

**In The Matter Of:**  
*State of Connecticut*  
*Connecticut Siting Council*

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*Docket No. 472*  
*June 15, 2017*

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1 STATE OF CONNECTICUT  
2 CONNECTICUT SITING COUNCIL  
3  
4 Docket No. 472  
5 Application from Cellco Partnership d/b/a Verizon  
6 Wireless for a Certificate of Environmental  
7 Compatibility and Public Need for the  
8 Construction, Maintenance and Operation of a  
9 Telecommunication Facility Located at 541  
10 Broadbridge Road in Bridgeport, Connecticut  
11  
12 Siting Council Hearing held at the Bridgeport  
13 City Hall, Council Chambers, 45 Lyon Terrace,  
14 Bridgeport, Connecticut, Thursday, June 15, 2017,  
15 beginning at 3:00 p.m.  
16  
17 H e l d B e f o r e:  
18 ROBIN STEIN, Chairman  
19  
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22  
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24  
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1 A p p e a r a n c e s:  
2 Council Members:  
3 JAMES J. MURPHY,  
4 Vice Chairman  
5  
6 ROBERT HANNON,  
7 DEEP Designee  
8  
9 ROBERT SILVESTRI  
10 DR. MICHAEL W. KLEMENS  
11 DANIEL P. LYNCH, JR.  
12  
13 Council Staff:  
14 MELANIE BACHMAN, ESQ.,  
15 Executive Director and  
16 Staff Attorney  
17  
18 MICHAEL PERRONE  
19 Siting Analyst  
20  
21  
22  
23  
24  
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1 A p p e a r a n c e s:(cont'd)  
2 For CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS:  
3 ROBINSON & COLE, LLP  
4 280 Trumbull Street  
5 Hartford, Connecticut 06103-3597  
6 BY: KENNETH C. BALDWIN, ESQ.  
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1 THE CHAIRMAN: I'd like to call to  
2 order the meeting of the Connecticut Siting  
3 Council, today, Thursday, June 15, 2017, at 3 p.m.  
4 My name is Robin Stein. I'm  
5 Chairman of the Connecticut Siting Council. Other  
6 members of the Council present are Senator Murphy,  
7 Vice Chairman; Mr. Hannon, designee from the  
8 Department of Energy and Environmental Protection;  
9 Mr. Silvestri; Dr. Klemens; and Mr. Lynch.  
10 Members of the staff present are  
11 our Executive Director Melanie Bachman; and  
12 Michael Perrone, our siting analyst.  
13 This hearing is held pursuant to  
14 the provisions of Title 16 of the Connecticut  
15 General Statutes and of the Uniform Administrative  
16 Procedure Act upon an application from Cellco  
17 partnership d/b/a Verizon Wireless for a  
18 certificate of environmental compatibility and  
19 public need for the construction, maintenance and  
20 operation of a telecommunication facility located  
21 at 541 Broadbridge Road in Bridgeport,  
22 Connecticut. The application was received by the  
23 Council on March 24, 2017.  
24 As a reminder to all,  
25 off-the-record communication with a member of the

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1 Council or a member of the Council staff upon the  
2 merits of this application is prohibited by law.  
3 The parties and interveners to the  
4 proceeding are as follows. Cellco Partnership, or  
5 Verizon Wireless, and Attorney Baldwin of Robinson  
6 & Cole.  
7 We will proceed in accordance with  
8 the prepared agenda, copies of which are available  
9 over there, at the podium. Also available are  
10 copies of the Council's citizen guide to Siting  
11 Council procedures.  
12 At the end of the afternoon  
13 evidentiary session we will recess and resume  
14 again at 7 p.m. for the public comment session.  
15 The 7 p.m. public comment session will be reserved  
16 for the public to make brief oral statements into  
17 the record.  
18 I wish to note that the party  
19 including their representative witnesses are not  
20 allowed to participate in the public comment  
21 session. I also wish to note for those who are  
22 here and for the benefit of your friends and  
23 neighbors who are unable to join us for the public  
24 comment session that you or they may send written  
25 statements to the Council within 30 days of the

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1 date hereof and such written statements will be  
2 given the same weight as if spoken at the hearing.  
3 A verbatim transcript will be made  
4 of the hearing and deposited with the city clerk's  
5 office in Bridgeport and the town clerk's office  
6 of Trumbull and Stratford for the convenience of  
7 the public.  
8 Is there a public official that  
9 would like to speak now?  
10 (No response.)  
11 THE CHAIRMAN: I guess not.  
12 I wish to call your attention to  
13 those items shown on the hearing program marked as  
14 Roman numeral 1D, items 1 through 67. Does the  
15 applicant have any objection to the items that the  
16 Council has administratively noticed.  
17 (No response.)  
18 THE CHAIRMAN: Hearing and seeing  
19 none, we administratively notice these existing  
20 documents, statements and comments.  
21 And now will the applicant present  
22 its witness panel for the purpose of taking the  
23 oath? And the Council's staff attorney will  
24 administer the oath.  
25 MR. BALDWIN: Certainly, Mr.

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1 Chairman.  
2 Good afternoon. Kenneth Baldwin  
3 for the applicant Cellco Partnership, doing  
4 business as Verizon Wireless. We have six  
5 witnesses on our panel this afternoon. I'll start  
6 with my right and continue down the row.  
7 This is Ryan Ulanday, who's a  
8 radiofrequency engineer with Verizon Wireless.  
9 Next to Ryan is Aleksey Tyurin, real estate  
10 consultant working for Verizon Wireless on this  
11 project.  
12 Tony Befera, who is the Manager of  
13 Real Estate and Project Implementation for Verizon  
14 Wireless; Mr. Doug Roberts, who works with the  
15 engineering firm of Hudson Design and project  
16 engineers; Mike Libertine, the Director of Siting  
17 and permitting for All Points Technology  
18 Corporation.  
19 And last, but not least Steve  
20 Gustafson, Senior Wetland Scientist and  
21 professional soil scientist with All Points  
22 Technology Corporation.  
23 And I offer them to be sworn at  
24 this time.  
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1 ANTHONY BEFERA,  
2 RYAN ULANDAY,  
3 MICHAEL LIBERTINE,  
4 DEAN GUSTAFSON,  
5 DOUGLAS J. ROBERTS,  
6 ALEKSEY TYURIN,  
7 called as witnesses, being first duly sworn  
8 by the Executive Director, were examined and  
9 testified on their oaths as follows:  
10 MR. BALDWIN: Mr. Chairman, we have  
11 five exhibits listed in the hearing program under  
12 Roman two, section B, items one through five And I  
13 offer them at this time for identification  
14 purposes subject to verification by the witnesses.  
15 For verification purposes if I  
16 could ask the witnesses, did you prepare or assist  
17 in the preparation of those exhibits listed in the  
18 hearing program under Roman two, subsection B,  
19 items one through five? Mr. Ulanday?  
20 THE WITNESS (Ulanday): I did.  
21 MR. BALDWIN: Mr. Tyurin?  
22 THE WITNESS (Tyurin): Yes.  
23 MR. BALDWIN: Mr. Befera?  
24 THE WITNESS (Befera): Yes.  
25 MR. BALDWIN: Mr. Roberts?

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1 THE WITNESS (Roberts): Yes.  
2 MR. BALDWIN: Mr. Libertine?  
3 THE WITNESS (Libertine): Yes.  
4 MR. BALDWIN: Mr. Gustafson?  
5 THE WITNESS (Gustafson): Yes.  
6 MR. BALDWIN: And do you have any  
7 corrections, modification or amendments that you'd  
8 like to offer to any of those exhibits?  
9 Mr. Ulanday?  
10 THE WITNESS (Ulanday): No, I don't  
11 have any corrections.  
12 MR. BALDWIN: Mr. Tyurin?  
13 THE WITNESS (Tyurin): No.  
14 MR. BALDWIN: Mr. Befera?  
15 THE WITNESS (Befera): No.  
16 MR. BALDWIN: Mr. Roberts?  
17 THE WITNESS (Roberts): No.  
18 MR. BALDWIN: Mr. Libertine?  
19 THE WITNESS (Libertine): I do have  
20 one minor correction that I'd like to point out to  
21 the Council, Exhibit 1, behind tab 9, which is the  
22 visibility analysis on the two last graphics data,  
23 the 11 by 17 maps, the view shed maps themselves.  
24 In reviewing the document I noticed  
25 that there were two photo locations that are not

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1 labeled on those maps and if you -- and if I refer  
2 you to either of those maps, you'll notice right  
3 in the very immediate vicinity of the site  
4 location in the center of the map you'll notice  
5 that there are two yellow photo locations just  
6 above number 15. Those should be labeled 16 and  
7 then moving north 17. They are both from Holland  
8 Avenue and within a few hundred feet of the site.  
9 And with that, that's my only  
10 correction.  
11 MR. BALDWIN: Mr. Gustafson, any  
12 corrections.  
13 THE WITNESS (Gustafson): No.  
14 MR. BALDWIN: And with those  
15 corrections, is the information contained in those  
16 exhibits true and accurate to the best of your  
17 knowledge? Mr. Ulanday?  
18 THE WITNESS (Ulanday): Yes.  
19 MR. BALDWIN: Mr. Tyurin?  
20 THE WITNESS (Tyurin): Yes.  
21 MR. BALDWIN: Mr. Befera?  
22 THE WITNESS (Befera): Yes.  
23 MR. BALDWIN: Mr. Roberts?  
24 THE WITNESS (Roberts): Yes.  
25 MR. BALDWIN: Mr. Libertine?

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1 THE WITNESS (Libertine): Yes.  
2 MR. BALDWIN: Mr. Gustafson?  
3 THE WITNESS (Gustafson): Yes.  
4 MR. BALDWIN: And do you adopt the  
5 information contained in those exhibits as your  
6 testimony in this proceeding? Mr. Ulanday?  
7 THE WITNESS (Ulanday): Yes.  
8 MR. BALDWIN: Mr. Tyurin?  
9 THE WITNESS (Tyurin): Yes.  
10 MR. BALDWIN: Mr. Befera?  
11 THE WITNESS (Befera): Yes.  
12 MR. BALDWIN: Mr. Roberts?  
13 THE WITNESS (Roberts): Yes.  
14 MR. BALDWIN: Mr. Libertine?  
15 THE WITNESS (Libertine): I do.  
16 MR. BALDWIN: Mr. Gustafson?  
17 THE WITNESS (Gustafson): Yes.  
18 MR. BALDWIN: I offer them as full  
19 exhibits, Mr. Chairman.  
20 THE CHAIRMAN: Okay. Thank you.  
21 The exhibits are admitted. We'll now begin with  
22 cross-examination starting with staff,  
23 Mr. Perrone.  
24 MR. PERRONE: Thank you,  
25 Mr. Chairman.

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1 Did Cellco fly a balloon today?  
2 THE WITNESS (Libertine): Yes. As  
3 noticed by the Council, there was a balloon aloft  
4 at the site at approximately 7:45 this morning.  
5 We started with a red balloon. The string height  
6 was tethered to 97 feet, and on top of that we had  
7 about approximately a four-foot diameter balloon.  
8 We had a red balloon flying until  
9 about noontime or so and we replaced it with the  
10 purple balloon, which you folks witnessed at the  
11 field walk. And that will stay up until 6 p.m.  
12 MR. PERRONE: And what were the  
13 weather conditions like? Were they optimal for  
14 such a flight?  
15 THE WITNESS (Libertine): I  
16 wouldn't use the word "optimal" for the field  
17 review. We did have favorable winds this morning  
18 where it was fairly -- kept and maintained its --  
19 its approximate height, but about 11:30 or so the  
20 winds did start to pick up in intensity. And  
21 certainly by the time we had our field walk it was  
22 probably steady in the 8 to 12-mile an hour range  
23 or so.  
24 Visibility was very good today, but  
25 the woods did not allow for the balloon to

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1 maintain its full height at all times.  
2 MR. PERRONE: And these are a  
3 couple possible technical corrections that I'd  
4 like to ask about. In the affidavit of  
5 publication I understand the affidavit of  
6 publication itself has Cellco's legal notice in  
7 the Connecticut Post, but the cover letter says  
8 the Advocate.  
9 I just wanted to confirm that the  
10 correct newspaper name is the Connecticut Post.  
11 THE WITNESS (Roberts): That would  
12 be me, Mr. Perrone. Yes, it is. It's the same  
13 publication group, but it was in the Connecticut  
14 Post.  
15 MR. PERRONE: Okay. And one other  
16 minor possible correction. In the visibilty  
17 analysis on page 2 at the bottom of the page it  
18 mentions that the Housatonic Trail runs  
19 north-south to the east of the site. I was just  
20 looking at the view shed. Is the Housatonic trail  
21 the line in blue to the west of the site?  
22 THE WITNESS (Libertine): Yes,  
23 you're correct. That should be -- that should be  
24 west and not east of the site.  
25 MR. PERRONE: Turning back to the

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1 application, pages 18 and 19, it talks about the  
2 technical reports. I understand the tech report  
3 was provided to the City on November 21st, 2016.  
4 And on page 19 it mentions the tech reports were  
5 also provided to Trumbull and Stratford.  
6 Were the tech reports provided to  
7 Trumbull and Stratford on the same date as sent to  
8 Bridgeport, or a different date?  
9 THE WITNESS (Befera): Yes.  
10 MR. PERRONE: Okay. Did Cellco  
11 receive any comments or recommendations from  
12 Bridgeport, Trumbull or Stratford?  
13 THE WITNESS (Befera): No.  
14 MR. PERRONE: Regarding the site  
15 search summary, I believe we have a revised search  
16 summary dated June 8th. I'm going to turn to the  
17 sites investigated on page 2. Number 7, which is  
18 19 Knollcrest, K-n-o-l-l-c-r-e-s-t Drive. Cellco  
19 notes that that site would not work due to site  
20 topography.  
21 Could you tell us about that and  
22 explain what about the site topography would be  
23 problematic for tower development?  
24 THE WITNESS (Tyurin): The -- the  
25 lot itself was kind of going up and down, up and

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1 down. So there was no -- not feasible to build  
2 anything on that site on that parcel.  
3 MR. PERRONE: So there would  
4 potentially be a lot of cutting and grading?  
5 THE WITNESS (Tyurin): Correct.  
6 MR. PERRONE: And there was one  
7 other site with some wetland areas. Number ten,  
8 it mentions the site was rejected due to  
9 significant wetland areas. Could you tell us a  
10 bit more about that? For example, would that  
11 potentially require a wetland crossing?  
12 THE WITNESS (Gustafson): Just for  
13 clarification, number 10 is that 264 Broadbridge  
14 Road in Trumbull?  
15 MR. PERRONE: Yes.  
16 THE WITNESS (Gustafson): We  
17 actually investigated -- performed a wetland  
18 investigation back in 2013 and evaluated that  
19 property. And the majority of that parcel that  
20 isn't already developed by a residence is  
21 dominated by wetland area.  
22 So it would require some extensive  
23 wetland impact to even build the facility. It  
24 wouldn't just be a crossing. So we deem that  
25 unsuitable as a proposed cell site because of the

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1 significant wetland impacts.  
2 MR. PERRONE: Turning to the  
3 responses to the Council interrogatories, number  
4 30 was the question about small cells or  
5 distributed antenna systems. In Cellco's response  
6 it notes that along portions of Route 8 there's no  
7 utility poles existing, and that's in the context  
8 of small cells.  
9 Would the lack of utility poles  
10 also be an issue for a distributed antenna system?  
11 THE WITNESS (Ulanday): That's  
12 correct.  
13 MR. PERRONE: To date has any other  
14 wireless carrier expressed an interest in  
15 co-locating on the facility?  
16 THE WITNESS (Tyurin): No.  
17 MR. PERRONE: To date have any of  
18 the three municipalities expressed an interest in  
19 co-locating emergency services antennas?  
20 THE WITNESS (Tyurin): No.  
21 MR. PERRONE: And Mr. Roberts, my  
22 understanding is from the centerline of the tower  
23 to the eastern property line, is that about  
24 17 feet?  
25 THE WITNESS (Roberts): Yes.

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1 MR. PERRONE: And to construct a  
2 yield point to ensure that the tower remains  
3 within the boundary of the subject property, the  
4 tower setback radius, would the yield point then  
5 have to be at something like 83 feet? How would  
6 that work?  
7 THE WITNESS (Roberts): That would  
8 be -- yes, we would have to design a yield point,  
9 and at that point would have to be reengineered  
10 and would have to replace it.  
11 MR. PERRONE: So even though at  
12 83 feet it would be close to the antennas and the  
13 ray dome. It would be built into the steel of the  
14 tower?  
15 THE WITNESS (Roberts): That would  
16 be correct. It would be built into the internal  
17 structure.  
18 MR. PERRONE: Okay. Turning to the  
19 response to question 16. I see that Cellco would  
20 initially deploy 700 megahertz and 2100 megahertz  
21 frequency bands, and that would be adequate at  
22 this time. Does Cellco have any future plans to  
23 deploy 850 or 1900 at the site?  
24 THE WITNESS (Ulanday): There is  
25 definitely plans, but we have to evaluate it,

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1 evaluate everything after we get this site on air.  
2 MR. PERRONE: Okay. And on the top  
3 of page 7 of the application Cellco notes that the  
4 proposed facility would provide capacity relief to  
5 the Alpha sector of North Bridgeport two, and the  
6 Gamma sector of Trumbull two.  
7 And my question is, are there any  
8 other sectors from adjacent sites that have  
9 capacity issues that the proposed site would  
10 address?  
11 THE WITNESS (Ulanday): As for the  
12 lay of this, they, Verizon has -- it's only those  
13 two sectors that are meeting our capacity limits.  
14 MR. PERRONE: Okay. And question  
15 20, the response to question 20. There's a table  
16 on dropped call and ineffective attempt data, and  
17 there's five different sectors here. So only  
18 those two sectors, would those have their  
19 ineffective attempts and dropped calls improved  
20 with the proposed facility?  
21 THE WITNESS (Ulanday): I'm sorry.  
22 Can you please --  
23 MR. PERRONE: Sure. I'll back up.  
24 No problem.  
25 In the response to question

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1 number 20 there's a table of ineffective attempts  
2 and dropped calls for various adjacent sectors.  
3 There's five different sectors listed. My  
4 question is, which of these sectors, if any, would  
5 be improved in terms of ineffective attempts or  
6 dropped calls by the proposed facility?  
7 THE WITNESS (Ulanday): It would  
8 definitely be all those, all these sectors right  
9 here that -- that will improve.  
10 MR. PERRONE: Okay. So all five  
11 would see an improvement in ineffective attempts  
12 and dropped calls.  
13 THE WITNESS (Ulanday): That's  
14 correct. All five sectors.  
15 MR. PERRONE: Would it potentially  
16 bring all of those to .57 percent or better?  
17 THE WITNESS (Ulanday): That, we  
18 did not do any study.  
19 MR. PERRONE: That's okay.  
20 THE WITNESS (Ulanday): But we'll  
21 definitely look at it after we get the site in  
22 service.  
23 MR. PERRONE: Okay. So you don't  
24 have the exact numbers, but potentially you'd see  
25 an improvement in all of those?

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1 THE WITNESS (Ulanday): We'd --  
2 yeah, that's correct.  
3 MR. PERRONE: Okay. And looking at  
4 the response to question 21, I understand that the  
5 network relief from the proposed facility would be  
6 sufficient for approximately three to five years.  
7 After that three to five year  
8 period would you look at perhaps another macro  
9 site or a combination of small cells? How would  
10 you address capacity after that three to five  
11 years?  
12 THE WITNESS (Ulanday): I guess  
13 that three to five years is just based on what  
14 data we have right now, but as for personal  
15 experience that could change a lot. It depends on  
16 a lot of factors like if there's company  
17 promotions or whatnot, unlimited -- like the  
18 recently unlimited data. So that three to five  
19 years could be -- that could move like a year or  
20 two years, but I guess you're right.  
21 If that exhausts here, if the  
22 neighbor sectors exhaust earlier we would  
23 definitely be looking at either options to  
24 offload, or to help our exhausting sectors. We  
25 will definitely look at all -- all options.

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1 MR. PERRONE: Okay. And that would  
2 be evaluated at that time?  
3 THE WITNESS (Ulanday): That's  
4 correct. We need to reevaluate.  
5 MR. PERRONE: Okay. I understand  
6 that there's two different levels of antennas  
7 proposed, 82 and 92. Would you have 700 megahertz  
8 at one array and 2100 at another array? Or are  
9 you using all dual-band antennas?  
10 THE WITNESS (Ulanday): Actually,  
11 the -- my initial design was to have all the low  
12 bands like 700 and 850 on top, and the high bands  
13 below.  
14 But then there -- all the available  
15 antennas right now won't fit inside the flagpole,  
16 so we may have to lay it out like we'll have 700  
17 and AWS, 2100 on top. And then 850 and PCS below.  
18 Yeah, but like Ken's point here,  
19 we're not deploying PCS and 850 at so -- that  
20 lower level may just be just a placeholder for now  
21 until we decide that we need -- we need to  
22 activate 850 and PCS.  
23 MR. PERRONE: So you would just  
24 have antennas at the 92?  
25 THE WITNESS (Ulanday): At the --

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1 we'll have to reevaluate everything, I mean -- I  
2 guess. We'll have to reevaluate, but as for the  
3 analysis that we made, we're doing 700 on the 92  
4 and the AWS on the lower level, 82 feet.  
5 MR. PERRONE: Okay. Moving on to  
6 the power density analysis, which is tab 13 of the  
7 application, I understand that you have all four  
8 frequency bands included.  
9 Since you're only using two of  
10 these frequency bands, is it safe to say that this  
11 is conservative? And you would actually only have  
12 the numbers for the 700 and the 2100?  
13 THE WITNESS (Ulanday): Yes, it's a  
14 very conservative calculation.  
15 MR. PERRONE: So with the bottom  
16 two rows you'd be at something like 12.9 percent?  
17 THE WITNESS (Ulanday): That's  
18 correct.  
19 MR. PERRONE: And in some of the RF  
20 questions I had asked about if the tower were  
21 ten feet shorter. But just generally speaking,  
22 what would be the consequences of making the tower  
23 ten feet shorter in terms of handoff or dropped  
24 calls, or capacity?  
25 THE WITNESS (Ulanday): I -- I

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1 guess the consequence would be -- I believe we put  
2 it out there that's -- that there's very little  
3 difference at the higher, like the 82 feet, but  
4 you can't come down to the 72. I believe you'd  
5 see a lot of difference especially on the high  
6 band 2100, and PCS 1900 megahertz.  
7 So if I can add to that if other  
8 carriers are looking to co-locate, probably --  
9 they would probably be less interested to go on to  
10 62 feet because you are way below the flat area,  
11 three lines. So -- but as for Verizon, I -- the  
12 82 feet would still be very usable.  
13 MR. PERRONE: But if the tower were  
14 about ten feet shorter would it affect your  
15 ability to provide capacity relief to those two  
16 sectors that we talked about?  
17 THE WITNESS (Ulanday): There would  
18 definitely be a difference, but not too  
19 significant.  
20 MR. PERRONE: And one of the last  
21 RF questions. In response to interrogatory 25 and  
22 26 where it talks about secondary roads, is it  
23 fair to say that the coverage gaps in the proposed  
24 coverage distances basically are the same?  
25 THE WITNESS (Ulanday): That's

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1 correct.  
2 MR. PERRONE: Okay. And if the  
3 tower were ten feet shorter those numbers would  
4 still be about the same?  
5 THE WITNESS (Ulanday): That's --  
6 that's correct. It would still be covering the  
7 same.  
8 MR. PERRONE: Also I had asked  
9 about the response from the state historic  
10 preservation office. And I understand the  
11 response was that the response will be provided  
12 when it's received. To date has a response from  
13 SHPO been received?  
14 THE WITNESS (Libertine): No, it  
15 has not.  
16 MR. PERRONE: Now I would like to  
17 talk about the trees around the site. Is it  
18 correct to say that as it stands now you don't  
19 propose to remove any trees?  
20 THE WITNESS (Roberts): That is  
21 correct.  
22 MR. PERRONE: Would you potentially  
23 have to trim some of the tree branches so they  
24 don't interfere with the tower?  
25 THE WITNESS (Roberts): Yes, we

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1 would just as a matter of making installation  
2 easily done.  
3 MR. PERRONE: And Mr. Gustafson,  
4 with no tree clearing being proposed would the  
5 project adversely impact the northern long-eared  
6 bat?  
7 THE WITNESS (Gustafson): No, there  
8 should be no effect on the northern long-eared  
9 bat. And with our initial consultation with US  
10 Fish and Wildlife that species was not identified  
11 in this part of Bridgeport.  
12 MR. PERRONE: Okay. I have a  
13 couple questions on visibilty. I'll move to the  
14 view shed map and the photo simulations.  
15 Mr. Libertine, is photo 31 the one closest to  
16 Beardsley Park, or roughly in the vicinity of  
17 Beardsley Park?  
18 THE WITNESS (Libertine):  
19 Generally, yes.  
20 MR. PERRONE: Okay. One second  
21 here. Let me move over to the view shed. I see  
22 that it's in the orange area. So the model wasn't  
23 conservatively predicting a seasonal visibility in  
24 that area. So during a field visit you didn't  
25 find any visibility around number 31?

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1 THE WITNESS (Libertine): No, we  
2 didn't. This site was done -- as you can see as  
3 evidenced by the photographs we had full leaf-on  
4 conditions. So what we elect to do when we do not  
5 have the opportunity to do it in the wintertime,  
6 this type of a field reconnaissance, we tend to  
7 rely more on the model and not take liberties to  
8 eliminate areas.  
9 I'm fairly confident that there  
10 will not be even a seasonal view of that tower  
11 just because of the distance and in the  
12 intervening vegetation topography and other  
13 structures. It's a fairly short tower, but again  
14 we tend to be very conservative when we don't have  
15 the opportunity to view those, those particular  
16 characteristics when we're out in the field.  
17 So I'd say in general the map that  
18 you're looking at in terms of seasonal visibility  
19 is fairly over predictive.  
20 MR. PERRONE: Is it fair to say,  
21 though, that generally Beardsley Park is a little  
22 bit to the west of 31?  
23 THE WITNESS (Libertine): Oh yes,  
24 it is. Yeah, that's more or less the entrance.  
25 MR. PERRONE: Okay. So in general

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1 could you tell us about the visibility at  
2 Beardsley Park? Would it not be expected?  
3 THE WITNESS (Libertine): Yeah,  
4 we're not expecting any visibility whatsoever. If  
5 there were to be any visibility at that park it  
6 would be strictly a matter of the model being able  
7 to predict it being maybe a few inches or a foot  
8 above the tree line.  
9 And again, at that distance I would  
10 think it would be very difficult for anyone to  
11 discern that it would be a tower, anything along  
12 the horizon there. So again, I think it's very  
13 over predictive. We're not expecting it to be  
14 able to be seen that far to the southwest.  
15 MR. PERRONE: Okay. I'd like to  
16 ask you about visibility from abutters, but I  
17 think it would be easier if I'll refer you to the  
18 abutters map, C-1 in the application.  
19 THE WITNESS (Libertine): I'm  
20 there.  
21 MR. PERRONE: Could you describe  
22 the visibility from the nearest property directly  
23 to the east?  
24 THE WITNESS (Libertine):  
25 Certainly.

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1 MR. PERRONE: The 29 Holland Road?  
2 THE WITNESS (Libertine): Right.  
3 As we were standing at the site today I think  
4 everyone noticed that we were fairly close to the  
5 fence line to that property, and we had the  
6 intervening deciduous treeline there.  
7 Essentially that is -- that site  
8 does have visibility certainly this time of year  
9 at the top of the tower. Certainly from the front  
10 entrance into the driveway. I believe that as  
11 you're moving into the backyard that's probably  
12 starting to fall behind the trees, but certainly  
13 during the wintertime there's going to be seasonal  
14 views directly through that area.  
15 I'm sure they can see the top of  
16 the building today during that time of the year.  
17 So my sense is they will probably see a fair  
18 amount of the unipole.  
19 MR. PERRONE: So there would be  
20 potentially a year-round view of the top of the  
21 tower?  
22 THE WITNESS (Libertine): There's  
23 potentially -- again, I did not step onto the  
24 property, but based on what I'm seeing, yeah, I  
25 think the top of the tower certainly will be



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1 visible. And that more or less maintains the case  
2 across the street further to the east, and then  
3 northward on that road for another two parcels or  
4 so.  
5 So in all, said and done, I think  
6 there's probably five or six parcels that will  
7 have an opportunity to have partial year-round  
8 views.  
9 MR. PERRONE: Okay. I was going to  
10 ask you about the one directly to the north at  
11 1088, but you basically covered that?  
12 THE WITNESS (Libertine): Yeah,  
13 that's -- that's part of that, what I just  
14 characterized, but yes. What happens there, that  
15 road tends to rise a bit and once it does and  
16 plateaus out it actually dips on the other side.  
17 And so there's not really a direct line of sight  
18 beyond there, but certainly those few, first few  
19 homes and backyards are -- well, they're not --  
20 they're not all abutting, but they're just about  
21 abutting the actual subject parcel.  
22 MR. BALDWIN: Could I just clarify  
23 something, Mr. Perrone. You mentioned 1088 and I  
24 think Mr. Libertine was talking about the  
25 properties on Holland Road, as opposed to 1088

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1 Huntington Turnpike, which is on the other side of  
2 the building.  
3 I just wanted to make sure that we  
4 were talking about the same thing.  
5 THE WITNESS (Libertine): I was  
6 characterizing on Holland Road itself, those  
7 properties there.  
8 The 1088 property, similarly  
9 they've got a little bit less of a view in the  
10 wintertime only because we've got the ability to  
11 shield the ground equipment and the compound and a  
12 fair amount of tower by the building itself.  
13 MR. PERRONE: Thank you.  
14 THE WITNESS (Libertine): Thank  
15 you. And thank you, Mr. Baldwin.  
16 MR. PERRONE: Is it correct to say  
17 that Bridgeport itself is located within the  
18 Connecticut coastal area, but the proposed  
19 facility itself would not be within the coastal  
20 boundary?  
21 THE WITNESS (Libertine): That's --  
22 yes, that's correct.  
23 MR. PERRONE: Mr. Roberts,  
24 regarding the access, would you have to add more  
25 asphalt to the east and then remove the curbing to

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1 maintain the access?  
2 THE WITNESS (Roberts): That is  
3 correct.  
4 MR. PERRONE: And the proposed  
5 routing of the natural gas line to supply the  
6 backup generator, as proposed would you expect to  
7 have a riser going up the wall and then have it  
8 enter the building and run through the roof  
9 inside, or potentially on the roof?  
10 THE WITNESS (Roberts): We're  
11 calling for it to be going -- going through the  
12 building right now, but we could once we reach out  
13 to the gas company -- and I think as was stated on  
14 the site walk, they're reluctant to discuss with  
15 us, utilities, until we have an approved project.  
16 But we can address that. It's very possible that  
17 we might bring our own line in from the street  
18 with electric and telco.  
19 MR. PERRONE: Okay. And if this  
20 project is approved could the final gas line route  
21 be included in a development and management plan?  
22 THE WITNESS (Roberts): It  
23 certainly would.  
24 MR. PERRONE: Okay. Thank you.  
25 That's all I have.

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1 THE CHAIRMAN: Okay. We will now  
2 continue with questions from councilmembers.  
3 Senator Murphy.  
4 MR. MURPHY: Thank you. Thank you,  
5 Mr. Chairman. Just a couple of items.  
6 First off, in the response to the  
7 interrogatory question 20 about the capacity  
8 assistance, or what have you, you have given us  
9 the breakdown. Do you have available for you  
10 today the number of calls in the month of April  
11 that these percentages represent?  
12 THE WITNESS (Ulanday): Yes, I do.  
13 I do have the numbers. Let me just grab it.  
14 MR. MURPHY: My follow-up question  
15 then is, what is it?  
16 THE WITNESS (Ulanday): Like, for  
17 Trumbull two we stated that based from our --  
18 based from the data from the month of April we're  
19 seeing .49 percent IAs, and that amounts to 244  
20 actual ineffective attempts.  
21 And on the dropped call where we  
22 were saying we're looking at 1.61 percent dropped  
23 calls, and that amounts to 803 actual dropped  
24 calls. And the total voice call attempts is  
25 49,880. That's on Trumbull through gamma sector

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1 alone.

2 MR. MURPHY: Thank you. I noticed

3 from the answer that you exclude repair time,

4 which I can understand, but don't include

5 weekends. Why is that?

6 THE WITNESS (Ulanday): That's

7 correct. When we do our -- the site analysis, we

8 don't usually include the weekends and the -- the

9 midnight hours, because the wee hours is usually

10 our maintenance issue window when we do some

11 software changes or any hardware changes.

12 MR. MURPHY: I understand the

13 maintenance windows. Is there more calls on the

14 weekend or less?

15 THE WITNESS (Ulanday): On weekends

16 we don't include it because there's not a lot of

17 activity, and that could skew the data towards --

18 MR. MURPHY: Is there more calls or

19 less on the weekend?

20 THE WITNESS (Ulanday): I'm sorry.

21 Can you say again? Can you say it again, sir?

22 MR. MURPHY: Can't hear him.

23 THE WITNESS (Ulanday): Can you

24 repeat the question, sir?

25 MR. MURPHY: Are there more calls

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1 per day Saturday and Sunday in comparison to the

2 average during the week Monday through Friday, and

3 inclusive thereof?

4 THE WITNESS (Ulanday): It depends

5 on the area, but usually there are less calls on

6 the weekends.

7 MR. MURPHY: So your dropped calls

8 would be less?

9 THE WITNESS (Ulanday): It is

10 significantly less during weekends.

11 MR. MURPHY: Okay. Thank you.

12 Turning to another item. First up,

13 out of curiosity on the tower that's going to be

14 ordered by Verizon, structurally the base that's

15 going to be installed, what height will it

16 withstand?

17 THE WITNESS (Roberts): I'm sorry.

18 We're having a hard time hearing you over here.

19 The foundation, were you referring to?

20 MR. MURPHY: The foundation.

21 THE WITNESS (Roberts): Sure.

22 MR. MURPHY: We realize that it can

23 be increased if some other carrier comes along and

24 what have you. But increasing, you know,

25 monopines and flags are a little bit different.

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1 What type of a foundation is going to be

2 installed? One that could provide for an increase

3 in the height of the tower?

4 THE WITNESS (Roberts): Certainly

5 if this was approved we would do a geotechnical

6 investigation. Determine, you know, my sense is

7 we're going to hit rock since we see some right

8 nearby. If that is the case, my initial thought

9 would be we would design a mat at grade with post

10 tension drop anchors to attach it to the ground

11 itself.

12 Short of having geotechnical

13 information, I'm surmising, but that would be my

14 approach if we did hit rock, and I'm confident we

15 will. It certainly could be designed to be -- the

16 foundation could be designed to accommodate an

17 expandable tower.

18 MR. MURPHY: It will be designed

19 for an increase potentially in height?

20 THE WITNESS (Roberts): Sure.

21 MR. MURPHY: Yes or no?

22 THE WITNESS (Roberts): Yes.

23 MR. MURPHY: Mr. Perrone covered

24 the sites that were knocked off. The other seven,

25 I believe it is, are no landlord interest. What

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1 did you do with those seven address proprietors?

2 How did you determine there was no interest from

3 those seven property owners?

4 THE WITNESS (Tyurin): I personally

5 sent a certified letter with my work phone number,

6 my cellphone number, my e-mail address, asked

7 them -- to contact them if they would be

8 interested in locating a telecommunication tower

9 on the property.

10 MR. MURPHY: The acoustics are

11 tough. I really can't hear. Did you contact all

12 of them, or just send them letters?

13 THE WITNESS (Tyurin): Just

14 certified letters. If there's no business, a

15 particular parcel I contacted the owner directly

16 because there was a for-lease sign and a phone

17 number in front of it. So I contacted the

18 landlord on this particular one.

19 Residential properties, I have to

20 send certified letters, because obviously that's

21 the only way I could contact those people. And

22 some of them called me back and we did a

23 preliminary site walk on those properties, decided

24 that they would not work for Verizon and the

25 others never contacted me. So the assumption is

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1 they're not interested.  
2 MR. MURPHY: Okay. I think that's  
3 all I have, Mr. Chairman. Thank you.  
4 THE CHAIRMAN: Thank you.  
5 Mr. Hannon.  
6 MR. HANNON: Thank you,  
7 Mr. Chairman. Yes, I do have some questions.  
8 Most of my questions are the application behind  
9 tab one, the environmental assessment statement.  
10 I had asked the question at the site, but I want  
11 to get it as part of the record.  
12 In terms of the periodic  
13 maintenance that's associated with a generator,  
14 the backup generator, what are the typical hours  
15 that those would be operated?  
16 THE WITNESS (Befera): They're  
17 exercised between twelve and one o'clock midday  
18 for 30 minutes twice a month.  
19 MR. HANNON: Under the noise  
20 section I'm just curious, has any type of noise  
21 study been done or conducted as to the noise level  
22 at the abutting properties, in particular I guess  
23 the property that is north, northwest?  
24 THE WITNESS (Roberts): Yes, we did  
25 conduct a noise study and evaluated how best to

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1 achieve the maximum noise allowed by code for that  
2 area. And we do have a noise study for that and  
3 recommendations from our noise analysis  
4 consultant. And we'll incorporate that, if this  
5 does get approved, into the D and M plans.  
6 MR. MURPHY: Does that include any  
7 sort of noise baffling material?  
8 THE WITNESS (Roberts): It does.  
9 We're talking padding against the fencing on the  
10 inside to absorb any of that noise.  
11 MR. HANNON: Okay. Thank you. On  
12 map C-3 you start getting in the information with  
13 the generator. Can you give me the dimensions of  
14 the backup generator?  
15 THE WITNESS (Roberts): The  
16 dimensions?  
17 MR. HANNON: Uh-huh.  
18 THE WITNESS (Roberts): I believe  
19 they're in -- it's 5 feet by 32 inches.  
20 MR. HANNON: Okay. I know -- I  
21 think in looking at some of the profiles it looks  
22 as though the generator is several feet below the  
23 wall height. Is that correct?  
24 And in one of the profiles in here  
25 it looks as though -- if you have an eight-foot

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1 high wall, it looks as though the generator is  
2 several feet below that. I just want to make sure  
3 the generator is below the wall that's going  
4 around the compound.  
5 THE WITNESS (Roberts): Yes, the  
6 specs are in the application, and as well since  
7 this is a natural gas generator set there is no  
8 belly tank. So most of the diesel tanks -- or  
9 diesel generators you see sit upon that fuel tank,  
10 so they're two, two and a half feet of base. This  
11 does not have that.  
12 THE WITNESS (Libertine): Behind  
13 tab seven.  
14 MR. HANNON: Thank you.  
15 THE WITNESS (Befera): It shows  
16 a -- it shows the generator set to be 77 inches  
17 long by 43 inches high by 34 inches wide.  
18 43 inches high.  
19 MR. HANNON: Okay. Thank you. In  
20 terms of -- you've got a note on here that talks  
21 about proposed Cellco partnership concrete block  
22 retaining wall with safety fence. But my question  
23 then goes to map C-6 because it looks -- at least  
24 to me, it looks as though the fence that you're  
25 proposing really doesn't have anything to do with

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1 the retaining wall because it looks like it's  
2 offset.  
3 So how does that compare with the  
4 abutting fence that is already in existence on the  
5 site? How close are you getting there?  
6 THE WITNESS (Roberts): The  
7 existing fence is pretty much on the property line  
8 itself and we're three, four feet away from that.  
9 So we don't want to disrupt the tree roots of the  
10 adjacent property's trees.  
11 MR. HANNON: Okay. But in looking  
12 at some of the dimensions on some of these blocks,  
13 whether it's the beveled unit or the straight  
14 unit, they're 20 inches deep. So it looks as  
15 though your fence is also close to 40 inches away  
16 from the face of the retaining wall that is sort  
17 of looking at the building, which that gets it  
18 pretty close to 4 feet, 3 and a half, 4 feet.  
19 So I just want to make sure there's  
20 not going to be any problem with the fence you're  
21 proposing where you're proposing it, and with the  
22 existing fence that's already on the property  
23 line.  
24 THE WITNESS (Roberts): Sure.  
25 There's -- there's a distance there and we

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1 certainly can adjust our fence to sit on top of  
2 our retaining wall itself.  
3 MR. HANNON: Okay. One other  
4 question. You show on -- it's a couple of the  
5 spots, but I'll use map C-6. It shows some of the  
6 drainage that's being proposed where you've got  
7 the aggregate so there's free-flowing water behind  
8 the retaining wall, which I know is standard  
9 practice. And you show it coming out with a  
10 four-inch diameter pipe.  
11 Where is that water going? Because  
12 one of the concerns I would have is if you have a  
13 bunch of water coming out, even in the wintertime  
14 you can create some significant icing conditions.  
15 So I'm just curious as to how that water is going  
16 to be controlled coming out of those pipes?  
17 THE WITNESS (Roberts): Certainly,  
18 that's -- as you know, will relieve the pressure  
19 from water behind the well itself. We can  
20 certainly look at possibly connecting it to one of  
21 the yard drains or dry wells that have their --  
22 that they have there.  
23 We can actually install around a  
24 dry well if the ground allowed us to, you know, we  
25 didn't hit rock. So we can look at that as an

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1 alternate.  
2 MR. HANNON: Okay. Thank you. And  
3 then my last question goes to Mr. Libertine. And  
4 had you not made your corrections earlier I would  
5 not have noticed this, but where you talked about  
6 the dots that didn't have the numbers 16 and 17,  
7 is that also the case of the dot that is northwest  
8 of number 7? Should that be a number four?  
9 THE WITNESS (Libertine): Why, yes  
10 it should.  
11 MR. HANNON: I wouldn't have  
12 noticed it had you not mentioned the other two, so  
13 thank you. I have no further questions.  
14 THE CHAIRMAN: Thank you.  
15 Mr. Silvestri.  
16 MR. SILVESTRI: Thank you,  
17 Mr. Chairman.  
18 I know what happens when I'm on my  
19 cellphone and the call is lost. The question I  
20 have for you, how do you determine that a call was  
21 dropped?  
22 THE WITNESS (Ulanday): In our  
23 system, in our system there is a built software  
24 counter that sees when the customer gets dropped.  
25 So there are a couple of scenarios -- or let me

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1 rephrase it, I guess.  
2 When a customer initiates a call so  
3 it sends some messaging, all that stuff to kind of  
4 sync the cellphone to the tower and that's -- that  
5 same scenario happens when you end the call. Your  
6 cellphone sends what we call a -- it basically  
7 sends a message that I -- my call was successful.  
8 I'm done and I close. I terminated the call  
9 properly.  
10 So otherwise if the system did not  
11 receive that, that -- that message, it basically  
12 counts that as a dropped call.  
13 MR. SILVESTRI: So your system  
14 could differentiate between, say, me calling up  
15 and saying, honey, I'm coming home. I hang up the  
16 phone. And then I call her right back again. It  
17 was like, oh, I forgot to tell you something, as  
18 opposed to me losing the call. Your system could  
19 differentiate that?  
20 THE WITNESS (Ulanday): That's  
21 correct.  
22 MR. SILVESTRI: Okay. Let me move  
23 on. If I could refer you to attachment number 1,  
24 page 4? You have Eversource listed as the power  
25 company, yet in my experience United Illuminating

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1 has traditionally has been the service provider  
2 for Bridgeport. Should that be United  
3 Illuminating?  
4 THE WITNESS (Befera): Yes.  
5 MR. SILVESTRI: Thank you. If I  
6 could then have you turn to attachment 8 on  
7 page 2, which is your site summary as well as the  
8 revised site summary that you sent in?  
9 The first question I have for you.  
10 Is 1294 Huntington Turnpike located in Bridgeport  
11 or Trumbull?  
12 Here's the reason I ask. If you  
13 look at your site map where you have the locations  
14 I see it being listed in Trumbull, and my concern  
15 is that if you sent out a certified letter to  
16 Bridgeport it might not have gotten there because  
17 it's the wrong town.  
18 THE WITNESS (Tyurin): Yeah, it is  
19 located in Trumbull, and I believe it's just  
20 mistaken, this document.  
21 MR. SILVESTRI: Similarly I'm  
22 struggling with 1234 Huntington Turnpike as to  
23 whether that's Bridgeport or Trumbull. I tried to  
24 do a lot of searching on that. Google tells me  
25 it's Trumbull. You have it listed as Bridgeport.

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1 I don't know, but again, my same  
2 concern that if it's misaddressed, did we actually  
3 get the letter to the right people to let them  
4 know you might have been interested in properties?  
5 THE WITNESS (Tyurin): I'm sorry.  
6 What address? What number?  
7 MR. SILVESTRI: 1234 Huntington  
8 Turnpike. It's really tough to differentiate.  
9 You have it again listed as Bridgeport. With my  
10 search on Google I had Trumbull. But again, my  
11 overall concern is that if we're sending out a  
12 registered letter did it get to the right address?  
13 If you could check that for me  
14 maybe on a better map than what we have here,  
15 because again I did struggle to figure it out.  
16 But I know the other one, 1294 is Trumbull, not  
17 Bridgeport.  
18 THE WITNESS (Tyurin): Yes, that's  
19 correct. It's the same company that owns both  
20 lots. I believe a certified letter went to  
21 Attention Family LP (phenetic), and I received no  
22 response from this company.  
23 And most likely it looks like it  
24 abuts the residential property, so it's empty lot.  
25 So I don't know if they have some plans for the

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1 residential development of those two lots, those  
2 other two lots. So --  
3 MR. SILVESTRI: Again, if you find  
4 anything different if you could submit it  
5 afterwards that would be great. Let me move on.  
6 We talked about other types of  
7 devices, if you will, that could be used for cell  
8 towers. Something on a pole, a utility pole or  
9 otherwise. But I didn't hear anything about the  
10 potential for roof antennas or roof-mounted sites.  
11 Is it possible that instead of a  
12 monopole, say, similar to Bridgeport two or  
13 Trumbull two referenced on page 8 of the  
14 application, that we could have something on roofs  
15 in the areas that would make up for the coverage?  
16 THE WITNESS (Tyurin): Yeah,  
17 definitely there were no tall enough buildings in  
18 the area to meet our coverage requirement for this  
19 site.  
20 MR. SILVESTRI: So the search area,  
21 if I heard you correctly, there's no tall enough  
22 building?  
23 THE WITNESS (Tyurin): Correct.  
24 It's mostly residential -- or mostly residential  
25 area.

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1 MR. SILVESTRI: Should the project  
2 be approved, does approval trigger changes to the  
3 other cell sites identified by Cellco?  
4 MR. BALDWIN: I'm sorry we're  
5 having a hard time hearing you.  
6 MR. SILVESTRI: Yeah. I know it's  
7 tough. Let me say that again. If the project is  
8 approved, do the other cell sites that you  
9 mentioned that are hurting for one reason or  
10 another, do changes have to be made to those cell  
11 sites with approval of this site?  
12 THE WITNESS (Ulanday): Yes.  
13 Definitely we will have to, what we call, optimize  
14 the neighbor sectors. We may have to down tilt  
15 them just to minimize the overlap between this  
16 site and the surrounding sites.  
17 MR. SILVESTRI: Is it a  
18 computerized type of change, or would you have  
19 to --  
20 THE WITNESS (Ulanday): It's a  
21 physical -- well, some would be just compute --  
22 software changes, but I'm not sure for now because  
23 we haven't reviewed it yet. We have to -- after  
24 the site gets on air we will have to do a thorough  
25 drive test just to verify how the area looks like.

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1 So we may have to change antennas  
2 here, but not here. We would -- we may just have  
3 to do some down tilts here, but not there. So we  
4 will have -- we will definitely have to assess  
5 everything when the site is -- gets on air.  
6 MR. SILVESTRI: So aside from  
7 software you may have to do something physical to  
8 the other cell towers. Is that correct?  
9 THE WITNESS (Ulanday): That's  
10 correct.  
11 MR. SILVESTRI: As a follow-up,  
12 could you do upgrades at those other sites that  
13 would solve the problems that you have and totally  
14 negate the need for this monopole?  
15 THE WITNESS (Ulanday): We have  
16 actually done upgrades on most if not all of  
17 these. I just didn't -- I just don't have the  
18 exact data for now, but we have, what we call,  
19 modernized all these neighbor sectors right now  
20 and it's -- and the site is still needed. The  
21 proposed site is still needed.  
22 MR. SILVESTRI: Can I kind of  
23 interpret that to say, you've done all the changes  
24 on the other cell towers that you possibly could  
25 already?

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1 THE WITNESS (Ulanday): Again, I  
2 don't have the exact data, but most of this I  
3 believe we have upgraded them. We have -- we have  
4 upgraded them to the -- to the most up-to-date  
5 equipment, and -- and still we're seeing these  
6 gaps and capacity constraints.  
7 MR. SILVESTRI: Staying with the  
8 site search, there are a number of transmission  
9 line towers that are located in the area,  
10 particularly north of 1294 Huntington Turnpike and  
11 8 Knollcrest Drive. In the site search itself it  
12 didn't identify any potentials for transmission  
13 line uses similar to what you have, perhaps, to  
14 Trumbull number four.  
15 So the question I'll have for you,  
16 could transmission line support structures in the  
17 area be a viable alternative to the monopole?  
18 THE WITNESS (Ulanday): We -- we  
19 typically shy away from the transmission lines and  
20 that's for a couple of reasons. First of all, if  
21 we go above the conductors of these transmission  
22 lines, if we get an outage or -- or one of our  
23 radios gets -- it needs replacement, we have to  
24 ask for an outage from the power companies. And  
25 we could be seeing probably days, or weeks or

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1 months before we can replace equipment.  
2 So unless we are -- we are really  
3 desperate that we need the site, we typically shy  
4 away from this transmission.  
5 MR. SILVESTRI: Thank you. I  
6 appreciate that.  
7 THE WITNESS (Befera): We have  
8 sites, a couple of them that are on transmission  
9 towers and they have various types. They have,  
10 like, types one through four and one of the few  
11 that we're on in the state of Connecticut only has  
12 one power outage per year. It's a type four and  
13 if something breaks we can't fix it sometimes for  
14 a very long period of time.  
15 Now in the instance of Trumbull  
16 four, in particular you mentioned because that's a  
17 transmission tower, due to the elevation of the  
18 structure and it's close proximity to the target  
19 area of that cloverleaf and the Merritt Parkway,  
20 we were able to mount below the conductors and  
21 confirm with Eversource -- the owner of the pole  
22 is Eversource even though United Illuminating is  
23 the provider of our power to the site -- that we  
24 would not require a power outage to service those  
25 antennas because we are so many feet below.

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1 I think the structure is close to  
2 150 feet and we're at 90 feet below all the  
3 powerlines. So that was an acceptable  
4 installation for us to be able to maintain a site  
5 as important as that.  
6 MR. SILVESTRI: Thank you. I want  
7 to turn now to backup power with the generator. I  
8 believe the response was that if your power was  
9 interrupted batteries would be able to power the  
10 system for something like four to eight hours. Is  
11 that correct.  
12 THE WITNESS (Befera): Yes,  
13 depending upon how busy the site gets during a  
14 power outage, if there were no generator the  
15 typical range is more like four hours. If the  
16 site's usage is high those batteries could be  
17 drained within two hours. So it's a wide range  
18 between two and eight hours depending upon how  
19 busy the site is.  
20 MR. SILVESTRI: When would the  
21 generator actually kick in? At what point?  
22 THE WITNESS (Befera): The  
23 generator would actually kick in with the  
24 automatic transfer switch almost -- well, within  
25 60 seconds of commercial power out. And it would

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1 not kick off until approximately 60 seconds after  
2 commercial power is restored.  
3 MR. SILVESTRI: Yeah, I'm confused  
4 on the sequencing of that. You lose commercial  
5 power. Do the batteries take over, then the  
6 generator?  
7 THE WITNESS (Befera): Well, the  
8 thing is the site, it's kind of like if you look  
9 at a linear diagram the generator is here, the  
10 batteries are here and the sensitive equipment is  
11 here. The batteries are designed to temper the  
12 commercial AC to avoid spikes and surges and that  
13 kind of stuff that could damage the sensitive  
14 equipment.  
15 When there's commercial power, the  
16 commercial power keeps the batteries charged. If  
17 commercial power goes out the generator keeps the  
18 batteries charged running the site. So it's  
19 really the commercial power generator and only in  
20 the absence of both would we be relying solely on  
21 the batteries.  
22 MR. SILVESTRI: What's the makeup  
23 of the battery? Are they lead acid?  
24 THE WITNESS (Befera): I'm sorry.  
25 MR. SILVESTRI: The composition of

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1 the batteries? Are they lead acid batteries?  
2 THE WITNESS (Befera): No. We call  
3 them gel cells.  
4 MR. SILVESTRI: Thank you. Staying  
5 with the generator, and if you reference  
6 attachment 1, page 7 for me? There's an air  
7 quality citation of 22A-174-36, if you see it  
8 under the large paragraph B. That citation is  
9 incorrect. That particular regulation pertains to  
10 low-emission vehicles.  
11 I think what you were looking at  
12 was 22A-174-3 with either an A, B, C, E, or F  
13 designation after that. That actually pertains to  
14 fuel-burning equipment.  
15 MR. BALDWIN: We'll confirm that,  
16 Mr. Silvestri. Thank you. It's possible that's a  
17 typographical error, but it does refer to the  
18 permit by rule that the generators would fall  
19 under.  
20 MR. SILVESTRI: You know, that  
21 could have been another letter instead of a six.  
22 But with that, though, I'm trying to find the  
23 generator emissions datasheet, yet I could not  
24 find one within the application package. Do you  
25 have an emissions datasheet for that generator?

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1 THE WITNESS (Befera): The spec on  
2 the generator is at the very end of section seven  
3 of the package.  
4 MR. SILVESTRI: But if I looked  
5 through that correctly, there's no emissions data.  
6 It doesn't tell me what the emissions for  
7 particulate matter, VOCs, carbon monoxide, et  
8 cetera would be.  
9 THE WITNESS (Befera): Okay. I see  
10 an exhaust section.  
11 MR. SILVESTRI: It references it,  
12 but it's not there. Let me tell you why I'm  
13 asking for that. In light of not having that  
14 sheet I did some research into generators. Could  
15 not locate that a specific emissions datasheet,  
16 but I found one specific to the QT025A unit. And  
17 what I found on a comparable one to that unit, if  
18 you look at QT022, it's a 2.4 liter natural gas  
19 unit. It seems comparable, so I'm trying to look  
20 at emissions from that just to get a sense on  
21 where we are.  
22 If I use that sheet the emissions  
23 for carbon monoxide, which is a priority  
24 pollutant, are on the order of 31 tons per year as  
25 potential emissions. That's if it ran 8760 hours

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1 a year. And that's how our Connecticut DEEP looks  
2 at fuel-burning equipment and what type of permit  
3 might be needed.  
4 What I'm getting at is that the  
5 significance of having 31 tons a year is that air  
6 regulation 3-A would apply because the potential  
7 to emit is greater than 15 tons a year. But if  
8 you continue to review the regulation, 3-B has an  
9 exemption for emergency engines provided that  
10 certain provisions are followed and the operation  
11 of an engine does not exceed 300 hours per year  
12 during any 12 month rolling aggregate period. All  
13 right?  
14 So if you look at that, and if you  
15 look at page 20 of the application it states that  
16 Cellco will obtain the necessary air permit. Yet  
17 on page 7 of the application of attachment 1  
18 Cellco states that the generator is exempt from  
19 air permit requirements. So one part of the  
20 application has, you need a permit. The other one  
21 says you're exempt. I'm curious what your  
22 explanation is?  
23 THE WITNESS (Befera): It's the  
24 classification. We do obtain air permits, air  
25 quality permits for all of our generators in our

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1 network. And the exemption that you're talking  
2 about that puts us in a different classification  
3 is because it's in the category of emergency,  
4 slash, standby. And that's how we are compliant.  
5 MR. SILVESTRI: So you're ready to  
6 comply with whatever limitation is on there for  
7 either monitoring of fuel or for hours of  
8 operation. Is that correct?  
9 THE WITNESS (Befera): Yes.  
10 MR. SILVESTRI: Is that generator  
11 remotely operated, or you need somebody there?  
12 THE WITNESS (Befera): It is  
13 remotely operated by -- it has an automatic  
14 transfer switch, not a manual transfer switch.  
15 It -- as soon as commercial power is interrupted  
16 the automatic transfer switch will kick that  
17 generator on within 60 seconds of the outage, as  
18 opposed to manual transfer switch when someone  
19 actually has to go there and pull a lever.  
20 MR. SILVESTRI: And testing would  
21 be done on site?  
22 THE WITNESS (Befera): I'm sorry?  
23 MR. SILVESTRI: Your weekly test,  
24 would somebody be there to operate it?  
25 THE WITNESS (Befera): No.

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1 MR. SILVESTRI: No?  
2 THE WITNESS (Befera): It's every  
3 other week for half an hour. However everything  
4 is alarmed between the equipment, the generator,  
5 so that if a site does not test during it's  
6 scheduled testing period we know that. It's  
7 called a generator failure and we immediately  
8 dispatch a repair -- a repair team from usually a  
9 representative of the generator manufacturer.  
10 MR. SILVESTRI: Still staying with  
11 the generator, where would the exhaust from the  
12 generator be located to avoid the exhaust either  
13 entering the ventilation system of the building or  
14 back onto the adjoining neighbors?  
15 THE WITNESS (Roberts): We would  
16 run the exhaust up the side of the building and  
17 exhaust it above the parapet of the existing  
18 building.  
19 MR. SILVESTRI: So you looked at  
20 the potential possibly that will get in there  
21 where you have a design --  
22 THE WITNESS (Roberts): Correct,  
23 and we'll analyze any kind of economizers of any  
24 air handlers on the roof. We'll make sure we're  
25 clear of all that.

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1 MR. SILVESTRI: A couple more  
2 questions. Where are you going to stage the  
3 equipment lay down areas for construction if this  
4 is approved?  
5 THE WITNESS (Roberts): I believe  
6 our intent would be to work with the landlord to  
7 coordinate a little area that we could keep our  
8 spoils and our equipment.  
9 There's not going to be a large  
10 excavation, I don't believe, and so we won't  
11 necessarily have to -- we won't be bringing --  
12 putting material back into, like a monopole where  
13 you're bringing material on and using it for back  
14 fill.  
15 I think this case will have  
16 minimum -- minimal reuse of material and that will  
17 be immediately removed off site. So it will be a  
18 very tight little area, but I believe we have a  
19 good plan in place.  
20 MR. SILVESTRI: Yeah, the concern I  
21 had when we were there for the field review at  
22 two o'clock, a very busy driveway. A very busy  
23 area easily that it's -- obviously the driveway  
24 leads right into the area you're going to be  
25 working on. That's the concern for the question.

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1 THE WITNESS (Befera): Well, the  
2 construction for something especially as tight  
3 like this would be -- is done in stages. And  
4 there would first be site work. The position of  
5 the monopole being in the back is not by chance,  
6 that the monopole is towards the back and not  
7 towards the front of the compound or the drive,  
8 the front of the driveway.  
9 The staging, as mentioned by  
10 Mr. Roberts, would be arranged with the landlord  
11 for the day of stacking the -- we'd stack  
12 something like this in one day. The parking lot  
13 area to the right of the driveway could possibly  
14 be an area right there, because there was quite a  
15 decent amount of parking spaces.  
16 Now once that's done nothing else  
17 has been brought on site. The platform on which  
18 the equipment goes is prefabricated. It's going  
19 to come in one piece and get placed in one day.  
20 The equipment that goes on that platform only  
21 comes after that's in place and we have commercial  
22 power to the site. So that comes in one day. It  
23 get placed on there. It doesn't need to be  
24 staged.  
25 The same with the generator. If

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1 the slab that the generator is going to sit on is  
2 not in place, cured and ready, the  
3 generator doesn't show up on site. The generator  
4 gets delivered once it's ready to be placed on  
5 site. So especially in the case of a site such as  
6 this with limited space that would be the course  
7 of construction.  
8 MR. SILVESTRI: Thank you. I  
9 wanted to go back to one of the questions that Mr.  
10 Perrone had posed to you, because I really  
11 couldn't hear the answer. So if you bear with me  
12 on a potential repeat here.  
13 On page 12 of the application with  
14 the tower sharing referenced, there's a statement  
15 that one or two additional antenna locations at  
16 the 62 and 72-foot levels could be made available  
17 to other carriers if a need existed.  
18 My question is, can Cellco's  
19 antenna equipment be located at those levels as  
20 opposed to the 82 and 92-foot levels to create a  
21 shorter monopole?  
22 THE WITNESS (Ulanday): I guess my  
23 answer previously with Mr. Perrone was, we have no  
24 problems with the 82-foot level, but at the  
25 72-foot level it may not be the best option.



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1 Because I guess to summarize it, we will not  
2 achieve our capacity, our -- our objective to  
3 offload capacity from the neighbors if we are  
4 pushed down towards the 72 feet level. So that's  
5 our concern, but at the 82, we look okay at 82.  
6 MR. SILVESTRI: Could everything be  
7 mounted at the 82-foot level, and not have to go  
8 to the 92-foot level and still achieve your  
9 objective?  
10 THE WITNESS (Ulanday): I don't  
11 know.  
12 THE WITNESS (Befera): No. The  
13 idea of having a unipole, having something that  
14 looks as clean as the proposed is -- it limits  
15 what we can put at each level, which is why our  
16 initial deployment, which is only two out of the  
17 four frequencies that we have licenses for, are  
18 going at those levels.  
19 That third slot could be when  
20 like -- when Ms. Ulanday talks about optimizing  
21 sites, the surrounding sites and doing everything  
22 that we can do with those sites before we look for  
23 an additional site to releve those ineffective  
24 attempt/dropped call problems that we have. We  
25 add those additional frequencies to those

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1 surrounding sites, like he referred to it as  
2 modernization. And what that is, is adding those  
3 frequencies to give those sites everything that  
4 they can possibly do before we come here today and  
5 propose what we're proposing.  
6 Now during this discussion of  
7 talking about lowering the height of the pole and  
8 dropping the antennas, what Mr. Ulanday is talking  
9 about is the 700 frequency. The LTE frequency  
10 goes a little bit further than the 1900 frequency.  
11 So what -- what he was saying was,  
12 you drop the height. We might be okay with the  
13 700 being 10 feet lower because it doesn't  
14 attenuate as fast from the source, but the 1900  
15 will not provide the coverage or capacity relief  
16 because it attenuates much faster from the source,  
17 meaning the coverage area is much smaller.  
18 So typically we like to have the  
19 higher frequency at the higher heights so that  
20 they can come -- they still don't come close to  
21 what the 700 or the 850 does, but it could satisfy  
22 the objective that we have in this area which is  
23 not strictly capacity.  
24 This site is initially, as you may  
25 notice from the ineffective attempt and dropped

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1 call data, that our biggest problem here is more  
2 of a voice over LTE, our voice over IP voice  
3 technology that kind of took over the 850 voice  
4 technology not being sufficient in this area. We  
5 call it a multi parity cell site, as opposed to a  
6 strictly capacity cell site.  
7 Now every cell site that we have  
8 that we add does a little bit of both. It adds  
9 capacity and provides incremental coverage even if  
10 it was initially designed as a capacity site. But  
11 this site here, although it has capacity issues  
12 that it will address, the bigger problems it's  
13 going to fix is the gap in the coverage as  
14 illustrated by the drop call data as well as the  
15 ineffective attempt data.  
16 So you know, a hundred feet tall  
17 wasn't an arbitrary number that was picked. It's  
18 done by a lot of modeling analysis that the RF  
19 engineering group does. And modeling analysis can  
20 be very accurate with the stuff that they have  
21 today.  
22 So pushing it down ten feet it's  
23 not going to do as good a job, especially at the  
24 higher frequencies. And when the 2100  
25 frequency -- the AWS frequency starts exhausting

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1 like the surrounding cells, our answer is to add  
2 the 1900 frequency. That's also a high frequency.  
3 It's not the 850. It's not the 700, but that's  
4 the next step for capacity relief.  
5 So when he talks about the three to  
6 five years, we'd have to look at, okay. Now we've  
7 got to add the PCS frequency as opposed to adding  
8 a new site somewhere in the perimeter where these  
9 sectors are exhausted. I hope that answers your  
10 question.  
11 MR. SILVESTRI: And I appreciate  
12 your answer. Thank you. I only have a couple  
13 more.  
14 In driving both to the site and  
15 then down to here there's the commuter parking lot  
16 on Penny Avenue. Was that investigated at all?  
17 THE WITNESS (Befera): Is that  
18 owned by the State?  
19 MR. SILVESTRI: I'm assuming so,  
20 but I don't --  
21 THE WITNESS (Befera): If it is  
22 owned by the State, it probably was not  
23 investigated because we cannot get a deal with the  
24 State for anything, but maybe Bradley Airport.  
25 MR. SILVESTRI: All right. That's

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1 probably the answer then.  
2           The last one I have for you deals  
3 with security. I've been reading a lot about  
4 geomagnetic disturbance radiofrequency weapons, to  
5 go that far. Would the system been resistant to  
6 any of that, or cyber attacks?  
7           THE WITNESS (Befera): To date it  
8 has been, so I have to assume that it is. We have  
9 not been subjected to any type of cyber attack on  
10 our network 30, 35 years that we've been in  
11 business here.  
12           MR. SILVESTRI: Yeah, it's not the  
13 typical question, but it goes a lot with the  
14 background that I come from. Thank you.  
15           Thank you, Mr. Chairman.  
16           THE CHAIRMAN: Thank you.  
17           Dr. Klemens.  
18           DR. KLEMENS: Well, I've had a lot  
19 of trouble trying to follow this entire dialogue.  
20 The acoustics in this room are very challenging  
21 for me. So if I repeat or ask something that has  
22 been said, please forgive me.  
23           I really want to focus on some  
24 larger policy issues, but let's first go with the  
25 gas line. I'm looking on -- what page is this?

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1 The first, sort of the overview map, the All  
2 Points overview map of the site. It's by the very  
3 beginning, its introduction. It's not numbered.  
4 It's like maybe II -- oh, it's three Is. It's  
5 III.  
6           In looking at the nature of that  
7 roof, can someone tell me what all these openings  
8 and things I'm seeing on the roof are? There's a  
9 whole bunch of stuff on there.  
10           THE WITNESS (Roberts): The squares  
11 that we see from the aerial photo are most likely  
12 air handlers for the stores themselves providing  
13 heating and cooling.  
14           DR. KLEMENS: So there's equipment  
15 on the roof, is what you're saying?  
16           THE WITNESS (Roberts): That is  
17 correct.  
18           DR. KLEMENS: And just for the  
19 record, can you say what's in those buildings  
20 below there? What are their nature? There's  
21 multiple businesses that we saw. Could someone  
22 sort of, for the record, state what those are? I  
23 can't testify. You have to.  
24           THE WITNESS (Befera): The  
25 storefronts themselves?

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1           DR. KLEMENS: What was the nature  
2 of the multiple businesses? And I'm telling you  
3 where I'm going with this. How many of those  
4 businesses involve cooking or equipment that in  
5 and of themselves are fire hazards?  
6           THE WITNESS (Befera): I saw a  
7 bakery. I saw a Subway. I saw what looked like a  
8 Japanese restaurant.  
9           DR. KLEMENS: So you saw places  
10 that have cooking and other types of things?  
11           THE WITNESS (Befera): Yes.  
12           DR. KLEMENS: I'm just going to  
13 state my opinion on this. I think this gas line  
14 on the roof is really -- I've never seen anything  
15 like this. I think with the nature of the  
16 particular buildings I would be concerned.  
17           Have you explored trenching the gas  
18 in the back in that alley? Or you also said you  
19 could bring it off the street, but there's another  
20 option. You could trench in that open space there  
21 at the back. Correct?  
22           THE WITNESS (Roberts): Certainly,  
23 and we'll explore those options. It's kind of how  
24 much gas are they delivering? At what pressure?  
25 And is that adequate for our generator set to run

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1 with all the other appliances that are on that, on  
2 that gas line.  
3           DR. KLEMENS: When that generator  
4 is not being used and there is a fire in that  
5 building and it penetrates that gas line, is there  
6 gas in that line when the generator is not being  
7 used?  
8           THE WITNESS (Roberts): Yes.  
9           DR. KLEMENS: I think I've made my  
10 point.  
11           Let's move to number 12, page 12,  
12 the tower sharing. And I'm kind of fascinated  
13 looking at this application and looking at the  
14 discussion we had a few days ago on another  
15 docket. And the whole concept that when we build  
16 towers we should be encouraging tower sharing.  
17           And what I see here is pretty much  
18 a statement that it's going to be nearly  
19 impossible to have tower sharing because of the  
20 small leased area. And yet when I went out on the  
21 site walk today I saw the area that was leased.  
22 It was painted with white, and then I saw a lot of  
23 other space as we went forward. I mean, there  
24 were dumpsters there in that, but there was a lot  
25 of space back there.

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1 So being mindful of the concept  
2 that we're here, one of the things we look at is  
3 ways to encourage tower sharing. Might not a  
4 different configuration of the lease area or the  
5 placement of the tower in that rather large space  
6 be able to achieve that potential goal, which is a  
7 goal that I believe we heard about in detail on  
8 Docket 471 two days ago?  
9 THE WITNESS (Befera): The way that  
10 the industry handles a situation like the one that  
11 we have is -- well, we need to be -- we need to  
12 maintain that eight-foot width so that we -- once  
13 we're done we still have access around the  
14 building for egress, ultimate means of egress and  
15 so forth.  
16 But how this is handled when the  
17 pole owner doesn't control enough land to do a  
18 sublease that can accommodate both tower space and  
19 ground space, is we do a tower only sublease and  
20 the prospective tenant has to go to our landlord  
21 for the additional ground space on a separate  
22 agreement.  
23 Those are things that we do when we  
24 go to collate -- co-locate on locations such as  
25 this, and that's what another carrier would need

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1 to do if they were going up. And the tower only  
2 rent, of course, is discounted taking into account  
3 that they also have to pay the underlying landlord  
4 some money to have that space on the ground.  
5 DR. KLEMENS: So if I hear you  
6 correctly -- and I'm trying, and it's not easy --  
7 you're saying that the challenge here is if  
8 someone else comes in, they're going to have to  
9 come and execute a separate lease for another  
10 piece of property.  
11 That's different from many -- from  
12 generally when I see the compounds come in and we  
13 talk about how much room there is in them. Why  
14 can't we at this point do something that  
15 encourages and makes it easier for another carrier  
16 to co-locate here, rather than to make it, as  
17 indicated on page 12, almost impossible?  
18 Shouldn't we be looking at making it easier?  
19 THE WITNESS (Befera): Well, we --  
20 as you've seen many of our applications,  
21 Dr. Klemens, in the past that is typically what we  
22 do. We -- there are physical constraints at this  
23 location that don't allow us to build a compound  
24 larger than what we needed for our use. It  
25 doesn't necessarily preclude an additional carrier

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1 from going straight to our landlord for that  
2 additional ground space. It's something that  
3 happens quite often in our business.  
4 DR. KLEMENS: Well, I understand  
5 what you're saying and I respectfully -- I mean,  
6 if you could make a larger compound there's a lot  
7 of land back there. You could have a larger  
8 compound. You could probably make it more  
9 attractive for someone to co-locate there.  
10 I think as it is now, it's very  
11 unattractive and probably we're creating a tower  
12 that will only be served by Verizon. I think it  
13 will be highly unlikely. That's my opinion.  
14 But let me move to the very  
15 final -- we'll keep on calling this thing a  
16 monopole, but it's not a monopole. It's a  
17 flagpole, or allegedly a flagpole.  
18 I'm looking at the photo simulation  
19 number 16, which is from Holland Road. I imagine  
20 that's actually the house which had the foxhound  
21 in the back, that red house just to orient me?  
22 THE WITNESS (Libertine): That is  
23 correct.  
24 DR. KLEMENS: Thank you. How wide  
25 is that flagpole, as you call it?

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1 THE WITNESS (Roberts): The  
2 flagpole itself is three-foot in diameter at the  
3 top, and approximately 45 inches in diameter at  
4 the base. The areas that contain the antennas  
5 themselves are all three-foot. So it tapers up to  
6 the section and then it's a straight shot.  
7 DR. KLEMENS: If you were to build  
8 a real monopole at that site with the exterior  
9 mounted antennas, what would the -- and I guess  
10 this is just a theoretical exercise.  
11 What would the width of that be  
12 recognizing the antennas would add some width?  
13 But where I'm driving with this is,  
14 this is pretty, from my perspective, fairly  
15 visually intrusive. And I wonder whether or not a  
16 traditional monopole with, you know, some mounted  
17 antennas, some of them that may be flush or even  
18 with the deck may actually look less intrusive  
19 than this. But we're not given any simulation  
20 between the two. We're given -- this is your  
21 preferred. It just seems very big.  
22 THE WITNESS (Roberts): Yeah. I  
23 guess from a size perspective, yes, we would be in  
24 the 18 to 24-inch diameter at top, and that's a  
25 consistent taper down. Flush-mounted antennas

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1 would achieve pretty much the same thing. This  
2 does conceal everything and it's not as busy  
3 visually.  
4 DR. KLEMENS: What I'm trying to  
5 get is, how much mass are we creating by this  
6 attempt to cover everything? It just looks, again  
7 from the simulation -- I know Mr. Libertine's  
8 simulations are pretty good.  
9 This looks very -- I've seen these  
10 before. I saw them in Norwalk, the double one we  
11 did in Norwalk on the parkway. But somehow they  
12 were higher. They didn't look quite as jarring.  
13 This is very, to me, a very jarring look from this  
14 residence, just my opinion.  
15 THE WITNESS (Libertine): I -- I  
16 think the overall net gain, if you will, in terms  
17 of a reduction of the diameter of the pole, we  
18 might be able to achieve something in the range  
19 of, you know, 12 inches. Once you get to the top  
20 you're probably talking a busier look just because  
21 we've got the external equipment. There's, you  
22 know, the remote radio heads.  
23 DR. KLEMENS: How much with the  
24 external, Mr. Libertine?  
25 THE WITNESS (Libertine): I think

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1 we'd be gaining somewhere in the, you know, a  
2 foot. We might be able to reduce the pole size at  
3 the -- below the antenna slots by perhaps a foot  
4 or so. Maybe 8 to 12 -- I'm sorry. 12 to 16  
5 inches just again, because there is a taper  
6 involved with the traditional monopoles.  
7 DR. KLEMENS: So basically the  
8 massing on most of the pole would be reduced  
9 anywhere from a third, or if not more in the  
10 massing?  
11 THE WITNESS (Libertine): I'm not  
12 sure I would go that far. I'd have to take a  
13 closer look at some of the specifications, but  
14 typically those polls go from about -- well, it  
15 depends on the loads, I imagine.  
16 Mr. Roberts can help me out here,  
17 but I know that often they do taper so that 24 to  
18 30 inches at the top certainly expands as we go  
19 down.  
20 Let's say if we can get 24 inches,  
21 or let's say we can get 20 inches at the top, I  
22 think we're still talking about a pole diameter  
23 that's going to be over, certainly over 2 feet,  
24 maybe 2 and a half feet as we go down a the pole.  
25 Would it be slightly slimmer? Yes.

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1 There's no question it could be a little slimmer.  
2 I'm not sure I can speak to the executive  
3 dimensions themselves.  
4 I -- I go back to the fact that  
5 here, in this particular situation because we did  
6 have close, or closer residences than you might  
7 see in most applications, the feeling was the --  
8 and I'm not -- personally I think it is a misnomer  
9 to really classify these as flagpoles.  
10 I think in the old days we actually  
11 used actual flags on top of these, but that's not  
12 really longer a standard practice. So these are  
13 really unipoles, and the whole idea is to give it  
14 a clean book.  
15 And you're absolutely right. I  
16 mean, I always say, beauty is in the eye of the  
17 beholder. And some people think this is a great  
18 sleek look. And others say, well, geez. It kind  
19 of looks blocky to me. So it's a -- but the idea  
20 here was really to keep it as clean as possible  
21 all the way up, but particularly because we knew  
22 we had views that were primarily the upper  
23 portions.  
24 And most folks do take offense to  
25 seeing the antennas, the equipment, the cabling

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1 and all the coupling at the top of these. And  
2 where we have two consecutive slots being used, it  
3 would be substantially busier. But I certainly  
4 hear and appreciate what you're saying in terms  
5 of, you know.  
6 DR. KLEMENS: I'm just grappling,  
7 trying to grapple with this.  
8 The other thing is, as I  
9 understand, these -- again, it's going back to the  
10 tower share concept. I mean, leaving aside the  
11 fact that the compound is small and there's a  
12 potential a "share-ee" is going to have to deal  
13 with negotiating an additional lease with the  
14 landlord.  
15 Doesn't this particular design also  
16 make it difficult, more difficult to expand and  
17 extend the tower even with the 10 percent  
18 allowable as of right extension permitted by  
19 FERC -- no. FCC? Sorry.  
20 THE WITNESS (Roberts): Certainly  
21 it does. Again, by containing all the antennas'  
22 cables inside this ray dome, you know, when you're  
23 down to the third or fourth set of antennas inside  
24 this cannister, it's very little room to put  
25 anything.

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1 You know, there's cables from  
2 everyone above you going by you. So you know, you  
3 reach a limit on how far you can expand, and also  
4 that center pipe where it was a single carrier ray  
5 dome, you know, ten feet tall you might be at a  
6 six-inch diameter center pipe.  
7 Where now that we're doing a four  
8 or five, we might in fact have, you know, a 10 or  
9 12-inch diameter structural member in that  
10 section, which now makes little -- littler -- less  
11 room for the antennas, which then increases that  
12 diameter of that ray dome from a 36 to possibly  
13 42.  
14 DR. KLEMENS: So in fact, it would  
15 not be unfair to say that the lack of compound  
16 size coupled with the design of this tower  
17 actually de facto results in a tower that probably  
18 is not going to be shared, or made very, very  
19 difficult to be shared?  
20 THE WITNESS (Befera): I -- I don't  
21 believe that's the case, Dr. Klemens, because it  
22 is -- and I know I've mentioned it, but it is very  
23 common on both sides.  
24 When we go on someplace where the  
25 tower owner doesn't have ground control or vice

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1 versa, it is very common that the tower owner is  
2 respective of that, offers a reduced rate for  
3 tower only space. And the separate lease is  
4 usually of nominal value in comparison.  
5 And the end result -- and the tower  
6 owners work with you. We work with each other  
7 because we compete for the customer, not  
8 necessarily the tower site. And we work with each  
9 other to make the overall rent what it should be.  
10 And our agreements with our competitors are  
11 reciprocal, and particularly in this state so that  
12 we charge each other exactly the same for  
13 modifications, for additional equipment, for  
14 initial tower rents.  
15 So if this landlord was greedy and  
16 wanted a little more for the ground, we'd give  
17 them tower space for a little less. So that the  
18 end result was our reciprocal rate agreement that  
19 we all enjoyed as competitors because of its  
20 reciprocity.  
21 DR. KLEMENS: So it's your position  
22 that this tower can be expanded, can have  
23 additional carriers on it and can be expanded  
24 ten feet without difficulty?  
25 THE WITNESS (Befera): I believe

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1 that's true, yes.  
2 DR. KLEMENS: Okay. Thank you. I  
3 have no further questions, Mr. Chairman.  
4 THE CHAIRMAN: Mr. Lynch.  
5 MR. LYNCH: I do have a few  
6 questions, Mr. Chairman, but with this cold my  
7 voice might give out before the questions get  
8 asked, so consider yourself fortunate.  
9 First I want to say I'm not  
10 testifying, but I know you're not going to fly a  
11 flag here, but I do want -- somewhere in the  
12 application I do want to recognize the fact that  
13 you understand flag protocol and I thank you for  
14 that.  
15 Mr. Befera, I know within each  
16 tower there's a fault point that the tower will  
17 collapse on itself. What's the difference between  
18 that happening to this flagpole and a standard  
19 monopole? Is there any difference? And if so,  
20 what is it?  
21 THE WITNESS (Roberts): I'll field  
22 that one.  
23 MR. LYNCH: Thank you, Mr. Roberts.  
24 We'll go through the engineer.  
25 THE WITNESS (Roberts): Certainly

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1 this will be a little bit different than any --  
2 like a monopole you'll point usually, or massing  
3 at a certain depth, distance, and you have a, you  
4 know, you're basically building the tower stronger  
5 than it needs to be above code. And then  
6 section -- meeting code, and theoretically that's  
7 the yield point.  
8 In this case we'd have to work with  
9 the manufacturer of this flagpole to make sure  
10 that we were able to design something that would  
11 fall within that ray dome to -- I think we said  
12 87 -- 83 feet above grade. We'd have to have that  
13 worked out, but it's slightly different.  
14 MR. LYNCH: Yeah. Dr. Klemens  
15 pointed it out, that it's a much different  
16 scenario.  
17 THE WITNESS (Roberts): Yes.  
18 MR. LYNCH: So I was just  
19 wondering, you know, what the difference between  
20 the two would be?  
21 THE WITNESS (Roberts): Yeah, and  
22 in this case there's a center structural tube  
23 section running through that whole ray dome  
24 portion where the antennas are. And that most of  
25 the time they're 20-foot sections that taper down.

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1 So they would most likely be at that one section a  
2 yield point.  
3 MR. LYNCH: And if we could stick  
4 with the pole for a second. On C-4 behind tab 4,  
5 I guess it is, you have the array setup and it  
6 looks like there's just two arrays. But would  
7 there be more sectors north, south, east, or west?  
8 Or in some cases I've seen where you have a  
9 cannister that actually surrounds the pole that  
10 you fit all your different sectors in.  
11 What are we looking at here? I'm  
12 looking at C-4.  
13 THE WITNESS (Befera): That, that  
14 is basically a top-down view of the tops of the  
15 antennas, what -- what they would look like if you  
16 were floating above the pole and looking down  
17 inside of it, if it were open at the top. Those  
18 three -- those three blobs, the top, there would  
19 be antennas mounted to the inside of the ray dome.  
20 MR. LYNCH: Would they be mounted  
21 on all four sides, or just two sides?  
22 THE WITNESS (Befera): No, no.  
23 Three sides.  
24 MR. LYNCH: Three? Okay.  
25 THE WITNESS (Befera): There's

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1 three. There's the alpha, beta and gamma sector.  
2 MR. LYNCH: I've got it now. Thank  
3 you.  
4 Also within the application and in  
5 the interrogatories there's a reference to  
6 residential gaps. And my question is, are these  
7 residential gaps for calls? Or are they for, you  
8 know, delivering data?  
9 THE WITNESS (Ulanday): It's  
10 basically for both, for every service that  
11 Verizon --  
12 MR. LYNCH: I'm sorry. I can't  
13 hear?  
14 THE WITNESS (Ulanday): It's for  
15 both. And it's for --  
16 MR. LYNCH: Then my question would  
17 be, I would assume in a residential area, you  
18 know, it's more important to deliver the data to  
19 these people so their kids can play with all their  
20 games and everything. Would I be safe to say  
21 that?  
22 THE WITNESS (Ulanday): Yeah,  
23 that's correct.  
24 MR. LYNCH: As far as calculating  
25 dropped calls, once, twice a week I find myself

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1 winning a trip to the Caribbean on my phone. And  
2 when that comes through I automatically just shut  
3 it down. Would that be considered a dropped call,  
4 or do I have to start to reconnect the call to be  
5 considered a dropped call?  
6 THE WITNESS (Ulanday): If -- if  
7 the terminal is shut down it's not a dropped call.  
8 It's basically saying your -- your phone, before  
9 it gets shut down it will send a message to the  
10 network saying that you turned off your phone so  
11 it's not a dropped call.  
12 MR. LYNCH: No, I'm just curious.  
13 Now as far as you talked earlier --  
14 I think, to Mr. Silvestri about upgrading your  
15 system, or upgrading the towers when you can --  
16 now if a new frequency comes along and you have to  
17 add new equipment or take out old equipment, you  
18 know, how difficult or how easy is that an  
19 application to do for your maintenance people?  
20 And how long would it take?  
21 Let's say you got a new frequency,  
22 you know, one that's more valuable than the LTE  
23 is, 700. How long would it take to actually  
24 outfit your entire network?  
25 THE WITNESS (Ulanday): If ever we

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1 get a new frequency it's basically we just need to  
2 change the antennas to accommodate the new  
3 frequencies.  
4 MR. LYNCH: I still can't hear.  
5 Sorry?  
6 THE WITNESS (Ulanday): We  
7 basically just need to change the antennas to  
8 accommodate the new frequencies.  
9 MR. LYNCH: So would that mean you  
10 would put in new antennas and take out old? What  
11 are we doing here?  
12 THE WITNESS (Ulanday): I suppose  
13 the antenna vendors could work out something like  
14 they can squeeze in, let's say, 600 megahertz.  
15 Although Verizon did not buy any 600 megahertz, I  
16 assume the antenna vendors can design an antenna  
17 that can fit 600 megahertz, the 700 megahertz and  
18 the 850 in just one antenna.  
19 MR. LYNCH: And then the last part  
20 of that was I know it took a couple years for you  
21 to implement that within the system, the 700 LTE.  
22 Would that also be the case if you went to 600?  
23 THE WITNESS (Ulanday): Yes, it  
24 would take an ample amount of time to deploy  
25 around the country.

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1 MR. LYNCH: All right. Thank you.  
2 On page 9 of the interrogatories  
3 you talk about the surrounding cell sites, you  
4 know, reaching their limit. Now is that limit due  
5 to calls, or due to capacity? And it's question  
6 number 21. Sorry.  
7 THE WITNESS (Ulanday): Yeah,  
8 Trumbull two based from the latest data that we  
9 have, if we can see that the site is already  
10 touching our capacity trigger.  
11 MR. LYNCH: Because what I'm really  
12 getting at is I see most of what we're doing is a  
13 capacity problem, not a call problem. Would I be  
14 incorrect in assuming that?  
15 THE WITNESS (Ulanday): Capacity  
16 can mean a call or data, so it's everything  
17 actually.  
18 MR. LYNCH: Okay. I'll take that.  
19 Now lastly, I have one last question. In lieu --  
20 and it's, again it's not really part of this  
21 application. But in lieu of what's happened in  
22 Paris, London, and Washington D.C. yesterday we  
23 get an influx of people going on their  
24 phones checking on their family, their friends and  
25 so on.

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1 Is there a possibility like I think  
2 happened in Katrina where your system could crash?  
3 And if so, is there a backup, whether it's, you  
4 know, to prevent that from happening? Or is that  
5 a few years down the road?  
6 THE WITNESS (Ulanday): Actually in  
7 the event that, let's say, one sector gets swamped  
8 and it's really out of capacity, the remaining  
9 customers that are not served by that sector would  
10 be served by the next best server, that we call  
11 it.  
12 So those excess -- I mean, those  
13 other customers would be served by another sector.  
14 And if that another sector is still exhausted, it  
15 will be served by the third neighbor sector.  
16 MR. LYNCH: From what I understand  
17 happened in London, all the sectors were maxed  
18 out.  
19 THE WITNESS (Ulanday): Then if  
20 it's -- if all the neighboring sectors are really  
21 maxed out there's no --  
22 MR. LYNCH: So all I'm saying is  
23 there is a potential for the system to crash?  
24 THE WITNESS (Ulanday): I wouldn't  
25 say no, but there is a very, very, very slim

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1 chance.  
2 MR. LYNCH: Thank you very much.  
3 THE CHAIRMAN: Thank you.  
4 A question. This, the design of  
5 the pole, this so-called flagpole, where did that  
6 come from? Did that come from Bridgeport, the  
7 community? Or is that from Verizon using that,  
8 that design?  
9 THE WITNESS (Befera): That was --  
10 that was our choice thinking it was a clean look.  
11 THE CHAIRMAN: And I want to get --  
12 well, the question is really the rationale, but  
13 I'll put it in another way. Is it feasible to do  
14 what I would call a traditional monopole with the  
15 exterior?  
16 THE WITNESS (Befera): Absolutely.  
17 And absolutely, we could do it.  
18 THE CHAIRMAN: Would you be opposed  
19 to that if the Council --  
20 THE WITNESS (Befera): Not at all.  
21 We thought that this -- we don't -- we don't  
22 prefer this type of design particularly with the  
23 antennas. We -- technically we prefer to have the  
24 triangular array, because with the type -- we  
25 prefer a typical monopole, the triangular array,

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1 because one antenna in the middle can't see you  
2 over there better than I can see you over there.  
3 But when you have antennas 12 feet across, this  
4 guy can see you over there better than this guy  
5 can see you over there, and vice versa.  
6 So it actually -- the form is  
7 better for us if we have the traditional  
8 triangular array, than to have it stack like this,  
9 combining frequencies into the same antenna. It  
10 doesn't work as good, but it works and it's a  
11 compromise that we would make for a cleaner look.  
12 But we prefer to have a traditional monopole with  
13 the triangular arrays.  
14 THE CHAIRMAN: Did you have any  
15 communication with either the City, any of the  
16 city boards, or any of the neighbors where you  
17 showed them this flagpole design?  
18 THE WITNESS (Befera): We -- when  
19 we consulted with the City of Bridgeport and the  
20 Mayor's aides they declined our offer of having a  
21 public meeting.  
22 THE CHAIRMAN: Okay. So I guess  
23 the question is, if the Council in its wisdom  
24 decided that the traditional monopole made more  
25 sense, it would not be counter to your

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1 communication with the Town, since basically -- or  
2 the City, since basically there were none, I mean  
3 other than --  
4 THE WITNESS (Befera): That's fair  
5 to say. They didn't ask for anything.  
6 THE CHAIRMAN: If it was the  
7 monopole, would that affect the height.  
8 THE WITNESS (Befera): No, that  
9 wouldn't affect the height because we'd still have  
10 the same frequencies at the same height that  
11 needed that height.  
12 THE CHAIRMAN: Okay. All right.  
13 That's the last question I have.  
14 MR. PERRONE: I just had a couple  
15 final cleanup questions, Mr. Chairman.  
16 Hypothetically, if Cellco were to  
17 go with a monopole would that result in a larger  
18 foundation and potentially a bigger compound? Or  
19 would the compound size stay about the same?  
20 THE WITNESS (Roberts): The  
21 compound itself would remain the same size. The  
22 base would probably be roughly the same diameter.  
23 It's just, you know, when we got to the top we  
24 transitioned at the very top of the steel  
25 structure the faceted side to around to 36 inches.

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1 Where in this case it would in fact be a smaller  
2 diameter as it went up and it would also give a  
3 potential for co-locate opportunities at a higher  
4 elevation.  
5 MR. PERRONE: As far as the antenna  
6 mounting on a monopole, would you still envision  
7 two levels or potentially put them all at, say,  
8 92 feet on a low-profile platform?  
9 THE WITNESS (Befera): We'd have  
10 them all at the hundred feet, or just below so  
11 that the top tip of the antenna was at a hundred  
12 feet. So call it a 96-foot centerline, or  
13 something like that, on a traditional 12-foot  
14 across triangular array. We would only need the  
15 one level.  
16 MR. PERRONE: So all your antennas  
17 could be up around 97?  
18 THE WITNESS (Befera): Yes.  
19 MR. PERRONE: Back to the original  
20 flagpole proposal. Senator Murphy had asked about  
21 would the tower be designed to accommodate a  
22 possible expansion. The answer was yes.  
23 Expandable by how many feet? Ten or 20?  
24 THE WITNESS (Roberts): I would  
25 think we would be pushing at the most 20. I would

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1 be cautious to the fact that, again an added  
2 carrier adds that many more cables into, you know,  
3 the mix and you know that diameter might increase  
4 from 36 to 42.  
5 MR. PERRONE: And under tab one the  
6 environmental assessment statement. Originally  
7 when I had looked at this I had noticed it says,  
8 the equipment to be in operation at the site would  
9 emit no noise. And then there was some later  
10 discussion on a possible noise analysis.  
11 Would there be noise emitted by the  
12 radio equipment?  
13 THE WITNESS (Befera): The noise  
14 study only refers to if the generator were in  
15 operation for a commercial power outage. Other  
16 than that, it's a hum like a refrigerator, like a  
17 refrigerator in your home, the equipment itself.  
18 MR. PERRONE: I understand the  
19 analysis based on the generator, but the radio  
20 equipment and battery equipment, the general  
21 ground equipment, would that impact sound levels  
22 at the property boundary?  
23 THE WITNESS (Befera): No. The  
24 sound emitting from the radio equipment is like --  
25 it's -- it's no more than your refrigerator in

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1 your home turning on.  
2 MR. PERRONE: And back to the sound  
3 analysis topic. So if necessary, you would  
4 utilize sound attenuation equipment to ensure  
5 compliance with DEEP noise standards at the  
6 property boundaries if necessary?  
7 THE WITNESS (Roberts): Yes, we  
8 would do that.  
9 MR. PERRONE: And lastly,  
10 Mr. Silvestri had asked about possible upgrades at  
11 other sites. And I understand there's a potential  
12 for some antenna replacements at other sites. If  
13 necessary, could those antenna replacements be  
14 filed separately such as in a notice of exempt  
15 modification?  
16 THE WITNESS (Ulanday): Yes.  
17 MR. PERRONE: And lastly, as far as  
18 the height of the proposed flagpole tower, is that  
19 driven by both capacity and coverage? Or just  
20 coverage?  
21 THE WITNESS (Ulanday): It's driven  
22 by both capacity and coverage.  
23 MR. PERRONE: Thank you. I'm all  
24 set.  
25 THE CHAIRMAN: The Council will



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1 recess until 7 p.m., at which time we'll commence  
2 the public comment session.  
3 (Whereupon, the witnesses were  
4 excused and the above proceedings were concluded  
5 at 4:57 p.m.)  
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1 CERTIFICATE  
2  
3 I hereby certify that the foregoing 93 pages  
4 are a complete and accurate computer-aided  
5 transcription of my original verbatim notes taken  
6 of the Siting Council Meeting in Re: Docket No.  
7 472, APPLICATION FROM CELLCO PARTNERSHIP D/B/A  
8 VERIZON WIRELESS FOR A CERTIFICATE OF  
9 ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR  
10 THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A  
11 TELECOMMUNICATION FACILITY LOCATED AT 541  
12 BROADBRIDGE ROAD IN BRIDGEPORT, CONNECTICUT, which  
13 was held before ROBIN STEIN, Chairman, at the  
14 Bridgeport City Hall, Council Chambers, 45 Lyon  
15 Terrace, Bridgeport, Connecticut, June 15, 2017.  
16  
17   
18 \_\_\_\_\_  
19 Robert G. Dixon, CVR-M 857  
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10 EXAMINATION  
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