



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

February 18, 2022

Ersilia Davis
Crown Castle
1777 Sentry Parkway W
VEVA 17, Suite 400
Blue Bell, PA 19422
edavis@nbcllc.com

RE: **EM-T-MOBILE-155-211122-** T-Mobile notice of intent to modify an existing telecommunications facility located at 29 South Main Street, West Hartford, Connecticut.

Dear Ms. Davis:

On January 25, 2022, the Connecticut Siting Council (Council) denied your request to modify the above-referenced existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. Thus, the above referenced request submitted on November 22, 2021 is no longer pending before the Council. A new request to modify the existing facility must be submitted with a filing fee of \$625.00.

On February 11, 2022, the Council received your submittal: *Radio Frequency – Electromagnetic Energy (RF-EME) Supplemental Technical Compliance Report*, dated February 11, 2022.

The cumulative power density information provided in the Report shows a total percentage of Maximum Permissible Exposure (MPE) of approximately 22.27 percent from both T-Mobile and AT&T antennas utilizing a RoofMaster software. Page 7, third paragraph of the Report states, "**This was determined through calculations along a radial from each sector taking full power values into account as well as actual vertical plane antenna gain values per the manufacturer-supplied specifications for gain**" (**emphasis added**). T-Mobile/AT&T power density numbers were not individually provided. Antenna height was assumed to be 38.6 feet to the bottom of AT&T antennas for calculation purposes.

Council staff calculated the MPE using T-Mobile's antenna height (52 feet from antenna centerline to the surface of the top level of parking garage), number of channels, ERP and designated antenna frequency consistent with a FCC OET Bulletin 65 formula. T-Mobile's total MPE calculated to 90.91 %. AT&T's MPE equates to 47.89%. Hence, the cumulative MPE is 138.79%. T-Mobile power density calculation includes a denominator of 10 specific to the 600-2100 MHz frequency and denominator of 20 specific to the 2500 MHz frequency as a gain equivalent explained in the initial November 11, 2021 EBI Radio Frequency (RF) report submitted with the November 22, 2021 request for an exempt modification that was denied (see Number 13). AT&T's power density calculation includes a denominator of 25 as a gain equivalent explained in the AT&T RF vendor submittal. The cumulative MPE must be at or below 100 percent with all carrier's antennas.

Please see attached Council Power Density table excerpt for this specific site.

EBI has provided many T-Mobile RF MPE reports that include a table that follows the Council's database. The Report submitted on February 11, 2022 does not include this type of table. Perhaps any future filings

could include this table as well as clarification of the vertical plane antenna gain values within the Council's power density calculation.

Sincerely,

A handwritten signature in dark ink, appearing to read "Melanie Bachman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Melanie Bachman
Executive Director

MAB/FOC/emr

c: The Honorable Shari Cantor, Mayor, Town of West Hartford (mayor@westhartfordct.gov)
Matthew Hart, Town Manager, Town of West Hartford (townmanager@westhartfordct.gov)

Control Number	Site	Carrier	#Channel	ERP/Ch (W)	Ant Ht	MHz	Power Density (μW/cm²)	S	%MPE	Site Total
Power Density Calculations										
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	566	40	850	0.0070	0.5667	1.24%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	3632	40	737	0.0452	0.4913	9.20%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	3982	40	2100	0.0496	1.0000	4.96%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	2729	40	2300	0.0340	1.0000	3.40%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	2692	40	763	0.0335	0.5087	6.59%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	4170	40	1900	0.0519	1.0000	5.19%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	1615	40	722	0.0201	0.4813	4.18%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	3460	40	850	0.0431	0.5667	7.60%	
EM-AT&T-155-210503	West Hartford - 27-31 South Main Street	AT&T	1	4458	40	1900	0.0555	1.0000	5.55%	47.89%
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	1034	52	600	0.0176	0.4000	4.39%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	1379	52	600	0.0234	0.4000	5.86%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	2	1215	52	700	0.0413	0.4667	8.85%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	4	3649	52	1900	0.2481	1.0000	24.81%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	2	3649	52	1900	0.1240	1.0000	12.40%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	2	4594	52	2100	0.1562	1.0000	15.62%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	10307	52	2500	0.0876	1.0000	8.76%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	3436	52	2500	0.0292	1.0000	2.92%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	6444	52	2500	0.0548	1.0000	5.48%	
T-Mobile proposed	West Hartford - 27-31 South Main Street	Sprint	1	2148	52	2500	0.0183	1.0000	1.83%	90.91%
										138.79%