 8:00 AM to 6:00 PM. Construction is planned to start in October 2025.

## **Public Health and Safety**

The Project would be constructed in accordance with the current Connecticut State Building Code, Telecommunications Industry Association (TIA) 222-H Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a maximum wind speed of 125 miles per hour, the National Electrical Code, the Connecticut State Fire Safety Code, and the Occupational Safety and Health Administration (OSHA) standards.

Expansion of the existing compound would not impact or interfere with any existing nearby public utilities. Prior to commencement of construction, all existing utilities and infrastructure locations will be identified to ensure that proper construction measures can be incorporated to avoid impacts and interference.

The nearest residential property line from the expanded fence is located approximately 220 feet to the northeast at 17 Wolf Hollow Lane.

A Professional Engineer duly licensed in the State of Connecticut has certified that the tower is structurally adequate to support the proposed loading with certain recommendations. Prior to T-Mobile's proposed antenna installation, tower modifications are required.

T-Mobile's proposed facility would be capable of supporting text to 911 and would comply with E911 requirements and the Warning, Alert and Response Network Act of 2006.

The expanded equipment compound would be enclosed by a locked fence. All cabinets would have alarms to detect tampering.

T-Mobile would install a 48 kW diesel-fueled emergency backup generator on a new 5-foot by 10-foot concrete pad. The generator would have a 240-gallon double walled fuel tank with fuel sensor. The generator run time under emergency conditions would be 48 to 72 hours before refueling is required. A biweekly 12-minute run cycle is required.

T-Mobile would also install a battery cabinet which would be capable of supplying power for approximately 6 to 8 hours before recharging is necessary.

Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the FCC. At present, no standards for backup power for CMRS providers have been promulgated by the FCC.

The calculated cumulative worst-case power density after T-Mobile's installation would be 22.7% of the applicable exposure limit established by the Federal Communications Commission at ground level using a far field approximation.

### **Environmental Effects and Mitigation Measures**

Construction will disturb a total area of 1,070 square feet. The estimated amount of cut and fill is 78 cubic yards. No trees would be removed for the compound expansion.

The site is not located within a flood zone or proximate to any wetlands. The nearest wetland is located off site approximately 600 feet (0.14 miles) west of the compound.

The site is not located within a Connecticut Department of Energy and Environmental Protection (DEEP) Natural Diversity Database buffered area and is not within a DEEP designated Aquifer Protection Area.

There would be no increase in tower height. The proposed compound expansion would impact a small portion of the existing site perimeter. The equipment would be located behind the existing compound and would not be visible from the road or surrounding area. Thus, no substantial adverse environmental or visual impact is expected from the proposed installation.

#### Conclusion

If approved, staff recommends the following conditions:

- 1. Approval of any project changes be delegated to Council staff;
- 2. Structural reinforcements shall be installed in accordance with the Structural Analysis and associated drawings performed by All-Points Technology Corporation, dated May 6, 2024 and stamped and signed by Michael Trodden, prior to T-Mobile's antenna installation;
- 3. Prior to antenna installation, T-Mobile shall provide documentation certified by a Professional Engineer that structural reinforcements were installed in compliance with the recommendations of the Structural Analysis;
- 4. RF access restriction and caution signage shall be installed at the site in compliance with FCC guidance;
- 5. Deployment of any 5G services must comply with FCC and FAA guidance relative to air navigation, as applicable;
- 6. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities:
- 7. Unless otherwise approved by the Council, if the facility modification authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the owner/operator shall dismantle and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The owner/operator of the associated equipment shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
- 8. Any request for extension of the time period to fully construct the facility modification shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Killingworth;
- 9. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed along with a representative photograph of the facility modification;
- 10. Any nonfunctioning equipment on this facility owned and operated by T-Mobile shall be removed within 60 days of the date the equipment ceased to function;
- 11. The owner/operator of the associated equipment shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility modification under CGS §16-50v;

- 12. This Declaratory Ruling may be transferred or partially transferred, provided the owner/operator/transferor of the associated equipment is current with payments to the Council for annual assessments and invoices under CGS §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under CGS §16-50v;
- 13. If the owner/operator of the associated equipment is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the associated equipment within 30 days of the sale and/or transfer; and
- 14. This Declaratory Ruling may be surrendered by the owner/operator of the associated equipment upon written notification to the Council.



**Figure 1 - Proposed Facility Location** 

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SITE PLAN SCALE: 1/8"=1'-0"

Figure 2 - Proposed Site Plan

EXISTING TOWN-ANTENNAS (TYP.) EXISTING ATAT ANTENNA CENTERLINE ELEV. 1379 (AGL) EXISTING ATET ANTENNAS m? FUTURE VERIZON ANTENNA CENTERLINE ELEV: 123'± (AGL) FUTURE VERIZON PROPOSED T-MOBILE -SECTOR FRAME PROPOSED T-MOBILE ANTENNA CENTERLINE ELEV: 113'2 (AGL) PROPOSED T-MOBILE -ANTENNAS (2/SECTOR, 6 TOTAL) AND RRUS (2/SECTOR, 6 TOTAL) EXISTING TOWN ANTENNAS (TYP.) EXISTING TOWN-ANTENNAS (TYP.) EXISTING 140 TALL SELF SUPPORT TOWER (REFER TO STRUCTURAL ANALYSIS AND TOWER MODIFICATION DESIGN)(BY OTHERS) PROPOSED T-MOBILE FEED LINES ERICSSON HYBRID TRUNK 6/24 4AWG (X3) PROPOSED T-MOBILE GPS RECEIVER MOUNTED TO POST PROPOSED T-MOBILE ICE BRIDGE PROPOSED B160 BATTERY CABINET PROPOSED 6168 SITE SUPPORT CABINET PROPOSED T-MOBILE 48 KW DIESEL GENERATOR (REFER TO PAGE A-2) APPROXIMATE GROUND LI.

**Figure 3 - Tower Elevation**