

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND CABLE**

CRC Communications LLC, d/b/a OTELCO,

Complainant,

v.

Massachusetts Electric Company d/b/a National
Grid, and Verizon New England Inc.,

Respondents.

D.T.C. 22-4

**PRE-FILED TESTIMONY OF
TOM PERRONE
ON BEHALF OF
CRC COMMUNICATIONS LLC, d/b/a OTELCO**

July 11, 2021

PUBLIC VERSION -- REDACTED

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I. INTRODUCTION

A. WITNESS IDENTIFICATION

Q. Please state your name and title and summarize your experience and responsibilities.

A. My Name is Tom Perrone. I am the Chief Operating officer of NetSpeed LLC. NetSpeed LLC, OTELCO and Finger Lakes Telecommunications Group are owned by Future Fiber LLC, and form the GoNetspeed family of companies. I have been COO of NetSpeed LLC for six years. I have worked in the competitive telecommunications industry for over 25 years. I have a Bachelor's of Science degree in Telecommunications from Rochester Institute of Technology. I have worked at competitive telecommunications providers, building fiber networks throughout the Northeast, Mid-Atlantic, and Midwest regions of the United States. Because of my experience at NetSpeed and other providers, I have experience building communications networks by attaching fiber to existing utility poles, and knowledge of pole attachment rules and standards, and their impact on fiber deployment speed and costs. I also have first-hand knowledge of GoNetspeed's network buildout in Connecticut, where opposite side construction is commonly used for building competitive broadband networks.

1 **B. PURPOSE OF TESTIMONY**

2 **Q. Please explain the purpose of your testimony.**

3 A. I submit this testimony in support of OTELCO's request for relief from the unreasonable,
4 discriminatory, and unjust attachment standards imposed by Verizon New England Inc.
5 ("Verizon") and Massachusetts Electric Company d/b/a National Grid ("National Grid"),
6 the respondents in this matter, particularly their prohibition of attachment on the field side
7 of poles (also called "Boxing").

8 **Q. Would you briefly summarize the areas upon which you are testifying?**

9 A. My testimony addresses the benefits of Boxing and its impact on broadband construction,
10 including the impact of allowing Boxing on broadband investment and service to
11 customers, based on my personal experience overseeing a major network buildout in
12 Connecticut, where Boxing is prevalent. I also respond to allegations made by Verizon
13 and National Grid that Boxing is unsafe, compromises the structural integrity of the pole,
14 and substantially complicates pole replacements, including in emergencies or as part of
15 storm restoration efforts. As I will explain in greater detail, in my experience Boxing can
16 be done safely, without compromising the pole, and does not lead to service outages, or
17 insurmountable replacement problems.

18 **III. TESTIMONY**

19 **Q. Please describe NetSpeed LLC.**

20 A. NetSpeed LLC is an Internet Service Provider formed in 2016. In 2017, NetSpeed
21 identified Connecticut as a promising expansion market. Particularly, we were aware from
22 prior experience that Connecticut permitted Boxing as an attachment method. In the

1 Connecticut market, NetSpeed has built approximately 1,700 miles of state-of-the-art fiber-
2 optic network providing broadband to the citizens, businesses, and communities of
3 Connecticut. NetSpeed plans to continue, and even accelerate, its construction in
4 Connecticut. Boxing has facilitated this construction in terms of cost-effectiveness and
5 pace by eliminating otherwise necessary make-ready work on poles required to build our
6 networks.

7 **Q. What is Boxing?**

8 A. Boxing is the practice of installing facilities on the field side of the pole, where most or all
9 of the other facilities are on the street side of that pole. Boxing is permitted by the National
10 Electrical Safety Code (“NESC”), and the practice is set forth in the BellCore Blue Book
11 Manual of Construction Procedures (i.e., the construction standards used by incumbent
12 local exchange carriers for placing communications facilities on or in supporting structures
13 owned by telephone companies). Boxing makes use of diagonal measurement to achieve
14 the recommended 12 inch separation between facilities required by NESC Rule 235H(1).
15 Boxing is especially attractive for building competitive broadband networks because poles
16 often have numerous existing facilities on the street side of the pole, but few if any on the
17 field side. Because available NESC-compliant space can be used on the field side, Boxing
18 dramatically reduces or eliminates the amount of work required to make space for new
19 attachments (“make-ready work”). This creates a “greenfield” opportunity on the field
20 side. Importantly, by effectively doubling the useable communications space on a given
21 pole, Boxing dramatically reduces the need for costly make-ready, including pole
22 replacements. The benefits of Boxing are thus clear: more efficient use of existing space

1 reduces make-ready costs, pole replacements, and early retirement of otherwise useful pole
2 assets.

3 **Q. What is your experience with the safety of Boxing?**

4 A. NetSpeed LLC has never had an incident involving its facilities in Connecticut attributable
5 to Boxing. I am unaware of any such incident involving another provider in Connecticut.
6 I am unaware of any outage caused by facilities being Boxed in Connecticut, and in our
7 experience, Boxing has not delayed restoration of service in emergency or storm events.

8 **Q. Does Boxing reduce the time required to build networks?**

9 A. Boxing can dramatically reduce the time between application for poles and service of
10 customers. In Connecticut, we are able to serve customers within three months of applying
11 for poles. Part of this speedy interval is because of regulatory timeframes and remedies.
12 But the amount of actual make-ready work required to be completed is dramatically lower
13 because Boxing eliminates most of it. Pole replacements to accommodate an attachment,
14 often the most time-consuming aspect of make-ready work, are quite rare in Connecticut.

15 **Q. What is the effect of restrictions on Boxing on broadband investment?**

16 Prohibiting Boxing significantly increases a provider's cost of constructing new broadband
17 networks, thereby reducing its broadband facilities' deployment. Further, increased make-
18 ready work delays the actual deployment of network, and delays service to the customer.
19 If service is delayed, revenue to the provider is also delayed. Improper prohibitions on
20 Boxing thereby create a double hazard: increased cost and delayed return on investment.
21 As the costs to provide broadband services increase, inversely, a provider's level of
22 investment in the state may decrease if it finds other more attractive, cost-effective

1 environments in which to offer services. If Verizon and National Grid are permitted to
2 deny boxing, broadband providers will invest dollars once earmarked for Massachusetts in
3 the other states where deployment costs are more favorable. In addition, the imposition of
4 such barriers to entry has detrimental effects beyond limiting facility deployment. As its
5 costs to provide service in a market increase, by having to bear unnecessary high make-
6 ready costs, consumer prices will be impacted. For example, a provider may be forced to
7 limit the number and duration of price promotions to the detriment of the consumer. Even
8 where broadband is currently available, price competition, an undeniable benefit to the
9 consumer, will be diminished.

10 Both private and public investment are enfeebled by unreasonable Boxing restrictions, and
11 the resulting stunted networks will impact fewer residents and businesses than otherwise
12 possible with Boxing. Any federal or state funds available for broadband deployment will
13 be substantially nullified as a larger portion of those funds would have to be applied to
14 needless and costly pole replacements and other make-ready work.

15 While Verizon and National Grid impose their unreasonable restrictions on Boxing in
16 Massachusetts, Connecticut and other states recognize the benefits of less expensive build
17 costs. States are in competition for investment dollars, and the policies of those states can
18 dictate the beneficiary.

19 **Q. How does the make-ready cost per mile in the OTELCO applications compare to the**
20 **same metric typical in Connecticut?**

21 **A. In Connecticut, our average cost per mile for make-ready, for power and communications**
22 **make-ready work, is [BEGIN HIGHLY SENSITIVE CONFIDENTIAL**
23 **INFORMATION] [REDACTED] [END HIGHLY SENSITIVE CONFIDENTIAL**

1 **INFORMATION]** By comparison, the average make-ready cost per mile for the
2 OTELCO applications in Massachusetts is nearly \$70,000. As a result, Connecticut is a
3 more attractive market for building and operating broadband networks, and private and
4 public investment dollars invested there are more effective in serving more customers.

5 **Q. On Page 25 of its Response, National Grid Asserts that “OTELCO’s request [for**
6 **Boxing] would not only complicate and prolong the process of pole replacement, it**
7 **would also lead to additional double pole complaints from local communities.” Do**
8 **you agree?**

9 **A.** I disagree. National Grid has this exactly backwards. Limiting boxing drastically increases
10 the number of double pole situations, and exacerbates make-ready backlogs. By reducing
11 the necessity of pole replacements, Boxing reduces the number of “double wood” poles,
12 where a replaced pole persists for an extended period of time while existing attachers
13 transfer their facilities to the new pole. Limiting Boxing will frequently trigger the need
14 for a new, taller utility pole. I am aware that the Respondents’ make-ready determinations
15 for OTELCO’s Belchertown applications call for 256 pole replacements (out of 1,606 total
16 poles applied for in that town). If Boxing were permitted, a large majority of these pole
17 replacements would be avoided, thus eliminating numerous persistent, unsightly, and
18 potentially unsafe double poles. Double poles remain a difficult, thorny problem in
19 search of a comprehensive solution. Needlessly adding double poles to the current
20 backlogged inventory is certainly not part of the solution, however. In Connecticut, pole
21 owners are capable of replacing Boxed poles. Any incremental increase in pole
22 replacement difficulty is certainly offset by the dramatic decrease in the number of poles
23 required for early replacement where Boxing is utilized.

1 **Q. Does Boxing save money for parties other than the new attacher?**

2 A. If there is an existing NESC violation caused by a pole owner, current NESC rules allow
3 for a new attacher to attach to the field-side, in an NESC compliant manner, without the
4 pole owner being required to correct its NESC violation. If a new attachment may be made
5 that is, in itself, compliant with the NESC, the NESC does not require immediate correction
6 of other existing noncompliance before attachment under most circumstances. NESC Rule
7 013B(4) provides:

8 [I]f adding a new item, or replacing or rearranging existing items
9 would not, in itself, either (1) create a structural, clearance, or
10 grounding nonconformance, or (2) worsen an existing non-
11 conformance, then the addition, replacement, or alteration may be
12 performed prior to correcting existing non-compliance items.¹

13 Accordingly, if there is compliant open space on a pole, but one or more facilities are out
14 of compliance, the new facility may be placed, and the NESC does not require the new
15 attacher, or prior attachers, or the pole owners, to pay to immediately bring the pole into
16 compliance. Usually, the NESC-compliant space for attachment on a pole containing a
17 violation will be on the field side, allowing the use of Boxing to attach without requiring
18 costly remedial work. That is not to say that existing non-compliance should not be
19 corrected. The NESC Rule 214A4 requires defects discovered to be not in compliance with
20 the rules that are not immediately threatening to life or property to be recorded and
21 scheduled for correction. NESC Rule 214A requires defects which could endanger life or
22 property to be promptly repaired.

¹ See also 47 CFR 1.1411(c)(2): “A utility may not deny the new attacher pole access based on a preexisting violation not caused by any prior attachments of the new attacher.”

1 **IV. CONCLUSION**

2 **Q. Do you swear that your testimony is true and accurate to the best of your knowledge?**

3 **A. Yes.**

4 **Q. Does this conclude your pre-filed testimony?**

5 **A. Yes.**

CERTIFICATE OF SERVICE

I hereby certify that on this 11th day of July 2022, I served the foregoing document upon each person designated by the official service list compiled by the Secretary in this proceeding listed below:

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