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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Docket No. 494

Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located south of Chestnut Hill Road at the intersection with Grilley Road and Lyman Road (Parcel No. 101-1-5B), Wolcott, Connecticut.

VIA ZOOM AND TELECONFERENCE

Public Hearing held on Tuesday, December 8, 2020, beginning at 2 p.m. via remote access.

H e l d B e f o r e:

ROBERT SILVESTRI, Presiding Officer

Reporter: Lisa L. Warner, CSR #061

A p p e a r a n c e s:

Council Members:

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Department of Energy and Environmental Protection

QUAT NGUYEN

Designee for Chairman Marissa Paslick Gillett
Public Utilities Regulatory Authority

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Executive Director and

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MICHAEL PERRONE

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For Applicant Cellco Partnership d/b/a Verizon Wireless:

ROBINSON & COLE LLP
280 Trumbull Street
Hartford, Connecticut 06103-3597
BY: KENNETH C. BALDWIN, ESQ.

For Intervenor New Cingular Wireless PCS, LLC (AT&T):

CUDDY & FEDER LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
BY: DANIEL PATRICK, ESQ.

Also present: Pryme Tyme

****All participants were present via remote access.**

MR. SILVESTRI: Good afternoon, everyone. I trust that my audio is coming through clear to everybody. This remote public hearing is called to order this Tuesday, December 8, 2020, at 2 p.m. My name is Robert Silvestri, member and presiding officer of the Connecticut Siting Council.

Other members of the Council are Robert Hannon, designee for Commissioner Katie Dykes of the Department of Energy and Environmental Protection; Quat Nguyen, designee for Chair Marissa Paslick Gillett of the Public Utilities Regulatory Authority; John Morissette; Michael Harder; Edward Edelson; and Daniel P. Lynch, Jr.

Members of the staff are Melanie Bachman, executive director and staff attorney; Michael Perrone, our siting analyst for today; and Lisa Fontaine, fiscal administrative officer.

As all are keenly aware, there is currently a statewide effort to prevent the spread of the Coronavirus. And this is why the Council is holding this remote public hearing, and we ask for your patience.

And we also ask that if you haven't done so already, please mute your computer audio

and/or telephone at this time.

This hearing is held pursuant to the provisions of Title 16 of the Connecticut General Statutes and of the Uniform Administrative Procedure Act upon an application from Cellco Partnership doing business as Verizon Wireless for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located south of Chestnut Hill Road at the intersection with Grilley Road and Lyman Road in Wolcott, Connecticut. This application was received by the Council on September 2, 2020.

The Council's legal notice of the date and time of this remote public hearing was published in The Waterbury Republican American on October 14, 2020. Upon this Council's request, the applicant erected a sign near the proposed access road entering the subject property from Chestnut Hill Road so as to inform the public of the name of the applicant, the type of facility, the remote public hearing date, and contact information for the Council.

As a reminder to all, off-the-record communication with a member of the Council or a

member of the Council staff upon the merits of this application is prohibited by law.

The parties and intervenors to the proceeding are as follows: The applicant, Cellco Partnership doing business as Verizon Wireless, its representative is Kenneth C. Baldwin, Esq. from Robinson & Cole LLP. The intervenor, New Cingular Wireless PCS, LLC/AT&T, its representative is Daniel Patrick, Esq. and Lucia Chiocchio, Esq. of Cuddy & Feder LLP.

We will proceed in accordance with the prepared agenda, a copy of which is available on the Council's Docket 494 webpage, along with the record of this matter, the public hearing notice, instructions for public access to this remote public hearing, and the Council's Citizens Guide to Siting Council Procedures. Interested persons may join any session of this public hearing to listen, but no public comments will be received during the 2 p.m. evidentiary session.

At the end of the evidentiary session we will recess until 6:30 p.m. this evening for the public comment session. And please be advised that any person may be removed from the remote evidentiary session or the public comment session

at the discretion of the Council.

The 6:30 p.m. public comment session is reserved for the public to make brief statements into the record. And I wish to note that the applicant and intervenor, including their representatives and witnesses, are not allowed to participate in the public comment session.

I also wish to note for those who are listening and for the benefit of your friends and neighbors who are unable to join us for the remote public comment session that you or they may send written comments to the Council within 30 days of the date hereof either by mail or by email, and such written documents will be given the same weight as if spoken during the remote public comment session.

A verbatim transcript of this remote public hearing will be posted on the Council's Docket 494 webpage and deposited with the Wolcott Town Clerk's Office and the Waterbury City Clerk's Office for the convenience of the public.

And the Council will also take a 10 to 15 minute break somewhere at a convenient juncture around 3:30 p.m. this afternoon.

I wish to call to your attention those

items that are shown on the hearing program marked as Roman Numeral I-B, Items 1 through 77, that the Council has administratively noticed.

Does any party or intervenor have an objection to the items that the Council has administratively noticed? And I'll start first with Attorney Baldwin.

MR. BALDWIN: No objection, Mr. Silvestri.

MR. SILVESTRI: Thank you, Attorney Baldwin.

Attorney Patrick?

MR. PATRICK: No objection, Mr. Silvestri.

MR. SILVESTRI: Thank you also, Attorney Patrick.

Accordingly, the Council hereby administratively notices these items.

(Council's Administrative Notice Items I-B-1 through I-B-77: Received in evidence.)

MR. SILVESTRI: Turning now to the appearance by the applicant. And will the applicant present its witness panel for the purpose of taking the oath, and Attorney Bachman will thereafter administer the oath.

MR. BALDWIN: Thank you, Mr. Silvestri. Again, on behalf of the applicant, Cellco Partnership doing business as Verizon Wireless, this is Ken Baldwin with Robinson & Cole. Our witness panel, as listed in the hearing program -- and I would ask our witnesses to turn your cameras on, if you would -- our witness panel includes Tim Parks. Mr. Parks is a real estate regulatory specialist with Verizon Wireless. Mr. Ziad Cheiban, who is the radio frequency design engineer responsible for the Wolcott South facility. Brad Parsons with All-Points Technology is a professional engineer responsible for site engineering, together with Hu Jiazhu with Nexius Engineering. Mr. Jiazhu is also a professional engineer with Nexius.

We're also joined by Brian Gaudet, the project manager with All-Points Technology; Mike Libertine, who is the director of siting and permitting with All-Points Technology; and Dean Gustafson, senior wetland scientist and professional soil scientist with All-Points Technology.

We have a full load today, Mr. Silvestri, and we offer them to be sworn at this

time.

MR. SILVESTRI: Thank you, Attorney Baldwin.

Attorney Bachman.

MS. BACHMAN: Thank you, Mr. Silvestri. Can the witnesses please raise their right hand?

T I M O T H Y P A R K S,

Z I A D C H E I B A N,

B R A D L E Y P A R S O N S,

H U J I A Z H U,

B R I A N G A U D E T,

M I C H A E L L I B E R T I N E,

D E A N G U S T A F S O N,

called as witnesses, being first duly sworn (remotely) by Ms. Bachman, were examined and testified on their oath as follows:

MR. BALDWIN: Mr. Silvestri, we have five hearing exhibits listed in the hearing program under Roman II, Section B. They include the application and its bulk file exhibits; protective order documents, dated October 8th, the applicant's responses to the Siting Council Set One interrogatories, dated November 13th; the applicant's sign posting affidavit, dated November 18th; and last, the applicant's responses to the

Council's interrogatories, Set Two, dated December 1, 2020. We offer them now for identification purposes subject to verification by our witness panel.

MR. SILVESTRI: Please proceed.

DIRECT EXAMINATION

MR. BALDWIN: Okay. If we could as a panel answer the following questions for these exhibits. Did you prepare or assist in the preparation of the exhibits listed in the hearing program under Roman II, Section B, Items 1 through 5?

Mr. Parks? Tim, could you unmute your phone?

THE WITNESS (Parks): My phone is unmuted. Is anyone hearing me?

MR. SILVESTRI: Yes, I am.

THE WITNESS (Parks): Sorry about that. I'm sorry, can you repeat that?

MR. BALDWIN: I can. Did you prepare or assist in the preparation of the exhibits listed in the hearing program?

THE WITNESS (Parks): Yes, I did.

MR. BALDWIN: Mr. Cheiban.

THE WITNESS (Cheiban): Yes, I did.

MR. BALDWIN: Mr. Parsons.

THE WITNESS (Parsons): Yes, I did.

MR. BALDWIN: Mr. Jiazhu.

THE WITNESS (Jiazhu): Yes, I did.

MR. BALDWIN: Mr. Gaudet.

THE WITNESS (Gaudet): Yes, I did.

MR. BALDWIN: Mr. Libertine.

THE WITNESS (Libertine): Yes.

MR. BALDWIN: And Mr. Gustafson.

THE WITNESS (Gustafson): Yes.

MR. BALDWIN: Do any of the witnesses have any corrections, modifications or amendments to make to any of those exhibits at this time?

Mr. Parks, we'll start with you.

THE WITNESS (Parks): No, I do not.

MR. BALDWIN: Mr. Cheiban.

THE WITNESS (Cheiban): No.

MR. BALDWIN: Mr. Parsons.

THE WITNESS (Parsons): No.

MR. BALDWIN: Mr. Jiazhu.

THE WITNESS (Jiazhu): No.

MR. BALDWIN: Mr. Gaudet.

THE WITNESS (Gaudet): No.

MR. BALDWIN: Mr. Libertine.

THE WITNESS (Libertine): No.

MR. BALDWIN: And Mr. Gustafson.

THE WITNESS (Gustafson): No.

MR. BALDWIN: And is the information contained in those exhibits therefore true and accurate to the best of your knowledge?

Mr. Parks.

THE WITNESS (Parks): Yes, it is.

MR. BALDWIN: Mr. Cheiban.

THE WITNESS (Cheiban): Yes, it is.

MR. BALDWIN: Mr. Parsons.

THE WITNESS (Parsons): Yes, it is.

MR. BALDWIN: Mr. Jiazhu.

THE WITNESS (Jiazhu): Yes.

MR. BALDWIN: Mr. Gaudet.

THE WITNESS (Gaudet): Yes.

MR. BALDWIN: Mr. Libertine.

THE WITNESS (Libertine): Yes.

MR. BALDWIN: And Mr. Gustafson.

THE WITNESS (Gustafson): Yes.

MR. BALDWIN: And do you adopt the information contained in those exhibits as your testimony in this proceeding this afternoon?

Mr. Parks.

THE WITNESS (Parks): Yes, I do.

MR. BALDWIN: Mr. Cheiban.

THE WITNESS (Cheiban): Yes, I do.

MR. BALDWIN: Mr. Parsons.

THE WITNESS (Parsons): Yes, I do.

MR. BALDWIN: Mr. Jiazhu.

THE WITNESS (Jiazhu): Yes.

MR. BALDWIN: Mr. Gaudet.

THE WITNESS (Gaudet): Yes.

MR. BALDWIN: Mr. Libertine.

THE WITNESS (Libertine): Yes.

MR. BALDWIN: And Mr. Gustafson.

THE WITNESS (Gustafson): Yes.

MR. BALDWIN: I offer them as full exhibits, Mr. Silvestri.

MR. SILVESTRI: Thank you, Attorney Baldwin.

Does any party or intervenor object to the admission of the applicant's exhibits?

Attorney Patrick.

MR. PATRICK: No objection.

MR. SILVESTRI: Thank you, Attorney Patrick. The exhibits are hereby admitted. Thank you.

(Applicant Cellco Partnership d/b/a Verizon Wireless Exhibits II-B-1 through II-B-5: Received in evidence - described in index.)

MR. SILVESTRI: We will now begin with cross-examination of the applicant by the Council, starting with Mr. Perrone, please.

MR. PERRONE: Thank you, Mr. Silvestri.

CROSS-EXAMINATION

MR. PERRONE: I'll begin with the response to Council Interrogatory 25 in Set One. The search radius is approximately 1,000 feet. Could you explain why the search ring was limited to a radius of 1,000 feet?

THE WITNESS (Cheiban): So we are on kind of the side of a steep hill, and, you know, making the search radius too large might have resulted in us getting candidates that are, you know, low in elevation or blocked by the hill. So we restricted it in order to get the candidates that would be suitable for us from an RF design perspective.

MR. PERRONE: Referencing the response to Council Interrogatory 26, the last paragraph of the response, the applicant notes a fourth parcel was initially reviewed but rejected. Do you know the address and property owner of this parcel?

THE WITNESS (Cheiban): If you're asking me, I do not. I don't know if anybody on

the real estate side knows.

THE WITNESS (Parks): I do not. I can find out.

MR. BALDWIN: Why don't we take that as a quick homework assignment, Mr. Perrone, and we'll get that information to you.

MR. PERRONE: Sure, I'll move on.

Referencing page 20 of the application. Since the filing of the application, has the applicant received any comments or feedback from the Town of Wolcott or the City of Waterbury?

THE WITNESS (Parks): We have not.

MR. PERRONE: Turning to the response to Council Interrogatory 28, which gets into co-location. Just as an update, has the Town of Wolcott or any other emergency services entity expressed an interest in co-locating on the tower?

THE WITNESS (Parks): They have not.

MR. PERRONE: And also as an update, other than AT&T, have any wireless carriers expressed an interest in co-locating on the tower?

THE WITNESS (Parks): Not that I'm aware of, no.

MR. PERRONE: Turning to the response to Council Interrogatory Number 4, the topic is

the yield point. At what height would the yield point be located?

MR. BALDWIN: Can we have one of our engineers take that one?

THE WITNESS (Cheiban): I think that might be a question for Jiazhu.

THE WITNESS (Jiazhu): Until we have finally, you know, finished the design of the tower, that's going to come through the final ordering of the tower structure to determine the exact yielding point.

MR. PERRONE: Okay. Generally speaking, with the yield point, does that mean that the lower section of the tower is somewhat overdesigned relative to the upper section?

THE WITNESS (Jiazhu): It can be actually anywhere on the tower. It depends on the design. A good design is supposed to have, you know, no yielding point along the entire tower at any section. All the sections on the tower are going to be good for the loading, extreme loading. I mean, so it's going to come through from the final design to determine where is the weakest point, if we are referring to the yielding point. However, a good design, once it's approved, our

design drawings, the tower should not have any yielding point under any extreme loading according to the requirements by the codes, building codes.

MR. PERRONE: Moving on to Council Interrogatory Number 18, this is a possible technical correction. In the response it says, "If Cellco were required to reduce the height of its antennas to 106 feet AMSL." Was "AGL" intended?

THE WITNESS (Cheiban): That is correct.

MR. PERRONE: And referencing the drawing, it's sheet Z-1, I understand Cellco has a proposed ice canopy over its equipment. Do you have the height of the ice canopy approximately?

THE WITNESS (Cheiban): Jiazhu, can you look that up on the drawings?

THE WITNESS (Jiazhu): It's about 120. That's the highest point of the structure.

MR. PERRONE: Has the applicant considered a shared generator to accommodate both Cellco and AT&T? And please explain why or why not.

THE WITNESS (Parks): We would consider that if AT&T did request that, and we do that for

really all of our new build sites.

MR. PERRONE: Referencing the response to Council Interrogatory 16, the question was regarding 5G services. Can you confirm which services Cellco would offer from the proposed site?

THE WITNESS (Cheiban): Yes, we would be offering both 4G and 5G service at the frequencies that are listed in our applications which are 700 megahertz, 850 megahertz, 1900 megahertz and 2100 megahertz.

MR. PERRONE: Referencing the response to Council Interrogatory 21, do you have an existing signal strength or range of signal strengths for 850 megahertz?

THE WITNESS (Cheiban): I'm sorry, can you clarify the question? I did not understand.

MR. PERRONE: Sure. The response to Council Interrogatory 21, we have the existing signal strengths for 700 megahertz, 2100 and 1900. I was wondering what the existing signal strength for 850 would be, or a range.

THE WITNESS (Cheiban): So we are deploying, you know, 4G and 5G onto our 850 frequency, but this is spectrum that is being

reused from the previous 3G technology, and currently the coverage is kind of sparse. So, you know, the Wolcott South facility will have 850. The site, just roughly south of it, which is we call Waterbury, it just got that turned on I think a couple weeks ago. So, you know, we don't have a lot of coverage on 850 currently because that spectrum is being reused, as I mentioned, from the 3G.

MR. PERRONE: And moving back to Council Interrogatory Number -- excuse me one second -- Number 20, we have the minimum design thresholds for LTE service it's given. So is that relative to the 700 megahertz; and if so, what would be the thresholds for the other frequency bands?

THE WITNESS (Cheiban): We use the same thresholds for all the bands.

MR. PERRONE: Okay. I'm all set on the RF topic.

Turning to the response to Council Interrogatory 46, could the applicant provide an update on its filing with and/or any responses received from SHPO?

THE WITNESS (Gaudet): That process has

not started yet when Cellco will be consulting with SHPO.

MR. PERRONE: A few visibility questions. Turning to page 3 of the visual assessment, at the bottom of page 3 it discusses the balloon float on January 14, 2020. Could you tell us about the duration of that balloon float?

THE WITNESS (Gaudet): I don't have the specific time offhand, but it's typically about a three to four hour field review of driving the entire study area.

MR. PERRONE: Referencing sheet SP-1 of the application and also C-1, there's a property immediately east off of Grilley Road, 6 Grilley Road. It directly abuts. And my question is, what would the visibility be of the proposed access drive from that property immediately to the east, could you describe that?

THE WITNESS (Gaudet): There's not much screening there that exists today, and there's going to be a couple trees removed. So the access drive, as designed, without any landscape or vegetation plan, will be visible from that property as much as a driveway can be. It's not substantial. There's some existing structure

there. It's like an old well or building foundation that will help to hide it a little bit, but there will be enough space in between that, you know, if there is vegetative screening being required, we could do that.

MR. PERRONE: Okay. And lastly regarding the access road, given that it's a curved access road, if you're standing at the entrance looking into the access road, would you be able to see the proposed tower compound?

THE WITNESS (Gaudet): I don't believe so. The access drive is pretty long, so it's, like you said, it curves, it kind of curves, as you're looking in to the right and then back around to the left, but there is going to be significant tree coverage in between the road and the tower compound itself.

MR. PERRONE: Thank you. That's all I have.

MR. SILVESTRI: Thank you, Mr. Perrone.

Attorney Baldwin, before we move on, anything on the address ownership question that Mr. Perrone had posed earlier?

MR. BALDWIN: I believe so. Mr. Parks, do you have that information?

THE WITNESS (Parks): I will have to research that.

MR. BALDWIN: Mr. Silvestri, I do have that information, if you can indulge me at the risk of testifying. I'm just referring to the town's GIS system. That adjacent parcel that Mr. Perrone referenced is owned by a company called Executive Hill LLC. And there is no street number, but the address is simply Grilley Road, G-R-I-L-L-E-Y Road.

MR. SILVESTRI: Very good.

THE WITNESS (Gustafson): I can verify that as well.

MR. SILVESTRI: Thank you, both.

Mr. Perrone, are you all set with that answer?

MR. PERRONE: Yes, sir. Thank you.

MR. SILVESTRI: Very good. Thank you. Thank you, all.

Okay. We will continue cross-examination of the applicant by Mr. Morissette, please.

MR. MORISSETTE: Thank you, Mr. Silvestri.

Good afternoon, everyone. Can you hear

me okay?

THE WITNESS (Parks): Uh-huh.

MR. MORISSETTE: Great. I'd like to turn to page 7 of the application at the very top, the first sentence, which starts actually on page 6, which reads, "In addition, perhaps more importantly, Cellco's existing Waterbury cell site, Wolcott cell site, and Wolcott North cell site are currently operating at or near the current capacity limits, resulting in a significant reduction in reliable wireless service in the area."

Can you tell me what the term operating at or near their capacity limits resulting in significant reduction in reliability means?

THE WITNESS (Cheiban): Yes. So each cell site has a certain limit as far as how much throughput it can handle in the aggregate for all the users that are served by it. And this specific one happens to be, you know, basically what we call exhausted for capacity, it's not delivering the user throughput that we design our network to deliver. And so the users would experience either, you know, a stall or slow data, things of that nature, and, you know, that's what

we're trying to remedy.

MR. MORISSETTE: Okay. Thank you. When you use the term "throughput," what is that relating to? I'm trying to get my head around capacity. And when you say that you're at capacity limits, your throughput is not available for all, could you elaborate a little bit more on that?

THE WITNESS (Cheiban): Sure. So it's basically that sector is being shared by all the users that are within its coverage footprint. And so as the number of users increases or the usage pattern of the users changes and they start using more data, the throughput that is experienced by each individual at the times when the site is congested decreases. And so, you know, instead of getting, for example 3 megabits per second, you might get 500, .5 megabits per second. So it can be a significant decrease, and users would experience slowness, the apps may not be as responsive as they need to be, and so on.

MR. MORISSETTE: Is it based on megabits per second, so is a site rated in megabits per second, and therefore if you reach a certain level then you start to lose reliability?

THE WITNESS (Cheiban): We collect statistics that give us the aggregate, the average throughput that each user experiences, and we base our capacity, our traffic engineering based on that. So we're trying to maintain a certain average throughput for all the users combined within the footprint of that sector.

MR. MORISSETTE: Okay. What is throughput measured in, is there a --

THE WITNESS (Cheiban): In megabits per second, yes. I'm sorry.

MR. MORISSETTE: Great. Thank you. That's helpful. Moving on to page 12 in the application under tower share, it says that the compound to be shared by a minimum of four wireless carriers, but then on the drawing for the hearing there are only three, only three positions on the tower. Is there a reason for that, or is that just an oversight?

MR. BALDWIN: Perhaps Mr. Parsons can help us with that one.

THE WITNESS (Parsons): That I would actually have to ask Jiazhu to step in on that one. I'm seeing that there were only two future locations, so I'm not sure if that was an

oversight on the tower elevation drawing.

MR. BALDWIN: It also may be a holdover to the days when there were four actual major carriers, Mr. Morissette, as now there are only three.

THE WITNESS (Jiazhu): I think that's a temporary configuration regarding what's the final loading to be put on the tower. Typically when the tower owner erects the tower, it's going to have some matching capacity for future co-location that's in the best interest for everyone, stakeholders.

MR. MORISSETTE: So is the tower designed for four or for three?

THE WITNESS (Jiazhu): I don't think we have determined the details regarding how many carriers can be co-located on that tower for now. I don't think we can go that far yet regarding the design of the tower. For now it's just illustrative of properties for putting three on the tower.

MR. MORISSETTE: So the application in front of us is for three positions?

THE WITNESS (Jiazhu): Yes.

MR. MORISSETTE: And the tower will be

designed to hold three positions for strength purposes?

THE WITNESS (Jiazhu): Yes, for now, yes.

MR. MORISSETTE: Okay. Thank you. I'd like to move to a discussion on Wetland 1. Mr. Gustafson, I think that's you.

THE WITNESS (Gustafson): Yes, it is.

MR. MORISSETTE: As far as the wetland crossing, I take it that there is -- is there a path across it now, or is there no crossing at all?

THE WITNESS (Gustafson): Yeah, there's no existing crossing of that wetland corridor.

MR. MORISSETTE: Okay. So when the road is installed, to install the culverts there will be some permanent impacts. Remind me what permitting will be required. Would a Corps permit be required to install those?

THE WITNESS (Gustafson): Yes, we're looking at 2,797 square feet of permanent impact. With that level of impact, the project is eligible under the Department of Army Connecticut General Permits Program as a Self-Verification Notification Form process. The design is also

sensitive to ensuring that there's no hydraulic, adverse hydraulic impacts, either upstream or downstream of the crossing. There's no defined flow path through that proposed crossing location, so that's the main impetus of proposing three culvert crossings to ensure that we don't impede any type of shallow surface water movement through that wetland corridor. And those culverts are embedded as well so that they comply with the natural stream crossing design standards recommended by both the Connecticut Department of Energy and Environmental Protection and the Army Corps of Engineers.

MR. MORISSETTE: Very good. Thank you.

Mr. Silvestri, that's all the questions I have. Thank you.

MR. SILVESTRI: Thank you, Mr. Morissette.

I'd like to continue cross-examination at this time with Mr. Harder, please.

MR. HARDER: Yes. Thank you, Mr. Silvestri.

I really have a few questions but just on one subject generally, and that is the site search. First of all, a preliminary comment. It

looks to me from looking at the coverage maps, the existing and proposed coverage maps, which are always a little difficult to interpret for me anyway, but it looks generally like the improved coverage is mostly to the north of the proposed site. Is that correct?

THE WITNESS (Cheiban): That is correct.

MR. HARDER: Okay. Well, getting to the site search then, I guess it looks like, unless there were a lot of number of other sites that were rejected that aren't even mentioned, it seems lacking that there's only two other sites that were considered, and maybe three, and they're all basically right there, right next door to the proposed site.

And the thing that's a little strange is, in the response to Interrogatory Number 26, it's indicated that over four and a half years the site search was handled by several consultants, and then based on a review of notes from the site search file, it appeared that those consultants reached out to the parcel owners, and we can only conclude the other property owners were not interested. It's like there was a review done of

those consultants' work, but there was no original work done to look at other sites.

And so my question is, were there other sites to the north that were considered? I gather from the existence or the proximity to Chestnut Hill Reservoir, you know, that's a low area, and there is highland to the east and somewhat to the west and the north. So I'm wondering, were there other sites in that area that were considered?

I guess the proposed site looks pretty good with one exception, that being the wetland. So I'm wondering, was consideration given to any other sites that might not have any wetland impacts and, you know, other problems associated with them?

THE WITNESS (Parks): I'll answer that one. Oh, go ahead, Ziad.

THE WITNESS (Cheiban): No, that's fine, Tim. I can maybe follow up after you.

THE WITNESS (Parks): I was going to say our site search is based on the search ring that's generated by the RF team, in this case it's Ziad. Candidates may have been researched to the north. As you can see from the overhead, not only is there Chestnut Hill Reservoir, but there's also

numerous smaller parcels. We were looking for a larger one so that basically we could construct a tower far enough from boundaries, far enough from other parcels as well.

Ziad, I'll let you talk about exactly where the search area was located.

THE WITNESS (Cheiban): Yes. So as Tim mentioned, basically the RF engineers design a search area and give it to the real estate consultants. And in this case we focused, as I mentioned, on the side of that hill where the proposed site is because it has good enough elevation that we can cover a wider area. And I don't think that there were any candidates much to the north of where we currently are proposing that were considered.

MR. HARDER: I guess I want to make sure. You're saying you don't think there were. Is that based on, you know, any kind of search, or was it based on just a lack of any indication in the prior consultants' work?

THE WITNESS (Cheiban): I mean, what I'm saying is that we, you know, the RF engineering team decides on where we want to put -- roughly where we want to put the new tower or

the new site, and we provide a map to the real estate consultants. And that search area was kind of focused on the hill where we are proposing the current project.

MR. HARDER: Okay. So again, within that 1,000 foot radius area?

THE WITNESS (Cheiban): Yeah, more or less. I mean, we would have considered, if they were beyond the 1,000 feet, we would have definitely considered those candidates, but we were not looking to be, say, a mile north or a mile and a half north of where we are.

MR. HARDER: That was because of what was presented to you? I guess I'm trying to get an idea of why the search area was so small. I mean, if what you were presented with was the 1,000 foot radius area, or approximately, you know, why was that? Obviously, like you said, I mean, I agree this site does look good with the exception of the wetlands, but I'm wondering, okay, you know, could there have been other sites outside that 1,000 foot radius that still would have provided coverage in that general area, if I'm interpreting it correctly, you know, around the reservoir more or less where those, you know,

one or more of those other sites could have been better.

THE WITNESS (Cheiban): So the area around the reservoir has a significantly lower elevation than the hill that we're on. We were, I mean, the engineering team basically focused the search on the area with the higher elevation.

MR. HARDER: Right. When I say around the reservoir, I don't mean just down low. I mean, in looking roughly at a topo map of the area extending further north of the reservoir than the maps provided in the application, it looks like the topography rises obviously as you go north and east especially so that -- and maybe I'm interpreting it incorrectly, but I would think that because of those areas being higher in elevation also that those might present some satisfactory sites also. That's it.

THE WITNESS (Cheiban): Yeah, in theory that might be true, but as I mentioned, we focused our search on the area where we thought we would have the best coverage.

MR. HARDER: Okay. All right. Thank you for that explanation. That's all the questions I have, Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Harder. I'd like to continue cross-examination of the applicant by Mr. Hannon at this time.

MR. HANNON: Thank you. Just a couple of general questions that I want to talk a bit about the wetlands. My understanding is you're proposing to use a 25 kilowatt fuel cell propane base, a 500 gallon fuel tank. How long would that run for before needing refueling?

THE WITNESS (Parks): That would typically run for approximately two to three days. Sites vary on how long the generator can run for on a full tank depending on how busy they are. The busier the site, the shorter span it would last. Typically it's two to three days.

MR. HANNON: Okay. And then looking at the maps and also on page 7 in the introduction it talks about the remnants of an old stone structure. So is it basically just sort of the foundation that's left over there, or is, you know, with a little bit of upgrading you could actually recreate the house? So I'm just trying to figure out what the status is of that old stone structure.

THE WITNESS (Gustafson): All that is,

is the remnants of a stone foundation and there is maybe some half walls. So it's not anything that anyone would consider kind of, you know, resurrecting or improving into a new structure. It's pretty well dilapidated.

MR. HANNON: Okay. Most of the balance of my questions really relate to the wetlands. So, my understanding is there was a vernal pool identified on the site, but I'm just trying to make sure I understand the date. Because there were three dates thrown out as far as the wetland vernal pool impact evaluation was April 15, 2015, August 22, 2017, November 25, 2019. So I'm assuming it's the April 15, 2015 site investigation where you came up with the information on the vernal pool?

THE WITNESS (Gustafson): That is correct.

MR. HANNON: Okay. And I guess where I'm having --

MR. BALDWIN: (Inaudible) the opportunity to get you to put this on the record.

MR. HANNON: I'm not sure who that was directed towards.

MR. SILVESTRI: Attorney Baldwin, I

kind of missed that myself.

MR. BALDWIN: I'm sorry, Mr. Hannon. I apologize. I'm circling back to a previous question, but I'll get to that shortly.

MR. HANNON: Okay. Here's where I'm having a little bit of difficulty sort of understanding sort of what's going on with the wetlands, because in the review it talks about an intermittent watercourse draining to the north. Okay, I follow that. But I can't say I'm familiar with too many intermittent watercourses where somebody has proposed three 24-inch wide pipes crossing the wetlands to be able to deal with that. So I'm just a little confused, I guess, about the wetlands here and why three 24-inch pipes might be required for this.

THE WITNESS (Gustafson): Yeah, I can provide some clarification on that, Mr. Hannon. So primarily the wetland system that's been delineated and identified on the subject property doesn't have a well defined flow path with the exception being that once the wetland system continues to drain to the north and gets closer to Chestnut Hill Road and Grilley Road, that intersection, it does start to form an

intermittent watercourse channel before it dumps into a culvert underneath that road system.

So where the crossing is proposed there isn't a defined flow channel. It's just broad shallow flow that flows across the width of that wetland system. But as you move further north then a channel does form. So I apologize for not providing clarification to give you a clearer understanding of how those resources interrelate to the proposed crossing.

But the reason why we proposed three 24-inch pipes is based on both an engineering drainage analysis of the watershed feeding that wetland system and also from an ecological crossing standpoint to try to avoid any type of hydraulic impacts to that wetland system with the understanding that those pipes have to be embedded 12 inches into the wetland system. So we came up with an appropriate design to use three pipes to make sure that we're not focusing or concentrating the flows as it moves through that proposed crossing location.

MR. HANNON: Here's also part of the reason why I'm looking at this is because a little further north in the wetlands where you're

proposing the wetland crossing, instead of the 60 foot area that you're looking at, a little bit north of that it looks as though the wetlands sort of kind of fall in on themselves. And you've got a width of the wetland that's only about 30 feet wide. So I'm just wondering, has anybody looked at putting in some type of crossing at that point, because, I mean, again, assuming that it was something like a smaller bridge, I mean, you could theoretically put up the head wall to not even have any adverse impact on the wetlands at all. The grading would tie in on the western side of the wetlands where it would basically come up and tie in with where you've got the road proposed on the west side of that wetland area now.

So I'm just wondering if anybody has even looked at that because the topography there is relatively flat. It may be a couple feet difference in height on the eastern bank versus the western bank, but topographically you should be able to run the roadway right up along parallel to the wetlands up to where you proposed it right now. So I'm just curious as to why you're looking at the area that's about a 60 foot wide width and putting a lot of fill within the wetlands when

there's another area further north that you could mitigate a lot of that activity.

THE WITNESS (Parsons): This is Brad Parsons.

THE WITNESS (Gustafson): Let me start and then you certainly weigh in. Thank you.

So the area that you're talking about, Mr. Hannon, is, you know, essentially moving the access road, cutting across the wetland, a little bit north of this old stone foundation into a narrow point -- (AUDIO DROPPED)

MR. SILVESTRI: Mr. Gustafson, for some reason I lost you. I don't know what happened with your audio.

MR. BALDWIN: Dean, can you hear us?

(No response.)

MR. BALDWIN: I'm sure this is a brilliant answer.

MR. SILVESTRI: Attorney Baldwin, I don't think he could hear you. I don't know if you could shoot him an email or something to maybe get his attention.

MR. BALDWIN: He's back. Hey, Dean.

THE WITNESS (Gustafson): Yes.

MR. BALDWIN: We lost that entire

answer. For some reason there was something that was keeping your audio from coming through. Could you go back to the beginning and wax poetic again, please? I'm sorry.

THE WITNESS (Gustafson): Sure. Can you hear me fine now?

MR. BALDWIN: Now we can.

THE WITNESS (Gustafson): Okay, great. Sorry about that, folks.

So Mr. Hannon, what I believe you're asking about is changing the proposed wetland crossing to the north side of the old stone foundation into a narrower point of that wetland corridor.

MR. HANNON: Correct.

THE WITNESS (Gustafson): And we did analyze that and looked at that. I consulted with Brad Parsons, the head of our engineering group, to see if we could make that crossing work and minimize, you know, provide some minimization to the direct wetland impact.

One of the main constraints we have with that alternative crossing design is the western property boundary is very close to that portion of the wetland system, so that constrains

quite a bit where the access road can be located. And then the resulting grades associated with that alternative crossing would end up pushing some of the fill material for that alternate access road westward into that wetland system.

So even though the actual crossing width is narrower because of that constraint to the property boundary, the toe of bell slope for that access road would actually result in greater direct wetland impacts than the proposed crossing location. And I'll let Brad provide his insight into that alternative as well.

THE WITNESS (Parsons): I think that's pretty good, Dean. This is Brad Parsons. That's pretty good, Dean, I think, Mr. Hannon, unless you have any further clarifications there. Again, I think the last thing I want to add is to try and make an almost 90 degree turn there, additionally, that's another piece that is really just going to, along with that additional bell slope along the side there, cause actual additional impacts.

MR. HANNON: But the way that I was sort of looking at it is the road, you know, a crossing there could be somewhat diagonal. But again, I'm just glad that you did, in fact, look

at it and tried to analyze it because of the question I had just in terms of did we need this much impact in the wetlands that you're currently proposing. But knowing that you had gone back and analyzed that other location, I feel a little bit better. So that's basically all I have.

MR. SILVESTRI: Thank you, Mr. Hannon.

I'd like to continue with cross-examination by Mr. Nguyen, please, at this time.

MR. NGUYEN: Thank you, Mr. Silvestri.

Good afternoon, everyone. Allow me to start with a follow-up question to Mr. Cheiban. You testified earlier to Mr. Perrone's question regarding 4G and 5G service. Is this tower ready to provide 5G service, am I hearing that correctly?

THE WITNESS (Cheiban): That is correct. So, I mean, 5G can be deployed in different frequency bands. And so on this one we are deploying our usual, you know, 700 megahertz, 850 PCS, which is around 1900, and AWS which is around 2100 megahertz.

MR. NGUYEN: In some other Cellco applications before the Council they indicated

that they are capable of providing 5G but not yet ready to provide 5G. So to the extent that one tower is ready to provide it, could you differentiate between why one is ready to provide 5G and the other is not?

THE WITNESS (Cheiban): It is a combination of the hardware equipment that is at the site and the software that's loaded onto it. And, you know, we have quite a number of sites that are ready to provide 5G. This specific one, since it's being newly built, will basically get the newest hardware and will be ready from the get-go to do that.

MR. NGUYEN: So going forward, would we see any future cell towers ready to provide 5G services?

THE WITNESS (Cheiban): Yes, we are, you know, we've upgraded quite a few of our sites, and we are in the process of upgrading the remaining ones.

MR. NGUYEN: My next question is addressed to the panel, so anyone feel free to jump in if you know the answer to them. Is this proposed tower connecting to Windsor or Wallingford mobile switching center?

THE WITNESS (Cheiban): It will go through the Wallingford switching center and up and -- I mean, our network is connected. There's interconnection between the two locations, so, I mean, there will be also a connection through Wallingford to Windsor.

MR. NGUYEN: I see. And is that meant for redundancy in case of a failure?

THE WITNESS (Cheiban): So we do have redundancy built into our network, but that's specifically it's just because of the way our network is laid out. A lot of the, basically a lot of the connections to the internet go through Windsor or a different location.

MR. NGUYEN: In terms of the Wallingford mobile switching center, other than connectivity, what are the functions of this switching facility, is it staffing at this switching center as well?

THE WITNESS (Cheiban): I mean, we do have an office there, and we have people who monitor the network and do software upgrades and things of that nature, but basically it is one of the hubs in our network, like a number of our sites go through it, and then, like I said, it is

interconnected with our other locations such as Windsor and others, you know, it is basically like one of the hubs where a large number of sites connect through.

MR. NGUYEN: I see from the application it indicated that there would be an underground connection from the proposed site to the street. Would that be fiber optic?

THE WITNESS (Cheiban): I think Jiazhu may be a better person to answer that.

MR. BALDWIN: I was going to ask for just some clarification. Are we talking about the backhaul and the electricity, Mr. Nguyen?

MR. NGUYEN: I'm talking about the connectivity between the cell towers to the street. I believe there's talk about underground facilities, so I suppose that includes power and fiber optics?

MR. BALDWIN: I think either of our engineers should be able to handle that one.

MR. SILVESTRI: Or if I could just clarify. What are the underground connections that are going from the proposed cell tower site to the street?

THE WITNESS (Parsons): This is Brad

Parsons. We have both electrical and telecommunications heading from the tower to the street.

MR. NGUYEN: And is that fiber optic?

THE WITNESS (Parsons): Yes, it will likely be fiber optic. It will ultimately depend on the utility at that point in time because they will be somewhat responsible for bringing that into the site.

MR. NGUYEN: The application on page 7 and 8 indicated that the technician will be at the site for the exercise once every two weeks for approximately 30 minutes for the back-up generator. The question is, what about the overall maintenance of the tower, if any, or the equipment on the tower?

MR. BALDWIN: You're on mute, Tim.

THE WITNESS (Parks): Sorry about that. Generally, our operation technicians will visit a site every couple weeks, and they'll maintain as needed. There really is no set schedule for visiting these. Did you have something more specific?

MR. NGUYEN: I'm asking what is the maintenance plans for the cell tower other than

maintain the back-up generator, what about the cell tower itself and the equipment on the tower.

THE WITNESS (Parks): The tower itself doesn't necessarily require maintenance as far as I understand. And the cell techs don't actually do the tower maintenance. The equipment is maintained as needed. Rarely do we swap out equipment because it's underperforming. That would be a rarity. That's really all I can say.

MR. NGUYEN: In other applications it's my understanding that you would send a technician out once every month just for the purpose of, you know, maintenance purposes.

THE WITNESS (Cheiban): So they do -- sorry, Tim. Can I just jump in for a second?

So they do go and do preventive maintenance, and I'm not sure what the schedule is nowadays for that. I think it used to be once every six months for the equipment. And then we monitor the network, you know, 24/7. If anything is failing or is experiencing any issues, then we have somebody go out and replace it or fix it, you know, as soon as possible.

MR. NGUYEN: And in that scenario, you would send technicians from the Wallingford

switching center or is it going to be --

THE WITNESS (Cheiban): Well, no, I mean, we basically, the technicians are assigned different areas, and they are typically pretty local to where they're assigned so that they can reach the sites, you know, faster. And so either one of our technicians would go there, or if it's something that requires climbing the tower, then we'd have a contractor that specializes in this that would go out and perform that maintenance or fix whatever is broken.

MR. NGUYEN: In terms of the contingency plans, to the extent that -- and hopefully it's not going to happen -- but with respect to contingency plans, has the company consulted or has the local town's responders communicated with the company in case of an emergency?

THE WITNESS (Cheiban): I'm not sure I understand the question.

MR. NGUYEN: In terms of -- go ahead.

THE WITNESS (Cheiban): I'm sorry. Can you be more specific?

MR. NGUYEN: Yes. With respect to emergency or contingency plan, in the case of

failure or any structure or anything that could happen to the cell tower, has there been any communication with the local responders that could in the case of emergency that they will be the first ones maybe at the site?

THE WITNESS (Cheiban): So are you asking in case the tower fails, like it has a structure failure?

MR. NGUYEN: Of anything that could happen to this cell tower. Is there any communication between the company and the local fire department, police?

MR. BALDWIN: Just so we try and understand. If there's some equipment failure or other problem with the cell site, does Verizon have a plan in place where it alerts the municipality, in particular, about a site being either offline or impacted by some event. Does that sum it up, Mr. Nguyen? I'm not sure I understand either, but does that sum up your question?

MR. NGUYEN: Well, part of it. To the extent that in case of a catastrophe that could happen to the cell tower, has there been any communication with the towns, for example, you

know, in case of an extreme emergency that they could be the one that will be there? That's kind of the information I'm looking for.

MR. SILVESTRI: Let me try to help on that too. Attorney Baldwin, I think what you mentioned was part of what Mr. Nguyen was looking for. I'd also put it in context to say, okay, has there been communication with the town regarding any type of security breach that you might pick up or in the event of some type of a fire has there been communication with the town as far as a fire response. I think that's what Mr. Nguyen is looking for in addition to what you mentioned, Attorney Baldwin.

MR. BALDWIN: Okay. So I think it's probably best for you, Tim, if there is some type of breach in security as it relates to the facility, maybe you can talk about the alarm systems and what happens if there is an alarm triggered. And then if there happens to be a fire at the site what the systems or the process would be for Verizon technicians to notify local authorities.

THE WITNESS (Parks): Typically, if we have an alarm at a site, our operations technician

will visit the site immediately. If it's a fire, we believe it's a fire, they would contact the local fire department. If it's a breach of security and someone is within our compound, they would immediately call the police department. That actually happens often due to the number of copper thefts we've had in the past. We don't have that much copper there anymore, but something similar to that.

Beyond that, I don't think we're in contact too often with the municipalities. I'm trying to think if there's any other catastrophic failures. None that I can think of.

THE WITNESS (Cheiban): So the sites are monitored 24/7 by a network operations center. And if they detect anything like that happening, they have a path to escalate to the right authorities.

MR. SILVESTRI: Mr. Nguyen, I don't know if that answered your question or not, but I'll pose my question to you if that answered your question or not.

MR. NGUYEN: Yes, it did, Mr. Silvestri. Thank you.

Would this proposed cell tower

eliminate the need for small cell applications with PURA?

THE WITNESS (Cheiban): Not necessarily. So we use small cells mostly in addition to our macro cell sites when we have a specific need in an area for additional capacity or, you know, there's a very small area that needs coverage enhancement then we would supplement the larger cells with a small cell.

MR. NGUYEN: Are there any pending small cell applications in this area before PURA?

THE WITNESS (Cheiban): Off the top of my head, I do not know. I need to look that up. I need to research it and get back.

MR. NGUYEN: Okay. I have nothing further, Mr. Silvestri. Thank you.

MR. SILVESTRI: Thank you, Mr. Nguyen.

I'd like to continue cross-examination of the applicant by Mr. Edelson at this time, please.

MR. EDELSON: Thank you, Mr. Silvestri.

I just want to button up one thing that Mr. Nguyen brought up on 5G. So converting to 5G for this macro site would require no additional equipment, hardware wise, to go forward, it's

basically completely set to go to 5G with the exception of maybe software that you need to install which I assume can be done remotely. Is that correct?

THE WITNESS (Cheiban): That is correct, yes.

MR. EDELSON: I'm going to jump around a little bit here because a lot of my questions have been answered, so I apologize for that. On the photo log which again was very, very helpful to understand the site and the configuration, number 12, photo log picture number 12 -- I'll give you a second to get there -- there was some color in there, and I couldn't -- and they weren't labeled. They almost looked like flags to me, but then again, it could have just been more colorful foliage. So I was wondering if those were wetland flags or any other marker to understand that picture. It's sort of towards the bottom on the right of center, if you will.

THE WITNESS (Gaudet): Are you looking just to the left of that big tree there?

MR. EDELSON: Yeah, right.

THE WITNESS (Gaudet): I believe those are some leaves, or it looks like foliage to me.

I don't believe they're markers. If you zoom in close on them, you can make it out a little bit better.

MR. EDELSON: No indicators or flags of any sort, okay. Thank you for that.

So I also want to circle back a little bit to questions of capacity that Mr. Morissette started us off with, I believe. If I understand the response to the Interrogatory Number 22, there you refer to dropped calls that they were above normal. That seemed to be the metric you were using for saying you're at capacity versus what I believe Mr. Morissette was getting at and you were answering which was megabits per second.

So I want to understand the difference. Are you really looking at dropped calls, or are you looking at more of what I think we were calling throughput when you determine that you're at capacity?

THE WITNESS (Cheiban): So for capacity we look at the throughput which is megabit per second, the average throughput that the users get. I believe we were asked in the interrogatory if the dropped call rate on the existing site was above normal and if the new site would help

improve that. And our answer was yes to both, that the dropped call rate was above normal on the existing site, and the new one would help solve that problem.

MR. EDELSON: So looking back in terms of public need, when did this become obvious to Cellco that this capacity constraint was upon you? And I assume that it already exists. This is not a forecast, this is where we are today.

THE WITNESS (Cheiban): That is correct. So we've known -- so we run forecasts on a regular basis, I believe every three months or maybe even monthly, and we evaluate which sites will need capacity additions in the future. So we initiated this project a while back, but at this stage, you know, I guess we didn't move fast enough, and we are currently above the design capacity of the existing site at Waterbury.

MR. EDELSON: And I think this has been a perennial problem for everybody in this business that demand is growing sometimes faster than the expectation. And I think we all can follow that with COVID the amount of people doing Zoom as one particular example has just exploded as far as demand.

My question is in terms of your design how much future growth have you allowed for, in other words, we don't want you to come back in six months and say, well, you know, we met the demand but now demand has, once again, been exceeded. So I'm trying to get a little bit better sense of how you're dealing with future growth at this site.

THE WITNESS (Cheiban): So, I mean, when we design a new site, we make sure that we are addressing the capacity need for the foreseeable future. And, you know, we don't foresee coming back, certainly not within -- definitely not within six months to ask for another site, but, you know, as you mentioned, the traffic is growing exponentially and we run these forecasts on a regular basis. It could be, I don't know, and I'm purely guessing, but it could be at some point in the future that we do see a need for additional sites, but at the present moment we do not see that need.

MR. EDELSON: So that's why page 13 in the application caught my eye. I think the term was the proposed cell site would be part of the system design to limit the need for additional cell sites in the future. And I guess I'd like

you to expand on that, how this particular site is going to do that when, as I see it, most of the need comes from the users which is growing quickly. What actually is unique about this site that causes you to say this system is designed to limit the need for additional cell sites?

THE WITNESS (Cheiban): So it's not unique to the cell site. It's in general like our design philosophy is to try to put the sites in the best locations at the best elevation that we can get so that we can address the long-term need versus, you know, picking a fair location which wouldn't address the need in an as comprehensive manner.

MR. EDELSON: I'm not really sure. Those were a lot of good words, but I'm not sure I really follow how we're not going to find ourselves back here with more need, more capacity need. Is there anymore you can --

THE WITNESS (Cheiban): So I think the only thing I can say is we try to plan these for the long term. As you know, these take a long time to search for a site, you know, go through the application process, et cetera, and they are also costly. So, you know, we don't really want

to be building a lot more sites. So what we try to do is in order to minimize the number of sites we build is to try to put them in the right locations at the right elevations and so on so that we don't have to come back and be continuously going through that process and continuously expending more capital into our network.

MR. EDELSON: So that leads me to a topic, and I'm just seeing if there's been anymore development here that you can share with us. But, as I've said before, coverage maps are easy for us to understand. Capacity maps or some metric or some visual way to see that your plan is to give us the coverage that customers are requiring, and I think we've all come to understand that means more in the area of video, have you come up with any metric that we can use together to understand what the capacity need that's going to be met by this tower in the area?

Do you understand what I'm trying to do is distinguish between coverage, which we've seen the maps and they're easy to relate to, but I'm not seeing the same kind of way to understand the words you're saying pictorially in terms of

capacity that is being delivered.

THE WITNESS (Cheiban): Right, I understand the question. Unfortunately, I don't have a great answer for you. So, the site has a given aggregate capacity in megabits per second, you know, we can make up a number. Let's say it's whatever, 2,000 megabits per second, it's actually higher than that, but just to pick a number, and the usage is distributed throughout the coverage footprint and the usage changes as people move. So it's difficult to pictorially, you know, it's not, these are not fixed locations, and the need changes during the day. So it's hard for us to represent it graphically that, you know, this is where the need is because it is, you know, it is constantly changing and it varies during the day. And I don't have a good way of giving you a graphic representation of it.

MR. EDELSON: Well, thank you for your honesty on that. It does sound like a complicated issue to try to boil down and say here's what we're trying to achieve and then how to basically measure that and display it, but don't give up because we need that, I think.

Since this application has two users,

two providers who are probably going to be here, it's a good opportunity for me to sort of clarify the difference between what Verizon refers to as Federal E911 and what I believe AT&T refers to as FirstNet. I was wondering if somebody can help me understand the difference between the two, and more importantly, if there's any way that they interconnect to make sure that if one provider in this area went down, is it easy for the first responders to move seamlessly to the other, or are these very distinct offerings that don't connect? Can somebody speak to that?

THE WITNESS (Cheiban): I think I would rather leave the FirstNet question to the portion of the hearing where AT&T is responding. The E911 is basically a mandate from the FCC that we, if a user dials 911, that we provide an approximate location of where they are, and we are compliant with that, as I believe are all the other operators.

MR. EDELSON: So just to make a worst case here, if we have both providers on this tower and for some reason AT&T lost its connection, FirstNet would not be available into the new coverage area?

THE WITNESS (Cheiban): So FirstNet is basically a network that is designed for first responders. And, like I said, I would rather leave the details of that to AT&T. But we also have first responders as users on our network, but they're basically -- it's not part of FirstNet.

MR. SILVESTRI: Mr. Edelson, definitely keep the questions in mind when we do have cross-examination of the intervenor.

MR. EDELSON: I will do my best. So this next one is probably a very simple one for All-Points Technology. Maybe my eyes are going, but in the interrogatories you included the viewshed maps that got lost -- or not lost but left off initially. And I for the life of me couldn't figure out what the difference between the two of them were as far as what they're trying to portray. They both look to me like the same area and the same legend, but they look differently, but I wasn't sure why. So maybe a word or two about those two maps would help me out.

THE WITNESS (Gaudet): Yes. So the two viewshed maps is the same area covering the some footprint, the same photo log locations. The

difference is one is just an aerial so you can see the surrounding features. The other is a topography.

MR. EDELSON: So it's more like the base map or the base picture.

THE WITNESS (Gaudet): Correct.

MR. EDELSON: I was looking at everything but that.

Okay. Mr. Silvestri, I think that's all the questions I have right now. Thank you.

MR. SILVESTRI: Thank you, Mr. Edelson. Actually, you posed a question, received an answer, but there's a definition, I think, that would help with the questions that you had.

Mr. Cheiban, I believe you mentioned foreseeable future. Could you define foreseeable future?

MR. EDELSON: Tomorrow.

THE WITNESS (Cheiban): That is a great question. So we do our forecasts typically a year in advance, but we do look at the longer term than that. So off the top of my head, I can't tell you exactly, but let's say it's within the one year to two year time frame.

MR. SILVESTRI: Okay. Thank you.

Mr. Edelson, does that also help you with the line of questioning that you had?

MR. EDELSON: Thank you very much. And it would be good to get some more specifics, I think, at some point maybe. It's not related to any particular tower, but it's a better feeling overall that we've got a network that people could ride into the future. And as I say, and I think we're all seeing it, the growth is pretty phenomenal and the variability in terms of performance that I think we're seeing throughout, probably throughout the nation, can vary so much that you can use your wireless connection and it be excellent one hour and the next hour it's not. And I think this is a real problem for people in terms of how they can rely on these systems and say what's the performance. I realize it's a very difficult area because the usage patterns are changing sort of beneath our very feet as we speak. So thank you.

MR. SILVESTRI: Very good. Thank you, Mr. Edelson.

I'd like to continue our cross-examination of the applicant this time by Mr. Lynch, please.

MR. LYNCH: Can you hear me, Mr. Chairman?

MR. SILVESTRI: Absolutely.

MR. LYNCH: I just want to let you know that the powers that be down in Washington have called a teleconference for 4 o'clock, so I will be leaving at 4 o'clock, but I'll get all my questions in before then.

MR. SILVESTRI: Very good. Thank you, Mr. Lynch.

MR. LYNCH: As far as the capacity issue that Mr. Edelson has been talking about, this has been an issue for the last, you know, number of years once we got through dealing with coverage gaps. Now, is it fair to say that the demand for capacity that Mr. Edelson was talking about is going to be the new norm for the future in your network? I've heard it said that the data coming is going to be like a tsunami for telecom. Is that fair to say?

THE WITNESS (Cheiban): It is increasing, you know, at a very rapid pace, that is true.

MR. LYNCH: A couple other -- most of my questions have been answered, but I'd just like

to get a follow-up to a few things. I didn't really understand the answer to Mr. Perrone on the yield point within the tower. Could someone go over that again? And I guess I'd really like to know is how is the yield point determined on a cell tower?

MR. BALDWIN: Thank you, Mr. Lynch. I was actually going to follow up and ask Mr. Parsons to address that question because I think Mr. Perrone was simply asking for a height above ground level where that yield point would be, and I think that may have gotten lost in the last discussion.

So Mr. Parsons, if you could address Mr. Lynch's question, that would be great.

THE WITNESS (Parsons): Yeah. So the yield point on a tower can obviously be determined in a multitude of different ways. And I think where Mr. Perrone was looking for here is what we would define in the parameters for the tower design that a yield point would have to be at a, you know, minimum height above grade to ensure that, you know, any failure of the tower would stay on property. In this case the closest point property line is approximately 99 feet to the

east. Assuming that we give a 5 foot buffer between the property line and the top of the tower there, you'd be looking at a minimum yield point of 26 feet above grade at the tower location.

MR. LYNCH: So that sounds like it's a geometric formula.

THE WITNESS (Parsons): Yeah, in this case it's a geometric formula to understand where the, if there was a failure point in the tower, where that failure point is based on the loading parameters, or once you get above loading parameters.

MR. LYNCH: Now, this is a follow-up question, but more of something I was, more of a curiosity question. Within your network, AT&T, Cellco, has there ever been a tower where the yield point has come into play rather than the tower falling over on its own?

MR. BALDWIN: If I could, the question is, is anyone on our team aware of towers failing either at the yield point or at some other point on the structure?

MR. LYNCH: Yes, Attorney Baldwin.

THE WITNESS (Jiazhu): As far as my knowledge, I see there are cases that can happen

to towers. It really depends on what kind of situation is going on. The tower can be totally, can break in the middle half or flip over. If the tower is really badly designed, it can tip over from the bottom of the tower.

MR. BALDWIN: Let me just ask Mr. Parks or Mr. Cheiban, are you aware of any structures in your network that have failed in the respect that Mr. Lynch is speaking of?

MR. LYNCH: Attorney Baldwin, I guess I should preface that I'm talking about monopoles and not lattice towers.

THE WITNESS (Cheiban): I'm not aware of any that have failed in Connecticut. But going back to the discussion of the yield point, it's basically these are calculated in case the monopole is, you know, say close to a property line or to another, say, a road or anything like that where it's not desirable to have the tower fall within that -- outside a certain footprint if it fails. So the yield point is designed to make it, you know, in case it's going to fail, make it fail and fall in a smaller footprint.

MR. LYNCH: I understand the purpose of the yield point. I'm just trying to figure out

how it's actually determined. Thank you.

Interrogatory Number 8, the extension of the tower from 20 feet. Could it be extended beyond that 20 feet?

MR. BALDWIN: Mr. Parsons.

THE WITNESS (Parsons): Could you repeat that question?

MR. LYNCH: In interrogatory, I think I have it down as number 8, you talk about the tower being able to be expanded by 20 feet. My question is, can it be extended beyond 20 feet so you're going up to 160 or 180 at some point?

THE WITNESS (Parsons): I don't think the intent at this time is to extend or have any additional --

MR. LYNCH: That's not my question.

THE WITNESS (Parsons): Okay.

MR. LYNCH: My question is, can it be expanded if you have a new carrier that comes along and wants to be at 160 feet?

THE WITNESS (Parsons): Likely not. The tower itself would not be designed to that capacity. It would only be designed for the additional 20 feet, as mentioned.

MR. LYNCH: Thank you. That's what I

wanted to know.

Now, Interrogatory Number 20 deals with in-vehicle and in-building coverage. My question becomes what's your priority, in-building now, or are you still in-vehicle?

THE WITNESS (Cheiban): Depending on the area, I mean, if there are residences or businesses, our priority would be in-building. If there are no residences or no buildings, then obviously in-vehicle would be sufficient.

MR. LYNCH: Okay. Thank you. Question Number 9 in the interrogatories talks about, you know, security and damage to your site by humans. Have large animals ever intruded on your sites in the past, be it bears or moose or deer or anything like that?

THE WITNESS (Parks): I'm not aware of any animals that have entered our compound, especially large animals, not that I'm aware of and anywhere in New England.

THE WITNESS (Cheiban): I've actually seen more damage from small animals like rodents. I'm not aware of any damage by large animals.

MR. LYNCH: Thank you. This is just another question I have an interest in. In your

marketing, your advertising on television, radio, and not only yours, but other carriers as well, they talk about 5G, which I'll get into a little bit more later, but they talk about, you know, increasing the speed. Now, by basic physics how do you increase the speed for different frequencies?

THE WITNESS (Cheiban): So there are two basic ways that we can increase the speed or the capacity of a site is, one, by deploying additional frequency bands, and the other is by deploying additional sites, whether they be small cells or regular cell sites. And these are basically the two ways. I mean, the other thing that happens is sometimes the technology itself improves such as going from 3G to 4G or 4G to 5G. Those have, you know, the way the signal is modulated, you know, there are improvements in the process, and that also yields a throughput increase or a megabit per second increase.

MR. LYNCH: So basically you're not really increasing the speed of the frequency, you're just adding more available capacity for it?

THE WITNESS (Cheiban): That's correct. I mean, so typically each operator will have a

certain amount of spectrum, a certain amount of frequencies in each area, and they're not always -- you know, it could be that we start with a certain amount, and then either we gain additional spectrum through an FCC option or through some other means, and we can deploy additional frequency which requires additional equipment, and that will yield an increase in the throughput overall on the site and the users are served by it.

MR. LYNCH: I think I have it now. Thank you. I forget which question it is, but one of the interrogatories deals with dropped calls. Now, are dropped calls measured by not being able to complete the call or not being able to deliver the data that is involved?

THE WITNESS (Cheiban): So we use the same network in 4G for the voice and the data, and when we refer to dropped calls, we are referring to the voice which is going over the same network. It's basically being transmitted as data. And we do measure both the dropped calls and the ineffective attempts which is when somebody tries to make a call and for whatever reason cannot get through like there is congestion on the site or

there's some other, like the signal is impaired, it's in a poor coverage area. We measure both.

MR. LYNCH: So it doesn't impact streaming of data or anything like that?

THE WITNESS (Cheiban): No, that one we would measure through the average megabit per second that is seen by the users.

MR. LYNCH: I'm going to switch over to back-up power for a second. And this question was asked a long, long time ago by former commissioner, Mr. Emerick. How do you determine for a site what size generator is needed and what type of fuel is actually going to be used?

THE WITNESS (Parks): Well, our generators are typically 30 kW generators with 500 gallon tanks.

MR. LYNCH: So that's just for your site the generator. But if you have to share a site with AT&T, would the size of the generator change and would the fuel supply change?

THE WITNESS (Parks): We might increase to 1,000 gallon tank. The problem is when you increase it, you take up additional space within the compound, the spark zone would increase due to the size of the tank. So we'd rather not take up

additional space, but if we had to, the -- I'm sorry, there was a second part of your question. I think it had to do with how it was powered. Is that what it was?

MR. BALDWIN: Would you have to increase the size of the generator to accommodate both carriers.

THE WITNESS (Cheiban): And how do we decide on which fuel to use.

THE WITNESS (Parks): Which fuel would -- it can be decided whether or not there is a wetlands within a certain proximity, whether propane or natural gas is available.

MR. LYNCH: Mr. Parks, you just went ahead and answered my follow-up question. If natural gas was available, would it be used, utilized?

THE WITNESS (Parks): It could be used. I couldn't guarantee that we would, but it could be used, yes.

MR. LYNCH: And you also answered the question I had about the size of a 500 gallon tank versus 1,000 gallon tank. And that's primarily, you know, for utilization of space?

THE WITNESS (Parks): Yes, I will say

it is.

MR. LYNCH: Again, I forget which interrogatory this was. But as far as back-up power lasting for eight hours, we have heard testimony in the past that if there's an emergency and the generators haven't kicked in and the batteries are operating on full capacity that there's no way they're going to last for eight hours. Would you agree with that?

THE WITNESS (Parks): No, that's not true. Some sites have multiple batteries. So they are engineered to last up to eight hours. If a site that is very busy goes down, it could last, it could be less than that. But it can last up to eight hours. Some sites have multiple batteries which will allow it to go longer than that. That said, if there was a generator at the site, the batteries only, will only run for about five or ten minutes once there's an outage to allow the generator to start up. Once the generator is up and running, the battery switches off and the generator takes over.

MR. BALDWIN: Just for the record purposes, Mr. Lynch, that's Interrogatory Number 31.

MR. LYNCH: Okay. I'm old. I'm forgetting these things.

MR. BALDWIN: I understand. It will help me with the brief later though.

MR. LYNCH: Now, my last question has to do with pre-storm preparation as far as your cell site is concerned. If we know there's a hurricane coming, a blizzard, a nor'easter, are there any special preparations that would be made for this site and others on your network, you know, topping off fuel, checking the generators operating correctly, make sure all cables are secure, is that being done, or is that going to be done?

THE WITNESS (Parks): Well, we do that. We try to fill up our generators, you know, top them off, as you mentioned. We do that to a point. As you're aware, we do have hundreds of sites in Connecticut, so we do as much as we can.

MR. LYNCH: I understand that, but my question is, is there a plan for doing this type of maintenance pre-storm; and if there is, you just mentioned, Mr. Parks, you have hundreds of sites, do you prioritize them?

THE WITNESS (Cheiban): I can answer

part of this question. So first of all, the generators are checked on a regular basis, I think every two weeks, to make sure that they start up, that they have fuel, et cetera. That's regardless of whether there's a storm coming or not. If there is a big storm coming, what we do is we stage resources to be able to deploy them quickly when we need them, like if we need to refuel, if we need to deploy additional generators, we basically pull resources from one region into the region that is affected. Basically we borrow resources from other regions, and we stage those so that we are ready to act whether during the storm or after the storm to restore service as quickly as possible or ideally to not even lose service.

MR. LYNCH: Thank you for your answers.

Mr. Silvestri, those are my questions, and as I said, sometime around 4 o'clock I will have to leave.

MR. SILVESTRI: Very good. Thank you Mr. Lynch.

I have a few follow-ups that I'd like to pose. Mr. Lynch actually took the one for the shared generators and the larger tanks. But going

back to Mr. Morissette when he had referenced page 12 and how many carriers that there possibly could be, the question I have is that there's going to be a certain amount of separation between your carriers, whoever might come onto that tower. And would the lowest carrier be, say, limited by terrain? I mean, is there a point that you get down on that tower that maybe number three is limited by the terrain as far as what type of area it could cover, and does that possibly prohibit a number four on that tower?

THE WITNESS (Cheiban): So that will depend on the frequencies that is owned by that carrier. The lowest frequencies propagate farther out than the higher frequencies. And I think it was mentioned that the tower -- so if going below is not suitable, I think it was mentioned that the tower is designed to accommodate a 20 foot extension, which would allow them then to go above.

MR. SILVESTRI: Fair enough, okay. I'm not sure if this was actually in the application -- new question here -- but let me pose this one. The way the site is being proposed, is the westerly bend in the access road

positioned to avoid a steeper slope in topography, as opposed to having a more direct road come right to where the compound would be?

THE WITNESS (Parsons): This is Brad Parsons, Mr. Silvestri. That is correct, the access road was designed with the bend in mind to avoid the steeper topography and ledge that is on site there as well.

MR. SILVESTRI: Very good. Thank you. I couldn't quite pick that up, which is why I posed the question. Thank you.

I'd like to turn to Interrogatory Number 16, I believe. Let me make sure I have it, yes. In the response to Interrogatory 16, it has "The initial deployment plan for the Wolcott South Facility does not include the installation of 5G technology, however certain frequencies may be reused for 5G services in the future."

I thought we answered that this is going to have 5G from the beginning, or did I miss something?

THE WITNESS (Cheiban): You are correct, it will have 5G. It is 5G capable. They just need to deploy the software to enable that.

MR. SILVESTRI: Then when you have

certain frequencies may be reused for 5G services, how do you reuse a frequency for a 5G service?

THE WITNESS (Cheiban): What we're currently doing, we're actually sharing the frequencies between 4G and 5G, and I believe that is the plan for the next few years.

MR. SILVESTRI: So when you would change it, would you get rid of the 4G?

THE WITNESS (Cheiban): No, they would both be active on the site. We are currently using something called dynamic spectrum sharing which allows us to share the same frequency bands between the two technologies depending on the usage. That may change at some point where we dedicate certain bands for one technology and other bands for, you know, say, certain bands for 5G, other bands for 4G, but what we're currently doing is dynamic spectrum sharing.

MR. SILVESTRI: Okay. Thank you. A new topic for you, and this goes to the response to question Interrogatory Number 29. It uses the term "beamforming." Could you explain beamforming for me?

THE WITNESS (Cheiban): Yes. So these antennas and the equipment that is there have

multiple antenna elements that can transmit. And by altering the timing between -- so if you send the signals with all the same timing, it will create a certain beam like a wider beam pattern. If we alter the software and the hardware in that equipment, it has the ability to alter that so that it can by changing the timing essentially steer the beam into a certain direction, and that basically is done to accommodate, like to basically point the beam where certain users are, and that's what beamforming is.

MR. SILVESTRI: So beamforming would be more directional, would that be correct?

THE WITNESS (Cheiban): Yes. Essentially, it is able to take that wider beam and create a narrower beam directed at certain users.

MR. SILVESTRI: Got you. Thank you. And I think my last question goes back to Interrogatory Number 50 and your response there that you would not propose any type of secondary containment for a propane fuel tank which I'll agree with. But my question is, do you have secondary containment for the generator itself and any oils or fluids that the generator would have?

MR. BALDWIN: Any takers on that one?

THE WITNESS (Parsons): This is Brad Parsons. I don't think we have anything specific proposed for the generator itself as far as secondary containment is concerned other than anything that may be built in as part of the generator.

MR. SILVESTRI: So for the most part, you might be looking at the generator manufacturer to have the secondary containment for that, would that be a good enough statement?

THE WITNESS (Parsons): That would be an accurate statement, Mr. Silvestri.

MR. SILVESTRI: Very good. Thank you. I have 3:50 on the clock. And I do want to give our Council members an opportunity to go back as questions and answers might spur more questions and answers. Before we do that though, why don't we take a 15 minute break, come back at 4:05, and then we could resume to make sure that our Council members don't have any additional questions, and then we could continue cross-examination of the applicant by New Cingular Wireless and Attorney Patrick.

So let's reconvene at five minutes

after 4. Thank you.

(Whereupon, a recess was taken from 3:50 p.m. until 4:05 p.m.)

MR. SILVESTRI: Okay. Ladies and gentlemen, I have 4:05 p.m. And just before we resume, I want to make sure that we have our court reporter on.

THE COURT REPORTER: Yes.

MR. SILVESTRI: Super. Thank you, Lisa.

Again, as mentioned before our break, I did want to go back to our staff and Council members just to see if they had any follow-up questions based on what we asked and learned in the process.

Mr. Perrone, any additional questions?

MR. PERRONE: Just one. Mr. Parsons, when you mentioned a potential yield point, you said a height of roughly 26 feet. With a yield point at that height, what would be the mechanism though of the yield point, would you just overdesign from zero to 26 or just how would that work?

THE WITNESS (Parsons): Mr. Perrone, yes -- this is Brad Parsons -- I believe that

would be the case. It would just be an overdesign from zero to 26 to make sure that that yield point is at a point greater than 26 feet in height. So it may be upsizing of the steel to ensure that.

MR. PERRONE: Thank you. That's all I have.

MR. SILVESTRI: Thank you, Mr. Perrone.

Mr. Morissette, any additional questions?

MR. MORISSETTE: Thank you, Mr. Silvestri.

At the risk of beating something to death here, I'm going to ask some questions about capacity. This is the first application that I've been involved with that has had detailed discussions on capacity, so I find it intriguing, and I'd like to further understand it.

This particular tower has a certain throughput associated with it. Would you correlate that to be the capacity of the tower?

THE WITNESS (Cheiban): That's correct, we typically think of it in terms of the capacity of each sector of that tower.

MR. MORISSETTE: Each sector, okay.

THE WITNESS (Cheiban): Yeah. And the

potential aggregate throughput that it can deliver.

MR. MORISSETTE: Okay. So you mentioned a 2,000 megabit per second throughput. What is the actual throughput of the sectors on this particular site?

THE WITNESS (Cheiban): I would have to look that up. I don't have the number off the top of my head. I can research that and get back to you.

MR. MORISSETTE: Okay. Well, let's use the 2,000 value that you threw out. I'm trying to understand the concept, not really the particulars of this site. So let's assume it's 2,000, for example. So when you look at a site and you evaluate that it needs capacity, so if it comes in, do you measure it as in capacity factor? Now, keep in mind I'm from the electric utility side, so I think of capacity in a slightly different way, but I think the methodology is somewhat similar.

THE WITNESS (Cheiban): So we look more at a given area. So typically each sector has a certain coverage footprint. It covers certain like, say, square miles, a certain amount of

square miles. And so we look at that area and see, okay, if it's congested and by how much it's congesting, or if we are forecasting like in a year or two that it's going to be congesting, how much over its capacity limit it's going to be, and we kind of work backwards to see how many solutions or how many sites or small cells we would need to add to basically be able to adequately handle that traffic. I'm not sure if that answered your question. If you want to, you know --

MR. MORISSETTE: So you have an actual throughput that you see in aggregate or average or however you measure it, and if you compare that to the actual as-built throughput, there's a percentage associated with that. So if it's 80 percent, you're at 80 percent capacity or 90 percent or 100 or 110 you're over. Is that an incorrect way of looking at it?

THE WITNESS (Cheiban): That's exactly what we do. That's exactly what we do.

MR. MORISSETTE: Okay. So this particular site when it's built what throughput capacity factor will it have once it's built?

THE WITNESS (Cheiban): So how much

head room will it have, like how much --

MR. MORISSETTE: Yeah. So, will it be 80 percent, 90 percent?

THE WITNESS (Cheiban): I'm sorry. Again, I need to research that to answer. I don't know the answer right now.

MR. MORISSETTE: Well, getting back to Mr. Edelson's comments about a way to measure this as to where an actual tower is and with respect to its capacity, that may be an opportunity to present that up front so it gives the Council an idea as, okay, well we're at 110 percent capacity on this particular tower, after it's built it is now at 70 percent, and therefore we have 30 percent room for growth throughout the years. So just as a thought, an aside.

I'll move on. Similar question on capacity. So if you have sites in Waterbury and Wolcott that are at capacity, can you change out equipment on those sites to increase the capacity of the equipment? Is that a viable option, not just in this particular case but in general?

THE WITNESS (Cheiban): So not really. What we can do is deploy all the frequencies that we own. In some cases we have sites where we

haven't deployed everything that we own so we can go and add equipment to transmit in those frequencies and gain capacity that way. But if we already have deployed everything, all the frequencies we own, then our only option would be to build a new site or a new small cell.

MR. MORISSETTE: So throughput relates to the ability of your frequency to handle it, not the size of your equipment if I understand you?

THE WITNESS (Cheiban): That's correct, yes.

MR. MORISSETTE: Okay. Thank you. And sorry to belabor the point. So once 5G is implemented, does that help relieve some of the capacity issues?

THE WITNESS (Cheiban): So 5G is a little bit more efficient and it can handle more data. So it will relieve to some extent, but it really is dependent on whether people have upgraded their phones. So if you still have a large user base that is still using 4G, then having that additional 5G is not really, you know, it will not come into play until they've upgraded.

MR. MORISSETTE: So as 5G comes on, the capacity issue will be somewhat mitigated?

THE WITNESS (Cheiban): Correct. As people upgrade their phones. Like the more people that have the phones that are capable of 5G, the more we'll see an increase in the capacity.

MR. MORISSETTE: Great. Thank you. That's very helpful for me to better understand the whole issue around capacity.

Thank you, Mr. Silvestri. I'm all set.

MR. SILVESTRI: Thank you, Mr. Morissette.

I'd like to move on to Mr. Harder to see if Mr. Harder has any additional questions.

MR. HARDER: I do not have anymore questions. Thank you.

MR. SILVESTRI: Thank you, Mr. Harder.

Mr. Hannon, any additional questions?

MR. HANNON: I have no additional questions. Thank you.

MR. SILVESTRI: Thank you also.

Mr. Nguyen, any additional questions?

MR. NGUYEN: No additional questions, Mr. Silvestri. Thank you.

MR. SILVESTRI: Thank you.

Mr. Edelson, any additional questions?

MR. EDELSON: Yes. Bringing up the

beamforming, which was not something I was aware of, got me wondering about whether or not Verizon looks at microwave communication as an alternative way to connect a macro site to its network. And I think you know the basis of this concern is that we focus a lot on alternate power generation or back-up power generation, but we realize the site is just as vulnerable to overhead wires that connect the macro site to, let's say, a Wallingford station. So I realize microwave can't work in all situations, but is that an alternative that Verizon looks at as a way to connect from a macro site to the network?

THE WITNESS (Cheiban): So we typically deploy fiber and we make sure that the fiber has a diverse path back to the hub location, but we also have microwave equipment that we can deploy in case of an outage or, you know, an emergency. We do have that equipment, and we do use it when needed, but it's not our go-to. Our go-to is fiber.

MR. EDELSON: Just to be clear, is there a microwave dish, or whatever the right term is, on this particular macro site, or are you just saying you have used it other places?

THE WITNESS (Cheiban): So this one there is no microwave dish. We are going to use fiber, but we do have the equipment. This is kind of part of the, you know, some of the emergency equipment that we keep on hand in case we need to deploy it.

MR. EDELSON: Okay. So if the interconnection for some reason through fiber optic and whatever other cabling system was severely damaged, you might bring in a microwave dish and set it up as a temporary emergency --

THE WITNESS (Cheiban): That's correct, yeah, we do set up as a temporary, and we basically will use one of the neighboring sites to provide the data to the site that's impacted.

MR. EDELSON: Okay. Thank you very much. No further questions, Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Edelson.

I'll ask for Mr. Lynch, but I believe he went on to that federal call.

Mr. Lynch, might you be with us?

(No response.)

MR. SILVESTRI: No. Very good. I only had one other follow-up question to pose, and this goes back to a security measure, if you will. I

remember reading, say, within the last month that some individual was stealing batteries out of various installations, including cell tower sites, and was curious if based on what I read and those thefts have you looked at doing anything different from a security standpoint for your facilities?

THE WITNESS (Parks): This is Tim Parks. I have not heard about that, so that is news to me.

MR. SILVESTRI: Okay. Then let me leave off with maybe you want to check that out. It was quite rampant what went on. And again, that's why I posed the question. But apparently, I guess, batteries are hot items on the black market. Just something to keep in mind and look at the security standpoint just to make sure things are tight.

Okay. Seeing that we're at the end of staff and Council questions, I'd like to continue with cross-examination of the applicant by New Cingular Wireless PCS, LLC/AT&T, and Attorney Patrick, please.

MR. PATRICK: Yes, thank you. We have no questions for the applicant right now.

MR. SILVESTRI: Very good. Thank you,

Attorney Patrick.

Okay. So with that, we'll move on to appearance by New Cingular Wireless. And Attorney Patrick, I'll ask you to present your witness panel for the purpose of taking the oath, and Attorney Bachman will subsequently administer the oath.

MR. PATRICK: Thank you very much. On behalf of AT&T we have two witnesses this afternoon. We have Martin Lavin, a radio frequency engineer from C Squared Systems. We also have Daniel Bilezikian. He's a site acquisition specialist from SAI Group. So I offer these two witnesses to be sworn in.

MR. SILVESTRI: Attorney Bachman.

MS. BACHMAN: Thank you, Mr. Silvestri. If the gentlemen could please raise their right hand.

M A R T I N L A V I N,

D A N I E L B I L E Z I K I A N,

called as witnesses, being first duly sworn (remotely) by Ms. Bachman, were examined and testified on their oaths as follows:

MS. BACHMAN: Thank you.

MR. SILVESTRI: Very good. Thank you,

Attorney Bachman.

And Attorney Patrick, could you please begin by verifying all the exhibits by the appropriate sworn witnesses.

MR. PATRICK: Yes. There are two exhibits. They are listed in the hearing program at Section III, Subsection B. It is AT&T's request to intervene, dated October 30, 2020; as well as AT&T's responses to interrogatories, dated December 1, 2020. And for verification purposes, I'll ask Mr. Lavin and Mr. Bilezikian a series of short questions and ask for their responses, if that's all right with you, Mr. Silvestri.

MR. SILVESTRI: That's fine.

DIRECT EXAMINATION

MR. PATRICK: All right. Mr. Lavin and Mr. Bilezikian, did you prepare or assist in the preparation of the exhibits identified?

Mr. Lavin.

THE WITNESS (Lavin): Martin Lavin. Yes.

MR. PATRICK: Mr. Bilezikian.

THE WITNESS (Bilezikian): Dan Bilezikian. Yes.

MR. PATRICK: Do you have any updates

or corrections to the information therein?

Mr. Lavin.

THE WITNESS (Lavin): Martin Lavin. No.

THE WITNESS (Bilezikian): Dan Bilezikian. No.

MR. PATRICK: Is the information contained in the identified exhibits true and accurate to the best of your belief?

Mr. Lavin.

THE WITNESS (Lavin): Martin Lavin. Yes.

MR. PATRICK: Mr. Bilezikian. Mr. Bilezikian?

THE WITNESS (Bilezikian): Dan Bilezikian. No.

MR. PATRICK: Can I ask that question again, Mr. Bilezikian? Is the information contained in the identified exhibits true and accurate to the best of your belief?

THE WITNESS (Bilezikian): Dan Bilezikian. Yes.

MR. PATRICK: Thank you.

THE WITNESS (Bilezikian): You cut out on me.

MR. PATRICK: Do you adopt these exhibits as your testimony in this proceeding?

Mr. Lavin.

THE WITNESS (Lavin): Martin Lavin. Yes.

MR. PATRICK: Mr. Bilezikian.

THE WITNESS (Bilezikian): Dan Bilezikian. Yes.

MR. PATRICK: All right. Mr. Silvestri, I offer these two exhibits in full. That's all.

MR. SILVESTRI: Thank you, Attorney Patrick.

Does the applicant object to the admission of AT&T's exhibits? Attorney Baldwin.

MR. BALDWIN: We do not, Mr. Silvestri. Thank you.

MR. SILVESTRI: Very good. Thank you. The exhibits are hereby admitted. Thank you.

(New Cingular Wireless PCS, LLC (AT&T) Exhibits III-B-1 and III-B-2: Received in evidence - described in index.)

MR. SILVESTRI: We will now begin with cross-examination of AT&T by Council and staff, and I'd like to start with Mr. Perrone, please.

MR. PERRONE: Thank you, Mr. Silvestri.

CROSS-EXAMINATION

MR. PERRONE: Has AT&T considered sharing a generator with Cellco, and please explain why or why not.

THE WITNESS (Bilezikian): AT&T prefers not to share a generator. They want to be responsible for their own maintenance. They are adverse to a single point of failure, so generally -- (AUDIO INTERRUPTION)

MR. PERRONE: My next question regarding AT&T's proposed walk-in equipment cabinet, do you have an approximate height on that cabinet?

(No response.)

MR. PERRONE: I'm sorry, I could not hear the response.

MR. PATRICK: Mr. Bilezikian, did you hear the question?

MR. PERRONE: The proposed walk-in equipment cabinet, what would be the approximate height of that cabinet?

MR. SILVESTRI: For some reason the audio on Mr. Bilezikian is just not coming through at all.

Mr. Bilezikian, can you hear us? I believe he could hear us but we -- well, unless it's just me, we can't hear him.

MR. PATRICK: Martin, do you happen to have the answer to that question? Maybe I'll try to email Dan and see if he's having trouble.

THE WITNESS (Lavin): I do not, no.

MR. PERRONE: In the meantime, I can move on to some RF questions.

MR. PATRICK: Maybe that would be best. Thank you.

MR. SILVESTRI: Attorney Patrick, just before Mr. Perrone moves on, I don't know if there's a way that Mr. Bilezikian could possibly just log off and maybe log back on again and maybe we could get a better connection.

MR. PATRICK: Yeah, I'm going to ask him to try that or try calling in from his cell phone instead of his computer maybe.

MR. SILVESTRI: Very good. Thank you.

Go ahead, Mr. Perrone, please continue.

MR. PERRONE: Sure. In response to the Council Interrogatory 14 to AT&T where it gives the proposed 5G services, my question is what other services would AT&T offer from the proposed

site?

THE WITNESS (Lavin): The other, all the other frequency bands would be on LTE 4G. 850 would have the 5G deployed only.

MR. PERRONE: And moving on to the response to Council Interrogatory Number 17, I see the design signal strengths for 700 megahertz and 1900 megahertz. Would you have the design signal strengths for 850, 2100 and 2300?

THE WITNESS (Lavin): For 850 it's the same as 700, negative 83, negative 93. For 2100 and 2300 it would be negative 86 and negative 96, as it is with PCS.

MR. PERRONE: Thank you. That's all I have right now.

MR. SILVESTRI: I don't know if Mr. Bilezikian was able to reconnect.

Attorney Patrick, do you know if he's back on?

MR. PATRICK: I believe he's trying to call in right now.

MR. SILVESTRI: Okay. Tell you what, we'll move on with other Council members, and I'll make a note to come back and see if we could get that answer to Mr. Perrone's question.

MR. PATRICK: Thank you very much.

MR. SILVESTRI: No. Thank you.

Mr. Morissette, we'd like to continue cross-examination with you at this time.

MR. MORISSETTE: Thank you, Mr. Silvestri. Does AT&T have a capacity issue as well, is that why you want to get on this tower?

THE WITNESS (Lavin): It's primarily a coverage site. There's also a capacity issue. Site CT1005, which is just off the bottom of the plots we presented, has exhausted capacity.

MR. MORISSETTE: Thank you. One final question. I'm a little confused. Is the intent to have a portion of AT&T facilities be approved through this application or will a separate tower share be filed?

THE WITNESS (Lavin): Attorney Patrick.

MR. PATRICK: I believe we would still have to come in for a tower share application, but I would have to look into that.

MR. MORISSETTE: Very Good. Thank you. That's all the questions I have.

MR. SILVESTRI: Attorney Bachman, would you like to opine on that one?

MS. BACHMAN: Thank you, Mr. Silvestri.

You must have seen me shaking my head.

MR. SILVESTRI: I did.

MS. BACHMAN: Because AT&T is an intervenor here, they are a party. And if the tower is approved, we will have all of their information, and they could come in with Verizon on a combined D&M plan. Thank you.

MR. SILVESTRI: Thank you, Attorney Bachman.

Mr. Morissette, did that answer your question?

MR. MORISSETTE: It certainly did. Thank you.

MR. SILVESTRI: Any follow-up that you need at this time?

MR. MORISSETTE: Not at all. Thank you.

MR. SILVESTRI: Very good. Thank you.

Mr. Bilezikian, could you hear me now?

(No response.)

MR. PATRICK: It looks like he's on mute, if he is here.

MR. SILVESTRI: I see him on the screen. I see him on mute. If we could unmute him, maybe we could hear him. Still on mute.

THE WITNESS (Bilezikian): Can you hear me now?

MR. SILVESTRI: Oh, absolutely.

Mr. Perrone, could you kindly go back and repeat that question for Mr. Bilezikian because I forgot what it was at this point.

MR. PERRONE: Sure. Referencing the drawing LE-3, the proposed walk-in equipment cabinet, we have the base dimensions, 6 foot 8 by 6 foot 8. Do you have the approximate height of the walk-in cabinet?

THE WITNESS (Bilezikian): Approximately 8 feet high.

MR. PERRONE: Thank you. I'm all set.

MR. SILVESTRI: Thank you both.

I'd like to continue with cross-examination by Mr. Harder at this time, please.

MR. HARDER: Yes. Thank you. Just one question thinking back to the discussion we had on the site search. Was AT&T in the process of looking for other sites or looking at other sites to satisfy your needs in this area, or did you become aware of this site and kind of jump on the band wagon without really doing any other search?

THE WITNESS (Bilezikian): No, we actually had a site that we were pursuing until we came across this filing.

MR. HARDER: Can you give us any idea? I assume you may not want to be specific, but can you give us an idea of generally where that other site is located?

THE WITNESS (Bilezikian): Are you familiar with the Pontelandolfo property?

MR. HARDER: No, I'm not.

THE WITNESS (Bilezikian): I can get the address for you in a second.

MR. HARDER: Do you know roughly how far it is from the proposed site?

THE WITNESS (Bilezikian): Less than probably a quarter of a mile.

MR. HARDER: Quarter of a mile?

(AUDIO INTERRUPTION)

MR. SILVESTRI: Mr. Bilezikian, was that less than a quarter of a mile?

THE WITNESS (Bilezikian): Yes.

MR. SILVESTRI: Thank you.

MR. HARDER: Okay. That's all the questions I had. Thank you.

MR. SILVESTRI: Thank you, Mr. Harder.

I'd like to continue cross-examination by Mr. Hannon at this time.

MR. HANNON: I have no questions at this time. Thank you.

MR. SILVESTRI: Thank you, Mr. Hannon.

Mr. Nguyen, do you have any questions at this time?

MR. NGUYEN: No questions at this time, Mr. Silvestri. Thank you.

MR. SILVESTRI: Thank you also.

Mr. Edelson, I know that you do have questions based on what was posed the first time with the applicant. Your turn, sir.

MR. EDELSON: Thank you. So I'll introduce it by noting what was said about the separate generator and not wanting to have one critical point. So if this is approved and AT&T and Verizon are on this tower, and for some reason or another AT&T lost power, what does that mean for FirstNet coverage in this area, if I'm a first responder how would that affect me?

THE WITNESS (Bilezikian): I'm sorry, can you hear me?

MR. EDELSON: I can now, yes.

THE WITNESS (Bilezikian): Okay. I was

unable to hear the last part of your question.

MR. EDELSON: The last part was from a first responder's point of view, how would I be affected, and again the presumption being that if there was some power loss that took this macro site out for AT&T, what would that do to first responders who are trying to use FirstNet?

THE WITNESS (Bilezikian): I don't believe I can answer that question.

MR. EDELSON: Can Mr. Lavin answer it?

THE WITNESS (Lavin): I believe that -- well, FirstNet is all based on prioritization. The technology would be the same between the units. It's all currently 4G. I don't know if there's a mechanism for them to roll over to Verizon presuming Verizon were to survive this event.

There was a question earlier about E911. That would continue on with Verizon. All the carriers are obligated to carry any 911 call that's presented to them. And if our subscribers' phones didn't see our network anymore because we were off the air, they would go through their preferred roaming list and get to Verizon pretty quickly, and Verizon would be obligated to carry

the E911 calls.

MR. EDELSON: Okay. I think incrementally I'm getting a better understanding of it, but I'm not sure I'm all the way there yet, but I think that's good enough for right now. And again -- good enough for now. Thank you, Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Edelson.

Mr. Lavin, just a clarification from a follow-up right there with Mr. Edelson. Did I hear that AT&T would have E911 and FirstNet?

THE WITNESS (Lavin): AT&T offers both services, yes. And if Verizon were to fail, AT&T would be obliged to carry the E911 calls from Verizon customers.

MR. SILVESTRI: Got you. Thank you. And also, I want to pose the same security question that I had posed to the applicant. I don't know if either of you have heard about that battery theft as well. So that would be the first question I'll ask, are you familiar with what happened with battery thefts at cell phone sites?

Mr. Bilezikian, have you heard?

THE WITNESS (Bilezikian): No. No, I'm not aware of it.

MR. SILVESTRI: Okay. Mr. Lavin?

THE WITNESS (Lavin): I did read the news item. I believe it was a gentleman who was going from site to site to site doing some other business and helping himself to batteries along the way.

MR. SILVESTRI: That basically sums it up, yes. You know, with that, has AT&T done anything else as far as security to basically say, okay, we need to implement X, Y or Z to try to prevent that from happening at our facilities?

THE WITNESS (Lavin): I don't know of anything specific. All the facilities are monitored. Every door is monitored. It really can't be opened without someone at the network operations center seeing that it's open. I don't know of any specific additional efforts underway based on this new and exciting kind of theft.

MR. SILVESTRI: Thank you, Mr. Lavin. And without revealing security measures, per se, I would take it there's some type of alarms or motion detectors, or something like that, that would go along with your compound?

THE WITNESS (Bilezikian): Correct.

MR. SILVESTRI: Very good. Thank you.

I don't have any further questions, so at this point I'd like to continue with cross-examination of AT&T by the applicant, and Attorney Baldwin, please.

MR. BALDWIN: I have no questions, Mr. Silvestri. Thank you.

MR. SILVESTRI: Thank you, Attorney Baldwin.

At this point, the Council will recess until 6:30 p.m. at which time we'll commence the public comment session of this remote public hearing.

And Attorney Baldwin, I'm under the impression that you'll give a brief presentation to start that off after my introductions; is that correct?

MR. BALDWIN: That's correct.

MR. SILVESTRI: Very good. All right. We will see everybody for the 6:30 public comment session. And I thank you, and enjoy your dinner.

(Whereupon, the witnesses were excused, and the above proceedings were adjourned at 4:35 p.m.)

CERTIFICATE OF REMOTE HEARING

I hereby certify that the foregoing 108 pages are a complete and accurate computer-aided transcription of my original stenotype notes taken of the Siting Council Hearing in Re: DOCKET NO. 494, CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A TELECOMMUNICATIONS FACILITY LOCATED SOUTH OF CHESTNUT HILL ROAD AT THE INTERSECTION WITH GRILLEY ROAD AND LYMAN ROAD (PARCEL NO. 101-1-5B), WOLCOTT, CONNECTICUT, which was held before ROBERT SILVESTRI, PRESIDING OFFICER, on December 8, 2020.

Lisa Warner

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I N D E X

WITNESSES: SWORN ON PAGE 10
TIMOTHY PARKS
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HU JIAZHU
BRIAN GAUDET
MICHAEL LIBERTINE
DEAN GUSTAFSON

WITNESSES: SWORN ON PAGE 93
MARTIN LAVIN
DANIEL BILEZIKIAN

APPLICANT CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS EXHIBITS
(Received in evidence)

I n d e x: (Cont'd.)

INTERVENOR NEW CINGULAR WIRELESS PCS, LLC (AT&T) EXHIBITS (Received in evidence)

**All exhibits were retained by the Council.