STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

| BLUE RIDGE ELECTRIC |) |
|------------------------|--------------------------|
| MEMBERSHIP CORPORATION |) |
| Petitioner, |) |
| |) |
| v. | DOCKET NO. EC-23, SUB 50 |
| CHARTER COMMUNICATIONS |) |
| PROPERTIES LLC, |) |
| |) |
| Respondent. |) |

RESPONSIVE TESTIMONY

OF

MICHEAL MULLINS

Submitted on Behalf of

Charter Communications Properties, LLC

October 30, 2017

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| T | INTRODUCTION | Т |
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| | INTRODUCTION | 4 |

- 2 Q. Please state your name, business address, and occupation.
- 3 My name is Micheal Mullins. I am currently the Construction Supervisor for A.
- 4 Charter Communications Properties, LLC ("Charter") for the Western North
- 5 Carolina Market Area. My business address is 220 McLean Drive, Lenoir, North
- 6 Carolina 28645.
- 7 On whose behalf is this testimony being presented? Q.
- 8 A. My testimony is offered on behalf of Charter.
- 9 Have you ever submitted testimony in a North Carolina Utilities Commission Q. 10 proceeding?
- 11 No. A.

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- Please describe your professional experience. 12 Q.
- 13 I have worked in the cable industry for 29 years. I have worked out of the Lenoir 7A.
- 14 office for Charter and its predecessors the entire time. I started out as an installer
- 15 and have worked my way up into supervisory roles. I have been in my current
- position for the last 11 years. I currently supervise construction and maintenance 16
- 17 activities handled by Charter's construction group in the Western North Carolina
- 18 Market Area, which includes the service area of Blue Ridge Electric Membership
- 19 Corporation ("Blue Ridge" or the "Cooperative").
- 20 Q. What is the purpose of your testimony?
- 21 I am submitting testimony in this proceeding to address a number of factual issues A.
- 22 that have bearing on the current dispute between Charter and Blue Ridge related
- 23 to pole attachment rates, terms, and conditions. My testimony also addresses the

| 1 | testimony filed by Lee Layton, Gregory Booth, and Wil Arnett on behalf of Blue |
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| 2 | Ridge. |

Q. Please summarize your testimony.

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My testimony describes the types of attachments Charter makes on Blue Ridge's poles, and how those attachments compare to attachments made by the Cooperative and other users of the poles. Less than one-third of the roughly 86,500 third-party attachments to Blue Ridge's poles are made by Charter, with the remaining attachments made by telephone companies (AT&T, CenturyLink, Skyline Telephone Cooperative, and Wilkes Telephone Membership Cooperative) or other communications companies such as Morris Broadband and Charter's competitor Skybest, an affiliate of Skyline. Charter makes its attachments under a pole attachment agreement entered into in 2008 and attached as MM Exhibit ("Ex.") 1 ("2008 agreement"). The 2008 agreement is similar to an agreement entered into by the parties in 2003. I understand that Charter had very little leverage in either the 2003 or the 2008 negotiations because, at the time, there was no law regulating pole attachment agreements between cable operators and electric cooperatives, and Charter already had extensive aerial facilities installed on Blue Ridge's poles that would be prohibitively expensive to move underground. In other words, Charter was essentially stuck with whatever terms Blue Ridge decided to impose.

Regarding the physical attachments, Blue Ridge uses as much as 8.5 feet of space (or more) at the top of the pole for its facilities. The Cooperative attaches a variety of facilities in that space and elsewhere on the pole, ranging from conductors, cross-arms, transformers, streetlights, fiber optic wires, wireless

antennae and associated facilities, and other equipment. Blue Ridge uses the socalled "safety" space between its conductors and Charter's facilities for the installation of streetlights, fiber optic wires, and other equipment to generate revenue or for other purposes.

Charter attaches below Blue Ridge's conductors, using a single throughbolt and bracket to support its communications wires. While Charter's bolt uses only about an inch of space, industry standard practices assign cable operators like Charter one foot of space on the pole. Blue Ridge licenses Charter to use "surplus" space on its poles—i.e., space that is not otherwise actively in use by the Cooperative or the incumbent telephone company. Where there is not enough space on a pole to accommodate Charter's attachment, Charter pays to create more space, either by paying to rearrange the existing facilities or to install a larger or stronger pole. Even when Charter pays for a larger pole, Blue Ridge continues to own the pole, and Charter still pays an annual attachment fee to attach to it. Charter does not dispute these aspects of the parties' relationship.

The telephone companies typically attach their larger and often heavier bundles of wires below Charter's attachment. The agreements between the telephone companies and Blue Ridge assign them two feet of space on the pole. The other communications companies typically attach fiber either above or below Charter's attachment. Blue Ridge, the telephone companies, Charter, and other communications attachers all run risers down the pole where they transition their aerial network underground. These risers do not foreclose the use of the space on the pole for the attachment of horizontal wires or other aerial facilities.

My testimony also explains how the Cooperative has systematically singled Charter out for different, more burdensome treatment as compared to the other attachers on its poles. Blue Ridge charges Charter the highest annual pole attachment rate of any third-party attacher. The annual rate Blue Ridge has imposed on Charter is almost double the annual pole attachment rate it has charged Charter's direct competitor Skybest. Blue Ridge also imposes more burdensome terms and conditions of attachment on Charter. For example, while virtually every other attacher is required to allow only 40 inches of separation from Blue Ridge's neutral, Charter must allow 72 inches of separation. Charter is only one of two attachers required to obtain certifications from a Professional Engineer for every attachment. The other is Morris Broadband (who has only a small number of attachments), but Blue Ridge apparently is not enforcing that requirement on it. Charter is one of the only attachers required to submit a permit prior to overlashing, although overlashing by third-party communications, including phone companies, is common. And Charter's current agreement, entered into in 2008 and attached as MM Exhibit ("Ex.") 1, is the only agreement Blue Ridge is renegotiating. In its negotiations with Charter, Blue Ridge has sought to impose many of the same burdensome terms and conditions Charter was forced to accept in the 2008 agreement.

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I understand that Blue Ridge asserts that it is treating Charter this way because of the results of a 2015-2016 pole attachment count and inspection that Blue Ridge conducted. But that explanation does not make sense. While Blue Ridge's audit found more *attachments* than was reflected in the billing records, it

actually found fewer *poles*. The 2008 agreement requires an annual rate *per pole*, not per attachment, meaning the audit actually revealed that Blue Ridge has been overbilling Charter for years—a fact Blue Ridge anticipated before the audit and confirmed after it. Yet, rather than fix its overbilling, Blue Ridge doubled-down on it by invoicing Charter for the higher attachment count and demanding that Charter pay back-rent on those attachments. (And Blue Ridge never told Charter that it had found that Charter's pole count was actually much lower than the attachment count). Blue Ridge's audit also found that other attaching entities had purported unauthorized attachments. And it found that all entities, including Blue Ridge itself, have compliance issues. Some entities had as many or more compliance issues as Charter, and several had higher rates of noncompliance than Charter. But Blue Ridge is not renegotiating its agreements with those entities and apparently has no intention of doing so. This suggests the only reason Blue Ridge is singling Charter out for different treatment is because Charter has challenged the annual rate Blue Ridge wants to charge it.

Finally, my testimony also addresses a number of false accusations made against Charter related to safety and our construction practices. I also discuss the results of my investigation into a number of poles Blue Ridge says pose "immediate hazards to public safety." It is clear that Blue Ridge created many of these conditions—in some cases more than a decade ago—and apparently has not considered them imminent threats until now, and does so only because it is convenient for purposes of this litigation.

II. CHARTER'S ATTACHMENTS TO BLUE RIDGE POLES

| 2 Q. Does Charter make attachments to Blue Ridg | age's p | otes : |
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A.

- 3 Yes. According to a recent audit conducted by Blue Ridge, Charter has 27,674 A. 4 attachments to 24,888 poles owned by Blue Ridge. Charter makes its attachments 5 to these "mainline" and "secondary" poles pursuant to the parties' 2008 6 agreement. Charter and Blue Ridge executed the 2008 agreement prior to the 7 enactment of G.S. § 62-350. I am not a lawyer, but as I understand it, no state or 8 federal law at the time of the 2008 agreement (or the 2003 agreement preceding 9 it) regulated the rates, terms, and conditions Blue Ridge could require of Charter 10 for making attachments to its poles. As a result, Charter had little choice but to 11 accept the rates, terms, and conditions Blue Ridge imposed.
- 12 Q. Why do you say Charter had little choice but to accept Blue Ridge's rates and terms?
 - Due to economic, aesthetic, legal, regulatory, and other factors, Charter often has no practical alternative to using Blue Ridge's poles to build its cable system.

 Also, it is important to remember that Charter has had attachments to Blue Ridge's poles for decades. When I started working in this area 29 years ago, most of Charter's current aerial plant was already in place. These facilities were installed at a time when Blue Ridge charged lower rates, imposed less stringent requirements, and had an informal and cooperative approach to pole attachment issues. So when Blue Ridge began imposing higher rates and more burdensome terms in 2003 and 2008, Charter had to accept them if it wanted to remain on Blue Ridge's poles. Moving Charter's extensive existing aerial plant underground would have been and remains prohibitively expensive. Charter currently budgets

| \$45,109.40 per mile for underground construction, compared to \$26,432.37 for |
|--|
| aerial construction. If we estimate Blue Ridge has 20 poles per mile (based on the |
| average span lengths calculated by Mr. Arnett), then Charter's aerial network on |
| 24,888 Blue Ridge poles spans about 1,244 miles. Moving 1,244 miles of aerial |
| plant underground would cost more than \$56 million, not counting the cost to |
| wreck out the aerial facilities or the expense of obtaining the necessary regulatory |
| approvals, permits, and easements associated with undergrounding work. |

A.

8 Q. If undergrounding is so expensive, why does Charter build underground at all?

- Sometimes Charter has no choice. For example, a lot of new developments are built with all utilities underground—electric, telephone, and cable. In these areas, there are no poles and Charter must go underground. But it is easier to build underground in a new development than it is go underground in an existing development because you can often do all your work before landscaping is done and before the residents move in. Other times, if the make-ready is too expensive or the current pole configuration is unworkable, Charter will build underground for a few spans. Even with new developments being built mostly underground, about 75% of Charter's existing plant in the counties that include Blue Ridge's area is aerial.
- 19 Q. Mr. Layton said that Charter serves areas with an average of 53 homes per mile in the Blue Ridge territory, is that accurate?
- A. No. Charter's discovery response said that Charter serves an average of 53 homes

 per mile in the areas that *include* Blue Ridge's service territory. These areas also

 include the more densely populated areas (like Boone and Hickory) that Blue

 Ridge does not serve. These dense areas inflate the average, particularly a college

| 1 | | town like Boone that has lots of apartments and multi-family housing units. |
|--------|----|---|
| 2 | | Charter was not able to isolate its homes passed in Blue Ridge's territory, but I am |
| 3 | | confident it is much lower than 53 homes per mile. And I know that Charter has |
| 4 | | extended service to areas served by Blue Ridge that have far fewer than 53 homes |
| 5 | | per mile. |
| 6 7 | Q. | You mentioned that Charter makes attachments to mainline and secondary poles, what is the difference between the two types of poles? |
| 8 | | |
| - | A. | A mainline pole refers to a pole along the main distribution route of a network. |
| 9 | A. | A mainline pole refers to a pole along the main distribution route of a network. When you travel along a road with a line of poles installed about every 200 feet or |
| | A. | |
| 9 | A. | When you travel along a road with a line of poles installed about every 200 feet or |

Q. Can you describe Charter's process for making new mainline attachments to Blue Ridge's poles?

Yes. Charter's construction coordinators pre-inspect and collect information

provide service to a particular customer's location.

A.

about all poles and spans involved in any new aerial construction project.

Charter's construction coordinators either call or email Blue Ridge's technicians to inform them where Charter proposes to attach, and to give them any information they request (such as span lengths, current facilities on the pole, and design maps). The Blue Ridge technicians assess Charter's request and respond informally either by approving the attachments, or by identifying necessary "make-ready" work and providing an estimated cost for it. Make-ready work is work necessary to accommodate Charter's requested attachments, such as the rearrangement of existing facilities on the pole or the installation of a taller or stronger pole. When Charter gets a make-ready estimate, it either approves the

estimate, in which case Blue Ridge does the make-ready work and Charter pays for it, or Charter chooses another approach that avoids the need for make-ready work. Alternative approaches could include rerouting to avoid the problem pole or going underground.

5 Q. Is that the process set out in the 2008 agreement?

A.

A.

No. The 2008 agreement outlines a more formal process for making new mainline attachments to Blue Ridge's poles. Charter would be willing to follow an approach like the one described in the 2008 agreement for mainline attachments, if Blue Ridge required it, because we follow similar formal procedures with other pole owners. But Blue Ridge has never insisted that Charter follow this approach, and its staking technicians have instead asked Charter to follow the more informal approach I described above. The informal approach has worked well because Charter does not make that many new mainline attachments and Blue Ridge's technicians have been very responsive.

Q. Has that process changed over the years?

Yes. Charter's construction team has long had very good working relationships with their counterparts at Blue Ridge. Charter's team has long followed the instructions given by Blue Ridge's technicians for making new attachments—whether that is a phone call, an email, or a formal application. When I was a construction manager about 11 or 12 years ago, the Blue Ridge technician my team worked with asked for formal applications, so that is what we gave him. But the current Blue Ridge technicians have asked us to follow more informal approaches.

| O. | How does | Charter | construct its | mainline | attachmen | ts? |
|-------------|----------|----------|---------------|----------|--------------|-----|
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Safety Code ("NESC").

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- A. Charter attaches its steel support strand to a Blue Ridge pole using a through-bolt in the pole. Charter then lashes its communications wire to this support strand.

 We currently space our attachment 72 inches below Blue Ridge's neutral wire, based on the standards in the 2008 agreement, and typically between 18 and 21 feet from "grade" (or ground level). Charter only uses space on the pole that is not otherwise used by Blue Ridge or another joint user, like a telephone company, and where it can make its attachment in compliance with the National Electrical
- 10 Q. Are all of Charter's attachments on Blue Ridge's poles spaced 72 inches below the neutral?
 - No. It is important to remember that Charter's predecessors built most of its aerial plant in this area decades ago, long before Blue Ridge adopted the 72 inch separation requirement it currently requires of Charter. Previously, Blue Ridge required 40 inches below the neutral and 30 inches below a transformer, consistent with the applicable safety codes. Most of Charter's existing aerial plant was built to these specifications. This is why the standards in both the 2003 and 2008 agreements specify that attachments existing on the commencement date of the agreement do not have to comply with the 72 inch separation requirement. I also note that the current standards allow us to place our attachment 40 inches below Blue Ridge's neutral with the Cooperative's permission, which we will seek if the 72 inch requirement would result in a costly pole replacement. Blue Ridge's technicians have typically worked with us to accommodate these situations.

| 2 | Q. | top of every pole for Blue Ridge's exclusive use? |
|--------|----|---|
| 3 | A. | No. Blue Ridge's standards have specified only the separation between Charter's |
| 4 | | facilities and Blue Ridge's facilities, typically either the neutral or the bottom of a |
| 5 | | transformer. |
| 6 7 | Q. | What happens if there is not any surplus space on the pole, or there is not enough space to accommodate Charter's attachment? |
| 8 | A. | Charter must pay to create space to accommodate its attachment or its attachment |
| 9 | | is not permitted. This could mean paying to rearrange the existing facilities on |
| 10 | | the pole. Or it could require Charter to pay for a taller or stronger pole, including |
| 11 | | all of the work to install the pole and transfer the existing facilities to it. |
| 12 | Q. | Does that mean Charter owns the new pole? |
| 13 | A. | No. Although Charter pays to replace a pole with a taller pole if necessary to |
| 14 | | safely accommodate its attachments, the pole will still belong to Blue Ridge. |
| 15 | | And, even though Charter bought the pole, Charter still pays an annual attachment |
| 16 | | fee for its attachment to the pole. |
| 17 | Q. | What happens if Blue Ridge needs space on a pole to which Charter is attached? |
| 18 | A. | Under the parties' 2008 agreement, if Charter is already occupying the pole and |
| 19 | | Blue Ridge determines it needs additional space for its electric service, we are |
| 20 | | required to rearrange our facilities to accommodate the change at our own |
| 21 | | expense within a time period prescribed by the Cooperative. MM Ex. 1. |
| 22 | Q. | Are these obligations in dispute? |
| 23 | A. | No. Charter remains willing to accept similar requirements in a new pole |
| 24 | | attachment agreement, and Nestor Martin has proposed language to address these |
| 25 | | obligations. |

| O. Does | s Charter overlas | sh its existing | strand with | additional | communications | wires |
|---------|-------------------|-----------------|-------------|------------|----------------|-------|
|---------|-------------------|-----------------|-------------|------------|----------------|-------|

- 2 A. Yes. As described by Mr. Martin, overlashing is an efficient and cost-effective
- 3 way for Charter to increase its network capacity by adding a new fiber optic or
- 4 coaxial cable onto the steel strand. Overlashing is often necessary to serve
- 5 commercial customers who require robust data connections. Overlashed fiber
- optic and coaxial cables are lightweight and about a half-inch in diameter. Often
- 7 Charter will swap out an existing coaxial or fiber optic cable with a new one that
- 8 has increased capacity, or where the old cable is no longer functioning properly.

9 Q. Does Charter currently seek permission from or notify Blue Ridge prior to overlashing its existing wires?

- 11 A. We do not notify Blue Ridge where it is part of our maintenance, for example,
- where we swap out an existing cable with a new one. We do contact Blue
- Ridge's staking technicians prior to adding an additional wire to the bundle.

14 Q. Has that process worked for Charter and Blue Ridge?

- 15 A. It has generally worked well because Blue Ridge's staking technicians typically
- respond very quickly to our requests. If they insisted that we follow the full
- 17 permitting process specified in the 2008 agreement, however, the process would
- significantly delay and inhibit our ability to sign up and serve new customers—
- 19 particularly new commercial customers.

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20 Q. Why does Charter make attachments to secondary poles?

- A. As I mentioned before, a secondary pole is usually placed off the mainline to
- allow clearance across a street. Charter will attach to these poles to extend a
- service line to a particular customer's location.

| 1 | Q. | Is the process for making attachments to secondary poles different from |
|---|----|---|
| 2 | | mainline poles and, if so, why is it different? |

- 3 A. It is different because the secondary pole attachment is made to provide a 4 particular customer service, and is performed by Charter's installation group. 5 Like Blue Ridge, it is important for Charter to serve customers quickly when they request service. In fact, under FCC customer service rules, Charter is obligated to 6 7 provide service within seven days of a customer's request. These operational 8 considerations explain why Charter cannot agree to submit permit applications for 9 secondary pole attachments—they could not be processed and approved in only 10 seven days.
- 11 Q. What would Charter propose instead of a permit process?
- 12 A. The 2008 agreement includes an after-the-fact notice requirement from secondary 13 pole attachments that Charter would agree to follow going forward. While 14 Charter has had difficulty tracking its secondary pole attachments in the past, it is 15 open to exploring approaches with Blue Ridge that would solve this problem. 16 One option Charter discussed with Blue Ridge, and Blue Ridge at one point 17 accepted, was to capture these attachments in the periodic audits, with the 18 understanding that Charter would pay appropriate back rent on them. Another 19 option would be for Charter to estimate the number of new drop attachments on a 20 monthly basis, with a reconciliation in the next audit.

Q. What is a riser?

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A. Risers are used to transition aerial facilities to underground. For example, there are places where all of the aerial facilities attached by Blue Ridge, Charter, and the telephone companies may need to go underground to traverse a major

| 1 | highway. In those cases, all of the parties will bring their facilities down the pole |
|---|---|
| 2 | and underground using a vertical "riser" and guards affixed to the pole. The |
| 3 | facilities then run underground to the next pole, where they go from the ground up |
| 4 | to the space that is usable on the pole for horizontal attachments. The companies |
| 5 | also use risers where they serve customers using underground drops. |

6 Q. If Charter uses a riser, does that prevent other parties from using space on the pole?

A.

- No. Charter often "follows" the power or the telephone company. Meaning that if those companies are going underground, Charter will go underground as well. This also means all of the parties on the pole will affix risers next to one another. Charter's use of a riser thus does not prevent other entities from using risers as well. Charter's riser also does not prevent the attachment of horizontal conductors in the usable space at the top of the pole. Charter's risers, for example, will commonly extend past the horizontal attachments made by the telephone companies. In the same way, the Cooperative's risers will often extend past the horizontal attachments made by Charter and the telephone companies. Whether used by Charter or the Cooperative, these risers in no way limit the use of the pole for other horizontal attachments.
- Q. Does Charter make attachments to poles owned by other entities in the same areas where it makes attachments to Blue Ridge's poles?
- 21 A. Yes. Charter also attaches to poles owned by Duke Energy, New River Power &
 22 Light, AT&T, CenturyLink, and others. Poles owned by AT&T, CenturyLink,
 23 and other telephone companies are interspersed with the Cooperative's poles, as
 24 they have each agreed to use the others' poles. Other electric providers, like Duke
 25 Energy and New River Power & Light, have service areas that are adjacent to the

|) | Q. | Are Charter's attachments to poles owned by Blue Ridge any different than |
|---|----|--|
| 9 | | or the other electric companies. |
| 3 | | by the Cooperative look the same as the poles owned by the telephone companies |
| 7 | | pole identification tags to determine who owns the pole, because the poles owned |
| 5 | | including Blue Ridge, are very similar. In the field, we often have to look at the |
| 5 | | line runs down a street or highway. The poles used by each of these companies, |
| 4 | | between poles owned by Duke, AT&T, CenturyLink, and the Cooperative as its |
| 3 | | street. It is not unusual for Charter's attachments to switch back and forth |
| 2 | | poles owned by these companies and the Cooperative's poles along the same |
| 1 | | Cooperative's service area. Often, Charter's mainline attachments will touch |

- 10 Q. Are Charter's attachments to poles owned by Blue Ridge any different than its attachments to poles owned by these other companies?
- 12 A. No. Charter's physical attachments—i.e., the through-bolt, strand, brackets,
 13 risers, and wires—are the same no matter whose pole they are on. The only thing
 14 that varies are the processes required by each pole owner to obtain permission for
 15 an attachment and, in the case of Blue Ridge, its atypical separation requirements.
- 16 Q. Have Charter and Blue Ridge attempted to negotiate a new pole agreement?
- 17 A. Yes. When Blue Ridge approached Charter about a new agreement in 2014, it
 18 was the first opportunity Charter had to negotiate a new agreement with Blue
 19 Ridge since the General Assembly enacted Section 62-350. *See* MM Ex. 2.
 20 Charter had long believed the annual rate Blue Ridge charged was excessive, but
 21 until Section 62-350, Charter had little choice but to pay it.
- 22 Q. What were Charter's goals in the negotiations?
- A. Agreeing upon a just and reasonable rate was one of Charter's primary goals in the negotiation. There were also a number of burdensome and unworkable terms

| 1 | | in the 2008 agreement that Charter sought to negotiate under the new law. |
|----------|----|--|
| 2 | | Among them were terms that required Charter to obtain a Professional Engineer |
| 3 | | certification for new attachments, and to follow an extended permitting process |
| 4 | | for overlashing. Charter also hoped to work with Blue Ridge to find a workable |
| 5 | | solution for tracking attachments to secondary poles. Charter was (and remains) |
| 6 | | willing to accept industry-standard terms regarding the process for making new |
| 7 | | attachments, paying make-ready fees, paying its share of audits and inspections, |
| 8 | | and allowing Blue Ridge to recover space on its poles for its core electric service. |
| 9 | Q. | How did the negotiations unfold? |
| 10 | A. | Charter sent a redline of the proposed Blue Ridge agreement in May 2015. MM |
| 11 | | Ex. 3. Shortly after receiving Charter's proposed redline agreement, Blue Ridge |
| 12 | | suggested we suspend negotiations pending the legislature's review of Section 62- |
| 13 | | 350 in 2015. MM Ex. 4. The discussions resumed later in 2015 when Blue Ridge |
| 14 | | sent a revised agreement in October. The revised agreement contained a number |
| 15 | | of changes. In addition to lowering the annual pole attachment rate to \$18 per |
| 16 | | year, per attachment, and among other changes, Blue Ridge proposed to: |
| 17 | | • eliminate its proposal for an unauthorized attachment daily penalty; |
| 18 | | • allow the use of correction plans to remedy non-compliant attachments; |
| 19 20 | | require Charter to pay five years back rent and apply for a permit for any attachments found in an initial inventory that lacked a permit. |
| 21 | | MM Ex. 5. Blue Ridge also supplied a formula and calculation showing how it |
| 22 | | derived its \$18 rate. MM Confidential Ex. 6. |

| Q. | What | happened | next? |
|----|------|----------|-------|
|----|------|----------|-------|

A.

- A. Charter still had concerns about the rate and the operational implications of some
 of Blue Ridge's proposed terms and conditions. Charter and Blue Ridge had
 additional discussions in late 2015, including a face-to-face meeting. Blue Ridge
 sent an additional redlined agreement in December 2015. MM Ex. 7. In it, Blue
 Ridge proposed to:
 - allow an authorized Charter signature for the engineering certification, pending a discussion about a state statute;
 - allow Charter to attach to secondary poles without notice or a permit, provided those attachments will be picked up in the next inventory and Charter will pay five years back rent on those secondary attachments; and
 - require Charter to pay five years back rent for unauthorized attachments, with no additional penalty.

Charter sent a redline back to Blue Ridge in 2016, noting, among other things, that the rate was to be determined based on further discussions. Blue Ridge then filed this lawsuit. I understand Blue Ridge now asserts that the terms it proposed in our negotiations are unreasonable.

III. OTHER ATTACHMENTS TO BLUE RIDGE POLES

19 Q. In addition to Charter, who else is attached to the Cooperative's poles?

Blue Ridge of course attaches its own electrical conductors and other equipment to its poles. Telephone companies, including AT&T, CenturyLink, Skyline Telephone Cooperative, and Wilkes Telephone Membership Cooperative, also attach to Blue Ridge's poles. Other third parties also attach to the Cooperative's poles, including other cable and fiber-optic companies like Skybest, ACTV, and Morris Broadband. Other entities also maintain a handful of attachments to Blue Ridge's poles, including Duke Energy Carolina, Granite Falls Electric

| 1 | | Department, New River Power & Light, and the North Carolina Department of |
|----------|----|--|
| 2 | | Transportation. |
| 3 | Q. | What kinds of attachments does Blue Ridge make? |
| 4 | A. | In addition to its electrical conductors, Blue Ridge also attaches cross-arms, |
| 5 | | transformers, streetlights, floodlights, its own fiber-optic wires, wireless antennae, |
| 6 | | risers, meters, and other equipment to its poles. |
| 7 8 | Q. | How do the attachments made by Blue Ridge compare to the attachments made by Charter? |
| 9 | A. | Obviously Blue Ridge makes many more attachments on a pole than Charter. |
| 10 | | Blue Ridge attaches multiple electrical conductors, neutrals, and other wires |
| 11 | | necessary for the provision of its utility service. Sometimes it will install cross- |
| 12 | | arms at the top of the pole to accommodate its facilities. Some poles contain one |
| 13 | | or more transformers, which step down the voltage for use by a particular |
| 14 | | customer. Some poles also have streetlights and floodlights owned by Blue |
| 15 | | Ridge. Blue Ridge also owns its own communications system consisting of fiber- |
| 16 | | optic wires, wireless facilities, and associated equipment attached to its poles. |
| 17 | Q. | What kinds of attachments do the telephone companies make? |
| 18 | A. | The telephone companies attach fiber-optic wires and copper bundles to Blue |
| 19 | | Ridge's poles. |
| 20 21 | Q. | How do the attachments made by the telephone companies compare to the attachments made by Charter? |
| 22 | A. | In many cases, the telephone companies will have two attachments to the pole, as |
| 23 | | opposed to Charter's single attachment. Also, the copper bundles attached by the |
| 24 | | telephone companies are typically much larger and heavier than the fiber-optic |
| 25 | | and coaxial cables attached by Charter. The telephone companies' fiber-optic |

| 1 | | cables, which are often affixed using a separate attachment placed above its |
|--------|----|---|
| 2 | | copper bundles, are similar to the fiber-optic wires attached by Charter. |
| 3 | Q. | Do these other entities all have pole attachment agreements with Blue Ridge? |
| 4 | A. | Many do, but not all of them. For example, I understand from Blue Ridge that it |
| 5 | | does not have an agreement with New River Power & Light because that utility |
| 6 | | has a minimal number of attachments on Blue Ridge poles (only 134). |
| 7 8 | Q. | Are Blue Ridge's agreements with these other entities similar to its 2008 agreement with Charter? |
| 9 | A. | Not at all. In fact, most are very different. Most significant, Charter's annual |
| 10 | | pole attachment rate is the highest rate paid by any other entity that attaches to |
| 11 | | Blue Ridge's poles. A document produced by Blue Ridge in discovery shows that |
| 12 | | Charter's annual rate is nearly double what another cable operator, ACTV, pays |
| 13 | | (identified as Ashe Cable and Alleghany Cable on the document), and \$9 more |
| 14 | | than what Charter's direct competitor, Skybest, pays. See MM Confidential Ex. 8 |
| 15 | | at BREMC-014279. Charter's rate is also higher than any rate paid by the |
| 16 | | telephone companies. |
| 17 | Q. | What services does Skybest offer? |
| 18 | A. | Skybest is an affiliate of Skyline. It offers video, phone, and Internet services in |
| 19 | | direct competition with Charter in Blue Ridge's service area. |
| 20 | Q. | What else is different? |
| 21 | A. | The agreements with the telephone companies give them more rights than |

responsibility to build its system to accommodate Charter's facilities. In fact,

Charter must pay to create space on Blue Ridge's poles and, if Blue Ridge needs

Charter. In Charter's agreement, Blue Ridge specifically disclaims any

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| 1 | | space for its electric service after Charter is attached, Blue Ridge can require |
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| 2 | | Charter to get off the pole or pay for a taller pole. All of the telephone companies |
| 3 | | (AT&T, CenturyLink, Skyline, and Wilkes) are guaranteed ***BEGIN |
| 4 | | CONFIDENTIAL*** |
| | | |
| | | ***END CONFIDENTIAL*** See Confidential Exs. 9 (AT&T); |
| 7 | | 10 (CenturyLink); 11 (Skyline); 12 (Wilkes). Additionally, in several |
| 8 | | agreements, Blue Ridge must pay for ***BEGIN CONFIDENTIAL*** |
| | | ***END |
| 10 | | CONFIDENTIAL*** See Confidential Exs. 9 (AT&T); 10 (CenturyLink); 12 |
| 11 | | (Wilkes). |
| 12 13 | Q. | Do you think the telephone companies should be treated differently than Charter because they are joint users? |
| 14 | A. | No. Blue Ridge's own records show that it maintains very few attachments on |
| 15 | | poles owned by the telephone companies. For example, Blue Ridge has only 135 |
| 16 | | attachments to Skyline's poles (compared to 27,081 Skyline attachments to Blue |
| 17 | | Ridge poles) and only five attachments to poles owned by Wilkes (compared to |
| 18 | | 959 Wilkes attachments to Blue Ridge poles). These numbers are so unbalanced |
| 19 | | that these companies are essentially third-party attachers like Charter. But it is |
| 20 | | not just the telephone companies that are treated different from Charter. Other |
| 21 | | third-party attachers also have much more favorable terms than Charter. |
| 22 | Q. | Can you elaborate? |
| 23 | A. | Yes. Here are just a few of the major differences: |
| 24 25 | | • The 2008 agreement requires, and Blue Ridge's proposed new agreement would require, Charter to submit a Professional Engineer certification for |

| 2 | | which would include a loading analysis for all new and overlashed poles. |
|--|----|--|
| 3 4 5 6 7 | | All of the telephone companies, Skybest, and ACTV have more favorable terms. None of these companies is required to submit a Professional Engineer certification or perform any kind of loading analysis. See Confidential Exs. 9 (AT&T); 10 (CenturyLink); 11 (Skyline); 12 (Wilkes); 13 (Skybest); 14 (ACTV). |
| 8 9 10 | | The 2008 agreement imposes, and Blue Ridge's proposed new agreement would impose, penalties on Charter for the discovery of noncompliant attachments and unauthorized attachments. |
| 11 12 13 14 15 16 17 | | All of the telephone companies, Skybest, and ACTV have more favorable terms. None of these companies is required to pay a penalty for the discovery of noncompliant attachments. See Confidential Exs. 9 (AT&T); 10 (CenturyLink); 11 (Skyline); 12 (Wilkes); 13 (Skybest); 14 (ACTV). Most of these companies are not required to pay a penalty for the discovery of unauthorized attachments. See Confidential Exs. 9 (AT&T); 12 (Wilkes); 13 (Skybest); 14 (ACTV). |
| 19 20 21 | | • The 2008 agreement requires, and Blue Ridge's proposed new agreement would require, Charter to place its attachments 72 inches below Blue Ridge's neutral. |
| 22 23 24 25 26 27 28 29 30 | | All of the telephone companies, Skybest, and ACTV have more favorable terms. None of these companies is required to place its attachments 72 inches below the neutral. <i>See</i> Confidential Exs. 9 (AT&T); 10 (CenturyLink); 11 (Skyline); 12 (Wilkes); 13 (Skybest); 14 (ACTV). Consistent with the NESC, several of these agreements specifically allow as little as ***BEGIN CONFIDENTIAL*** between the company's attachment and Blue Ridge's neutral. <i>See</i> Confidential Exs. 9 at Ex. D (AT&T); 10 at Ex. B (CenturyLink); 11 at Ex. B (Skyline). |
| 32 | Q. | Is Blue Ridge renegotiating any of these agreements? |
| 33 | A. | No, not according to Blue Ridge's deposition testimony. Most are either expired |
| 34 | | or could be terminated if Blue Ridge believed they were not working or needed to |
| 35 | | be replaced. But Blue Ridge has not terminated them or sought to renegotiate any |
| 36 | | of them. |
| | | |

| 1 | Q. | Mr. Layton testified that Blue Ridge's 72 inch separation requirement is |
|---|----|---|
| 2 | | intended to give the Cooperative room to add additional facilities, such as |
| 3 | | transformers, without first having to ask Charter to relocate its facilities or pay |
| 4 | | for additional make ready work. Does this explanation make sense to you based |
| 5 | | on what you now know about these other agreements? |

- 6 A. No. If that were a valid concern for Blue Ridge, I would expect that it would 7 have the same requirement in all of its agreements. Imposing the requirement on 8 Charter alone makes little sense given that Charter is attached to only about 30 9 percent of the Blue Ridge poles with third-party attachments. Additionally, and 10 as I discuss in more detail below, Blue Ridge often does not ask Charter to 11 relocate its facilities when it places a transformer—instead hanging the 12 transformer in the 40 inch space Charter allowed between the neutral and 13 Charter's wire when it first installed its facilities decades ago. When Blue Ridge 14 does this, it creates a violation of the NESC and makes it very dangerous for 15 Charter's employees and contractors to do work on the pole.
- 16 Q. Do you know why Blue Ridge has singled out Charter for these more stringent requirements and a much higher pole attachment rate?
- 18 A. No. Blue Ridge has insisted on keeping these agreements confidential, so I did
 19 not know about these differences until this case.
- Q. Are you aware that Blue Ridge said it was because it believed Charter had a lot of unauthorized and noncompliant attachments in the 2015/2016 audit?
- A. I had heard that, but it does not make sense. Blue Ridge imposed the terms of the
 23 2003 and 2008 agreements on Charter, but not others, long before the recent audit.

 And Blue Ridge opened negotiations with Charter on a new agreement a full year
 before the recent audit. I will discuss the audit in more detail below, but a few
 key takeaways contradict Blue Ridge's explanation. Blue Ridge testified in its

deposition that most, if not all, attaching entities had unauthorized attachments,

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| 1 | yet it has only assessed penalties against Charter. I have examined the results |
|---|---|
| 2 | Blue Ridge provided and it is clear that all parties (including Blue Ridge) have |
| 3 | compliance issues, and that some of the other companies have more compliance |
| 4 | issues than Charter and higher rates of noncompliance than Charter. See MM Ex. |
| 5 | 15. Yet, while Blue Ridge dumped thousands of repair tickets on Charter in a |
| 6 | single day, it has admitted that it has done nothing to address these issues with the |
| 7 | other companies. MM Ex. 16 at |
| | |

8 Q. Do you believe this treatment is discriminatory?

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- 9 A. I believe it is. Several of these companies compete with Charter to provide video, 10 broadband, and voice services. For example, as noted above, Skybest competes 11 directly with Charter in Blue Ridge's footprint. Saddling Charter with a higher 12 pole attachment rate and more stringent terms and conditions of attachment favors 13 Skybest and makes it cheaper and easier for Skybest to deploy and maintain its 14 facilities.
- Q. Do you believe the terms of Blue Ridge's pole attachment agreements should be 15 confidential? 16
- A. I believe this case proves they should not be confidential. I understand Blue Ridge testified in its deposition that there was no proprietary or sensitive information in its pole attachment agreements. Rather, its justification for keeping the terms confidential is that it is "nobody else's business." MM Ex. 16 at 237-38. I strongly disagree with this position. It is certainly our business when we are forced to pay higher rates and comply with more stringent terms than our 23 competitors.

| IV. | USE OF | SPACE | ON BLU | UE RIDGE | POLES |
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- A. Blue Ridge makes its attachments in the top portion of the pole. Charter is
 typically next, with its attachment framed either 40 inches below the neutral or 30
 inches below the transformer (for attachments made prior to 2008), or 72 inches
 below the neutral for attachments made since then. Charter will also frame its
 attachment 12 inches above telephone. The telephone companies' attachments
 are typically the lowest on the pole. I understand the telephone companies reserve
 two feet of space for their attachments on Blue Ridge's poles. Other entities
- 12 Q. What is the "safety space" on a pole?

attachments are configured on the pole.

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13 A. The safety space refers to the minimum separation required by the NESC between

might attach above or below Charter's attachment, depending on how the existing

- third-party communications facilities and the Cooperative's electrical conductors.
- The safety space is typically 40 inches, but there are exceptions.
- 16 Q. Who does the safety space protect?
- 17 A. The safety space is intended to protect both the communications worker and the
- Cooperative's workers. It also allows the Cooperative's employees clear space
- 19 for work on its facilities.
- 20 Q. Is the safety space unusable?
- 21 A. It is unusable for third-party communications companies like Charter. But it is
- usable by the pole owner. The pole owner may use the safety space for many
- purposes that generate revenue. MM Ex. 16 at 32-36. It may attach streetlights or
- 24 floodlights within a few inches of the communications facilities, so long as they

| 1 | | are grounded. The pole owner also may install its own communications wires in |
|----|----|---|
| 2 | | the safety space or traffic equipment for a government entity. Safety codes allow |
| 3 | | these other uses because they do not pose a danger to workers on the pole. |
| 4 | Q. | Does Blue Ridge use the safety space on poles with Charter's attachments? |
| 5 | A. | Absolutely. Blue Ridge regularly places streetlights, its own fiber, and wireless |
| 6 | | antennae in the safety space. I have identified a number of instances where Blue |
| 7 | | Ridge is using the safety space for its own facilities. |
| 8 | Q. | Can you provide examples? |
| 9 | A. | Yes. My team and I inspect and observe Charter's attachments to Blue Ridge's |
| 10 | | poles on a daily basis. I recently took photos of several Blue Ridge poles that are |
| 11 | | generally representative of those with Charter attachments. Those photos are |
| 12 | | depicted on the following pages with descriptions of what can be seen in each |
| 13 | | one. |
| 14 | | |
| 15 | | [[Remainder of Page Intentionally Left Blank]] |
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Photo 1, below, shows how Blue Ridge is able to make full use of the safety space. This pole is numbered 05-11-225.

Photo 1



Charter's attachment is the lowest on the pole, with the necessary safety space between it and the bottom of Blue Ridge's transformer. In that safety space Blue Ridge has attached its own fiber optic bundle and an antenna extending horizontally from the pole. I also note Blue Ridge has slung a large coil of fiber next to its attachment—a practice it would surely complain about in this proceeding if it were Charter's fiber.

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| 1 | Photo 2, below, is another Blue Ridge pole showing its use of the safety space. |
|---|---|
| 2 | This pole is numbered 05-07-267. |

Photo 2



This photo shows Blue Ridge's fiber (marked with an arrow) attached in the safety space between the bottom of its transformer and Charter's attachment, which is the second from the bottom. The lowest attachment belongs to the telephone company.

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Photo 3 is another Blue Ridge pole showing its use of the safety space. This pole is numbered 05-07-165.

Photo 3



There is more than 30 inches on this pole from Charter's attachment (the second from the bottom) and the bottom of Blue Ridge's transformer. But it is clear that Blue Ridge is maximizing its use of all of this space by placing a large cylindrical antenna extending well below the transformer and multiple fiber optic wires below that, as marked on the photo with arrows. This pole also has multiple Blue Ridge risers and several large boxes attached below the lowest communications attachment. I note this equipment because they pose a number of climbing obstructions (what Blue Ridge calls a "mess" when discussing Charter) on a pole that cannot be accessed by bucket truck.

| 1 | Q. | Have you observed other poles in Blue Ridge's pole network with characteristics |
|---|----|---|
| 2 | | similar to the poles you describe above? |

- 3 A. Yes.
- 4 Q. Are the attachments and poles you observed generally representative of the other Blue Ridge poles with Charter attachments?
- 6 A. Yes.

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- 7 Q. What is Charter's approach to transfer requests?
- 8 A. We have processed hundreds of transfer requests this year, in addition to
 9 performing work related to relocations. We know there are pending requests and
 10 we are working our way through them. The 2008 agreement allows Blue Ridge to
 11 make the transfer at Charter's expense.

V. AUDIT RESULTS

- 13 Q. Have you seen the results of the attachment inventory and audit Blue Ridge conducted in 2015/2016?
- 15 A. Yes. But I did not see any detailed results until Blue Ridge provided documents 16 in response to discovery requests in this case.
- 17 Q. Did Charter verify the results of the attachment count?
- 18 A. Usually when an audit is conducted we have an opportunity to verify that the
 19 attachments counted belong to us and are not attributed to us mistakenly. But we
 20 received detailed results only recently, again through this case, and have not had
 21 any opportunity to verify the tens of thousands of attachments identified in those
 22 results. That process would take many months and substantial resources. It
 23 would take far more time than we have had since receiving the detailed results
 24 from Blue Ridge in this proceeding.

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- 2 A. Charter does not dispute that the numbers are generally accurate, and is willing to 3 accept them for billing purposes. But Charter certainly disputes Blue Ridge's 4 decision to bill on an "attachment" basis when the 2008 agreement specifies that 5 Charter should pay on a per-pole basis. I have learned in this case that the audit actually disclosed that Charter has attachments to far fewer poles than it has been 6 7 billed for and has paid for. If Charter's new rate is a per-pole rate, like its old 8 rate, it should be based on the actual number of poles to which Charter is 9 attached.
- 10 Q. Why did Charter pay Blue Ridge \$182,884 for back billing on the additional attachments found in the audit?
 - Blue Ridge sent Charter an invoice indicating it found additional attachments in the audit, and that Charter owed that the amount for back-billing amounts. When we talk with Blue Ridge, we sometimes use the terms "attachment" and "poles" interchangeably, and we assumed that Blue Ridge found additional poles with attachments in the inspection. Blue Ridge certainly did not advise Charter that it had counted far fewer poles than it had been billing Charter, even though documents produced in this case show that Blue Ridge knew that was the case.

 See MM Ex. 17. Now that we know the whole story, we believe it was improper and misleading for Blue Ridge to back-bill for this amount and to adjust the billing total moving forward. And we certainly dispute the back-billing amount Blue Ridge required Charter to pay. In fact, we now believe we have been overpaying Blue Ridge for years—possibly the entire term of the 2008 agreement.

| Q. What did the audit find with respect to compliance is | issue | ues |
|--|-------|-----|
|--|-------|-----|

Blue Ridge says it found 3,767 "safety violations" among Charter's attachments, including cases where it asserts Charter attached too close to Blue Ridge's electrical facilities, made improper mid-span attachments, or had other issues like missing or broken guys and anchors. I have reviewed the documents Blue Ridge provided and it is clear that Charter is not the only attacher with compliance issues. Every attaching entity, including Blue Ridge, has violations. As noted above, Skyline and Skybest are affiliated companies providing voice, video, and Internet services. See https://www.skybest.com/. Together, the audit showed that they have nearly 700 more violations than Charter. But the raw number of violations does not tell the whole story, because both Charter and Skyline/Skybest have many more attachments than the other entities. So I also calculated each entity's violation rate, expressed as a percentage of poles with a violation compared to the total number of poles with its attachments. That analysis found that ACTV's violation rate (29 percent) is double Charter's violation rate (14 percent). It also found that Charter's violation rate is comparable to the violation rates of AT&T (9 percent), CenturyLink (10 percent), Morris Broadband (11 percent), and Skyline/Skybest (15 percent). These violation rates remain essentially the same if they are calculated as a percentage of attachments (rather than poles) with a violation. My analysis is summarized in the table on the following page.

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| | Total Poles with Attachments (from 2016 Audit) | Total Poles with Violations | Violation Rate |
|-----------------|--|-----------------------------------|-------------------|
| ACTV | 1,868 | 533 | 29% |
| AT&T | 15,976 | 1,460 | 9% |
| Charter | 24,888 | 3,544 | 13% |
| CenturyLink | 5,453 | 554 | 10% |
| Morris | 5,289 | 575 | 11% |
| Skylink/Skybest | 28,469 | 4,173 | 15% |
| Wilkes | 959 | 50 | 5% |

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2 Q. When did Blue Ridge identify these issues?

- 3 A. Blue Ridge identified these issues during the course of its 2015/2016 audit.
- 4 According to its documents, it noted the first violation involving Charter facilities
- 5 in January 2015, and the last one in October 2016.

6 Q. When did Blue Ridge notify Charter about these issues?

- 7 A. Blue Ridge did not notify Charter of these issues or submit tickets through the
- 8 National Joint Use Notification System ("NJUNS") as it discovered them, or even
- 9 after the audit had been completed. Blue Ridge waited until the end of August
- 10 2017, when this litigation was underway, to provide any notice to Charter. That
- notice, when it came, consisted of more than 3,500 NJUNS tickets dumped on
- 12 Charter over a two-day period.

13 Q. Blue Ridge says that its delay was not an effort to punish Charter or gain leverage in this proceeding. What do you think?

- 15 A. Blue Ridge says it has notified Charter of these issues because they need to be
- fixed. But, again, it just does not add up. If these problems need to be fixed so
- urgently, why did Blue Ridge wait so long to do something about them? Consider
- that Blue Ridge waited two-and-a-half years before notifying Charter of the first
- issues it identified, and almost a year before notifying Charter of the last issue it

identified. Also, Blue Ridge has submitted NJUNS tickets only to Charter. It has not submitted any tickets to any of the other entities with violations. Nor could it confirm that it ever sent the other entities the results of the audit. *See* MM Ex. 16 at 231-35. I understand from Blue Ridge's deposition testimony that it has not even fully evaluated the violations attributed to other attachers. Again, if the motive is to have these issues fixed, why has Blue Ridge focused solely on Charter and why did it wait until now to do so? I also note that many of the violations identified by the audit had clearly been present for many years, if not decades. To the extent these violations were "apparent and obvious," the standard that Blue Ridge claims were used by the auditors, they must have been evident to Blue Ridge's employees for years. It seems to me the only explanation is that Blue Ridge felt no urgency to do anything about these issues until it decided to make them a focus of this litigation (as it has in Mr. Layton's and Mr. Booth's testimony).

Q. Does Charter dispute the results of the compliance inspection?

A.

We have not yet had an opportunity to review every violation identified by Blue Ridge. Recall that Charter received the results of an audit that took Blue Ridge's outside contractor nearly two years to complete only about two months ago. And then, the results were provided in a massive NJUNS ticket dump that has swamped Charter's local resources. The NJUNS tickets themselves provide scant information about the violation—generally only whether it is a pole separation, mid-span, or down-guy issue and the proposed fix (e.g., "lower," "raise," etc.). But I have reviewed a number of the tickets Blue Ridge submitted and it is clear there are problems with them. For some, it is unclear what Blue Ridge believes to

be the violation involving Charter's facilities. For many, it is unclear who created the violation, or abundantly clear that Charter did not create it. I have seen many situations where Charter had properly framed its attachment 40 inches below the neutral, as required by the parties' prior contracts, and Blue Ridge has subsequently installed a transformer within that space creating a safety violation. There are others where, after Charter attached to a pole, Blue Ridge has installed risers that are too short and, thus, too close to Charter's existing attachment. While Charter will work with Blue Ridge to resolve these situations, it is simply not accurate to say that Charter has "created" these violations.

10 Q. Are there other problems with the NJUNS tickets?

A.

Yes. The tickets do not appear properly sequenced, meaning that Blue Ridge or the telephone company would need to do work on the pole before Charter could perform the proposed fix. In most cases any fix will require a coordinated effort between Blue Ridge, Charter, and any other party on the pole. For example, for some tickets, Charter cannot perform the required fix until the telephone company first moves its attachment. For others, Blue Ridge's proposed solution would actually create other issues on the pole (e.g., an instruction to "lower attachment" might create a road clearance violation). Still others will require Blue Ridge to take the first action (such as replacing the pole) before Charter can transfer its attachments, or to ensure Charter's contractors can work on the pole safely. Others can be fixed without any action by Charter, such as extending a riser owned by Blue Ridge.

Q. What has Charter done with the NJUNS tickets?

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2 A. We have developed and submitted for budgetary approval for a remediation plan 3 that would address each ticket, beginning in November and concluding in July 4 2018, at a cost of nearly four hundred thousand dollars. This schedule and budget 5 assumes that the work can be completed at the time the crew is on-site. But from 6 what we have seen, there will be many locations where we cannot complete our 7 work until additional work is completed by either Blue Ridge or the telephone 8 company, which will be a wasted trip for our crews and will add unnecessary 9 costs and avoidable delays to this project.

VI. CONSTRUCTION & MAINTENANCE PRACTICES

Q. What is Charter's culture with regard to safety?

Safety is very important to Charter and to me. It should go without saying that the safety of the people who work on our facilities and the general public is always the top priority. I have conducted regular safety training sessions for my employees for years, covering topics ranging from pole-attachment issues to driving safety, and more. One of Charter's safety practices that my team and I follow every day is to place orange cones in front of and behind our trucks, no matter where we park or for how long. This requires us to do a "walk-around" of our truck before starting it to make sure there are no safety risks, such as a child playing behind it. In addition to these safety concerns, building a high-quality and safe network is necessary for Charter to have a reliable network. A reliable network is what our customers expect and depend upon for their business and personal needs. If we do not build a reliable and safe network, then we risk losing customers to our competitors.

| Q. How does Charter address safety violati |
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A. We maintain open lines of communications with pole owners to ensure any safety issues identified among our facilities on a pole are brought to our attention and swiftly addressed. We are always on the alert for dangerous conditions, and seek to ameliorate hazards in order to protect our workers, contractors, and the general public. With a network the size and breadth of ours, issues inevitably do arise, and we are always ready to do the work necessary to resolve them.

Q. Does Charter conduct its own safety inspections?

Charter employees generally note violations when they come across them and fix them in the course of their regular work. As far as conducting regular separate safety inspections, Charter generally relies on the pole owners to conduct inspections of their aerial plant, which they do on a regular basis, and to notify Charter when those inspections come across code issues related to Charter's plant. In some cases, the pole owners have provided in their pole attachment agreements that the parties will conduct regular joint safety inspections, with Charter paying for its share of the costs.

17 Q. Do you agree with Mr. Layton's characterization of Charter's workmanship?

Not at all. Mr. Layton seems to be leaping to conclusions about Charter's workmanship—and its contractors and subcontractors—without sufficient facts.

Mr. Layton cites the audit results as the primary source of his beliefs. But those results do not tell the full story—especially when it comes to identifying who created a particular violation. As I mentioned above, my own investigations have revealed a number of circumstances where Blue Ridge created the violation when

| 1 | it placed a transformer too close to Charter's wire, without giving Charter notice |
|---|--|
| 2 | or a chance to move its facilities. |

- **Q.** Why would Blue Ridge add transformers to poles after Charter's facilities have been constructed?
- 5 A. Transformers are used by Blue Ridge to translate the high voltage power carried on 6 their secondary lines to voltage used by customers. Often transformers are added by 7 the Cooperative as new houses are added along its distribution system. In many cases 8 where new residences are built, Charter already has attached to the pole on which the 9 Cooperative plans to place a transformer to provide electricity to the residence. This 10 could arise where Charter has already extended service to older homes deeper in the 11 same neighborhood. In some cases, the pole does not have room above Charter's 12 attachment for the transformer to be installed consistent with applicable safety codes 13 or the Cooperative's own standards. Although the pole agreement provides that Blue 14 Ridge may require Charter to move its attachments to make room for a new 15 transformer, in some cases Blue Ridge gives Charter no notice of the installation of 16 the transformer, even where there is insufficient room to meet the required separation. 17 And in some cases, rather than having Charter move its attachment, Blue Ridge goes 18 ahead and installs the transformer in a pole location that does not comply with the 19 applicable safety codes or its own standards.

Q. Is this a dangerous practice?

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A. Absolutely. It puts Charter's workers at risk when they need to work on Charter's facilities. That is why Blue Ridge has the right to require us to move our facilities *before* they install the transformer, and why their failure to do so is a safety violation for which they are responsible.

- Q. What about Mr. Layton's assertion that these problems were created by Charter's failure to honor the 72 inch separation requirements in the 2003 and 2008 agreements?
- 4 A. That assumes Charter has made the majority of its attachments in the last fifteen 5 years. In fact, the vast majority of Charter's system in this area was built decades 6 ago—long before Blue Ridge had conceived or required 72 inches of separation. 7 The 2003 and 2008 agreements specifically state that attachments made prior to 8 the commencement date of the agreement may be placed within 40 inches of the 9 neutral because that is when most of Charter's attachments were made. As I 10 understand it, Blue Ridge's auditor made no effort to identify when Charter's 11 attachments were made, and whether they were made before or after 2008.

12 Q. Are there other reasons you disagree with Mr. Layton's characterization?

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Yes. Mr. Layton seems to be suggesting that the existence of a violation necessarily means Charter employs poor workmanship. If that were true, then everybody has poor workmanship, Blue Ridge included, because the inspection discovered violations related to everyone's attachments. Even though the auditors were focused only on third-party attachments, for example, they noted hundreds of Blue Ridge violations related to separation requirements, missing or broken guys and anchors, mid-span violations, road clearance issues, and more. MM Ex. 16 at 231-35. Many violations are the product of the forces of nature—wind, ice, storms, fallen trees/branches, rust, corrosion, rot, etc.—not to mention third party tampering. For example, a properly installed attachment may become noncompliant if rot on a nearby pole or storm damage causes it to sag, or if a tree limb lands on the cable line but does not disrupt service. Or a properly installed attachment may become noncompliant if Blue Ridge or a third party installs

| 1 | | facilities without notifying Charter, or moves Charter's facility as part of a |
|-------------|----|--|
| 2 | | relocation or transfer. Or a properly installed guy or anchor could be damaged by |
| 3 | | corrosion. Even with constant maintenance, issues will inevitably arise, and the |
| 4 | | only thing we can really do is commit to fixing the issues as we discover them or |
| 5 | | they are brought to our attention. |
| 6 7 8 | Q. | Mr. Layton says Charter's use of "excess" and "poorly placed" equipment creates impediments for Blue Ridge personnel climbing poles. How do you respond to this? |
| 9 | A. | It is perplexing to me because Blue Ridge typically places many more facilities |
| 10 | | than Charter in the climbing space on a pole. For example, photo 3 above shows |
| 11 | | a pole that is not accessible by bucket truck with multiple Blue Ridge risers on all |
| 12 | | sides of the pole and several large boxes that would make the pole very difficult, |
| 13 | | if not impossible to climb. Blue Ridge creates these conditions on other poles as |
| 14 | | well. Photos 4 and 5 on the following page show a pole on Main Street, off |
| 15 | | Highway 321 in Blowing Rock. The pole is tagged as an AT&T pole. But its |
| 16 | | climbing space is full of Blue Ridge equipment, including large boxes, multiple |
| 17 | | risers, an antenna, and lots of wires. It is another case of Blue Ridge taking a |
| 18 | | normal practice—one that it uses far more than Charter—and making it seem as if |
| 19 | | Charter is a bad actor. |
| 20 | | |
| 21 | | [[Remainder of page intentionally left blank]] |
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Photo 4



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Photo 5



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| 1 | Q. | You mentioned storm damage, what is Charter's process for responding to |
|---|----|---|
| 2 | | downed lines? |

- A. We have an on-call team ready to respond at all hours to emergencies like downed lines immediately. Downed main line distribution cables are treated like any other outage, where we ensure all issues are, at the very least, temporarily secured while a plan is put in place to fix the line. Whenever there is a major storm, like the one that struck our area last week, we devote as many resources as possible to riding our lines to proactively identify and remediate problems.
- 9 Q. Mr. Layton places the blame for poor workmanship on Charter's use of contractors. How do you ensure your contractors are complying with applicable standards?
- 12 A. We oversee every project that is sent out to a contractor. This involves regular

 13 communication with our contractors, and upon completion of the project we

 14 receive a report back from the contractor detailing the work completed. Our

 15 construction coordinator reviews the report in detail, which may include

 16 photographs of the work done and precise location data so we can verify that the

 17 work was completed in compliance with the work order and specifications.
- Were you able to inspect the locations identified in the photos Mr. Layton and Mr. Booth included in their testimony?
- 20 A. Yes. I was able to inspect most of the locations identified by Mr. Layton in his
 21 testimony, except for a few where he did not provide location information. I was
 22 able to inspect a few of the poles depicted in Mr. Booth's photos, but with the
 23 major storms that hit our area last week I could not devote my time to chasing
 24 down each and every pole.

| 1 | Q. | What did you find after inspecting the locations identified by Mr. Layton? |
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| 2 | A. | Exhibit No. LL16-A. Contrary to Mr. Layton's assertion, Charter did not "sling" |
| 3 | | its cable over Blue Ridge's secondary conductor in the first photo. It actually |
| 4 | | shows an old drop, likely here for decades, in a windy area at the top of a ridge |
| 5 | | that over time had some slack in it and became wrapped in the secondary |
| 6 | | conductor. Charter can easily remediate this by removing its drop. The second |
| 7 | | photo has no location specified and it is impossible to tell from this limited |
| 8 | | information what led to this situation. |
| 9 | | Exhibit LL-16B. The first photo shows a telephone attachment underneath |
| 10 | | Charter's attachment, so both of these issues would need to be addressed to |
| 11 | | resolve this clearance issue. It is unclear how this situation developed, including |
| 12 | | when the driveway was constructed. The second photo shows a Charter wire |
| 13 | | along a remote gravel road that was chained closed the first time I tried to visit |
| 14 | | this location. The man in the photo is standing on a steep slope where no vehicles |
| 15 | | could pass. Not pictured is a large tree limb that appears to have fallen across |
| 16 | | Charter's line, causing it to sag, but not causing a service disruption. |
| 17 | | Exhibit LL-16C. The first photo has no location specified, so I could not visit it or |
| 18 | | collect additional information about it. There appears to be 40 inches between the |
| 19 | | neutral and Charter's wire. So the question is when did each party install its |
| 20 | | respective facilities? I understand from the Blue Ridge deposition that Mr. |
| 21 | | Layton does not know when Charter installed its wire, or when Blue Ridge |
| 22 | | installed its transformer, so we cannot draw any conclusions about this without |
| 23 | | more information. MM Ex. 16 at 206-09. Note, however, that this is an example |
| 24 | | where Blue Ridge has installed a streetlight in what would be the safety space, if |

there were the full complement of safety space on this pole. The second photo shows Charter's facilities within 13 inches of the top of Blue Ridge's riser. Here, again, Blue Ridge has not provided any information about when each party placed its facilities. If Blue Ridge placed its transformer and riser after Charter, then it should have installed a longer riser to avoid creating this issue in the first place. *Exhibit LL-16D*. Mr. Layton says that Charter's attachment is not guyed in the first photo. This is not accurate. In fact, Charter's guy follows Blue Ridge's guy. Photo 6, below, shows Charter's guy in the background and Blue Ridge's guy in the foreground.

Photo 6



In fact, other attachments are not guyed, including what appears to be Blue Ridge's own fiber optic attachment. It is also possible that Blue Ridge's guy at

the top of the pole is on the wrong angle or is over-tensioned. I say that because Blue Ridge's guy remains taught, and I would expect it to have slack in it if the pole were bowed because of the attachments in the middle. The second photo shows a pole where Charter has had an attachment for decades. I know this because Charter's attachment is 500 cable, which we have not used for at least 20 years. We do not have information about when the transformer was placed. But we know that it was either placed after Charter made its attachment, or this condition has existed for decades without complaint by Blue Ridge. Charter is guyed on this pole, but it could be tightened. Charter has guys on other poles along this road, so any issues with guys likely exist because of the age of this construction. Exhibit LL-16E. The photo here simply says "terrible mess on pole from Charter," without additional detail. Blue Ridge asserts there is no climbing space on this pole because of Charter. But to the extent there is no climbing space, or a "terrible mess," it is because of Blue Ridge. Photo 7 shows multiple Blue Ridge risers that obstruct the climbing space, even without any Charter facilities.

Photo 7



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| 0. | What about | the locations | identified by | v Mr. Booth? |
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- 2 These are similar to the issues identified by Mr. Layton. For many, it is A. 3 impossible to tell how these asserted noncompliance issues came about. Some 4 appear to be the product of natural events, like storms, corrosion, damage from 5 fallen tree limbs, and other issues. Others appear to be the result of Blue Ridge 6 adding a transformer to the pole after our facilities were already in place, but 7 more information would be needed in order to verify. Virtually all would require 8 an investigation into when each facility was placed on the pole to determine who 9 "caused" the violation and whether it is the result of workmanship or natural 10 events.
- 11 Q. Do you know if Blue Ridge has a statutory duty to attempt to work out any concerns about safety violations cooperatively before bringing any issues to this Commission?
- A. While I am not aware of any interpretative guidance, I have been told that Section 62-350 of the North Carolina statutes provides a formal process for notification by the pole owners of violations and a time period for cure. Also, the Act provides that "[a]ll attaching parties shall work cooperatively to determine the causation of, and to effectuate any remedy for, non-compliant lines, equipment, and attachments." *Id.*While Blue Ridge has provided notice of these issues, the process of working together cooperatively to identify causation and effectuate remedies has barely begun.

Q. Did Blue Ridge and Mr. Booth identify additional issues that you investigated?

A. Yes. On October 17, 2017, Blue Ridge's counsel sent a list to Charter's counsel identifying 22 issues it deemed "immediate hazards to public safety." MM Ex.

18. In his deposition a few days ago, Mr. Booth also identified the 30 photos in

| 1 his exhibit GLB-3 as immediate hazards. I have learned that the October | r 17, 2017 |
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- 2 list also came from Mr. Booth, and that he collected the information in both the
- 3 October 17 list and GLB-3 in August.
- 4 Q. If these are immediate hazards to public safety, do you know why Blue Ridge waited two months before notifying Charter, and why it did not notify you directly?
- 7 A. If these truly were immediate hazards, I would have expected Blue Ridge to 8 notify me or someone on my team as soon as they were discovered. In terms of 9 why Blue Ridge delayed, I can think of only two explanations. One possible 10 explanation is that, if these are really immediate hazards, Blue Ridge decided to 11 wait until the timing was right for purposes of this litigation to tell us about 12 them—i.e., after it had submitted its direct testimony. By waiting, it could 13 highlight issues like this in its testimony while denying Charter the opportunity to 14 do anything about them, despite the risks this tactic would pose to the public. 15 Another explanation is that these are not immediate hazards to public safety, but
- Blue Ridge decided to characterize them that way solely for purposes of this
- 17 litigation.

18 Q. Which do you think is the most likely explanation?

A. Probably both. Blue Ridge inspected all of these locations in its 2015/2016 audit,
and did not even identify a Charter violation for most of these locations in that
audit, let alone an "immediate hazard." For the others, the auditor noted a
violation, but did not mark it "high priority" or include any notes indicating that it
was sufficiently dangerous to warrant immediate action. And Blue Ridge did not
notify Charter of these situations until a year or more had passed since it
discovered them. Even then, the notice it provided was through a non-prioritized

list of 3,500 NJUNS tickets. And then Mr. Booth inspected them in August and apparently did not deem any of them sufficiently hazardous or imminent to warrant notice (or even NJUNS tickets) at the time he discovered them. Finally, after investigating many of these situations, I am at a loss as to why Blue Ridge would deem most of them "immediate hazards" to the public safety, why Blue Ridge blames these conditions on Charter, or what Blue Ridge expects Charter to do about it.

Q. Why do you say that?

I will not go through the entire list of 52 poles, but will provide a few illustrative examples. A number of the issues identified by Mr. Booth as "immediate hazards" appear to be situations where Charter's predecessors framed its attachment decades ago 40 inches below the neutral, and then Blue Ridge later hung its transformer in violation of the NESC and without even bothering to notify Charter about it. It is not clear what makes these "immediate hazards" where Blue Ridge has created other conditions like this, and where Charter does not have any equipment (such as a node or amplifier) that is likely to bring Charter's workers into close proximity to the electrical conductors. The following photos depict examples of this situation.

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Photo 8 (Pole No. 10-09-085)



Photo 8 shows a situation where Charter framed its attachment decades ago with plenty of space below the neutral. It is likely that Blue Ridge installed the transformer and riser after Charter. The home this transformer serves appears to be of recent construction, and the transformer drip loops are so close to Charter's bracket—indeed even appearing to touch it—that Charter's contractors simply could not have safely installed its attachment like this. It appears Blue Ridge could have maintained 30 inches below the transformer had it placed the transformer closer to the neutral and ran a longer riser. In any event, Charter cannot lower its attachment here until the phone company lowers first.

1 Photo 9 2 (Pole No. 16-08-038)



Photo 9 similarly shows a pole where Charter has been attached for decades and was initially framed with plenty of separation between the neutral and Charter's wire. It is clear that Blue Ridge installed its transformer after Charter because the drip loops coming from the transformer actually wrap in front of Charter's attachment and behind the phone attachment as they feed into a riser that is too short. Charter's contractors could not have installed their strand and then run the coax through the small space between the pole and the drip loops. The house served by this transformer also appears to be recent construction. In fact, the house next door is new construction, and Blue Ridge has hung a transformer with this same configuration on the next pole over. Charter cannot lower its facilities until the phone company lowers theirs.

Photo 10 (Pole No. 16-08-038)



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Photo 10 shows an old pole where Charter has been attached for decades. I measured the facilities and Charter was initially framed 51 inches below the neutral, but it appears Blue Ridge placed a transformer here without notice to us. Again, Charter must wait for telephone (which may also be too close to the transformer) to lower before it can move its facilities.

9 Q. Are there other situations that strike you as more immediate hazards?

10 A. There are certainly situations that strike me as hazardous. But it appears that Blue
11 Ridge, not Charter, created many of the violations, and that it did so long ago.
12 The photos on the following pages depict examples of these situations.

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Photo 11 (Pole No. 07-02-005)



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Photo 11 shows a pole with a mess of transformers and triplex wires on a pole

Charter has been attached to for decades. Charter is framed 40 inches below the
neutral, and nearly has 30 inches below the transformers. The biggest problem
here is the tangle of Blue Ridge's wires feeding into the risers, and it is entirely
Blue Ridge's creation. We dead-end at this pole with a down guy on the side
opposite of the one pictured in Photo 11, indicated by an arrow in Photo 12 on the

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following page.

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Photo 12 (Pole No. 07-02-005)



Again, this problem is clearly Blue Ridge's doing. Photo 12 shows that Charter's down guy bolt is buried behind all of Blue Ridge's wires as they loop into the weather-heads at the top of its risers. It would be impossible for Charter to have installed its bolt here after-the-fact. You can actually see that Blue Ridge has spaced the risers unevenly to make room for our down guy to pass, another indication we were already there. While we could probably get off this pole, I would not ask any of Charter's contractors to attempt to remove the attachment and down guy now, as it would be far too dangerous.

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Photo 13 (Pole No. 05-07-263)



Photo 13 shows another one of the "immediate hazards" identified by Mr. Booth that is actually Blue Ridge's creation. Charter's attachment is marked with an arrow. Blue Ridge has its own fiber on a cross-arm that is bolted immediately above Charter's attachment. I can tell Blue Ridge created this condition because Charter's attachment is tucked behind the drip loop extending from the transformer in the foreground. There is simply no way Charter could have installed its bolts, strand, and wires in this configuration. Blue Ridge's risers are also too short. This appears to be a newer pole (serving a newer commercial building). It is possible Blue Ridge moved us into this spot when it replaced the pole. Again, there is nothing Charter can do on its own to safely fix this.

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Photo 14 (Pole No. 05-11-228)



Photo 14 shows a pole in downtown Blowing Rock that Booth identified in his October 17 list. Charter's plant has been here more than 30 years. Our attachment here is more than 72 inches from the neutral, well more than 40 inches from the transformers, and more than 8.5 feet from the top of the pole. The imminent hazard appears to be Blue Ridge's risers, which are far too short. The risers have a 2004 date stamp, and were likely installed long after Charter made its attachment. The solution here is for Blue Ridge to extend its risers. Indeed, Blue Ridge's inspector did not even mark this as a third-party violation in his audit results, likely because the violations so clearly belong to Blue Ridge.

Q. Are these examples representative of the other "immediate hazards" identified by Booth?

A. Yes. There are a few that Charter may have created, and a few that we can remediate (and we will). But many were not created by Charter and cannot be

- fixed by Charter without Blue Ridge or the telephone company performing their work first.
- Q. Did you observe any other hazardous conditions while inspecting the locations identified by Mr. Booth?
- Yes. Perhaps the most dangerous condition I observed was not one on Mr.

 Booth's list. It was a Blue Ridge wire hanging very low across Seven Devils

 Road. This is a winding two lane road that runs down the side of a mountain,

 with no shoulder to speak of, a steep drop on one side and the mountain face on

 the other. The wire was a feeder for a streetlight placed on a pole on the opposite

 side of the road. Blue Ridge's wire only had 14 feet and 3 inches of clearance

 over the road. The wire is depicted in Photo 15 below.

12 **Photo 15**



| 1 | After observing this condition, I contacted Blue Ridge to let them know about it. |
|---|---|
| 2 | I also observed a broken Blue Ridge fiber lying on the ground along the highway, |
| 3 | including across a driveway, and contacted Blue Ridge about that condition as |
| 4 | well. |

5 Q. What do you take from this?

It all seems to me to be a litigation tactic, not an actual concern with safety. Blue Ridge has created many of these conditions. Many have existed for years. And many were not flagged in the 2015/2016 audit, or in prior inspections. These tactics disappoint me because we have always had a good working relationship with Blue Ridge. And I do not believe that a dispute about pole attachment rates should change that or interfere with our normal practice of coordinating and communicating when serious issues arise. Open lines of communication are important for both parties to ensure our respective networks remain safe and reliable. As with any relationship, issues inevitably arise, and when they do, we work to resolve them. I do not believe the approach taken by Blue Ridge here is an effective or efficient way to resolve these issues.

VII. <u>CONCLUSION</u>

- 18 Q. Does this conclude your responsive testimony?
- 19 A. Yes

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MULLINS EXHIBITS

| LABEL | DESCRIPTION |
|--------------|--|
| MM 1 | BREMC-Charter 2008 Pole Attachment Agreement |
| MM 2 | 2014 Renegotiation Email |
| MM 3 | Charter May 2015 Email |
| MM 4 | Letter Pausing Negotiations |
| MM 5 | BREMC Oct. 15 Email |
| MM 6 | BREMC Formula & Calculation (Confidential) |
| MM 7 | December 2015 Redline Agreement |
| MM 8 | BREMC Powerpoint (Confidential) |
| MM 9 | AT&T Agreement (Confidential) |
| MM 10 | CenturyLink Agreement (Confidential) |
| MM 11 | Skyline Agreement (Confidential) |
| MM 12 | Wilkes Agreement (Confidential) |
| MM 13 | Skybest Agreement (Confidential) |
| MM 14 | ACTV Agreement (Confidential) |
| MM 15 | Summary Table of Violations |
| MM 16 | Excerpt from BREMC Deposition |
| MM 17 | Invoice |
| MM 18 | Letter to Aaron George |