STATE OF CONNECTICUT

SITING COUNCIL

*

NORTH ATLANTIC TOWERS, LLC and NEW CINGULAR WIRELESS PCS, LLC

* OCTOBER 2, 2012 * (1:00 p.m.)

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND

ENVIRONMENTAL COMPATIBILITY AND *
PUBLIC NEED FOR THE CONSTRUCTION, * DOCKET NO. 427
MAINTENANCE AND OPERATION OF A *
TELECOMMUNICATIONS FACILITY *
LOCATED AT ONE OF TWO SITES: 171 *
SHOPT BEACH POAD BRANEOUD: OP *

SHORT BEACH ROAD, BRANFORD; OR 82 SHORT BEACH ROAD, EAST HAVEN, CONNECTICUT

* * * * * * * * * * * * * * * * * *

BEFORE: ROBIN STEIN, CHAIRMAN

BOARD MEMBERS: Colin C. Tait, Vice Chairman

Brian Golembiewski, DEP Designee

Michael Caron, DPUC Designee

Daniel P. Lynch, Jr. Edward S. Wilensky Philip T. Ashton James J. Murphy, Jr. Dr. Barbara Currier Bell

STAFF MEMBERS: Linda Roberts, Executive Director

Robert Mercier, Siting Analyst Melanie Bachman, Staff Attorney

APPEARANCES:

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BY: JONATHAN SCHAEFER, ESQUIRE

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FOR THE INTERVENORS, DANIEL CRISCUOLO AND PAMELA MAKI:

DANIEL CRISCUOLO (Pro Se)
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100 Short Beach Road
East Haven, Connecticut 06412

1	Verbatim proceedings of a hearing
2	before the State of Connecticut Siting Council in the
3	matter of an application by North Atlantic Tower LLC and
4	New Cingular Wireless PCS, LLC, held at the offices of
5	the Connecticut Siting Council, Ten Franklin Square, New
6	Britain, Connecticut, on October 2, 2012 at 1:00 p.m., at
7	which time the parties were represented as hereinbefore
8	set forth
9	
10	
11	CHAIRMAN ROBIN STEIN: This hearing is
12	called to order today, Tuesday, October 2, 2012 at
13	approximately 1:00 p.m.
14	My name is Robin Stein and I'm Chairman of
15	the Connecticut Siting Council.
16	We're here relative to Docket No. 427 and
17	this is the continuation of a hearing that was held on
18	July 10, 2012 in East Haven and continued at the
19	Council's office on August 15th and September 11th of
20	2012.
21	The hearing is held pursuant to the
22	provisions of Title 16 of the Connecticut General
23	Statutes and of the Uniform Administrative Procedure Act
24	upon an application from North Atlantic Towers LLC and

1	New Cingular Wireless PCS, LLC for a Certificate of
2	Environmental Compatibility and Public Need for the
3	construction, maintenance, and operation of a
4	telecommunications facility located at one of two
5	possible sites; 171 Short Beach Road in Branford or 82
6	Short Beach Road in East Haven, Connecticut. The
7	application was received by the Council on April 24,
8	2012.
9	A verbatim transcript will be made of the
10	hearing and deposited with the Town Clerks' Offices both
11	in East Haven and Branford Town Halls for the convenience
12	for the public.
13	We'll proceed in accordance with the
14	prepared agenda, copies of which are available at the
15	table over there.
16	We'll start with and I'm not sure he's
17	here the appearance of the Intervenor Mr. James
18	Berardi. Is he here? He's not.
19	(pause)
20	CHAIRMAN STEIN: Do any of the the
21	Applicant, parties, or intervenors have any objection to
22	taking in his written statement requesting intervenor
23	status? Hearing and seeing none, so we'll we'll admit
24	his written statements.

1	(Whereupon, Berardi Exhibit No. 1 was
2	received into evidence.)
3	CHAIRMAN STEIN: Obviously we cannot do
4	any cross-examination, so we'll now go to the Intervenor
5	Mr. Criscuolo.
6	MR. DANIEL CRISCUOLO, SR.: Yes.
7	CHAIRMAN STEIN: You're present. And
8	we'll start by swearing you in. Please stand so
9	MS. MELANIE BACHMAN: Raise your right
10	hand.
11	(Whereupon, Daniel Criscuolo, Sr. was duly
12	sworn in.)
13	MS. BACHMAN: Thank you.
14	MR. CRISCUOLO: Thank you.
15	CHAIRMAN STEIN: Mr. Criscuolo, I'm going
16	to go through the verification of your exhibit, which is
17	which I believe is Roman Numeral X, which you filed.
18	And first for identification purposes is there any
19	objection to that? Hearing and seeing none, I'm just
20	going to ask you a series of questions.
21	Mr. Criscuolo, did you prepare or assist
22	in the preparation of this exhibit?
23	MR. CRISCUOLO: I did.
24	CHAIRMAN STEIN: Do you have any

1	additions, clarifications, deletions, or modifications?
2	MR. CRISCUOLO: No. Basically it's the
3	same.
4	CHAIRMAN STEIN: Thank you. Are these
5	exhibits true and accurate to the best of your knowledge?
6	MR. CRISCUOLO: They are.
7	CHAIRMAN STEIN: Do you offer these
8	exhibits as your testimony here today?
9	MR. CRISCUOLO: Yes, I do.
10	CHAIRMAN STEIN: And do you offer them as
11	full exhibits?
12	MR. CRISCUOLO: Yes.
13	CHAIRMAN STEIN: Is there any objection
14	from any of the from the Applicant or the parties or
15	intervenors to having these admitted as full exhibits?
16	Hearing and seeing none, they shall be admitted.
17	(Whereupon, Criscuolo Exhibit No. 1 was
18	received into evidence.)
19	CHAIRMAN STEIN: We'll now proceed with
20	cross-examination, starting with staff.
21	MR. ROBERT MERCIER: Thank you. Mr.
22	Criscuolo, I was just wondering where your where your
23	house was in relation to the East Haven site?
24	MR. CRISCUOLO: It's one piece of property

- 1 away. The firehouse, James' property, and then mine.
- 2 It's 100 Short Beach Road.
- MR. MERCIER: Okay, so you are west of the
- 4 site?
- 5 MR. CRISCUOLO: Yes.
- 6 MR. MERCIER: Were you at home during the
- 7 balloon fly on July 10th?
- 8 MR. CRISCUOLO: Yes, I was.
- 9 MR. MERCIER: And could you describe if -
- first of all, did you see the balloon from your
- 11 property?
- 12 MR. CRISCUOLO: I could see the balloon
- and probably 15 feet of line even though there were
- leaves on the trees in the summertime. It was the same
- day of the hearing in East Haven.
- 16 MR. MERCIER: So it was above the trees?
- MR. CRISCUOLO: Above the trees, yes.
- 18 MR. MERCIER: And from what portions of
- 19 your property did you see the --
- MR. CRISCUOLO: From my front door.
- MR. MERCIER: Okay.
- 22 MR. EDWARD S. WILENSKY: Sir, could you
- 23 move the microphone closer to you, that way the --
- 24 MR. CRISCUOLO: Is that better?

1	MR. WILENSKY: The one on the table as
2	well.
3	MR. CRISCUOLO: It's a long reach. That
4	better?
5	MR. WILENSKY: Better.
6	MR. CRISCUOLO: Okay.
7	MR. WILENSKY: You look better and you
8	sound better (laughter)
9	MR. CRISCUOLO: Okay. I can't hear myself
10	sometimes.
11	MR. MERCIER: Okay, thank you. I have no
12	other questions.
13	CHAIRMAN STEIN: Okay. We'll now go to
14	the Council Members to see if we have any questions.
15	MR. COLIN C. TAIT: No questions.
16	MR. PHILIP T. ASHTON: No questions.
17	CHAIRMAN STEIN: Mr. Wilensky.
18	MR. WILENSKY: No questions.
19	CHAIRMAN STEIN: Mr. Golembiewski.
20	MR. BRIAN GOLEMBIEWSKI: Yes, Chairman.
21	Hi, how you doing.
22	MR. CRISCUOLO: Good. How are you?
23	MR. GOLEMBIEWSKI: Mr Crisuolo?

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MR. CRISCUOLO: Criscuolo.

1	MR. GOLEMBIEWSKI: Criscuolo.
2	MR. CRISCUOLO: You've got to roll it
3	MR. GOLEMBIEWSKI: A Polish
4	MR. CRISCUOLO: Yeah, it's (laughter) -
5	-
6	MR. GOLEMBIEWSKI: Just if you could
7	give me a summary of your position? Because I know I
8	read your testimony and it's it has different matters,
9	but just if you could summarize what
10	MR. CRISCUOLO: Well, it's basically the
11	same: You know, being able to look at this tower or a
12	tree or a pole from my front door year-round is a very
13	disheartening thing for me; the stability of the land,
14	the relative whether it's relative or not, the health
15	situation. Other than that, I I stand my ground with
16	basically the rest of my counterparts. They're a lot
17	more knowledgeable than I am, but it's just my feelings
18	on this I'd just hate to see this thing out my front
19	door every day.
20	MR. GOLEMBIEWSKI: So you are recommending
21	the Branford site by your testimony
22	MR. CRISCUOLO: I don't want to dump it on
23	anybody
24	MR. GOLEMBIEWSKI: Okay

1	MR. CRISCUOLO: I don't want to I
2	don't want to do that to anybody. I wouldn't want that
3	next to me and I don't think anybody else would want it
4	next to them.
5	MR. GOLEMBIEWSKI: Okay.
6	MR. CRISCUOLO: I just don't feel it's
7	necessary. We've lived with this thing for 15 years I've
8	been in my home and so I can't always get a signal. I'm
9	up high. I usually get a signal all the time
10	(laughter) but I don't drive and talk anyway, so it's
11	it's immaterial to me.
12	MR. GOLEMBIEWSKI: Okay, thank you. Thank
13	you, Chairman.
14	CHAIRMAN STEIN: Okay. Mr. Lynch.
15	MR. DANIEL P. LYNCH, JR.: You just
16	excuse me, I've got a cold you just used the term
17	disability of the land. Could you explain that term?
18	MR. CRISCUOLO: Disability?
19	MR. LYNCH: I think that's what you said.
20	MR. GOLEMBIEWSKI: Visibility
21	MR. CRISCUOLO: Visibility
22	MR. LYNCH: Oh
23	MR. CRISCUOLO: visibility from my

front door.

- MR. LYNCH: Sorry. My hearing isn't all -
- 2 -
- MR. CRISCUOLO: Mine isn't either, but
- 4 today I'm good -- (laughter) --
- 5 MR. LYNCH: Thank you --
- 6 MR. CRISCUOLO: -- and the background is
- 7 quiet.
- 8 CHAIRMAN STEIN: Senator Murphy.
- 9 MR. JAMES J. MURPHY, JR.: Just to
- 10 clarify, I thought you said stability.
- MR. CRISCUOLO: Well stability of the land
- 12 as far as the tower or a tree or a pole --
- MR. MURPHY: Right --
- MR. CRISCUOLO: -- yes.
- 15 MR. MURPHY: Okay. No, I understood --
- MR. CRISCUOLO: Yes --
- MR. MURPHY: -- what stability meant.
- 18 Okay.
- MR. CRISCUOLO: Stability and visibility
- 20 both -- (laughter) --
- MR. MURPHY: Okay. I heard -- I know
- 22 stability --
- MR. CRISCUOLO: Your ears are better than
- everybody's.

1	MR. MURPHY: Very good.
2	CHAIRMAN STEIN: Dr. Bell.
3	DR. BARBARA C. BELL: I have no questions,
4	Mr. Chair, thank you.
5	MR. CRISCUOLO: Thank you.
6	CHAIRMAN STEIN: Okay. We'll now go
7	through the other parties and intervenors. Representing
8	AT&T?
9	MS. LUCIA CHIOCCHIO: No questions, Mr.
10	Chairman.
11	CHAIRMAN STEIN: Representing Cellco?
12	Attorney Shafer.
13	MR. JONATHAN SCHAEFER: No questions.
14	CHAIRMAN STEIN: Sarah Pierson.
15	MS. SARAH PIERSON: No questions.
16	CHAIRMAN STEIN: The Town of Branford.
17	Attorney Ainsworth?
18	MR. KEITH AINSWORTH: I have none, thank
19	you.
20	CHAIRMAN STEIN: Mr. Moreland?
21	MR. RICHARD MORELAND: No questions.
22	CHAIRMAN STEIN: Miss Whitehead?
23	MS. NIKI WHITEHEAD: I have no questions,

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thank you.

1	CHAIRMAN STEIN: I guess Mr. Berardi
2	unless he's made a stealth appearance also does not have
3	any questions. Mr. Williams?
4	MR. BRUCE WILLIAMS: No questions.
5	CHAIRMAN STEIN: So that's that's it
6	for you.
7	MR. CRISCUOLO: I'm out of here. Thank
8	you.
9	CHAIRMAN STEIN: And now we'll continue
10	our with the appearance of the Applicant. Attorney
11	Chiocchio.
12	(pause)
13	CHAIRMAN STEIN: Attorney Chiocchio, do
14	you have any new or additional witness that has to be
15	sworn in?
16	MS. CHIOCCHIO: Yes, thank you, Chairman.
17	We have a substitute, Mr. Adrian DeSantis for Mr. John
18	Stevens. Adrian is (indiscernible) with Infinigy
19	Engineering and he needs to be sworn in
20	COURT REPORTER: One moment please. You
21	need to bring that over to you
22	(pause - audio testing)
23	MS. CHIOCCHIO: So we have a substitute
24	witness, Mr. Adrian DeSantis for Mr. John Stevens.

- 1 Adrian DeSantis is also with Infinigy Engineering. And
- 2 Adrian does need to be sworn in.
- 3 CHAIRMAN STEIN: Would you please stand.
- 4 MS. BACHMAN: Please raise your right
- 5 hand.
- 6 (Whereupon, Adrian DeSantis was duly sworn
- 7 in.)
- 8 MS. BACHMAN: Thank you.
- 9 CHAIRMAN STEIN: Please begin by verifying
- 10 any new exhibits.
- 11 MS. CHIOCCHIO: We have one exhibit,
- 12 Exhibit No. 18, the responses to the Siting Council's
- 13 Interrogatories, Set 3, along with some supplemental
- information dated September 24, 2012.
- So I'll -- I'll ask each of my witnesses a
- series of questions, and I'll start with Mr. Mark Kiburz
- on the end. Did you prepare and assist in the
- 18 preparation of the materials identified?
- MR. MARK KIBURZ: I did.
- MS. CHIOCCHIO: Mr. Howse.
- MR. RANDY HOWSE: I did.
- MS. CHIOCCHIO: Mr. DeSantis.
- MR. ADRIAN DESANTIS: Yes, I did.
- MS. CHIOCCHIO: Mr. Wells.

1	MR. ANTHONY WELLS: Yes.
2	MS. CHIOCCHIO: Mr. Vivian.
3	MR. DAVID VIVIAN: Yes.
4	MS. CHIOCCHIO: And Mr. Libertine?
5	MR. MICHAEL LIBERTINE: Yes
6	MS. CHIOCCHIO: Do you have any
7	corrections or clarifications to the information
8	contained therein?
9	MR. KIBURZ: Mark Kiburz. No.
10	MR. HOWSE: Randy Howse. No.
11	MR. DESANTIS: Adrian DeSantis. No.
12	MR. WELLS: Tony Wells. No.
13	MR. VIVIAN: Dave Vivian. No.
14	MR. LIBERTINE: Mike Libertine. No.
15	MS. CHIOCCHIO: Is the information
16	contained therein true and accurate to the best of your
17	belief?
18	MR. KIBURZ: Mark Kiburz. Yes.
19	MR. HOWSE: Randy Howse. Yes.
20	MR. DESANTIS: Adrian DeSantis. Yes.
21	MR. WELLS: Tony Wells. Yes.
22	MR. VIVIAN: Dave Vivian. Yes.
23	MR. LIBERTINE: Mike Libertine. Yes.
24	MS. CHIOCCHIO: And do you adopt it as

1	your testimony in this proceeding?
2	MR. KIBURZ: Mark Kiburz. Yes.
3	MR. HOWSE: Randy Howse. Yes.
4	MR. DESANTIS: Adrian DeSantis. Yes.
5	MR. WELLS: Tony Wells. Yes.
6	MR. VIVIAN: Dave Vivian. Yes.
7	MR. LIBERTINE: Mike Libertine. Yes.
8	MS. CHIOCCHIO: And we ask that the
9	Council admit Item No. 18 as a full exhibit.
10	CHAIRMAN STEIN: Does any party or
11	intervenor object to the admission of this exhibit?
12	Hearing and seeing none, the exhibit is admitted.
13	(Whereupon, Applicant Exhibit No. 18 was
14	received into evidence.)
15	CHAIRMAN STEIN: We'll now proceed with
16	cross-examination on the additional information first
17	with staff.
18	MR. MERCIER: Thank you. In regards to
19	Set 2, Question 1, the last sentence basically says that
20	a flagpole type facility could be constructed here, but
21	require an increase in height. Do you have the total
22	height that would accommodate Verizon and AT&T based on
23	the antennas that you plan to use here?
24	MR. WELLS: For the Branford site in

1	particular?
2	MR. MERCIER: That's correct
3	MR. WELLS: Yes
4	MR. MERCIER: I'm sorry, the Branford
5	site.
6	MR. WELLS: The for AT&T with our
7	minimum height of 120 feet and for the lowest antennas,
8	that would drive us to 150 feet. I can't speak for I
9	don't know all the details of Verizon's coverage
10	objective, but I would assume that they would not want to
11	go any lower than 110 feet. So if you assume that they
12	wouldn't want to go any lower than 110 feet, and they
13	wanted at least two spots, that would put them up to 120,
14	which would put our lowest antenna at 130, driving the
15	height to 160, again assuming they only needed two
16	heights. If they needed three, then that will drive it
17	to 170.
18	MR. MERCIER: Okay, thank you. I just
19	have two other general questions, and I need to have some
20	more information on it if that's okay
21	CHAIRMAN STEIN: Go ahead.
22	MR. MERCIER: One is with regards to
23	utilities. I didn't see anything in the record that
24	indicated above ground or overhead that's proposed here.

1 MR. DESANTIS: Both of these sites are 2 proposed underground utilities. 3 MR. MERCIER: Thank you. And Mr. 4 Libertine, there was previous testimony from Mrs. 5 Whitehead at the last hearing -- I think that was 6 September 11th -- she said she saw a balloon fly in the 7 spring of 2012. Do you know if you did one in the spring 8 of 2012? If so, what month or day and what height the 9 balloon was? 10 MR. LIBERTINE: The only record I have of 11 a spring balloon float would have been in June of 2011. 12 I don't believe there was a flight before the July 12th -- or the July 2012 float done this year. So, I'm -- I'm 13 14 just not -- the only -- the only data gap that might 15 exist there is that VHB, who I formally worked with, was 16 responsible up to a certain point of this work, if they 17 in fact at gone out sometime before the hearing -- it's 18 highly unlikely because I was kept in the loop of this 19 docket for the transition. But I don't believe there was 20 anything done in the spring of this year. But certainly June of 2011 was the last time that I'd been out to the 21 22 site and done a balloon float in the spring. 23 MR. MERCIER: Okay, thank you. I have no other questions. 24

1 CHAIRMAN STEIN: Thank you. We'll now 2 continue with questions from the Council. 3 MR. TAIT: No questions. 4 MR. ASHTON: No questions, Mr. Chairman. 5 CHAIRMAN STEIN: Mr. Wilensky. 6 MR. WILENSKY: With internal mounted 7 antennas, at what height could you -- could the Branford 8 site -- could the Branford site would have to -- what 9 height would the Branford site have to be with internal 10 mounted antennas? 11 MR. WELLS: Actually, I think I said 150 12 previously --13 MR. ASHTON: One sixty --14 MR. WELLS: -- but that was a 15 miscalculation, so --16 MR. WILENSKY: I'm sorry, Mr. Wells? 17 MR. WELLS: For AT&T's purposes alone, 140 18 feet -- I think I said 150 before, but I forgot to count 19 20 MR. ASHTON: One sixty --21 MR. WELLS: I did say 140 -- but then if 22 you include Verizon, and assuming that they have a 23 minimum height at 110, then they need 110, 120, and AT&T

needs 130, 140, and 150, so it would be 150.

21

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1 MR. WILENSKY: So in other words you would 2 need three positions, 150, 140, and 130? 3 MR. WELLS: We would need three and 4 Verizon, as I understand it, would need two. 5 MR. WILENSKY: Verizon then would down to 6 120, 110, and 100? 7 MR. WELLS: As I understand it, Verizon would need two. If they needed three, then that would 8 9 raise the height to 160. 10 MR. WILENSKY: So in other words, then 11 using an internal mounted antenna as I read this, it 12 would not work on the East Haven site based on your restrictions from the FAA, is that correct? 13 14 MR. WELLS: That's correct. 15 MR. WILENSKY: Okay. Thank you very much. 16 Thank you, Mr. Chairman. 17 CHAIRMAN STEIN: Thank you. Mr. 18 Golembiewski. 19 MR. GOLEMBIEWSKI: Thank you, Chairman. Ι 20 have some questions in regards to some of the stealth 21 designs or different slim profile. Exhibit 18 has I

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quess a schematic of a unipole, I quess if you want to

use that, and it says it's 40-inch diameter. That's at

the top. And then it's more than five feet at the base.

22

23

1 Does that taper? 2 MR. DESANTIS: Yes. The -- the diameter 3 at the top -- the dimension line at the top is four feet 4 5 MR. GOLEMBIEWSKI: Okay --MR. DESANTIS: -- and not 40-inch. When 6 7 the antennas and equipment are laid out, it comes out to be just about four feet. 8 9 MR. GOLEMBIEWSKI: So 48 inches at the 10 top? 11 MR. DESANTIS: Correct. 12 MR. GOLEMBIEWSKI: And then I think I see -- unfortunately, I don't have my glasses --13 14 MR. DESANTIS: Five foot --15 MR. GOLEMBIEWSKI: -- five foot two --16 MR. DESANTIS: Five-foot-two at the base -17 18 MR. GOLEMBIEWSKI: -- at the bottom? 19 MR. DESANTIS: Correct. 20 MR. GOLEMBIEWSKI: Okay. And so if you 21 compare that to the normal -- to the pole with the 22 platform, the pole itself is 36-inch diameter normally --

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MR. DESANTIS: Typically -- typically at

what's the normal taper on that?

23

23

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- 1 the top of the tower it's 36-inch at the top, five feet
- 2 at the bottom, so it's similar.
- 3 MR. GOLEMBIEWSKI: The one with the
- 4 platform on it?
- 5 MR. DESANTIS: Correct.
- 6 MR. GOLEMBIEWSKI: Oh, okay.
- 7 MR. DESANTIS: A typical monopole.
- 8 Obviously, you know, based on the loading --
- 9 MR. GOLEMBIEWSKI: Yeah --
- 10 MR. DESANTIS: -- the structural
- 11 suitability of it is subject to change, you know, based
- on final loading --
- MR. GOLEMBIEWSKI: Okay --
- MR. DESANTIS: -- and the final
- 15 calculations. But -- but typically, it's about five feet
- 16 at the base --
- MR. GOLEMBIEWSKI: Okay --
- 18 MR. ASHTON: Excuse me. Is that five feet
- and three foot for a 120-foot monopole?
- MR. DESANTIS: That could be on the high
- 21 side. A hundred and twenty feet --
- MR. ASHTON: I'm seeing some eyebrows
- 23 fluttering on your side --
- MR. LIBERTINE: Actually, I think just for

24

- 1 clarification, depending on the height, depending on the
- 2 number of carriers that are planned for the pole, it can
- 3 vary. So, I --
- 4 COURT REPORTER: I'm sorry, could you
- 5 point that --
- 6 MR. LIBERTINE: I'm sorry. Actually, Mr.
- 7 Vivian and I were discussing on the sideline here that
- 8 we're familiar with some slimmer poles that, you know,
- 9 are being built or already in existence, you know, 36
- inches at the base, and that may taper to 24 inches. I
- don't think they go much lower -- in the old days we did
- see some 24 inches down to 18. Those are pretty obsolete
- 13 these days. So, I think that's -- that's kind of the
- 14 range, 36 to 24 or more on the line of what Mr. DeSantis
- 15 had indicated.
- 16 MR. VIVIAN: And just to clarify, it's --
- it's going to be height dependent. We're talking -- you
- 18 know, when Michael is talking about that very very slim,
- 19 it's for a shorter tower. The taller the tower, the
- wider the base, and thicker the steel.
- MR. GOLEMBIEWSKI: I know there's been
- 22 some testimony as to the high potential for wind in light
- of its, you know, I quess juxtaposition near the ocean.
- Is that of any concern with that widen any type of

1	monopole there or no?
2	MR. DESANTIS: Certainly the location, the
3	geographic location is all taken into consideration when
4	the tower is designed, so all that does factor in. But
5	again, as Mr. Libertine had discussed, those you know,
6	those are typical ranges and they're pretty common for
7	this type of area. But obviously, the final the final
8	diameter would be designed when the structural is
9	completed.
10	MR. GOLEMBIEWSKI: Okay.
11	MR. VIVIAN: And that comes that comes
12	into play as D&M tower
13	MR. GOLEMBIEWSKI: Yeah
14	MR. VIVIAN: the foundation and the
15	steel
16	COURT REPORTER: I'm sorry, Mr. Vivian
17	MR. VIVIAN: the TIA standards
18	COURT REPORTER: Mr. Vivian
19	A VOICE: You're going to have to repeat
20	all of that
21	MR. VIVIAN: The the National Code G
22	MR. GOLEMBIEWSKI: Yeah
23	MR. VIVIAN: accounts for differences
24	in average winds, typically from one county to another

1	throughout	the	state.	

- MR. GOLEMBIEWSKI: Okay. Mr. Libertine,
- 3 if we could quickly go through sort of the -- I guess the
- 4 profile of the different options. So we have -- what
- 5 you're proposing is a low profile platform --
- 6 MR. LIBERTINE: Correct --
- 7 MR. GOLEMBIEWSKI: -- and what's the
- 8 dimensions -- my understanding is that's like 14-foot --
- 9 with 14 feet on each triangle of the platform?
- MR. LIBERTINE: Yeah, 12 to 14 feet is
- 11 typical.
- MR. GOLEMBIEWSKI: Okay. And then if you
- go to a T-arm --
- 14 MR. LIBERTINE: Mmm-hmm --
- 15 MR. GOLEMBIEWSKI: -- is the profile the
- same?
- 17 MR. LIBERTINE: The width is approximately
- 18 the same in that 12 to 14 feet because of the horizontal
- separation. But of course you don't have the connecting
- points, so there's a little bit less bulk to that because
- it's not a complete triangle. Those are actually
- independent arms. That's why they more or less look like
- 23 a T at a -- if you're looking at it flush. So there is a
- 24 little bit less bulk overall associated with those. So

- 1 if we had to kind of say most bulk, for lack of a better 2 term, you know, I think we could start with certainly the full platform. Then the T-arms certainly start to reduce 3 that significantly. 5 MR. GOLEMBIEWSKI: Okay. And then you go to either a flush mount or a close mount? 6 7 MR. LIBERTINE: Correct. 8 MR. GOLEMBIEWSKI: Okay. And so if you do 9 an exterior mount, do we still have the same pole width, 10 the pole diameter issues? Is it based because of the 11 coaxial where we're talking about -- because I know we're 12 going with either say a five-foot diameter, but that's interior -- they're -- they're -- they essentially have a 13 14 pole with a sleeve over it, right? 15 MR. LIBERTINE: I'll speak first -- but I 16 think -- this is all site specific -- but my experience 17 has been if we're doing a flush mount or a close contact 18 -- because I think flush is a little bit misleading because obviously you've got a few inches off the pole, 19 20 but certainly it's very -- we're talking about less than 21 a foot in terms of -- including the antenna being off the
- the internal arrays because in addition to all the

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necessarily have to be as wide obviously to accommodate

pole. My experience has been that those are -- not

1 cabling, it's the antennas themselves that kind of create 2 -- needed to create an angle to get the correct azimuth, 3 you're talking about a much wider diameter. So from my experience, I've normally seen the close contact arrays 5 be more of what I'd consider to be a typical slim 6 monopole design. But again, some of it's site specific, 7 so I don't want to speak -- you may have something there 8 to add --9 MR. DESANTIS: I would concur with that 10 statement. As Mr. Libertine is saying, the interior 11 mounts obviously have to be bigger to accommodate the 12 equipment inside. The close contact could be mounted to 13 the exterior of it, although yes it is -- you know, it 14 would be narrower, you would have the antennas and other 15 equipment outside. 16 MR. GOLEMBIEWSKI: Okay. And then -- when 17 -- when -- there was testimony as to needing three levels 18 on a unipole, saying that 120 is your minimum height. 19 Now is that based on the 700 megahertz, the LTE? Where 20 do you get -- do you know what I'm saying? Which --21 which -- which are you designing to because I know you 22 have multiple frequencies? 23 MR. WELLS: Yeah, that's actually based on 24 the -- on the 800 megahertz model.

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1 MR. GOLEMBIEWSKI: Okay. So an LTE could 2 potentially go below that at 110 and still get you 3 similar coverage? 4 MR. WELLS: I -- I don't think so. 5 Although -- you're headed in the right direction. 6 think your assumption is that well it's 700, it's a lower 7 frequency and it will cover a little more --8 MR. GOLEMBIEWSKI: Yes --9 MR. WELLS: -- but there's also -- you're 10 packing a lot of information in short bits. And what 11 we're seeing is that LTE is -- you need -- you need a 12 little better coverage with LTE to maintain the expected standard for that --13 14 MR. GOLEMBIEWSKI: So --15 MR. WELLS: -- and there's not a huge 16 difference between 700 and 800 to begin with --17 MR. GOLEMBIEWSKI: Okay --18 MR. WELLS: -- it's fairly -- it's not 19 like 800 and 1900 where you're almost doubling the 20 frequency. So conceptually you're headed in the right 21 direction, but you have those two constraints; (1) it's 22 very close -- it's close in propagation; and (2) if you 23 look at the modulation schemes for that, it's crazy what 24 they're trying to pack into a little bit of RF space.

1	MR. GOLEMBIEWSKI: So to use the 800, you
2	get a comparable coverage map for the LTE is what you're
3	saying?
4	MR. WELLS: Yeah
5	MR. GOLEMBIEWSKI: When I look at
6	MR. WELLS: as a as a general
7	guideline
8	MR. GOLEMBIEWSKI: Okay
9	MR. WELLS: there's definitely
10	differences, but as a general guideline only. But like I
11	said, the LTE we're finding is requires some stricter
12	standards to maintain good thru-put.
13	MR. GOLEMBIEWSKI: Okay. And then just to
14	refresh my memory, when you when you were talking
15	about a monopine, you could put all your antennas at one
16	level on a monopine?
17	MR. WELLS: Yes.
18	MR. GOLEMBIEWSKI: Okay. And then refresh
19	my memory, Mr. Libertine, the appropriateness of the
20	monopine at either site, my recollection is you said it
21	wasn't the greatest site
22	MR. LIBERTINE: I
23	MR. GOLEMBIEWSKI: for either
24	MR. LIBERTINE: Yeah, I think these

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1 these locations are not what I'd consider to be like the 2 ideal spot. From certain vantage-points, I think a tree 3 would be very helpful. I think especially right out in front of each of those sites, and if you were an 5 adjoining neighbor, certainly of the East Haven site, a 6 tree would be much more palpable. But there are going to 7 be some other locations, especially as you move away, 8 and there are a few spots where the facility will likely 9 be significantly above the tree line, it's likely that 10 it's going to stand out just a little bit more just 11 because of the bulk that would be necessary to carry 12 that. Okay. And then if a 13 MR. GOLEMBIEWSKI: 14 monopine was used in East Haven, would there need to be 15 any additional changes to the proposed foundation? Would 16 it -- would it put more stress on the --17 MR. DESANTIS: Certainly the foundation --18 you know, no matter what the site type is -- whatever the 19 structure type is, everything will be designed during the 20 D&M process. We'll do our subsurface testing, you know, 21 based on the site selection. But yes, the foundation may 22 be a little more bulky if it's a monopine versus a slim 23 monopole, or whatever. 24 MR. GOLEMBIEWSKI: Okay, great.

1	you, Chairman.
2	MR. WILENSKY: Mr. Chairman.
3	CHAIRMAN STEIN: Yes.
4	MR. WILENSKY: Mr. Libertine, if the
5	monopine was used in East Haven, because of the height
6	limitations would that work because you'd have to
7	increase the monopine another seven feet I would assume -
8	_
9	MR. LIBERTINE: Well in this case we had
10	proposed
11	MR. WILENSKY: and now you're up to
12	about 110 feet
13	MR. LIBERTINE: Right. Recognizing that
14	we do have the height limitation, in this case we
15	proposed to not go with the additional seven-foot taper
16	and to instead propose what we call kind of a flattop
17	style monopine, which is done. So rather than having
18	that kind of taper that you would normally see that more
19	or less conceals all the antennas and just above it, but
20	does not extend significantly above the
21	MR. WILENSKY: In other words you are not
22	putting your antennas down
23	MR. LIBERTINE: No, it wouldn't it
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24 would not necessitate bringing the antennas down, but

instead of going seven feet above that platform, we would

-- we would shroud those in the branches so to speak, but

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couple of years.

4 MR. WILENSKY: You'd have like a bulky top

5 rather than a --

6 MR. LIBERTINE: Right. More like a
7 stunted tree that you might see that had been -- you
8 know, in the natural environment that may have been hit
9 by lightning or just had been -- you know, had some
10 damage at the top.

MR. ASHTON: Heavily pruned.

MR. LIBERTINE: That's one of the problems with the monopine. Sometimes I think everybody, including myself, we've all kind of thought about designing these things to look like Christmas trees. And the more I've driven around and looked at pine trees in their natural environment, they're very sparse, they are not symmetrical normally, and a lot of times you don't get that nice taper, you get a lot of these kind of what I'll call these stunted tops. So it's not that uncommon. It would still look natural, but it wouldn't be what I think we're used to calling the traditional monopine that certainly has been built in Connecticut over the last

1 MR. WILENSKY: Thank you, Mr. Libertine. 2 Thank you, Mr. Chairman. 3 CHAIRMAN STEIN: Thank you. Mr. Lynch. MR. LYNCH: Mr. Wells, let's revisit the 4 5 internal design or flush mount antenna designs. In light 6 of the new technologies that may be coming down the line 7 and stuff becomes obsolete -- what is it, Morris law or the Morris Principle -- in 18 months things are obsolete, 8 9 and how practical is it -- because we've already 10 replaced a couple of flush mount antennas with full 11 antenna designs, how practical are these designs as far 12 as their lifetime in light of the new technology that may be coming? I know that's a loaded question, but --13 14 MR. WELLS: Yeah -- yeah, I guess -- you 15 know, from an engineering standpoint you always want as 16 much flexibility as possible. And you know, of course we 17 have to balance that against the constraints of 18 visibility and everything else. But as you've said, you 19 know, recently we've had to go back and convert some of 20 the old ones to -- to get away from that flush mount and 21 interior type environment. So it's becoming more and 22 more of a challenge every day. I mean there's more 23 spectrum, more usage, and the technology is getting more and more challenging every day to optimize. And you 24

1 know, we've always been concerned about flush mounts. 2 And as you said, you know, you try to compromise where it 3 makes sense, but ultimately you need to provide coverage where people use it. And when you're doing the flush 5 mount, you are, as we've always said, constraining the 6 design. And what we're finding now with LTE is it is --7 it's a challenge for optimization and --8 MR. LYNCH: It is constrained for 9 capacity? Is that what you're talking --10 MR. WELLS: Yeah -- eventually a lot of 11 stuff comes down to capacity, but it's optimization for 12 capacity. For example, if you -- if you look at CDMA --13 if you look at the progression from -- say even from CDMA 14 technology, which was a handoff type technology or UMTS 15 for example, you could -- if you're on a voice channel, 16 you could aggregate multiple sectors. So if you get a 17 sector from one site, Site A, and then another from Site 18 B coming into the same spot, your mobile would decode 19 both of those sectors and so you would -- so that 20 wouldn't hurt you. But now as we migrate more and more 21 to data, you can't -- there's some constraints on that. And now that Sector B is -- now it interferes. So now 22 23 you've really got to optimize that so that Sector A 24 maintains that dominant server. And that -- that can be

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1 a real challenge. And if you're constrained by your 2 physical location of those antennas and where you can 3 point them and how much you can down tilt them, you know, it's a challenge already, and then it becomes even more 5 of a challenge. MR. LYNCH: Thank you. And I have a 6 7 general question also. Your commercials for AT&T and 8 Verizon are advertising something called -- and I may be 9 wrong or get the pronunciation wrong -- FILO or FIL -- or 10 something like that -- is that an LTE designation? 11 MR. WELLS: Boy, I --12 A VOICE: I haven't seen that ad --MR. WELLS: What is it? 13 14 MR. LYNCH: I think it's FILO, F-I-L -- I 15 don't know if it's O or apostrophe O, or dash O. And 16 both AT&T and Verizon are advertising this. I don't know 17 if it's something that's in -- an app that goes in the 18 clouds or something, but I was just wondering what it 19 was. 20 I'm sorry, I'm not -- you MR. WELLS: 21 know, I don't pay too much attention to the marketing 22 quys, but -- (laughter) --23 MR. LYNCH: Thank you. No more --24 MR. WELLS: It wasn't -- it's not FIOS

- 1 you're referring to, right? It's not FIOS with an S that
- 2 you're referring to?
- 3 MR. LYNCH: It could be -- it could be.
- 4 MR. WELLS: Okay. Well FIOS is a -- it's
- 5 fiber to the home basically if you're referring to fiber
- 6 -- or if you're referring to -- I'm sorry, if you're
- 7 referring to FIOS, F-I-O-S, then that's fiber to the home
- 8 and that's not an RF --
- 9 MR. LYNCH: Okay --
- 10 MR. WELLS: -- it's not an RF thing.
- 11 MR. LYNCH: I was just wondering what the
- 12 hell it was.
- MR. WELLS: Yeah.
- MR. LYNCH: No more questions, Mr.
- 15 Chairman.
- 16 CHAIRMAN STEIN: Alright, thank you.
- 17 Senator Murphy.
- 18 MR. MURPHY: Just a few, Mr. Chairman,
- 19 thank you.
- 20 Prior to preparing this conceptual
- 21 drawing, which is part of the September 24th filing, was
- Verizon consulted as to how many locations they would
- 23 need or did you just go forward on a two basis?
- 24 (pause)

1	MR. MURPHY: If nobody speaks up, I guess
2	nobody talked to them (laughter)
3	MR. ASHTON: Tough questions.
4	(pause)
5	MR. VIVIAN: I think we went off of
6	Verizon's original testimony at this hearing when they
7	were asked about how many spots they would need for a
8	unipole, and the RF engineer indicated two.
9	MR. MURPHY: Okay. And no conceptual plan
10	was done for East Haven because it just won't work, is
11	that basically it?
12	MR. WELLS: That's correct.
13	MR. MURPHY: And turning to what's the
14	conceptual design here for Branford, it really doesn't
15	work from an RF standpoint either, does it, at 130 feet
16	if you need three?
17	MR. VIVIAN: Well, I we would for
18	AT&T from AT&T's perspective and likely from Verizon's
19	that the height would have to go up to make it
20	MR. MURPHY: It would have to be more than
21	130 feet?
22	MR. VIVIAN: Correct.
23	MR. MURPHY: Right. So at 130 feet of the
24	conceptual design, it really won't work for you if it's

- 1 limited to 130 feet. So what you're really -- the point
- 2 I want to make is for us to do this and for it to work
- for AT&T, the tower would have to go higher than 130
- 4 feet?
- 5 MR. WELLS: That's correct.
- 6 MR. MURPHY: Perhaps 150 and maybe higher
- 7 depending on Verizon's needs?
- 8 MR. WELLS: Correct.
- 9 MR. MURPHY: Alright. I have no other
- 10 questions, Mr. Chairman.
- 11 CHAIRMAN STEIN: Dr. Bell.
- DR. BELL: Thank you, Mr. Chair. Just to
- 13 review this matter of the width one more time, AT&T has
- 14 constructed towers, flush mounted, internal mounted
- 15 towers in Avon and in Farmington recently that are
- 16 according to our records 36 feet in diameter. Why is it
- 17 -- and these are, as I understand it, comparable to the
- 18 100-foot tower, not the taller towers. Why is it that
- 19 you would need a greater width in this case for the short
- tower which we're dealing with in East Haven?
- MS. CHIOCCHIO: We'll let Mr. Wells answer
- that question.
- MR. WELLS: I think -- and I'll let Mr.
- 24 DeSantis jump in as well -- but part of -- part of the

1 design -- the design here includes LTE and remote radio 2 heads and so you need -- you need room for those remote radio heads up at the top. Where I think probably in 3 4 your other installation that you're talking about, that 5 was a coax fed system in which you only had the antennas -- all the base equipment on the bottom and coax fed to 6 7 those antennas. 8 DR. BELL: The remote radio heads -- the 9 remote radio heads are fed by fiber, right? 10 MR. WELLS: That's correct. 11 DR. BELL: So they actually take less in 12 terms of larger mass of coax --13 MR. WELLS: For coax yes. But at the top 14 because now you no longer have a passive antenna, you 15 have active electronic components up there, so now you 16 have to --17 DR. BELL: So now there's a greater width 18 demanded for the antenna or for the remote radio head 19 equipment itself? 20 MR. WELLS: For the antenna and the remote radio head --21 22 DR. BELL: All together? 23 MR. WELLS: Right. Because you've got to 24 account for both where before you only had to account for

1 one. 2 DR. BELL: Okay -- alright, that -- that 3 answers my question, thank you. 4 Staying with you, Mr. Wells, I guess --5 and I think we had some discussion earlier, but I'm not sure and I'd like to review it. In a response which was 6 7 to Question 12 of the interrogatories from the Siting 8 Council --9 A VOICE: Which set --10 DR. BELL: The second set of 11 interrogatories, Question 12, in commenting on the 12 coverage maps that were provided with that second set of interrogatories, you -- you said -- or whoever was answer 13 14 the question said that those coverage maps had been 15 prepared with better or an upgrade, or some term like 16 that, data on the terrain. I'm just trying to understand 17 what changed or what enabled you to understand the 18 terrain better in order to answer the question in the way 19 you did? 20 MR. WELLS: Well the -- throughout the 21 duration from our first plots for this hearing to the 22 actual hearing day and the interrogatories was -- during

-- during that intervening time we actually upgraded our

terrain database. We're always trying to improve the

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1 model. So in this case we were able to get lower 2 resolution -- or higher resolution, lower size bins for 3 our terrain. So when we answered the interrogatory, we had submitted a map. And I was going over it with our 5 engineers and noticed that there were some anomalies 6 between the first submittal and those interrogatory 7 responses. So at that point we found, oh, yeah, we 8 changed terrain at that point, and it improved the model 9 a little bit. Substantially it didn't change anything. 10 If you look at the plots, there's very subtle differences 11 within there, but we just -- we wanted to be as accurate 12 as possible for the record, so we submitted it with that new improved terrain. But it's -- like I said, as you 13 14 can see, if you look at the submittals, it's not a 15 substantial difference. 16 COURT REPORTER: One moment please. 17 (pause - tape change) 18 MR. WELLS: Mr. Vivian has pointed out 19 that I should explain what the improved terrain means --20 (laughter) -- that's why I have him sit next to me --21 (laughter) -- although it gets me into trouble sometimes 22 -- the -- so when I say improved terrain, what we do is 23 from the -- the USGS is the source for that and they're

always making -- they're always trying to improve theirs,

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1 so we get those improvements. So what we do is we -- we 2 take the available terrain data and assign that to bins. 3 And whether it's -- initially we used to use 30 meter by 30 meter bins, but now a higher resolution. I think our 5 resolution is now 10 meter by 10 meter bins. So we take that -- you know, all the terrain within that bin size 6 7 and average that out and assign a single value to that bin. So the lower -- the smaller that bin size is the 8 9 more resolution you can get. As I said, in this kind of 10 environment you'll see very subtle differences in the 11 If there were some very sharp changes in terrain, 12 that's where it really makes a difference because now 13 you're not averaging out larger areas, you're averaging 14 out a much smaller area. 15 DR. BELL: What -- the -- a change in terrain might be caused by the development of a large 16 17 building or -- I mean terrain -- I'm trying to understand 18 what a terrain change would be. If you had a hurricane 19 that knocked down a lot of trees, which we did, that 20 might cause it. What -- what is --21 MR. WELLS: No, it's actually not a change 22 -- in general it's not a change in the terrain itself. 23 It's -- it's -- it's better -- better terrain data 24 available for that particular area. So you -- I mean if

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you've got a mountain there today, it's probably going to 1 2 be there tomorrow too -- (laughter) -- but if -- like I 3 said, if you get more resolution, you can use smaller bin 4 sizes to represent that terrain. 5 MR. VIVIAN: It's sort of like say a 6 digital TV where you have ten-eighty dots per inch versus 7 seven-twenty. So the -- so the improved terrain model 8 has more accuracy and less -- you know, a smaller area 9 for averaging each -- each bin if you will. 10 DR. BELL: Okay. Obviously these 11 questions are becoming general, but I mean it did open up 12 this general area, so I'm just attempting to understand so that we can understand other applications where 13 14 presumably this same kind of phenomenon would happen --15 MR. LIBERTINE: Well --16 DR. BELL: -- but I guess my -- my last 17 question about that would be -- you mentioned that -- you 18 said the USGS is always trying to improve their data and 19 you guys are always trying to improve your model -- and 20 I'm sure you are -- but what constitutes always --21 MR. WELLS: Yeah --22 DR. BELL: -- I mean how is -- what --23 what is the period of always? 24 MR. WELLS: Yeah, you're right. I think

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1 that was probably too much of a generalized statement. 2 Whenever we find new sources available -- I mean I quess 3 always -- I mean we are -- I don't know how to put that in perspective, and I certainly don't know the inner 5 workings of the USGS and what their plans are -- I mean I 6 guess could do some research on that, but I don't know 7 what they plan --8 MR. LIBERTINE: I can shed a little light 9 on the D -- the DEMS -- because we've been wrestling with 10 this as well. And actually on a recent petition I had to 11 write a brief memo on this issue because the -- the 12 digital elevation models the USGS developed were done 13 several years ago and they were done at a specific 14 resolution. I think it was a 30 meter resolution. So 15 that was coarse terrain data. And for -- looking out 16 over two, three, or four miles, it's more than adequate. 17 But there are certain inaccuracies that lie within that 18 because of the lack of density, for lack of a better 19 term. 20 About four years ago the folks at U-Conn 21 took some much better data, LIDAR data that we're now using, and made that available. And they've since done 22 23 some upgrades to that. So we're seeing kind of a 24 progression as data becomes -- as Tony had said, as data

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becomes available, we're trying to integrate that because it just gives us a more accurate look. And actually, it will give us just less room for that margin of error that we were seeing. And it's subtle, but it's -- certainly anytime you can do that -- it's the same thing as aerial photography gets better and better, we're obviously using the most recent as well as the ones that have the best resolution so that we can really get down and see what we're dealing with.

So it happens periodically. I'd love to say, boy, every couple of years they go back and really look at these things. But the USGS, one of the limitations there was they tried to do that seamlessly across the entire United States. And it's very helpful if we're dealing with a site in Ridgefield let's say where you have the New York border right next door and some of the propagation or in my case some of the visibility now extends into New York, it's wonderful. The LIDAR data unfortunately stops at the border. LIDAR sees geo-political borders, where the USGS kind of took flight and said we want the whole continental United States. So there's -- there's actually I quess a benefit to using one over the other in certain cases. But again, when you have the best resolution and you can get the --

in the case of the LIDAR, I believe it's two feet 1 2 resolution as opposed to 30 meters. That's a big 3 difference in terms of that overall level of accuracy. 4 So it's a progression, the data gets 5 better. It's just kind of like this industry; it 6 continues to kind of evolve. And as the information and 7 data becomes available, we're -- we're constantly trying to incorporate it because it just gives us a better 8 9 picture and it gives us a little bit more accuracy as we 10 go, so -- I don't know if that helps or complicates it 11 more --12 DR. BELL: No -- yes, it definitely does 13 help because I am familiar with LIDAR --14 MR. LIBERTINE: Mmm-hmm --15 DR. BELL: -- which you're bringing in at 16 this point. But the USGS is not using LIDAR --17 MR. LIBERTINE: Not at this point, no. 18 DR. BELL: Only Connecticut? Does 19 Massachusetts have LIDAR? 20 MR. LIBERTINE: Massachusetts has -- it's 21 a little bit -- it's in a little bit -- it's in a little 22 bit different form. So the general populous, including 23 myself, if I didn't have a real great computer person who knew what they were doing, I wouldn't really be able to 24

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access it as easily as -- in Connecticut U-Conn made it 1 2 very available through the magic site where they've got a 3 lot of great resources. Massachusetts is still doing it a little bit more archaically, so it's not as generally 5 available. If you know what you're doing, you can pull 6 it down and you can actually generate it. And we've been 7 playing around with that for our Massachusetts sites, but 8 it's just in a little bit different format. So LIDAR is 9 not unique to Connecticut. It's just unique in the sense 10 that it's so readily available right now.

DR. BELL: Yeah.

MR. LIBERTINE: The only other thing I would add is the good news with the USGS is that they've just updated a lot of the maps that were -- most recently -- like the 1982 updates, they've all been redone in the last year or so. So at least the base mapping that we all see, you know, the big sheets has become now updated, what is it, 30 years later. So at least it's now becoming a little bit more current. So from a land use perspective, that's very helpful when we're analyzing certain things.

DR. BELL: Thank you. Thank you, Mr.

23 Chair.

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24 CHAIRMAN STEIN: I just have hopefully two

1	quick questions. Just to refresh my memory, on the
2	backup power are you proposing two separate facilities,
3	one for AT&T and the other for Verizon?
4	MR. HOWSE: Yes, we are.
5	CHAIRMAN STEIN: Is there any reason why
6	it couldn't be one facility to be used by both and have a
7	standardized
8	MR. HOWSE: We could attempt to negotiate
9	a deal with both carriers and share the implementation
10	cost of a single generator. So
11	CHAIRMAN STEIN: Okay. I just wanted to
12	make sure that's on the record.
13	Okay, we'll now go to cross-examination.
14	We'll go down the list to see if Cellco, Attorney
15	Schaefer, any
16	MR. SCHAEFER: No questions.
17	CHAIRMAN STEIN: Sarah Pierson.
18	MS. PIERSON: No questions, thank you.
19	CHAIRMAN STEIN: The Town of Branford,
20	Attorney Ainsworth?
21	MR. AINSWORTH: A couple yes.
22	CHAIRMAN STEIN: Please.
23	(pause)

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MR. AINSWORTH: Alright. Now has AT&T

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1 considered using lower profile flagpoles or shorter less 2 bulky facilities, but using more of them as opposed to 3 using a single facility that has a larger profile and 4 larger impact locally? 5 MR. WELLS: So instead of one location -instead of one tower, multiple -- multiple towers? 6 7 MR. AINSWORTH: Correct. In other words 8 using smaller -- more smaller towers to have less impact 9 as opposed to, you know, driving the height up with the 10 external mounts? 11 MR. WELLS: I think -- what interrogatory 12 response did we respond to that -- (pause) -- and I don't know the -- we -- we did answer that question in one of 13 14 the interrogatories, but basically you are -- the -- it 15 wouldn't necessarily change the diameter of the pole, and 16 now you have multiple locations as well, so -- and I'll 17 let Mr. Libertine speak to the visibility aspects of 18 that, but, you know, I would suspect that your overall 19 visibility is going to increase with multiple locations 20 because you still -- you still need to be above the tree 21 line, so it's not -- it's not like you use two shorter 22 towers and they both disappear. Do you want to add to 23 that?

MR. LIBERTINE: Yeah, I would concur,

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that's usually been the case. When we've tried looking at those scenarios, my experience has been that when we're talking about shorter towers, we're usually talking about probably in this case a minimum height of 60 feet to get above the trees, and probably a little bit taller than that. So for the sake of argument, if we're saying we replace a single tower of 103 feet versus two or three towers even at 65 or 70 feet, I think it stands to reason that the overall visibility footprint is going to be a large one, and probably impact more folks than the single tower, although obviously there's some site specific aspects, you know, that might change that variable, but I think generally speaking that that's going to be the case because again it's a matter of getting that facility and those antennas above the tree line. MR. WELLS: And just to add one thing

MR. WELLS: And just to add one thing further -- I mean siting towers in locations, as we've all seen, is not an -- it's not an easy process. And the shorter -- the shorter the tower, the more precise of a location it has to be. And so now you've got to find more precise locations in two spots to replace that one if you are able, you know. And this is all predicated on the assumption that you can replace one taller site with two shorter sites, which is not always the case. Again

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depending on the location, you could end up with more 1 2 than two sites to replace that one. 3 MR. AINSWORTH: Well there was a question 4 earlier that -- you know, that was to the effect that 130 5 feet wouldn't work at Branford, which is shorter than 6 what's proposed, but given that there was testimony at 7 the last hearing that you might need -- at either location, whichever one is chosen, you might need a site 8 9 in the future to cover future capacity and also some of 10 the gaps that exist on either side of the proposed 11 facility, wouldn't -- would you be able to use a 130-foot 12 tower at Branford for instance and then another facility later on that's much shorter to cover the infield? 13 14 MR. WELLS: Well just to clarify, when we 15 say 130 feet would not work, that's for the flush mount 16 or internal mount antennas, correct --17 MR. AINSWORTH: Yeah --18 MR. WELLS: -- that's -- that's what we 19 referred to when we answered that question --20 MR. AINSWORTH: Right --21 MR. WELLS: -- I just wanted to make sure that's clear. And (2), I'm not sure -- without specific 22 site locations that we could actually look at, I'm not 23 24 sure what the answer is to that question. You know,

- 1 conceptually is it possible? Yes. But I don't know, I'd
- 2 have to look at what locations are actually available,
- 3 leasable, and work for RF.
- 4 MR. AINSWORTH: That's always true though
- 5 when you're siting new facilities, that you -- you're
- 6 providing coverage in places that you don't currently
- 7 have it and you don't necessarily know where you're going
- 8 to get the next location?
- 9 MR. WELLS: It is always true. But as I
- 10 said earlier, it becomes -- the shorter the -- the
- 11 shorter the proposed site, then the more difficult the
- 12 siting is. The more precise it has to be --
- MR. LYNCH: Mr. Chairman --
- 14 MR. WELLS: -- and now you're even more
- 15 constrained with the typical constraints of can we zone
- 16 it there, can we find a landlord, and will it work for
- 17 RF.
- 18 MR. AINSWORTH: So that's more from a
- 19 property acquisition standpoint as opposed to visual
- 20 impact?
- 21 MR. WELLS: Property acquisition, ability
- 22 to zone it there -- I mean we can't -- you know, we can't
- 23 put it anywhere we want it, and the -- and does it work
- for RF. Again balancing those three constraints becomes

1 more difficult as you lower the height	1	more	difficult	as	vou	lower	the	height
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- 2 CHAIRMAN STEIN: We have a follow-up --
- 3 MR. AINSWORTH: Well when you say to zone
- 4 it there -- oh, I'm sorry --
- 5 MR. LYNCH: Mr. Ainsworth, if I may? Mr.
- 6 Wells, if you're looking for multiple sites or shorter
- 7 towers, you're not necessarily looking for just two
- 8 sites, you could be looking for three or four to cover
- 9 that area?
- 10 MR. WELLS: That's -- that's correct, yes.
- MR. LYNCH: Thank you. Thank you, Mr.
- 12 Ainsworth.
- MR. AINSWORTH: Okay.
- 14 (pause)
- 15 MR. AINSWORTH: I think that may be it --
- 16 (pause) -- I think that's it. Thank you.
- 17 CHAIRMAN STEIN: Thank you. Mr. Moreland?
- 18 Miss Whitehead?
- MS. WHITEHEAD: No questions, thank you.
- 20 CHAIRMAN STEIN: Mr. Berardi? Mr.
- 21 Williams?
- MR. WILLIAMS: No questions.
- 23 CHAIRMAN STEIN: Mr. Criscuolo?
- MR. CRISCUOLO: No questions.

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1	CHAIRMAN STEIN: Okay, thank you all.
2	Finally, does the Applicant have any rebuttal or comments
3	before we close the hearing?
4	MS. CHIOCCHIO: No, Chairman.
5	CHAIRMAN STEIN: Okay. Before closing
6	this hearing, the Connecticut Siting Council announces
7	that briefs and proposed findings of facts may be filed
8	with the Council by any party or intervenor no later than
9	November 1, 2012, this year. The submission of briefs or
10	proposed findings of fact are not required by the
11	Council, rather we leave it to the choice of the parties
12	and intervenors.
13	Anyone who has not become a party or
	Anyone who has not become a party or intervenor, but who desires to make his or her views
13	
13 14	intervenor, but who desires to make his or her views
13 14 15	intervenor, but who desires to make his or her views known to the Council, may file written statements with
13 14 15 16	intervenor, but who desires to make his or her views known to the Council, may file written statements with the Council within 30 days of the date hereof.
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13 14 15 16 17 18 19 20	intervenor, but who desires to make his or her views known to the Council, may file written statements with the Council within 30 days of the date hereof. The Council will issue draft findings of fact. And thereafter, parties and intervenors may identify any errors or inconsistencies inconsistencies between the Council's draft findings of fact and the
13 14 15 16 17 18 19 20 21	intervenor, but who desires to make his or her views known to the Council, may file written statements with the Council within 30 days of the date hereof. The Council will issue draft findings of fact. And thereafter, parties and intervenors may identify any errors or inconsistencies — inconsistencies between the Council's draft findings of fact and the record. However, no new information, no new evidence, or

1	hearing will be filed at the East Haven and Branford Town
2	Clerks' office.
3	And I hereby declare this hearing
4	adjourned and thank you all for your participation.
5	
6	(Whereupon, the hearing adjourned at 2:01
7	p.m.)

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