VERIZON PENNSYLVANIA LLC AND
VERIZON NORTH LLC

V.

METROPOLITAN EDISON COMPANY,
PENNSYLVANIA ELECTRIC COMPANY,
AND PENN POWER COMPANY

DOCKET NO. C-2020-3019347

VERIZON PENNSYLVANIA LLC
AND VERIZON NORTH LLC

STATEMENT NO. 1.1

(SURREBUTTAL TESTIMONY)

WITNESS: Stephen C. Mills

DATED: June 18, 2020

PUBLIC VERSION

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I. INTRODUCTION

Q. Please state your name, title and business address.

A. My name is Stephen C. Mills. I am a Consultant – Contract Management in the Wireline Network Operations Division of Verizon Services Corporation. My business address is 502 E. Piedmont Street, Culpeper, VA 22701.

Q. Did you submit direct testimony in this case?

A. Yes. I submitted direct testimony in this case on April 21, 2020.

Q. On whose behalf are you submitting this surrebuttal testimony?

A. I am submitting this surrebuttal testimony on behalf of Verizon Pennsylvania LLC ("Verizon PA") and Verizon North LLC ("Verizon North") (collectively, "Verizon").

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to allegations in the rebuttal testimony submitted by witnesses for the Pennsylvania operating subsidiaries of FirstEnergy Corp. known as Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), and Pennsylvania Power Company ("Penn Power") (collectively, "FirstEnergy"). I will respond primarily to Mr. Schafer's rebuttal testimony, but will also address statements in the rebuttal testimony of FirstEnergy's other witnesses.

Q. Are you sponsoring exhibits with your surrebuttal testimony?

A. Yes. I am sponsoring Verizon Exhibits SCM-8 to SCM-44.

II. RESPONSE TO MR. SCHAFER'S REBUTTAL TESTIMONY (Statement 1-R)

Q. What was your overall reaction to Mr. Schafer's rebuttal testimony?

A. I was surprised Mr. Schafer focused primarily on topics tangential to the real issue in dispute, which is the just and reasonable rate for Verizon's use of FirstEnergy's poles under the FCC regulations the Commission adopted. For example, Mr. Schafer compares the rate FirstEnergy has charged Verizon to pole attachment rates under a rate formula that is not an FCC rate formula. He testifies at length about his dissatisfaction with the parties' negotiations, provides an inaccurate description of the history of the parties' joint use agreements, and even summarizes FirstEnergy's legal arguments.

Mr. Schafer devotes far less of his testimony to an attempt to justify the rates FirstEnergy has been charging Verizon under the Commission's regulations. As Dr. Calnon explained in his direct testimony, the Commission adopted the FCC's regulations, which were revised in 2011 to require competitively neutral pole attachment rates among competing providers of telecommunications, video, broadband, and other advanced services.[1] Verizon is an incumbent local exchange carrier (an "ILEC") that competes with competitive local exchange carriers ("CLECs") and cable companies. Verizon and its competitors attach comparable facilities to utility poles, but FirstEnergy continues to charge Verizon far more for use of a comparable amount of space on a utility pole. I think Mr. Schafer's decision to focus his testimony on issues other than this competitive rate disparity undermines his rebuttal testimony and arguments supporting the exceptionally high rental rates FirstEnergy charges Verizon.

[1] VZ Statement 2.0 at 2:18-3:3 (Calnon Direct Testimony).

Q. What topics in Mr. Schafer's rebuttal testimony would you like to address?

A. Mr. Schafer gets a lot wrong in his description of the history of the joint use agreements and the parties' negotiations, which I would like to correct. He presents potentially confusing testimony about what he calls a "fully allocated" rate methodology. The methodology Mr. Schafer proposed is not an FCC rate methodology, and I want to eliminate the suggestion it is. Also, to be clear, the FCC's rate formulas do allocate all pole costs among attachers and pole owner, just not as Mr. Schafer would prefer.[2] Mr. Schafer also states Verizon paid less in pole attachment rent than Verizon in fact paid, so I will clear that up. But I will spend most of this testimony detailing my disagreement with Mr. Schafer's claim Verizon should pay a higher rate than its competitors based on certain alleged advantages under the joint use agreements.

Q. Will you address these topics in the same order as Mr. Schafer?

A. No. I will address Mr. Schafer's allegations about alleged competitive advantages first, and then address topics that do not affect rates calculated under the standard of competitive neutrality adopted by the Commission.

A. Verizon Attaches to FirstEnergy's Poles Under Materially Comparable Terms and Conditions as Its Competitors, But at Far Higher Rates.

Q. Please let us know what you will address in this section.

A. First, I will clarify just how high the FirstEnergy's rates for Verizon are when compared to the rates FirstEnergy may charge Verizon's competitors. Second, I will identify overarching flaws with Mr. Schafer's claim Verizon should pay a higher rate than its

[2] VZ Statement 2.1 at 48:17-55:5 (Calnon Surrebuttal Testimony); VZ Statement 3.1 at 9:19-15:16 (Tardiff Surrebuttal Testimony).

competitors based on alleged "advantages" provided by the parties' joint use agreements. Third, I will address the specific "advantages" Mr. Schafer alleged and explain why they are not "advantages," and certainly not net material competitive advantages as required to justify a rate higher than the new telecom rate.

1. Verizon Pays Pole Attachment Rates Far Exceeding the Rates FirstEnergy May Charge Verizon's Competitors.

Q. The rates FirstEnergy charges Verizon are in your direct testimony. Is there a way to know the rates FirstEnergy may charge Verizon's competitors?

Yes. FCC regulations set the maximum rate FirstEnergy may charge Verizon's competitors (CLECs, cable companies providing telecommunications services, wireless providers) using a formula based on its reported costs. The formula is typically referred to as the "new telecom formula" and the resulting rate is typically known as the "new telecom rate."

Q. Is the new telecom rate the "just and reasonable" rate for an ILEC's use of an electric utility's poles?

Yes, with one exception. The Commission adopted the FCC's standard of competitive neutrality under which the just and reasonable rate for an ILEC is the same rate guaranteed its competitors (the new telecom rate) if it attaches to an electric utility's poles under materially comparable terms and conditions. An electric utility may try to justify charging the ILEC a higher rate by showing it provides the ILEC terms and conditions that give the ILEC a net material advantage as compared to its competitors. If it can make this showing, the just and reasonable rate for the ILEC would be the new telecom rate plus the quantified per-pole value of the net material competitive advantage. To assist with negotiations in this scenario, in 2011, the FCC initially advised companies

to look to a rate known as the "pre-existing telecom rate" or the "old telecom rate" as a "reference point" when net material competitive advantages are shown. The FCC provided further clarity to negotiations in 2018 when it made the pre-existing telecom rate the maximum rate when an electric utility proves with clear and convincing evidence it provides the ILEC net material competitive advantages. When properly calculated with the FCC's inputs, the pre-existing telecom rate (also known as the old telecom rate) is about 1.51 times the new telecom rate.

Q. Has competitive neutrality been the standard since 2011?

Yes, although the FCC strengthened the standard in 2018 when it adopted a presumption that the just and reasonable rate for ILECs is the new telecom rate under joint use agreements falling within a broadly defined set of joint use agreements.[3] Under current regulations, the electric utility can try to rebut the presumption with clear and convincing evidence it provides the ILEC net benefits under the terms and conditions of the joint use agreement that materially advantage the ILEC as compared to the terms and conditions provided CLECs and cable companies providing telecommunications services on the same poles. If the electric utility rebuts the presumption, the old telecom rate is the maximum rate it may charge the ILEC.

Q. Did Mr. Schafer provide the new telecom rates he calculated for Verizon's use of FirstEnergy's poles?

A. Yes, and many approximate the new telecom rates Dr. Calnon calculated.

[3] *See* VZ Statement 2.0 at 3:4-9 (Calnon Direct Testimony).

Q. The rates FirstEnergy charged Verizon under the various joint use agreements are not in dispute, correct?

A. Correct. FirstEnergy agreed it charged the rates I included in Exhibit SCM-1 in a Joint Statement filed at the FCC.[4] The Joint Statement also includes rates for use in comparing the rates Met-Ed charged Verizon (which apply to a subset of poles) to the rates resulting from the FCC's formulas (which apply to all poles).[5]

Q. Please compare the new telecom rates Mr. Schafer included in his rebuttal testimony with the rates FirstEnergy charged Verizon.

A. The following table shows how the rates FirstEnergy has charged Verizon far exceed the new telecom rates Mr. Schafer included in Tables 1, 2, and 3 of his rebuttal testimony:

Verizon's Use of Met-Ed's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
New Telecom Rate (per pole)	$8.33	$9.90	$10.43	$4.87	$8.93	$8.31	$9.05	$11.38
Rate charged Verizon (per pole)	[redacted]							
Verizon's Use of Penelec's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
New Telecom Rate (per pole)	$6.34	$6.74	$7.20	$5.06	$6.76	$6.90	$7.23	$10.03
Rate charged Verizon (per pole)	[redacted]							

[4] Ex. SCM-8 (Joint Statement ¶ 7).

[5] The comparative rates assign Met-Ed and Verizon the same per-pole rate for use of the other's poles, so are referred to as "reciprocal" rates. The reciprocal rates understate the competitive disparity between Verizon and its competitors because Met-Ed should, in fact, pay a proportionally higher rate than Verizon pays because Met-Ed uses far more space on Verizon's poles than Verizon uses on Met-Ed's poles.

Verizon's Use of Penn Power's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
New Telecom Rate (per pole)	$8.20	$9.21	$9.35	$8.40	$9.73	$10.31	$10.30	$12.62
Rate charged Verizon (per pole)	[redacted]							

2. There are Overarching Flaws with Mr. Schafer's Claim that Verizon Enjoys "Advantages" Under the Joint Use Agreements

Q. Mr. Schafer says Verizon should pay rates higher than the new telecom rate because the joint use agreements provide Verizon advantages. Do you agree with his statement?

A. No. Mr. Schafer has not identified an "advantage" that individually or combined justifies charging Verizon a rate higher than the new telecom rate. His analysis also has basic across-the-board flaws.

Q. Let's discuss your overarching criticisms first. What is your first criticism?

A. Mr. Schafer says Verizon receives *advantages* as compared to its competitors,[6] but mere "advantages" do not justify charging Verizon a rate higher than the new telecom rate. FirstEnergy must instead show Verizon receives *net* benefits that provide it a *material* advantage over other telecommunications attachers.[7] Mr. Schafer has failed to apply the proper standard.

Q. What do you mean by "net" benefits?

To understand "net" benefits (also referred to as "net" advantages), let me first explain the difference between joint use agreements, which ILECs typically have with electric utilities, and license agreements, which cable companies and CLECs typically have with

[6] *See, e.g.*, FE Statement 1-R at 31:13-15 (Schafer Rebuttal Testimony).

[7] *See, e.g.*, FE Statement 2-R at 18:5-7 (Zarakas Rebuttal Testimony).

electric utilities. A joint use agreement is an agreement between two pole owners allowing each pole owner to attach facilities to poles owned by the other. A license agreement, in contrast, is an agreement between a pole owner and (typically) a communications company seeking to attach facilities to the pole owner's poles.

By definition, joint use agreements impose unique costs on ILECs that are not imposed on their competitors under license agreements. Under a joint use agreement, each company is required to own and maintain poles and, with limited exception, to give the other company the same terms and conditions for use of its poles the company receives for its use of the other company's poles.[8] In other words, under a joint use agreement, each pole owner is effectively both a tenant leasing space on the other company's poles *and* a landlord renting space on its poles to the other company. As a landlord, the company must extend to its tenant the same terms and conditions it receives when it is the tenant on the other company's poles. For this reason, provisions in joint use agreements are often referred to as "reciprocal." License agreements do not include pole ownership obligations or reciprocal provisions and therefore the licensee does not incur the same pole ownership, maintenance, and other costs ILECs incur under a joint use agreement.

The "net" benefits standard ensures competitively neutral rates account for unique advantages provided by a joint use agreement (if any) *and* unique costs ILECs incur under joint use agreements. Charging an ILEC a rate higher than the new telecom rate

[8] The exception is generally something like the amount of space provided to each company, as an electric utility's facilities occupy far more space on a pole than an ILEC's facilities.

would only be justified if the value of the "net" benefits (meaning unique benefits less unique costs) is greater than zero.

Q. You said Mr. Schafer did not account for net benefits. Please give us an example of a "benefit" Mr. Schafer includes even though Verizon provides it to FirstEnergy.

A. Mr. Schafer says Verizon is advantaged because Verizon does not need to submit a pole profile sheet or provide a photograph of a pole before Verizon attaches facilities to FirstEnergy's poles.[9] FirstEnergy also does not need to submit a pole profile sheet or provide a photograph of a pole before FirstEnergy attaches facilities to Verizon's poles. This reciprocal arrangement, where Verizon gives something up (specifically, the same alleged "benefit" it is provided), does not exist under FirstEnergy's license agreements.

Q. When you said net benefits must "materially" advantage Verizon over its competitors, what did you mean?

A. The net benefits must have some quantifiable value and material impact on FirstEnergy's bottom line to justify FirstEnergy's collection of a higher rate. The FCC explained in 2011 that an ILEC should receive the new telecom rate where it is not subject to the same terms and conditions as its competitors so long as "the arrangement at issue does not provide a *material* advantage" to the ILEC.[10] Mr. Schafer relies on alleged advantages he and FirstEnergy's other witness cannot quantify, and makes no effort to explain why they are "material."

[9] *See* FE Statement 1-R at 34:11-13 (Schafer Rebuttal Testimony).

[10] *Pole Attachment Order*, 26 FCC Rcd at 5336 (¶ 217).

Q. Has Mr. Schafer explained how each alleged advantage is a "competitive" advantage?

A. No. This is another problem with Mr. Schafer's analysis. He says he identified advantages Verizon has "over its cable company and CLEC competitors,"[11] but he includes items that are not uniquely provided to Verizon. For example, Mr. Schafer says Verizon is advantaged because FirstEnergy deployed poles including communications space, which means its poles can accommodate electric facilities and communications facilities, rather than just electric facilities. This is of equal "benefit" to Verizon's competitors, which also attach in the communications space on FirstEnergy's poles.

Q. Do you have another overarching criticism of Mr. Schafer's approach to alleged advantages?

A. Yes. Mr. Schafer essentially asks the Commission to accept him at his word. He did not provide a license agreement to support his allegations. He did not cite, quote, or compare language in the joint use agreements to the language in FirstEnergy's license agreements. He also did not attach documentation to substantiate the costs he alleges.

Q. Do you have reason to question an electric utility when it alleges, without documentation, that Verizon has "advantages" under a joint use agreement?

A. Yes. As I have experienced throughout the extensive and unsuccessful negotiations with FirstEnergy and several other companies, electric utilities have every incentive to allege "advantages" exist to try to continue collecting unreasonably high rental rates from Verizon.

[11] *See, e.g.*, FE Statement 1-R at 31:13-14 (Schafer Rebuttal Testimony).

Q. How has FirstEnergy engaged in such an effort in its negotiations with Verizon?

A. As I'll detail further below, FirstEnergy has acknowledged many "advantages" it relied on during our negotiations are not, in fact, net material competitive advantages. For example, FirstEnergy alleged "Verizon is not subject to safety violation penalties, *unlike its competitors*."[12] This claim is false. FirstEnergy now admits it has not imposed safety violation fees on Verizon's competitors either.[13] Why FirstEnergy made this and other false claims is unclear, but they had the effect of complicating Verizon's efforts to obtain just and reasonable rental rates through negotiations.

Q. Mr. Schafer says FirstEnergy needs additional discovery from Verizon to prove and quantify alleged advantages? Is this true?

A. No. As an initial matter, Mr. Schafer is wrong when he says Verizon did not "engage in an open and fair discovery process."[14] Verizon responded to significant discovery in this case, including ten interrogatories served while at the FCC, and 47 discovery requests and 20 requests for admission served after the case was transferred to the Commission.

More fundamentally, Mr. Schafer is wrong that discovery from Verizon is needed. If *FirstEnergy* provides Verizon net material benefits under the terms and conditions of *FirstEnergy's* joint use agreements as compared to the terms and conditions of *FirstEnergy*'s license agreements with Verizon's competitors, Mr. Schafer would have access to that information. Mr. Schafer cannot show FirstEnergy provides Verizon a net

[12] Ex. SCM-5 at VZ00690 (FCC Ex. 29) (emphasis added).

[13] Ex. SCM-10 (Response to Verizon Interrogatory Set II, No. 25).

[14] FE Statement 1-R at (Schafer Rebuttal Testimony)

material competitive benefit under the joint use agreements because FirstEnergy does not provide Verizon a net material competitive benefit under the joint use agreements.

Q. Do you have other criticisms of Mr. Schafer's approach before we discuss the individual advantages he alleges?

A. Yes. Mr. Schafer does not try to justify the specific rates FirstEnergy charges Verizon based on the advantages he alleges or compare them to the old telecom rate for Verizon's use of FirstEnergy's poles, which is a hard cap on the rate FirstEnergy may charge if it proves Verizon receives net material competitive advantages.

Q. Did you compare the rates FirstEnergy charged to the old telecom rates?

A. Yes. The following table shows FirstEnergy has charged Verizon rates much higher than the old telecom rates Dr. Calnon calculated (he called them pre-existing telecom rates):

Verizon's Use of Met-Ed's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
Old Telecom Rates (per pole)	$12.57	$14.96	$15.26	$7.61	$14.16	$13.32	$14.47	$18.49
Rate charged Verizon (per pole)	[redacted]							
Verizon's Use of Penelec's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
Old Telecom Rates (per pole)	$9.74	$10.29	$10.89	$7.89	$10.54	$10.88	$11.35	$15.90
Rate charged Verizon (per pole)	[redacted]							
Verizon's Use of Penn Power's Poles								
	2011	2012	2013	2014	2015	2016	2017	2018
Old Telecom Rates (per pole)	$11.06	$12.83	$12.90	$12.44	$13.54	$14.24	$13.75	$16.94
Rate charged Verizon (per pole)	[redacted]							

3. Mr. Schafer's Alleged Advantages Do Not Provide Verizon a Net Material Competitive Advantage

Q. Did Mr. Schafer identify benefits or a group of benefits that gives Verizon a net material advantage over its competitors?

A. No.

Q. Let's go through his alleged advantages one at a time. First, Mr. Schafer says the joint use agreements "allowed Verizon to construct its communications systems unfettered by significant make-ready expense, while its competitors pay a substantial amount in make-ready to gain access to FirstEnergy's poles." Please explain what "make-ready" is.

A. At a high-level, make-ready is work required to "make" a pole "ready" for a new attachment. Sometimes, a communications company can attach facilities to a pole without completing much or any make-ready. Other times, the existing facilities on the pole need to be moved up or down so the new attachment can be added and appropriate clearances between facilities maintained.

The term "make-ready" is used in different ways. Sometimes it refers only to work rearranging facilities and attaching the new facility. Other times, it is used to describe all work required to attach a new facility, including survey and engineering work before attaching and survey and inspection work after. Still other times, it includes work required to replace an existing pole with a taller or stronger pole and to transfer existing facilities to the replacement pole. It appears Mr. Schafer includes all these tasks when he refers to make-ready because his analysis includes both "make-ready engineering" and "make-ready construction" work.[15]

[15] Ex. SFS-5.

Q. Do you agree with Mr. Schafer's claims about make-ready?

A. No. I disagree for at least three reasons. First, I disagree that a just and reasonable rate for Verizon's use of FirstEnergy's poles should be higher based on history alone, which is what Mr. Schafer is advocating for here. His point, as I understand it, is that because Verizon is an ILEC, Verizon deployed facilities before cable companies and CLECs existed. Mr. Zarakas makes the same argument when he says the joint use agreements gave Verizon "[s]eamless access to a pole network in the era before the implementation of the Telecommunications Act of 1996," which created CLECs.[16] I do not think the fact ILECs existed before cable companies and CLECs should impact the just and reasonable rate for use of poles today.

Q. What is the second reason you disagree?

A. I disagree Verizon avoids make-ready that its competitors require when attaching to FirstEnergy's poles. Verizon and its competitors deploy facilities of comparable size to FirstEnergy's poles and so require comparable space on poles with the same existing attachments. Verizon and its competitors should require the same make-ready work to attach their facilities to the same poles.

Q. If Verizon attaches its facilities to FirstEnergy's poles first, does it increase the make-ready work required for Verizon's competitor to attach?

A. Typically it should not. Utility poles come in five-foot increments (35-foot, 40-foot, 45-foot, etc.), and a communications company is presumed to occupy one foot of space. A 30- or 35-foot pole can accommodate an electric utility and two communications attachers. A 37.5-foot pole is presumed to accommodate an electric utility and four

[16] FE Statement 2-R at 31:12-14 (Zarakas Rebuttal Testimony).

communications attachers.[17] A 40- or 45-foot pole can accommodate even more. FirstEnergy's witness Mr. Guo claims that the average height of FirstEnergy's poles exceeds 40 feet and have about three entities attached (FirstEnergy, Verizon, one communications company).[18] If true, there should be plenty of room for more communications companies to attach with little (if any) make-ready required.

Q. What is the third reason you disagree with Mr. Schafer's allegation?

A. Mr. Schafer bases his claim on a misleading, incomplete, and inaccurate comparison of make-ready costs.

Q. How so?

A. For several reasons. First, Mr. Schafer incorrectly claims that Verizon had [redacted] per pole in make-ready costs during the last two years. Mr. Schafer calculates these values based *solely* on make-ready payments Verizon made to FirstEnergy. But as I explained in my direct testimony, Verizon completes much of its own make-ready work when attaching to FirstEnergy's poles, just as FirstEnergy does when attaching to Verizon's poles. Verizon (like FirstEnergy) does not avoid this cost; instead it incurs the cost of this make-ready work directly by performing the work itself.

Q. Why does this undermine Mr. Schafer's analysis?

A. It is incomplete and misleading to compare work FirstEnergy completes for Verizon with work FirstEnergy completes for Verizon's competitors, which is what Mr. Schafer has done. Verizon completes much of the make-ready work it requires when making

[17] *See* 52 Pa. Code § 77.4(a); 47 C.F.R. § 1.1409(c), 1.1410.

[18] FE Statement 7-R, Ex. CG-1 at Table 3 (Guo Rebuttal Testimony).

attachments to FirstEnergy's poles, while Verizon's competitors typically pay FirstEnergy to complete that same work at cost.[19] Verizon and its competitors should incur comparable make-ready costs under these approaches. They may incur the costs in a different way, but the costs themselves should still be comparable because labor and material costs are comparable in the same general area.

Q. If Mr. Schafer's chart shows only a portion of Verizon's make-ready costs, can you provide the additional make-ready costs Verizon incurred?

A. Not with precision. Verizon does not separately track the labor and material costs it incurs when completing make-ready to attach to FirstEnergy's poles. Mr. Schafer argues that, because of this, the Commission should disregard the costs Verizon incurs.[20] But Mr. Schafer does not dispute that Verizon, in fact, incurs costs by performing make-ready work itself. And the limitations of Verizon's records are fairly standard. In discovery, FirstEnergy conceded that when it completes inspections "with internal company labor, … there is no specific labor code available to accurately determine the effort and labor costs" involved.[21]

Q. What would happen if some of Verizon's make-ready costs were ignored?

If the make-ready costs Verizon incurs by performing work are ignored, FirstEnergy would collect higher rental rates from Verizon based on costs FirstEnergy does not incur.

[19] *See, e.g.*, Ex. SCM-11 at FE00268 (CLEC-5 License Agreement [redacted]) ([redacted]).

[20] *See* FE Statement 1-R at 40:17-41:9 (Schafer Rebuttal Testimony).

[21] Exhibit SCM-12 (Response to Verizon Interrogatory Set II, No. 13).

This would effectively charge Verizon for make-ready twice—once when it performs the work and again when it pays rent to FirstEnergy. Verizon's competitors, in contrast, would only pay for make-ready once.

Q. What is another criticism of Mr. Schafer's make-ready analysis?

Mr. Schafer's analysis is incomplete because it does not account for the pole replacement costs and transfer costs FirstEnergy imposed on Verizon but not on Verizon's competitors.[22] To attach new facilities or expand existing facilities on a pole, a company sometimes requests a taller or stronger pole. I explained in my direct testimony that FirstEnergy has imposed far more pole replacement costs (the cost to replace the pole) and transfer costs (the cost to transfer facilities from the existing pole to the new pole) on Verizon than Verizon has required of FirstEnergy. FirstEnergy's license agreements [redacted].[23]

My analysis showed that over about a five-year period, FirstEnergy required Verizon to incur the cost to replace 569 more poles and to complete 3,687 more transfers than Verizon required of FirstEnergy.[24] Mr. Schafer reviewed my analysis and challenged

[22] *See* Ex. SCM-1 at VZ00025-00028 (Mills Aff. ¶¶ 57-61).

[23] *See, e.g.*, Ex. SCM-3 at VZ00507 (Bell License, Art. IV(1a)) ("Licensee shall perform such work at its own expense except in cases where the cause is due solely to changes, improvements or renewal of Owner's facilities (*e.g.*, including but not limited to installation of a transformer, installation of a recloser or a rephasing of conductors)…. Licensee's expenses for such work shall be paid by Owner...").

[24] Ex. SCM-1 at VZ00026-28 (Mills Aff. ¶¶ 60-61).

only the inclusion of 28 pole replacements in the Met-Ed service area.[25] He says the 28 poles should not have been included because they would have been replaced anyway because of deterioration or a road project. Even if true, Mr. Schafer did not criticize the other hundreds of pole replacements and thousands of transfers FirstEnergy required of Verizon, but not Verizon's competitors. But Mr. Schafer's number is overstated. Of the 28 pole replacements, I agree 13 were related to highway projects. But of the remaining 15 pole replacements, just two were labeled as damaged, and one of the two needed replacement irrespective of the damage because Met-Ed required a larger class pole to support its new equipment.

Q. Do you have other criticisms of Mr. Schafer's make-ready analysis?

A. Yes. His analysis is misleadingly incomplete because he compares Verizon to a small subset of FirstEnergy licensees that rapidly deployed their networks over the last two years. Mr. Schafer limited his analysis to [redacted] companies per FirstEnergy operating company, for a total of [redacted] companies.[26] In contrast, FirstEnergy has "185 license agreements between FirstEnergy and cable and CLEC entities."[27]

The companies Mr. Schafer chose for the analysis are not typical of Verizon's competitors. Mr. Schafer says he selected only those companies that "submitted the largest number of attachment applications during the past two years."[28] This produced a

[25] FE Statement 1-R at 37:16-21 (Schafer Rebuttal Testimony).

[26] FE Statement 1-R, Ex. SFS-5 (Schafer Rebuttal Testimony).

[27] *See* Ex. SCM-13 (Response to Verizon Interrogatory Set II, No. 20).

[28] FE Statement 1-R at 32:10-13 (Schafer Rebuttal Testimony).

skewed list of companies that includes companies just beginning to deploy their networks. Some in the analysis [redacted] before 2018 (and have never paid the exorbitant rental rates FirstEnergy imposed on Verizon). This is not typical of Verizon's competitors, many of which, like Verizon, have been deploying extensive networks for decades.

Q. Next, Mr. Schafer says Verizon "attached to the vast majority of available FirstEnergy poles pursuant to the 'built to order' joint use agreement system." Do you understand what he means by a "built to order" joint use agreement system?

A. I think so. FirstEnergy argued in its Answer that Verizon is advantaged because the "joint use system of building new pole lines tall enough and strong enough to accommodate both ILEC and electric facilities … has been the common practice of joint use for a century.[29] FirstEnergy referred to this as a "built to order" system of poles that would accommodate Verizon's facilities.

Q. Do you agree that FirstEnergy built a network specifically to accommodate Verizon's service needs?

A. I cannot speak to what happened 50 or 100 years ago, but I have seen no evidence that the height of FirstEnergy's poles was determined based solely on the requirements or to meet the needs of Verizon's predecessor companies. I do know Verizon's poles are typically taller than required for its communications facilities alone, which is why Verizon can accommodate FirstEnergy's electric facilities and the facilities of Verizon's competitors. Shared infrastructure is a good thing for attachers and communities. It

[29] Answer ¶ 72.

should not forever increase the rates Verizon pays to use poles its competitors also use, but at far lower rates.

Q. Does the height of poles FirstEnergy deployed decades ago matter when setting the just and reasonable rate for Verizon's use of FirstEnergy's poles today?

A. No. As I state above, the fact that FirstEnergy's poles include communications space in addition to power space does not advantage Verizon as compared to its competitors. Verizon's competitors can also attach to FirstEnergy's poles because the poles include communications space.

Q. Mr. Schafer says that Verizon previously "attached to the vast majority of available FirstEnergy poles" so does not need to file as "many applications to install new attachments to FirstEnergy's poles" as its competitors. Do you agree?

A. No, although again I'm not sure why the historical development of the network matters when setting rates for use of poles today. Regardless, Verizon's principal competitors have also been deploying extensive networks for decades. Cable television has been available since at least the 1970s, and CLECs entered the market in the late 1990s. The age of Verizon's network does not mean Verizon is less focused on deployment or should pay more for the pole space required to maintain, extend, expand, and improve its services.

Q. Mr. Schafer says that Verizon can reach new customers and provide additional services to existing customers by overlashing existing facilities or lighting dark fiber capacity. Does this distinguish Verizon from its competitors?

A. No. Verizon's main competitors have been deploying extensive networks for decades. They can also reach new customers and provide additional services to existing customers by overlashing existing facilities or lighting dark fiber capacity.

Q. Mr. Schafer says overlashing or lighting dark fiber saves time as compared to a completing make-ready to attach to a pole. Is this true?

A. Yes, but that would apply equally to Verizon's competitors who also can overlash or light dark fiber to reach customers. FirstEnergy admitted cable companies that attach to FirstEnergy's poles "arguably can compete with Verizon for certain new business by overlashing existing facilities or by lighting spare dark fiber capacity."[30] And it has always been far less expensive for Verizon's competitors to deploy cables with additional capacity since they were paying much lower rental rates to attach their facilities.

Q. If make-ready is required, how much time does it require?

A. The Commission adopted FCC regulations that speed the time for Verizon's competitors to attach. If they use a one-touch-make-ready option, they can complete the work in as few as 25 days after filing an application. If they do not elect the one-touch-make-ready option or their make-ready work is complex, make-ready still must be completed to allow them to attach in the communications space of a pole within about 113 days. Verizon's competitors can shorten this period by, for example, quickly accepting an estimate of the make-ready work that needs to be performed.

Q. As another alleged advantage, Mr. Schafer says Verizon does not need to complete a pole profile sheet or provide a photograph of the pole before it attaches. Do you agree this "requires considerably less upfront work" for Verizon?

A. No. Based on my review of FirstEnergy's [redacted] and its Field Reference Guide, the pole profile sheets and photographs are used to document the existing

[30] Answer ¶ 82 n.92. FirstEnergy does not know the extent to which Verizon's competitors have overlashed or used dark fiber, so cannot show they have done so to a lesser extent than Verizon. *See* Ex. SCM-14 (Response to Verizon Interrogatory Set III, No. 5); Ex. SCM-15 (Response to Verizon Interrogatory Set III, No. 6).

attachments on a pole.[31] Verizon must obtain and document this same information before attaching to a pole. There is no material difference between Verizon and its competitors.

Q. Mr. Schafer says Verizon is advantaged because it does not need to wait for FirstEnergy to process the pole profile sheet. Do you agree?

A. No. That comparison assumes Verizon could immediately attach its facilities to a pole in a situation in which its competitor would need to wait for FirstEnergy to process the pole profile sheet. That is not a realistic situation when make-ready is required. As an ILEC, Verizon is not eligible for the one-touch-make-ready option. This means that when Verizon requires make-ready, Verizon must wait for existing attachers to move or relocate their attachments before Verizon can attach. This can take significant time, and certainly more time than FirstEnergy should need to process a pole profile sheet FirstEnergy and Verizon agreed to forego under the joint use agreements.

Q. What do you think about Mr. Schafer's claim that Verizon has avoided application fees for use of SPANS, FirstEnergy's electronic application processing system?

A. FirstEnergy did not implement SPANS until 2014 in its Penn Power service area and 2016 in its Met-Ed and Penelec service areas,[32] so Verizon could not have "avoided" anything before then. And I have not seen anything showing uniform payment of SPANS fees since then. FirstEnergy only passes through SPANS fees when permitted by its license agreements.[33] I reviewed the six license agreements FirstEnergy attached to its Answer and did not see anything that allowed FirstEnergy to charge fees for SPANS. I

[31] Ex. SCM-6 at VZ00694-95 (FirstEnergy Field Reference Guide); Ex. SCM-11 at FE00282 (CLEC-5).

[32] Ex. SCM-16 (Response to Verizon Interrogatory Set II, No. 3).

[33] *Id.*

also reviewed FirstEnergy's website, which defines a "complete application" without mention of SPANS fees.[34]

Q. What do you think about Mr. Schafer's claim that "Verizon is subject to much more lenient overlashing rules than CLEC and cable company attachers"?

A. I do not agree. Mr. Schafer says cable companies and CLECs must provide notice before and after they overlash their facilities, but this is not a material difference because notice is provided quickly and electronically through SPANS[35] and FirstEnergy does not maintain the information.[36] Mr. Schafer also says FirstEnergy requires cable companies and CLECs to provide pole loading studies before overlashing. Commission regulations, however, *prohibit* pole owners from requiring attachers to submit engineering studies before overlashing.[37]

Q. Mr. Schafer says Verizon is advantaged because it is not subject to field audit costs paid by its competitors every five years. What is your response to this?

A. This, too, is misleading. FirstEnergy was not able to identify the last field audit it had in Pennsylvania,[38] so Verizon's competitors have not paid field audit costs since 2011. There is also no guarantee Verizon's competitors will pay field audit costs for FirstEnergy's future field audits because FirstEnergy's contractor first needs to negotiate

[34] Ex. SCM-6 (FCC Ex. 30).

[35] Ex. SCM-17 (Field Reference Guide Joint Use dated Sept. 19, 2019).

[36] Ex. SCM-14 (Response to Verizon Interrogatory Set III, No. 5).

[37] 47 C.F.R. § 1.1415; *Third Report and Order*, 33 FCC Rcd at 7765 (¶ 119) ("We also emphasize that utilities may not use advanced notice requirements to impose quasi-application or quasi-pre-approval requirements, such as requiring engineering studies.").

[38] Ex. SCM-18 (Response to Verizon Interrogatory Set II, No. 7); Ex. SCM-19 (Response to Verizon Interrogatory Set II, No. 24).

with attaching entities to secure their acceptance of the fees.[39] If an attaching entity agrees to pay the fees, the attachers will pay them directly to the contractor.[40] FirstEnergy will not receive fees for the field audit or incur costs from the field audit. It is not apparent to me why FirstEnergy should collect a higher rental rate from Verizon to cover the cost of a possible field audit, which will be free to FirstEnergy and optional for Verizon's competitors.

It is also highly doubtful FirstEnergy will conduct field audits "on a five-year cycle" as Mr. Schafer predicts. FirstEnergy could not identify its most recent field audit in Pennsylvania and knows it has not had one since 2011.[41] Verizon should not pay a higher annual rate based on a self-serving prediction FirstEnergy may suddenly conduct field audits with regularity.

Q. Do you agree a field audit would cost about [redacted] per pole?

A. It is hard to say. The cost of a field audit can vary significantly based on scope, location, the data being collected, the standards being applied, time constraints, and whether the contract was competitively bid.

[39] *See* Ex. SCM-18 (Response to Verizon Interrogatory Set II, No. 7, Attachment E) at p.8 (stating the contractor "will negotiate" with "attaching companies" for audit fees).

[40] Ex. SCM-18 (Response to Verizon Interrogatory Set II, No. 7).

[41] Ex. SCM-18 (Response to Verizon Interrogatory Set II, No. 7); Ex. SCM-19 (Response to Verizon Interrogatory Set II, No. 24).

Q. Mr. Schafer says Verizon would be advantaged if charged the new telecom rate because FirstEnergy would still pay joint use agreement rates. What is your reaction to this?

This claim is wrong and disingenuous. Verizon has repeatedly represented that, when the just and reasonable rate for Verizon's use of FirstEnergy's poles is set in this case, Verizon will charge FirstEnergy a proportional rate for its use of Verizon's poles.[42] Verizon made this clear by requesting a refund of its overpayments calculated using proportional rates for Verizon and FirstEnergy—not FCC rates for Verizon and joint use agreement rates for FirstEnergy.[43] There will be no rental period in which FirstEnergy pays joint use agreement rates but Verizon pays new telecom rates.

Q. Mr. Schafer describes the "single greatest benefit" to Verizon as "a significant 'speed to market' advantage over its competitors." What does he mean by a "speed to market advantage"?

A. FirstEnergy explained this argument in its Answer using a hypothetical it has admitted was pure speculation.[44] FirstEnergy thinks Verizon can deploy facilities faster than its competitors and the speed could mean another company "los[es] out on the ability to reach a customer and to earn a … profit."[45] In other words, FirstEnergy wants to collect

[42] *See, e.g.*, Complaint ¶ 62 (requesting refund of overpayment calculated using proportional new telecom rates for Verizon and FirstEnergy); VZ Statement 2.0 at 5:10-13 (Calnon Direct Testimony) (describing "calculation of the proportional new telecom and pre-existing telecom rate[s] Verizon would charge FirstEnergy for use of Verizon's poles if it were charged the new telecom and pre-existing telecom rates I calculated in Exhibits C-1 through C-3.").

[43] *See, e.g.*, Ex. MSC-1 at VZ00047 (Calnon Aff. ¶ 25) ("To ensure that Verizon and FirstEnergy have proportional rates for use of each other's poles, I first calculated the proportional per-pole new telecom rates that would apply to FirstEnergy's use of Verizon's poles if Verizon pays the new telecom rental rates calculated in Exhibits C-1 through C-3.").

[44] *See* Ex. SCM-20 (Response to Verizon Interrogatory Set II, No. 5).

[45] *See* Answer ¶ 87.

higher rates from Verizon *not* based on FirstEnergy's costs, but based on speculation about customer choice in the competitive communications market.

Q. Do you agree Verizon has a "speed to market" advantage?

A. No. Mr. Schafer says the alleged "speed to market" advantage is a combination of the alleged advantages already discussed.[46] Those alleged advantages are not net material competitive advantages on their own or combined. As previously detailed, there should be no material difference in the time it takes for Verizon and its competitors to deploy facilities on the same poles, particularly because Verizon's competitors are eligible for one-touch-make-ready and Verizon is not. They also have long paid rental rates a fraction of the rates FirstEnergy has imposed on Verizon.

Q. Mr. Schafer says broadband providers told the FCC they "risk losing the sale" if they cannot quickly deploy their facilities. The letter he cites challenges delays in making "customer drops" or "service drops." Please explain what a service drop is.

A. A service drop is typically a lighter cable connecting service from the utility pole at the street to the customer's house. The letter Mr. Schafer cites asks the FCC to remind electric utilities they should not stand in the way of deployment by requiring pre-approval for these "customer drops" or "service drops."[47] The FCC rejected a pre-approval requirement for service drops two decades ago.[48] The letter thus identifies an unreasonable pre-approval requirement, which should not slow any company's

[46] FE Statement 1-R at 36:7-9 (Schafer Rebuttal Testimony).

[47] Ex. SCM-21 (Letter from B. Hurley, ACA Connects to M. Dortch, FCC (Mar. 26, 2020)).

[48] *Mile Hi Cable Partners, L.P.*, 15 FCC Rcd 11450, 11461 (¶ 19) (2000).

deployment. It does not support FirstEnergy's continued collection of unreasonably high rates from Verizon.

Q. Mr. Schafer says Verizon receives a "significant benefit" because "FirstEnergy performs comprehensive vegetation management near all of its facilities." What is your response?

A. This is work FirstEnergy does for FirstEnergy. FirstEnergy's website says its vegetation management program is conducted to "maintain safe, reliable *electric* service."[49] Its contractors trim trees and prune vegetation so it is "clear of *electric* power lines" and often leave lower-level vegetation undisturbed.[50] This is typical of electric utilities' vegetation management programs, which generally leave vegetation untouched near the communications facilities on a pole. But if FirstEnergy's vegetation management were to have some secondary benefit for the communications facilities on a pole, it would extend equally to Verizon and its competitors. In fact, Verizon's competitors' facilities are located about a foot higher on the pole than Verizon's facilities, so are closer to the vegetation work FirstEnergy completes on its own facilities.

Q. Mr. Schafer says Verizon is advantaged because Verizon can "avoid" vegetation management expenses near Verizon's poles while "Verizon's competitors do not have pole lines" to "incur vegetation management expenses of the kind that Verizon is able to avoid." What is your response to this?

A. This is upside-down. Verizon does not "avoid" expenses *FirstEnergy* incurs to maintain *FirstEnergy*'s facilities. But even assuming it did, Verizon cannot be advantaged as compared to a competitor that never incurs the expense to begin with.

[49] Ex. SCM-22 (FirstEnergy Tree Maintenance Practices) (emphasis added).

[50] *Id.* (emphasis added).

Q. Mr. Schafer says FirstEnergy "inspects Verizon's pole plant because Verizon cannot be relied upon to properly inspect its own pole plant." What is your response?

A. I disagree with his allegation about Verizon's inspection program. Verizon has a robust and comprehensive pole inspection program, which includes inspections in the normal course and an Enhanced Pole Inspection and Treatment Program. This latter program ensures a complete inspection of Verizon's pole plant every ten years, which is consistent with industry standards.[51] It also bears mentioning FirstEnergy has not identified work it actually performs for Verizon—instead, it relies on work *FirstEnergy* completes to inspect *FirstEnergy's* "electric assets," and claims those inspections may provide a secondary benefit to Verizon.[52]

Q. FirstEnergy produced a spreadsheet to support its allegation about Verizon's pole maintenance. Does it support Mr. Schafer's allegation?

No. The spreadsheet identifies concerns about 427 of 174,520 poles reviewed over a nine-year period, or 0.2 percent.[53] This confirms the effectiveness of Verizon's pole inspection program. There are more than 412,000 poles jointly used by the parties, so neither Verizon nor FirstEnergy can monitor its facilities on all those poles on a daily basis. It is therefore reasonable and inevitable for each party to identify concerns with

[51] *See* VZ Statement 4.0 (Surrebuttal Testimony of T. MacNabb).

[52] *See* Ex. SCM-12 (Response to Verizon Interrogatory Set II, No. 13).

[53] FirstEnergy first said the spreadsheet identified concerns with 1,278 poles, but revised its response to state that "the number is actual 456, not 1,278." Ex. SCM-12 (Response to Verizon Interrogatory Set II, No. 13). In fact, the spreadsheet lists concerns with 427 poles. 403 were marked "damaged/deteriorated" and 24 were marked "severely leaning." *Id.*

poles owned by the other party when working in the field. Indeed, Verizon has on occasion notified FirstEnergy of defects with FirstEnergy's joint use poles.[54]

Q. Mr. Schafer concludes by stating "[o]f all of these benefits, it is indisputable that Verizon, at the very least, enjoys the benefits of: guaranteed access; reserved space; no permitting; no inspection; lowest space on the pole; and charging First Energy a fully allocated cost rate for attachments to its poles." Is this undisputed?

A. No, not at all. I disagree with each allegation and will address them in order. *First*, Verizon is not "guaranteed access" to FirstEnergy's poles because FirstEnergy may deny Verizon access to poles under the joint use agreements.[55] *Second*, Verizon is not "reserved space" on FirstEnergy's poles under the joint use agreements[56] and cannot "reserve space" on FirstEnergy's poles under the statutory standard the Commission adopted.[57]

[54] *See* Ex. SCM-23.

[55] Ex. SCM-2 at VZ00168 (Met-Ed Bell JUA, Art. II), VZ00187 (Met-Ed Bethel JUA, Art. I), VZ00214 (Met-Ed Contel JUA, Art. I), VZ00230 (Met-Ed Quaker JUA, Art. I), VZ00245 (Met-Ed York JUA, Art. I), VZ00322 (Penelec Bell JUA, Art. I), VZ00348 (Penelec Contel JUA, Art. I), VZ00373 (Penelec GTE JUA, Art. I), VZ00438 (Penelec Quaker JUA, Art. I), VZ00471 (Penn Power JUA, Art. II).

[56] The Met-Ed joint use agreements do not include space allocations or reservations. The Penelec and Penn Power joint use agreements designate space as "telephone space" or "communications space," but do not reserve that space for Verizon's exclusive use. *See* Ex. SCM-2 at VZ00322 (Penelec Bell JUA, Art. II), VZ00348 (Penelec Contel JUA, Art. II), VZ00374 (Penelec GTE JUA, Art. II), VZ00438 (Penelec Quaker JUA, Art. II), VZ00474 (Penn Power JUA, Art. IX). In practice, FirstEnergy regularly lets Verizon's competitors install their facilities in the space the joint use agreements designate as communications space. *See* Ex. SCM-1 at VZ00029 (Mills Aff. ¶ 63).

[57] *See* 52 Pa. Code § 77.4(a) (incorporating 47 U.S.C. § 224(f)); *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, 16053 (¶ 1170) (1996) ("Permitting an incumbent LEC, for example, to reserve space for local exchange service … would favor the future needs of the incumbent LEC over the current needs of the new LEC. Section 224(f)(1) prohibits such discrimination among telecommunications carriers.").

Third, Verizon is not provided a net material competitive advantage from "permitting" differences for reasons I detailed above. Indeed, Verizon uses the same electronic notification program Verizon's competitors use when it notifies FirstEnergy of new attachments requiring make-ready and manages the make-ready process. *Fourth*, Verizon is not competitively advantaged by FirstEnergy's inspection program for reasons I detailed above. Verizon, as a pole owner, incurs substantial pole inspection costs its competitors do not incur.

Fifth, Verizon is not competitively advantaged by its typical location at the lowest space on the pole because this location is a competitive *disadvantage* for reasons I detailed in Exhibit SCM-1. FirstEnergy confirmed one reason in its discovery responses when it stated individuals working higher on a pole must take "extra care to avoid damaging the attachments of lower communications facilities."[58] Regardless of the care taken, Verizon's facilities are nonetheless damaged at times because they are the lower communications facilities on the pole.

Verizon provided additional evidence of the types of damage and increased costs it incurs because of its lowest location on the pole. Verizon does not separately track the damage or costs incurred because of its location on the pole and often repairs such damage without recording it. Verizon nonetheless provided FirstEnergy the best information it has available. Mr. Schafer criticizes the information we produced, but he does not provide contradictory evidence of his own.[59] I also disagree with Mr. Schafer's criticism

[58] Ex. SCM-24 (Response to Interrogatory Set II, No. 23).

[59] FE Statement 1-R at 39:13-40:16 (Schafer Rebuttal Testimony). FirstEnergy's allegation about Verizon's location on the pole is based on "qualitative and not quantitative" input gained

of Verizon's evidence. He says some damage Verizon identified was not unique to Verizon's facilities because the event broke "poles in half and thus [brought] down all of the attachers."[60] He also says some vandalism identified may have been occurred because Verizon's facilities were copper (assuming they were).[61] These criticisms, even if true, do not impact the damage identified which *was* unique to Verizon's location on the pole (such as where a pole was not pulled down with Verizon's cable) or had nothing to do with the material of Verizon's facilities (such as gunshot damage).[62] In addition, Verizon's location on the pole is not a competitive *advantage* when even FirstEnergy admits Verizon's location on the pole prevents facilities from crisscrossing midspan, which "benefits Verizon and its competitors equally."[63]

Sixth, Verizon is not competitively advantaged because Mr. Schafer thinks Verizon charges "First Energy a fully allocated cost rate for attachments to its poles" under the joint use agreement rate provisions.[64] But Verizon clarified it seeks a rate methodology under which Verizon *and* FirstEnergy would pay proportional new telecom rates (which, incidentally, allocate all pole costs among the owner and attachers).[65] As a result, when

through "unrecorded conversations" with unidentified lineman. Ex. SCM-24 (Response to Verizon Interrogatory Set II, No. 23).

[60] *See* FE Statement 1-R at 39:9-13 (Schafer Rebuttal Testimony).

[61] *Id.* at 40:2-4.

[62] *See* Ex. SFS-9 (Response to FirstEnergy Interrogatory Set I, No. 15).

[63] Response to Compl. ¶ 50.

[64] This claim is curious because the Met-Ed joint use agreements do not assign Met-Ed a rate for use of Verizon's poles.

[65] *See* VZ Statement 2.1 at 39:13-40:4, 48:17-55:5 (Calnon Surrebuttal Testimony); VZ Statement 3.1 at 9:19-15:16 (Tardiff Surrebuttal Testimony).

the Commission sets Verizon's rate in this case, FirstEnergy will pay a rate proportional to Verizon's rate—and not the joint use agreement rates.

Q. Before we move on, please address footnote 5 of Mr. Schafer's rebuttal testimony. There, he says "Verizon's competitive advantages include" the 24 items Mr. Karaga included in his June 2018 letter to Verizon. Do you agree?

A. No. My direct testimony and exhibits explain why the 24 alleged advantages FirstEnergy relied on during negotiations did not, in fact, provide Verizon a net material advantage over its competitors.[66] In footnote 5, Mr. Schafer simply repeats the original allegations. This surprised me because FirstEnergy's Answer, discovery responses, and rebuttal testimony confirm many items in the list are not competitive advantages. To illustrate, below are some allegations from footnote 5 and statements also made by FirstEnergy:

Allegation (Statement 1-R n.5)	Subsequent Statement
"Verizon is guaranteed a number of feet on each pole."	"[I]t is true that FCC regulations prohibit pole owners from reserving space except under certain conditions."[67]
"Verizon can attach to FirstEnergy's multi-ground neutrals, unlike Verizon's competitors"	"FirstEnergy admits that attaching to FirstEnergy's multi-ground neutrals … [is] not [a] difference[ ] that give[s] Verizon a material net advantage over its competitors."[68]
"Verizon can attach to FirstEnergy's guys and anchors, unlike Verizon's competitors"	"FirstEnergy admits that … attaching to FirstEnergy's guys [is] not [a] difference[ ] that give[s] Verizon a material net advantage over its competitors."[69]
"Verizon is not subject to audit costs, while its competitors are subject to those costs"	"FirstEnergy does not have a record of its last field audit."[70]

[66] *See, e.g.*, Ex. SCM-1 at VZ00021-32 (Mills Aff. ¶¶ 48-73).

[67] FE Statement 1-R at 38:20-21 (Schafer Rebuttal Testimony).

[68] Answer to Compl. ¶ 47.

[69] *Id.*

[70] Ex. SCM-18 (Response to Verizon Interrogatory Set II, No. 7).

"Verizon need not affix identification tags, unlike its competitors"	"FirstEnergy admits that affixing a tag … [is] not [a] difference[ ] that give[s] Verizon a material net advantage over its competitors."[71] "FirstEnergy neither provides nor charges for identification tags."[72]
"Verizon is not subject to unauthorized attachment penalties, unlike its Competitors"	"[N]ot all, FirstEnergy contracts with cable companies and CLECs, permit FirstEnergy to impose unauthorized attachment … fees."[73] "Unauthorized attachment fees have not been charged by Met-Ed, Penelec or Penn Power since 2011."[74]
"Verizon is not subject to safety violation penalties, unlike its competitors"	"[N]ot all, FirstEnergy contracts with cable companies and CLECs, permit FirstEnergy to impose … safety violation fees."[75] "No safety violation fees have been charged to entities by Met-Ed, Penelec, or Penn Power since 2011."[76]
"Verizon need not post bonds or other security, unlike Verizon's competitors"	"[N]ot all, FirstEnergy contracts with cable companies and CLECs, require them to post a security bond."[77] "FirstEnergy has not compiled a list or record of each entity that has posted a security bond."[78]
"Verizon does not pay any agreement preparation fees, unlike its competitors"	"The 'agreement preparation fee'" is "not in FirstEnergy's template CLEC agreement."[79]
"[T]he insurance provisions are less burdensome for Verizon as compared to its competitors"	"FirstEnergy has not compiled a list comparing insurance provisions."[80]

[71] Answer to Compl. ¶ 47.

[72] Ex. SCM-38 (Response to Verizon Interrogatory Set III, No. 7).

[73] Answer ¶ 51.

[74] Ex. SCM-19 (Response to Verizon Interrogatory Set II, No. 24).

[75] Answer ¶ 51.

[76] Ex. SCM-10 (Response to Verizon Interrogatory Set II, No. 25).

[77] Answer ¶ 53.

[78] Ex. SCM-25 (Response to Verizon Interrogatory Set II, No. 28).

[79] Answer ¶ 43.

[80] Ex. SCM-26 (Response to Verizon Interrogatory Set II, No. 26).

"[T]he indemnification provisions are more favorable to Verizon, saving it millions of dollars in out of court settlements over its competitors"	"FirstEnergy has not compiled a list or record comparing the indemnification provisions."[81]

It is unclear to me why FirstEnergy ever claimed these were benefits except to frustrate negotiations and delay providing Verizon the just and reasonable rates to which it is entitled under law. It is even more unclear to me why Mr. Schafer continues to repeat them in his rebuttal testimony long after FirstEnergy conceded they are baseless.

B. Mr. Schafer's Description of the Joint Use Agreements Is Not Accurate

Q. Mr. Schafer says the joint use agreements "established (or continued) cost sharing arrangements between the parties for their distribution pole infrastructure." Do you agree?

A. No. The joint use agreements include rates, terms, and conditions for each party's use of the other party's poles. I disagree that labeling them "cost sharing arrangements" somehow justifies charging Verizon higher pole attachment rates. Electric utilities have repeatedly and unsuccessfully tried to avoid reducing pole attachment rates to a competitively neutral level by claiming joint use agreements are "cost sharing arrangements" rather than pole attachment agreements.

[81] Ex. SCM-27 (Response to Verizon Interrogatory Set II, No. 27).

Q. Mr. Schafer says the joint use agreements "are fundamentally different from cable or [CLEC] agreements" for three reasons. First, he says they "provide for joint ownership of poles within a certain area." Is this true?

A. No. The poles are not jointly owned. Instead, each party owns poles and allows the other party to attach to its poles under the terms and conditions of the joint use agreement.[82] In this respect, the joint use agreements are different from cable or CLEC agreements because cable companies and CLECs are not required to own and maintain a network of poles to which FirstEnergy may attach its facilities.

Q. Second, Mr. Schafer says the joint use agreements "provide benefits to each pole owner that are not provided in cable or CLEC agreements." Is this true?

A. In the limited sense that joint use agreements give each pole owner the right to use the other party's poles at the same reciprocal rates, terms, and conditions that apply to use of its own poles. But to the extent Mr. Schafer suggests the existence of these offsetting "benefits" justifies charging Verizon a rate higher than the new telecom rate, he is wrong. Cable and CLEC agreements do not contain similar offsetting "benefits" because cable companies and CLECs are not required to own and maintain a network of poles to which FirstEnergy may attach its facilities. The standard of competitive neutrality thus looks to whether a joint use agreement provides the ILEC a *net* material competitive advantage for purposes of setting the just and reasonable rate.[83]

[82] *See, e.g.*, Ex. SCM-2 at VZ00167 (Met-Ed Bell JUA) ("Met-Ed hereby grants [Verizon] permission to make attachments to Met-Ed poles as hereinafter provided, and [Verizon] hereby grants to Met-Ed permission to make attachments to [Verizon] poles as hereinafter provided…").

[83] *See, e.g.*, *Third Report and Order*, 33 FCC Rcd at 7768 (¶ 123).

Q. Third, Mr. Schafer says the joint use agreements "are based on each company's full cost of service." Is this true?

A. Not as I understand Mr. Schafer's argument. He says the joint use agreements "reflect the mutual agreement of the parties with respect to the costs of each party to own and maintain poles" while "account[ing] for the difference in the amount of space that each utility occupies on a pole plus equally sharing the cost of the common space."[84] This is not true. Mr. Schafer points to the Met-Ed joint use agreement with Bell Atlantic, which he says divides costs between Verizon (45%) and Met-Ed (55%). But FirstEnergy's best-case-scenario is that Verizon occupies [redacted] feet of space on a pole and Met-Ed occupies [redacted] feet[85]—which is not a 45% to 55% split. In addition, Verizon's competitors are *also* attached to Met-Ed's poles, so it does not make sense for Verizon to pay Met-Ed a rate that ignores the additional rent FirstEnergy collects from Verizon's competitors.

Q. Mr. Schafer says Verizon voluntarily entered the joint use agreements. Is that true?

A. I can't really say because the joint use agreements were entered into by various Verizon predecessor companies between 1958 and 1988. Mr. Schafer admits he can't speak to those negotiations either.[86] Instead, he says the joint use agreements must have been voluntarily entered because they do not state, on their face, that FirstEnergy leveraged its pole ownership advantage to impose unjust and unreasonable rates, terms, and conditions.[87] I have worked in my current position for over fifteen years and have yet to

[84] FE Statement 1-R at 9:9-10:2 (Schafer Rebuttal Testimony).

[85] FE Statement 7-R, Ex. CG-1 at Tables 3, 4.

[86] FE Statement 1-R at 23:10-12 (Schafer Rebuttal Testimony).

[87] *Id.* at 32:11-12.

find an electric utility that would agree to include that statement in a joint use agreement. Mr. Schafer's argument also flies in the face of FCC orders and rulings acknowledging ILECs like Verizon have been unable to negotiate just and reasonable rates because of the lack of bargaining leverage resulting from being a minority pole owner.

Q. Mr. Schafer says Verizon was pleased with the rates negotiated in the 2009 amendments to the Met-Ed and Penelec joint use agreements. Do you agree?

No. I was aware of and supported the negotiations leading to the 2009 amendments, which created a "common rate structure" for all the Met-Ed joint use agreements and for all the Penelec joint use agreements. Before the 2009 amendments, there were seven different rate arrangements for the two FirstEnergy operating companies because of the many legacy joint use agreements between FirstEnergy and Verizon's predecessor companies. The rate charged depended on where a pole was located in relation to outdated legacy service area boundaries. This added unnecessary administrative burdens because it required recordkeeping tracking where poles were located in relation to the outdated service areas. The 2009 amendments streamlined the rate structure, creating one rate structure for Met-Ed and one for Penelec.[88]

Mr. Schafer relies on a 2009 letter from a former Verizon employee,[89] but as the letter states, Verizon was pleased only that the parties resolved the logistical and administrative nightmare resulting from having seven different rate arrangements for two FirstEnergy operating companies. In thanking the FirstEnergy team for finalizing the amendments, my colleague wrote: "With the execution of this [Memorandum of Understanding

[88] *See* Ex. SCM-2 (FCC Exs. 6, 11).

[89] *See* FE Statement 1-R at 32:14-18 (Schafer Rebuttal Testimony); *see also* Ex. SFS-1.

(MOU)] Verizon Pa and FirstEnergy can finally have a *common rate structure* that is fair and equitable for all the Joint Use Agreements between both companies in Pennsylvania."[90] His comments were directed at the "common rate structure"—not the resulting rates.

Q. Was Verizon pleased with the rates in the 2009 amendments?

Not at all. The 2009 amendments did not provide Verizon relief from the prior net rental payments, which were unreasonably high. In the Met-Ed territories, Verizon had paid Met-Ed four different rates in 2008 (before the amendment): [redacted]. In 2009 (after the amendment), Verizon paid Met-Ed one rate, which was essentially at the mid-point of the prior rates: [redacted]. In the Penelec territories, Verizon paid Penelec net rent in 2008 (before the amendment) calculated under three rate structures requiring Verizon to pay Penelec [redacted] per pole and charged different rates to Penelec depending on location: [redacted]. In 2009 (after the amendment), Verizon's rate to Penelec was lowered to [redacted], but all of Penelec's rates were reduced to [redacted]. This had the effect of giving Penelec equal or greater rate reductions than Verizon received.

Q. What was the effect of the 2009 amendments on Verizon's net rental payment to Met-Ed and Penelec?

Verizon's net rental payment to FirstEnergy was higher in 2009 than it was in 2008. In 2008, Verizon's total net rental payment to Met-Ed and Penelec was [redacted]. The

[90] Ex. SFS-1 (emphasis added).

following year, under the amendments, Verizon's total net rental payment to Met-Ed and Penelec was [redacted]—about [redacted] higher.

Q. Why did Verizon sign the 2009 amendments if it was not pleased with the rates?

A. Verizon signed the 2009 amendments to obtain the common rate structure. FirstEnergy's pole ownership advantage made obtaining rental relief impossible, and Verizon lacked an avenue for challenging the rates FirstEnergy charged because the FCC did not yet regulate the rates it charged ILECs. Verizon thus sought to at least eliminate the additional regulatory burden imposed by the prior rental rate structure. Verizon also understood FirstEnergy would sell Verizon poles, and Verizon tried to begin those pole purchase negotiations immediately after signing the 2009 amendments. Because the FCC did not yet regulate the rates charged ILECs, a pole purchase seemed the only way to reduce Verizon's annual net rental payment obligation and FirstEnergy's bargaining power. Nevertheless, as I detailed in Exhibit SCM-1, FirstEnergy refused to sell poles despite Verizon's years-long effort to purchase them. The only positive aspect of the 2009 amendments, therefore, was the common rate structure.

Q. Mr. Schafer admits FirstEnergy would not sell Verizon poles, but says Verizon could have installed more poles over the years to reduce its rental payments. What is your response?

A. It is convenient for Mr. Schafer to now state Verizon could have installed "as many poles as it wished" over the years, but this statement ignores four critical facts. First, on many occasions, FirstEnergy places or replaces a pole without providing Verizon notice or the opportunity to do so. Second, it would be impossible to set enough poles in the normal course to eliminate the pole ownership disparity between the parties, which is why

Verizon asked to purchase 41,633 poles from Met-Ed[91] *and* to set more poles going forward in the letter Mr. Schafer cites.[92] Third, it is better for all attachers to maintain consistency of pole ownership along a pole line, which is another reason Verizon asked to purchase 41,633 poles in the second letter Mr. Schafer cites instead of only "arbitrarily set[ting] more poles."[93] Finally, owning more poles does not reduce rental rates, only net rental payments. Verizon must be charged just and reasonable rates regardless of how many poles it owns or attaches to.

Q. Mr. Schafer says FirstEnergy incurred higher pole installation and maintenance costs because Verizon has not installed more poles. What is your response?

A. This assumes FirstEnergy would let Verizon install more poles. FirstEnergy is typically first on the scene because electricity is required in new developments before telecommunications services and because electric lines create an extraordinary risk of harm following an accident or emergency. It is convenient for FirstEnergy now to say Verizon should have placed and replaced more poles when FirstEnergy did not give Verizon the opportunity. FirstEnergy instead chose to maintain and expand its pole ownership advantage. Indeed, Mr. Schafer says FirstEnergy incurred greater expense because it "found itself … replacing and taking ownership of damaged poles."[94] But when FirstEnergy takes ownership of Verizon's pole, it does not incur greater expense—it takes Verizon's asset. It should instead invoice Verizon for the cost of the pole

[91] Ex. SCM-1 at VZ00551 (FCC Ex. 17).

[92] FE Statement 1-R at 11:17-19 (Schafer Rebuttal Testimony); Ex. SFS-1.

[93] FE Statement 1-R at 11:19-22 (Schafer Rebuttal Testimony); Ex. SFS-2.

[94] FE Statement 1-R at 12:3-5 (Schafer Rebuttal Testimony).

replacement and leave pole ownership with Verizon.[95] It is telling that FirstEnergy could not confirm whether it notified Verizon or invoiced Verizon after replacing Verizon's poles.[96] FirstEnergy owns more poles because FirstEnergy wants to own more poles.

C. Mr. Schafer is Wrong about the Parties' Rate Negotiations

Q. Do you agree with Mr. Schafer's description of the parties' negotiations since 2009?

A. No. I was disheartened to see Mr. Schafer's description and the allegation in FirstEnergy's Answer that Verizon negotiated in bad faith during the more than seven years Verizon sought to negotiate a just and reasonable rental rate with FirstEnergy. I participated in many discussions, email exchanges, and in-person meetings, and I did so in good faith, with the goal of reaching a business deal. The rest of the team at Verizon also tirelessly sought to negotiate in good faith with FirstEnergy and avoid the need for a complaint proceeding. Despite all the effort, FirstEnergy never made an offer to materially change the agreement rates and the annual net rental payment Verizon would have to pay. In other words, FirstEnergy never proposed to charge Verizon a rental rate in the range between properly calculated new and pre-existing telecom rates.[97]

Q. Mr. Schafer says Verizon "insisted on FirstEnergy charging Verizon new rental rates based on the FCC's new telecom formula." Is this true?

A. Not at all. From the beginning of our negotiations, I sought a just and reasonable rate for Verizon. It was my expectation based on experience that Verizon is comparable to its

[95] *See, e.g.*, Ex. SCM-2 at VZ00173 (Met-Ed Bell JUA, Art. VIII(D)) ("In cases of emergency, Licensee may replace Owner's pole. Owner shall be notified of such replacement as soon as possible. Owner shall pay Licensee actual cost of replacement of pole only.").

[96] Ex. SCM-28 (Response to Verizon Interrogatory Set II, No. 14).

[97] *See, e.g.*, Ex. MSC-1 at Ex. C-6 (Calnon Direct Testimony).

competitors when attaching to FirstEnergy's poles, so Verizon should pay the same properly calculated new telecom rate guaranteed to Verizon's competitors. But I always sought to understand whether a rate higher than the new telecom rate might be justified. Beginning in 2012, the Verizon team asked for copies of FirstEnergy's license agreements with CLECs and cable companies. We also asked FirstEnergy to provide a list of alleged competitive advantages it thought would support a higher rate. FirstEnergy refused to provide the requested license agreements until after Verizon filed its complaint at the FCC, did not provide a list of alleged advantages until June 2018, and it chose not to defend those alleged advantages in its Answer in this case.

Despite the lack of information supporting a higher rate, Verizon still offered to negotiate within the range of rates made relevant by the FCC's 2011 *Pole Attachment Order*. It is untrue "Verizon never submitted an offer to FirstEnergy that was not based on the new telecom rate."[98] FirstEnergy admitted in its Answer, as it must, that Verizon asked to negotiate "between the new telecom rate and the old telecom rate."[99]

Exhibits SCM-1 and SCM-5 document Verizon's extensive effort to negotiate a compromise business deal, but they do not include all of Verizon's exchanges and offers because some were sent as confidential settlement communications. At all times, Verizon negotiated in good faith and with the goal of reaching a negotiated deal within the parameters set by the FCC in its Orders.

[98] FE Statement 1-R at 25:2-3 (Schafer Rebuttal Testimony) (emphasis in original).

[99] Answer ¶ 14.

Q. Mr. Schafer says the discussions began because the parties wanted to see "whether they could consolidate and update all of the terms and conditions" of the joint use agreements. Do you agree?

A. No. The discussions began because Verizon wanted just and reasonable rates. All options were on the table, though, and Verizon spent significant time discussing other topics with FirstEnergy, such as new operational terms for a consolidated joint use agreement, a pole purchase, and a pole sale. But it is not accurate to say the parties had agreed upon operational terms for a new consolidated agreement and "simply needed to add a new" rate term.[100] Verizon could not commit to operational terms without knowing what rate FirstEnergy would negotiate and whether it would be comparable to the rate charged Verizon's competitors.

Q. Mr. Schafer says FirstEnergy was willing to compromise more than Verizon during the negotiations. Is this true?

A. No. FirstEnergy never made an offer to materially change the agreement rates and Verizon's annual net rental payment so that Verizon would pay a rental rate in the range between properly calculated new and pre-existing telecom rates.[101] For example, and as I explained in Exhibit SCM-1, FirstEnergy's first offer would have reduced Verizon's approximately [redacted] million annual rental payment to Met-Ed by $465. I was on the conference call when FirstEnergy proposed the parties agree to this arrangement, even if it was (as Mr. Schafer now claims) a starting point to "begin discussing the Met-Ed joint use rates" five years into the rate negotiations.[102] FirstEnergy's next offers were similarly

[100] FE Statement 1-R at 26:21-23 (Schafer Rebuttal Testimony).

[101] *See, e.g.*, Ex. MSC-1 at Ex. C-6 (Calnon Direct Testimony).

[102] FE Statement 1-R at 27:17-28:5 (Schafer Rebuttal Testimony).

objectionable, including one that would have increased Verizon's annual net rental obligation to Penn Power by more than $100,000.[103]

It is also inaccurate to suggest FirstEnergy was open to negotiating just and reasonable rates in accordance with FCC regulations. Mr. Schafer admits FirstEnergy was unwilling to agree to rates based on FCC rate formulas because it does not think "the FCC's formulas properly allocate the full costs of poles, … let alone adhere to the cost-sharing arrangements established by mutual agreement many decades ago."[104] Indeed, when I attended a long-planned executive-level meeting with FirstEnergy in April 2018, I was discouraged to learn most of FirstEnergy's executives in attendance had not reviewed the detailed rate calculations our Vice President sent FirstEnergy almost four months earlier.[105] More recently, FirstEnergy took the position in its Answer that, despite the years of effort I devoted to seeking a good faith settlement, there was "not enough guidance in the [FCC's] 2011 Pole Attachment Order for the parties to negotiate a resolution of this issue without a pole attachment complaint proceeding."[106] Had FirstEnergy informed Verizon of its position in 2012, Verizon could have sought relief then instead of devoting so much time and effort in pursuit of a negotiated resolution to which FirstEnergy would never agree.

Q. Mr. Schafer says he has been advised by counsel that Verizon is "not legally entitled to the new telecom rate for their unterminated joint use agreements." Did he ever

[103] *See* Ex. SCM-1 at VZ00020 (Mills Aff. ¶ 45).

[104] FE Statement 1-R at 25:15-18 (Schafer Rebuttal Testimony).

[105] *See* Ex. SCM-5 at VZ00592-646 (FCC Ex. 27). This letter was sent on December 20, 2017, but was not printed on letterhead due to an inadvertent clerical error.

[106] Answer ¶ 121.

suggest Verizon had to terminate the joint use agreements before it could obtain a just and reasonable rate?

A. I do not recall anyone at FirstEnergy suggesting Verizon had to terminate the joint use agreements before it could obtain a just and reasonable rate. Had FirstEnergy raised the argument sooner, it could have crystalized the dispute and clarified the need for FCC intervention. At a minimum, Verizon could have discussed the issue with FirstEnergy and pointed out that the FCC did not require termination of existing agreements. Nor should it. Termination of the joint use agreements—without a replacement agreement or the statutory right of access to poles enjoyed by Verizon's competitors—would further disadvantage Verizon and increase the cost of deployment of broadband and other advanced services. If the joint use agreements were terminated, Verizon would lose the right to deploy facilities on new FirstEnergy pole lines and would have to identify and obtain approval to use alternate infrastructure, such as constructing a duplicative pole line or undergrounding its facilities. Obtaining the approvals, if possible, would take substantial time.

Q. Let's discuss Mr. Schafer's claim that FirstEnergy offered "to transition Verizon from the current Joint Use Agreements to the Companies' standard CLEC agreement and CLEC rate." Did FirstEnergy make this offer?

A. No. I was also surprised to see FirstEnergy's repeated reliance on this argument in its Answer and again in Mr. Schafer's rebuttal testimony. Mr. Schafer relies on emails from May and June 2018 (after the parties' April 2018 executive level meeting) in which Mr. Schafer raised an "outside the box" suggestion for future discussion. According to the emails, Mr. Schafer said FirstEnergy may discuss the possibility of "a CLEC rate" if Verizon agreed to "transition … out of the pole-owning business in FirstEnergy service

territories" by transferring ownership of Verizon's poles to FirstEnergy.[107] Mr. Schafer now claims this was an "offer," and FirstEnergy argued in its Answer the mere act of making the "offer" shows FirstEnergy lacked bargaining power, and that Verizon must consider the joint use agreements superior because it did not accept the "offer." I disagree with all of this.

First, FirstEnergy never made a formal offer for Verizon to accept. Mr. Schafer did not identify the rates or terms that would apply to Verizon and appeared to speak for himself instead of for any or all of the FirstEnergy operating companies. Verizon also had no way of knowing what Mr. Schafer was contemplating. FirstEnergy had informed Verizon in July 2017 it does not have a "standard" license agreement because it negotiates "modifications" of its draft agreement.[108] FirstEnergy has also confirmed it does not have a "CLEC rate" because its operating companies charge CLECs a wide range of pole attachment rates, including rates exceeding the properly calculated rate guaranteed CLECs by the FCC's (and now this Commission's regulation). Even now, Mr. Schafer says FirstEnergy is only "willing to explore" his idea and admits there are "significant details to be worked out."[109] There was no "offer to transition Verizon from the current Joint Use Agreements to the Companies' standard CLEC agreement and CLEC rate."[110]

[107] Ex. SCM-5 at VZ00650-51 (FCC Ex. 28).

[108] Ex. SCM-5 at VZ00577 (FCC Ex. 23).

[109] FE Statement 1-R at 29:7-8, 13-14 (Schafer Rebuttal Testimony).

[110] *See id.* at 29:4-5.

Second, FirstEnergy's proposal was designed to increase FirstEnergy's superior bargaining power. Had Verizon accepted such a proposal, FirstEnergy would have owned all the joint use poles, which would further increase FirstEnergy's pole ownership advantage and ability to impose unreasonable rates, terms, and conditions on Verizon.

Third, under this "proposal," FirstEnergy said it should continue using Verizon's poles under the terms and conditions of the joint use agreements during the transition—but at new telecom rates.[111] In other words, FirstEnergy thought it appropriate to pair the terms and conditions of the joint use agreements with new telecom rates for its own use of Verizon's poles, but would require Verizon to agree to transfer ownership of its pole assets for the mere opportunity to discuss new telecom rates for Verizon's use of FirstEnergy's poles.

Fourth, the "offer" would not have placed Verizon "on equal footing" with its competitors as Mr. Schafer claimed.[112] FirstEnergy was then insisting rates for Verizon's use of FirstEnergy's poles be calculated using inflated inputs (such as three feet of space occupied) that do not reflect real-world conditions even under the flawed data FirstEnergy provided with its rebuttal testimony. The "proposal" also did not include a guarantee of continued access to FirstEnergy's poles. If accepted, it would have further disadvantaged Verizon relative to its competitors: Verizon would pay rates higher than the properly calculated new telecom rates and would not have the guarantee of continued

[111] *See* Ex. SFS-3.

[112] *See* Ex. SCM-5 at VZ00651 (FCC Ex. 28).

pole access statutorily provided to Verizon's competitors. FirstEnergy's proposal was a non-starter.

D. Mr. Schafer's Legal Analysis and Rate Discussion Include Additional Errors

Q. What are some factual errors underlying Mr. Schafer's legal analysis?

A. I am not a lawyer, so I will leave the response to Mr. Schafer's legal analysis[113] to the lawyers, but I will correct a few factual premises. First, Mr. Schafer states my direct testimony "fundamentally fail[ed] to reflect the change of jurisdiction from the FCC to the Commission."[114] This is not true. I detailed "Verizon's extensive and good faith efforts since early 2012 to negotiate with FirstEnergy for a just and reasonable pole attachment rental rate that complies with federal law and regulations, which have now been adopted by the Pennsylvania Public Utility Commission."[115]

Second, Mr. Schafer says Verizon "claimed that the impact of its requested relief on broadband deployment is irrelevant."[116] This is not true. The Commission found prompt enforcement of the FCC's regulations will "promote and encourage the provision of advanced telecommunications services and broadband deployment in the Commonwealth."[117] It remains Verizon's position that the Commission should enforce its regulations in this case "to achieve the 'rate parity between incumbent LECs and their telecommunications competitors' that 'can energize and further accelerate broadband

[113] FE Statement 1-R at 4:16-7:15 (Schafer Rebuttal Testimony).

[114] *Id.* at 5:9-17.

[115] VZ Statement 1.0 at 2:13-16 (Mills Direct Testimony) (emphasis added).

[116] FE Statement 1-R at 6:8-9 (Schafer Rebuttal Testimony).

[117] See *Assumption of Commission Jurisdiction Over Pole Attachments from the Federal Communications Commission*, 52 Pa. B. 470 (Jan. 18, 2020).

deployment.'"[118] In so doing, "the Commission will advance its deployment goals by eliminating outdated rate disparities and creating a more competitive market for deployment of broadband and other advanced services."[119]

Third, Mr. Schafer says Verizon has asked to lower the rate "it pays FirstEnergy without amending any of the other terms and conditions in the agreements, including the rates that FirstEnergy pays Verizon."[120] This is not true for reasons previously detailed. Verizon could not have been more clear that it will charge FirstEnergy proportional rates to the rates set in this proceeding.

Q. Have you identified errors in Mr. Schafer's discussion of rental rates?

A. Yes. Dr. Calnon and Dr. Tardiff will address the errors at length, but I want to make sure there is no confusion created by Mr. Schafer's discussion of rates he refers to as "fully allocated" rates.[121] Mr. Schafer's discussion of "fully allocated" rates is flawed in two critical respects. First, the rates Mr. Schafer calls "fully allocated" rates are not FCC rates, are not calculated using FCC formulas, and were not incorporated into the Commission's regulations when it adopted the FCC's regulations. Second, the FCC formulas the Commission adopted already divide all pole cost among the pole owner and attachers, just not in the manner Mr. Schafer would prefer.[122] The entire argument is an

[118] Complaint ¶ 19 (citation omitted).

[119] Complaint ¶ 59 (citations omitted).

[120] FE Statement 1-R at 6:22-7:1 (Schafer Rebuttal Testimony).

[121] *See* FE Statement 1-R at 12:10-19:8 (Schafer Rebuttal Testimony).

[122] VZ Statement 2.1 at 48:17-55:5 (Calnon Surrebuttal Testimony); VZ Statement 3.1 at 9:19-15:16(Tardiff Surrebuttal Testimony).

attempt to obtain a different formula than the Commission adopted last year and that is required by the Commission's regulations.

Q. Mr. Schafer says he calculated rates using "actual data." Do you agree?

A. No. Mr. Schafer calculated rates for time periods dating back to 2011 using data FirstEnergy's contractor did not collect until 2020 and collected only on a tiny fraction of poles. Because there are also significant errors in the data collected and reported, it cannot be considered "actual data." I did a spot check of FirstEnergy's data after Verizon received it on May 22, 2020.[123] My review confirmed there are errors in the data set.

Some of the errors appear to be the natural consequence of how the field review came to be. Mr. Schafer says FirstEnergy "believe[d] it necessary to establish actual data that reflects the specific characteristics of its pole plant,"[124] but the documents show the field review was a litigation-motivated effort designed by counsel to quickly collect data to try to charge Verizon higher rates.[125] FirstEnergy's field contractor, as a result, asked "to discuss further the collection of the midspan heights to assure that the data being collected is appropriate *for the intended use of First Energy*. Otherwise, we believe that the documented scope addresses all *that First Energy requires*."[126] If FirstEnergy sought

[123] Although Verizon asked for the data in November, it did not receive it until May 22, 2020, the day after FirstEnergy submitted its rebuttal testimony. *See* Verizon's First Set of Interrogatories to FirstEnergy (Nov. 20, 2019).

[124] FE Statement 1-R at 22:6-7 (Schafer Rebuttal Testimony).

[125] Ex. SCM-29 (Response to Verizon Interrogatory Set II, No. 19) ("The scope of the audit, information that would be collected, and the manner in which the study would be performed was *determined by counsel* in consultation with Thomas Pryatel, Stephen Schafer, and Randal Coleman." (emphasis added).

[126] *Id.* (emphasis added).

to obtain accurate data about the joint use poles, it would have done so in a measured way based on industry standards and neutral metrics that do not require input from litigation counsel.

Q. Can you provide an example of an error you identified during your spot check of FirstEnergy's field review data?

A. Yes. I noticed seven poles where FirstEnergy's contractor misidentified a cable television attachment as Verizon's attachment.[127] While Verizon and its competitors use similar lightweight cables, the companies use visibly different hardware that a trained and experienced auditor in the field should immediately recognize. As an example, the following photo of Penelec's pole (Scid no. 116) identifies a "Verizon" attachment despite the cable hardware I marked below. This is not a Verizon attachment, so should not be used to calculate rates charged Verizon:

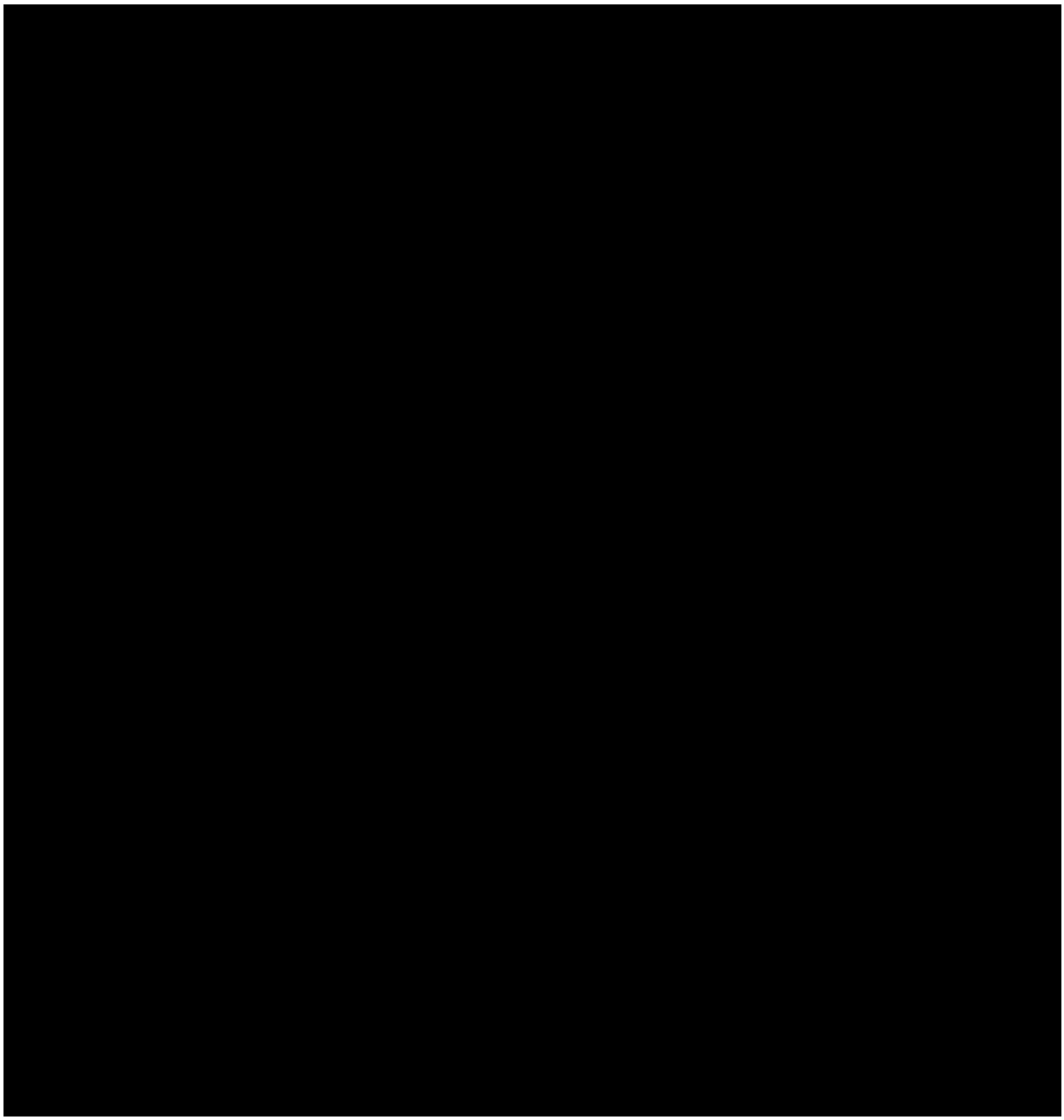
[127] I noticed this issue with poles identified with Scid numbers 14, 116, 137, 313, 367, 786, and 1486 in Attachment D to FirstEnergy's Response to Verizon's Interrogatory No. 34. *See* Ex. SCM-39.

Q. Did you identify other errors in the results?

A. Yes. I saw six poles where FirstEnergy's contractor recorded an incorrect number of attaching entities.[128] As an example, FirstEnergy recorded two attaching entities on this pole (Scid No. 1487), even though it is obvious FirstEnergy is attached in addition to the facilities marked "Company 1" and "Verizon":

[128] I noticed this issue with poles identified with Scid numbers 108, 304, 313, 398, 786, and 1487 in Attachment D to FirstEnergy's Response to Verizon's Interrogatory No. 34. *See* Ex. SCM-40.

Some poles with the wrong number of attaching entities were poles without FirstEnergy attached, meaning the pole is not a joint use pole and should not be used to calculate rates Verizon pays FirstEnergy. The following pole (Scid no. 108), for example, has a Verizon pole tag and no FirstEnergy attachment (the arrow shows where FirstEnergy's facilities would be located), but was recorded as a FirstEnergy pole with two attaching entities:



Q. Were there other errors in the data?

A. Yes. There are significant errors that inflate the amount of space FirstEnergy says Verizon occupies. I was surprised by the allegation in FirstEnergy's Answer that its field audit data showed Verizon required about four inches of additional space on

FirstEnergy's poles than Verizon's competitors require.[129] This is not consistent with my experience and the fact that Verizon and its competitors deploy comparably sized facilities on FirstEnergy's poles. When I reviewed the standard for the field review, the flaw in FirstEnergy's claim became clear. FirstEnergy claims Verizon requires more space on its poles by comparing the 1-foot space occupied presumption in the regulations the Commission adopted[130] to field measurements assuming Verizon occupies at least one foot of space on every pole. In particular, the field review incorrectly "deemed [Verizon] to occupy six (6) inches of clearance above its highest usable space attachment and six (6) inches below its lowest usable space attachment."[131]

The assumption that Verizon always occupies at least one foot of space inflated the space occupied measurement in two ways. *First*, FirstEnergy assumed Verizon has six inches of clearance *above* its facility in all cases, but I saw many poles where that was not true.[132] For Verizon to have six inches of clearance above its facilities, Verizon's facilities must be twelve inches below the next highest facilities. The following pole (Scid no. 164) shows Verizon's facility is located seven inches below the facility above it, leaving Verizon with 3.5 (not six) inches of clearance above its facility:

[129] Answer ¶ 89 (alleging Verizon occupies [redacted] feet on Met-Ed's poles, [redacted] feet on Penelec's poles, and [redacted] feet on Penn Power's poles).

[130] *See* 52 Pa. Code § 77.4(a); 47 C.F.R. § 1.1410.

[131] FE Statement 6-R, Ex. SC-1 (Carlin Rebuttal Testimony).

[132] I noticed this issue with poles identified with Scid numbers 35, 164, 190, 688, 742, 745, 804, 878, and 1457. *See* Ex. SCM-41.

in Attachment D to FirstEnergy's Response to Verizon's Interrogatory No. 34.

Second, FirstEnergy assumed Verizon occupies six inches of space *below* its facility, which added six inches to the space occupied by Verizon because the space below Verizon's lowest attachment is *unusable* space, for which FirstEnergy is already compensated when rates are properly calculated under the new telecom rate formula. This double collecting for unusable space is apparent in many photographs in the field review data.[133] For example, the following photograph (Scid no. 478) shows Verizon's

[133] I noticed this issue with poles identified with Scid numbers 11, 26, 46, 169, 192, 221, 249, 265, 291, 298, 473, 478, 530, 617, 692, and 1001 in Attachment D to FirstEnergy's Response to Verizon's Interrogatory No. 34. *See* Ex. SCM-42.

facility as low as permitted at the location and within the space FirstEnergy counted as unusable space in its rate calculations:

Had FirstEnergy properly measured the space used by Verizon's facilities, FirstEnergy's data would have confirmed Verizon's facilities occupy space comparable to the Commission's one-foot space occupied presumption.

Q. Were there errors in the data FirstEnergy collected about Verizon's poles too?

A. Yes. I saw poles where FirstEnergy's contractor under-reported the space FirstEnergy occupied, such as in this location (Scid no. 1244) where the lowest FirstEnergy

attachment was measured as Met-Ed's primary (37 feet 8 inches) instead of at the bottom of the bracket located lower on the pole (as shown by the arrows below):[134]

I also saw poles that should not have been included in the data set because they are stand-alone street-light poles without wireline attachments.[135] For example, the decorative street lamp at the following location was measured (Scid no. 1143) even though it has no aerial attachments. It was measured at 13.5 feet tall, meaning its inclusion in the data reduced the average pole height and, if used to calculate rental rates, would reduce the rate FirstEnergy would pay Verizon:

[134] *See* Ex. SCM-43.

[135] I noticed this issue with poles identified with Scid numbers 1143, 1210, 1298, 1381, and 1389 in Attachment D to FirstEnergy's Response to Verizon's Interrogatory No. 34. *See* Ex. SCM-44.

Q. What did you conclude about FirstEnergy's field audit data?

A. The data is not accurate or reliable. My spot check of the data corroborated my concern that the litigation-focused field review was designed to produce biased results that would favor FirstEnergy, and uncovered errors in the execution of the field review. The data should not be used to calculate pole attachment rental rates.

Q. In Tables 4 through 7 of his rebuttal testimony, Mr. Schafer reports "actual invoice" amounts paid by Verizon. Are these the correct amounts?

A. No. My Exhibit SCM-1 includes the correct amounts, as evidenced by the parties' agreement to those amounts in a Joint Statement filed at the FCC.[136] The most significant error is Mr. Schafer's use of a [redacted] million rental amount for Verizon's payment to Met-Ed for the 2012 rental year.[137] Met-Ed's invoices, attached as Exhibit SCM-30, substantiate the [redacted] million payment for the 2012 rental year included in my direct testimony and the Joint Statement.[138]

Q. Do you agree with the "Net $ Fully Allocated Pre-2011" amounts and "2011-2019 Change from Actual" amounts Mr. Schafer reports in Tables 4 through 7?

A. No. These numbers are apparently based on Mr. Schafer's proposed change from the Commission's adopted rate formulas to his proposed "fully allocated" methodology, so are incorrect for that reason. I cannot provide further analysis of the amounts he calculated because Mr. Schafer did not show his math in his rebuttal testimony and FirstEnergy declined to produce his calculations in response to Verizon's discovery request.[139] It is impossible to know how Mr. Schafer calculated the "net" numbers he reports without knowing the rental rates he assigned to FirstEnergy for use of Verizon's poles.[140] It is also impossible to compare them to the incorrect "actual invoice" amounts

[136] Ex. SCM-8 (Joint Statement ¶ 8).

[137] *See* FE Statement 1-R at 18:5 (Schafer Rebuttal Testimony).

[138] Ex. SCM-1 at VZ00006 (Mills Aff. ¶ 10); Ex. SCM-8 (Joint Statement ¶ 8).

[139] *See* Ex. MSC-7 (Response to Verizon's Interrogatory Set III, No. 21).

[140] Mr. Schafer says his "comparison adjusts Verizon's rates for FirstEnergy's use of Verizon poles," but does not provide the rental rates or their calculations. *See* FE Statement 1-R at 18:1-3 (Schafer Rebuttal Testimony).

he reports without knowing the numbers of Verizon and FirstEnergy poles he included in each calculation.

III. RESPONSES TO ADDITIONAL REBUTTAL TESTIMONY

A. Mr. Zarakas's Rebuttal Testimony (Statement 2-R)

Q. What would you like to correct in Mr. Zarakas's description of joint use agreements?

A. Mr. Zarakas says categorically that "[w]hen [joint use] agreements were initially effectuated, telephone companies owned about the same number of poles as did electric utilities, resulting in roughly equal sharing of poles and costs."[141] This has not been my experience. Instead, many joint use agreements, including the joint use agreements at issue here, were negotiated by small predecessor regional telephone companies at a distinct negotiating disadvantage relative to the electric utility because they owned substantially fewer poles.[142]

Q. Mr. Zarakas says relative pole ownership percentages for ILECs and electric utilities changed over time. Do you have a response?

A. As a general matter, relative pole ownership percentages have changed and left ILECs in an even less advantageous bargaining position. But, in my experience, they have not changed for the reasons Mr. Zarakas claims. According to Mr. Zarakas, the pole ownership disparity widened because "the ILECs opted not to construct new poles when opportunities arose and/or opted to sell or transfer some of their poles to electric

[141] FE Statement 2-R at 5:3-5 (Zarakas Rebuttal Testimony).

[142] *See also, e.g.*, Ex. SCM-31 (Letter from R. Litland, Verizon, to M. Dortch (July 26, 2018)) (citing pole ownership data).

utilities."[143] He also says ILECs "replaced fewer of their own damaged poles."[144] I disagree. In my experience, the pole ownership disparity has widened because electric utilities have not given Verizon the opportunity to install new poles, have replaced and taken ownership of Verizon's poles despite joint use agreement provisions prohibiting the practice, and have refused to sell poles to Verizon. Mr. Schafer admits FirstEnergy refused to sell Verizon poles in this case[145] even though Verizon tried for years to purchase them.[146] I also disagree with the suggestion Verizon does not properly maintain its pole plant for reasons detailed above.

Q. Mr. Zarakas says the joint use agreements "involve sharing of a pole network in its entirety." Is this true?

A. No. This ignores the many other attaching entities also using FirstEnergy's poles. FirstEnergy has 185 license agreements with cable companies and CLECs,[147] and collects rent from each of them.

Q. Do you have concerns with Mr. Zarakas's Exhibit WZ-1?

A. Yes. Exhibit WZ-1 states "[b]y safety code, electric lines occupy the top of the usable space; ILECs typically occupy the lower portion of usable space (for ease of access); cable and other attachers occupy space in between."[148] The typical location of ILEC attachments is not "for ease of access." It is the result of standard construction practices

[143] FE Statement 2-R at 15:6-7 (Zarakas Rebuttal Testimony).

[144] *Id.* at 15:9-10.

[145] *See* FE Statement 1-R at 11:1-11 (Schafer Rebuttal Testimony).

[146] *See* Ex. SCM-1 at VZ00007-8 (Mills Aff. ¶ 15).

[147] *See* Ex. SCM-13 (Response to Verizon Interrogatory Set II, No. 20).

[148] Ex. WZ-1.

pre-dating third-party attachers. As Mr. Zarakas notes, electric utilities require space higher on the pole for safety reasons. They also require 40 inches of clearance between their facilities and telecommunications facilities, which is known as "safety space." As a result, electric utilities historically placed their facilities higher on the pole and ILECs historically placed their facilities lower on the pole—meaning the available space was between their facilities when cable companies and CLECs entered the market. Maintaining consistency of those pole locations helps eliminate ambiguity about the ownership of particular facilities on the pole and ensures communications facilities do not crisscross midspan, which "benefits Verizon and its competitors equally."[149]

Q. Do you have other concerns with Exhibit WZ-1?

A. Yes. It is not a "contentious issue" as to "how much of the total pole space should be included in the rate formula," because the issue was decided decades ago by Congress and the FCC in the statute and regulations the Commission adopted.[150] Also, the FCC rate formulas do not calculate rates based on "space allocated," but on "space occupied," and do not distinguish between ILEC and non-ILEC facilities for purposes of the space occupied input. Instead, the FCC adopted a one-foot space occupied presumption for communications facilities, which include ILEC facilities, which presumptively leaves 10.5 of space for the electric utility, including 40 inches of safety space.

[149] Response to Compl. ¶ 50.

[150] 52 Pa. Code § 77.4(a).

Q. Is there anything else in Mr. Zarakas's rebuttal testimony you want to address?

A. Yes. Mr. Zarakas repeats Mr. Schafer's argument about the "offer" FirstEnergy never made to transition to a license agreement,[151] his claim Verizon was satisfied with the rates FirstEnergy imposed in the 2009 negotiations,[152] his allegations about alleged benefits under the joint use agreements,[153] and his misleading reliance on a letter to the FCC from broadband providers challenging an unjust and unreasonable practice of electric utilities with potential to slow deployment.[154] I have explained my disagreement with each of these above so will not repeat my disagreements here.

B. Ms. Savage's Rebuttal Testimony (Statement 3-R)

Q. What would you like to address in Ms. Savage's rebuttal testimony?

A. Ms. Savage says Verizon should be denied just and reasonable rates because FirstEnergy did not account for this requirement when it filed its base rate proceedings in 2014 and 2016.[155] If this is indeed true, it is no basis for denying Verizon just and reasonable competitively neutral rental rates as required by law. But FirstEnergy was on notice well before the 2014 and 2016 proceedings that ILECs were entitled by federal law (now adopted by the Commission) to rental rate relief. The FCC's 2011 *Pole Attachment Order* was the result of a rulemaking four years in the making, and in which FirstEnergy participated. FirstEnergy was also put on notice by Verizon's 2012 correspondence[156]

[151] *See, e.g.*, FE Statement 2-R at 26:27-27:3, 29:12-30:22 (Zarakas Rebuttal Testimony).

[152] *See, e.g.*, *id.* at 27:13-28:3.

[153] *See, e.g.*, *id.* at 31:1-32:7.

[154] *See, e.g.*, *id.* at 31:17-32:7.

[155] FE Statement 3-R at 5:5-17 (Savage Rebuttal Testimony).

[156] *See, e.g.*, Ex. SCM-5 at VZ00551, VZ00554, VZ00557 (FCC Exs. 17-19).

and was the subject of a 2014 pole attachment complaint proceeding initiated by various Frontier operating companies.[157] The parties' negotiations were prolonged primarily because FirstEnergy insisted we discuss operational issues before it would discuss rental rates. It eventually became clear to me FirstEnergy was using those operational discussions to stall and postpone rate discussions. FirstEnergy's rebuttal testimony confirms my understanding, as Mr. Schafer and Mr. Zarakas assert Verizon should have further postponed its complaint to discuss an entirely new operational idea Mr. Schafer floated for the first time in June 2018.[158]

Q. Do you have additional comments about Ms. Savage's rebuttal testimony?

A. Yes. Ms. Savage repeats the false allegation that "Verizon acknowledges that a reduction in the rates FirstEnergy charges Verizon is irrelevant to enhancing broadband services or deployment in Pennsylvania."[159] Above, I explained my disagreement with this allegation, which also conflicts with the contrary conclusion reached by the FCC and the Commission on several occasions over the last decade.

[157] *See Commonwealth Tel. Co., et al. v. Met-Ed, et al.*, Docket No. 14-218, File No. EB-14-MD-008 (filed June 11, 2014).

[158] *See, e.g.*, FE Statement 1-R at 29:13-14 (Schafer Rebuttal Testimony) ("No doubt there are significant details to be worked out, which is why FirstEnergy's first offer was to discuss the concept."); FE Statement 2-R at 30:7-8 (Zarakas Rebuttal Testimony) (alleging Verizon "opted to file a pole attachment complaint with the FCC rather than discuss and flesh out this option").

[159] FE Statement 3-R at 7:3-5 (Savage Rebuttal Testimony).

C. Mr. Coleman's Rebuttal Testimony (Statement 4-R)

Q. What is your response to Mr. Coleman's rebuttal testimony about Verizon's compliance with FirstEnergy's construction standards?

A. Mr. Coleman's rebuttal testimony is misleading and inaccurate. He makes a broad generalization based on three photographs, two in Penn Power's service area and one in an unidentified location.[160] His allegation is also misleading because he does not say when the attachments were made, but judges them based on "FirstEnergy's construction standards in effect as of January 2020."[161] Some construction standards attached to his rebuttal testimony were revised as recently as 2018 or 2019.[162] Facilities must be attached to a pole in compliance with existing standards when the facilities are attached to the pole. If an attacher completes further work on a pole at a later date, it must ensure its attachments are brought into compliance with then-existing standards. This concept is generally referred to as "grandfathering" and ensures communications companies (and electric companies) do not need to incur the cost to visit every pole every time a change is made to a construction standard. The National Electric Safety Code explains in Section 1, Part 013 - Application Paragraph B(2) that "[e]xisting installations, including maintenance replacements, that currently comply with prior editions of the Code, need not be modified to comply with these rules" unless the pole is replaced or the update is required for safety reasons.

[160] FE Statement 4-R, Ex. RC-1 (Coleman Rebuttal Testimony).

[161] FE Statement 4-R at 3:10-11 (Coleman Rebuttal Testimony).

[162] *See, e.g.*, FE Statement 3-R, Ex. RC-2 at FE00067, FE00069, FE00073, FE00076, FE00082, FE00084, FE00086 (Coleman Rebuttal Testimony).

In addition, Mr. Coleman faults Verizon because its construction standards require "40 inches of separation between the lowest power device and the upper most communications attachment."[163] This concern is not apparent in Mr. Coleman's photographs, however, because Mr. Coleman did not provide the measurement for the lowest power device.

Q. What is your response to Mr. Coleman's cost estimate for removing FirstEnergy's facilities from Verizon's poles?

A. It is based on unsupported assumptions, rather than a "specific pole or line."[164] But I do not necessarily disagree with the general point that it would be expensive and time-consuming to identify and obtain approval to use alternate infrastructure, such as constructing a duplicative pole line or undergrounding facilities. What Mr. Coleman ignores is the far greater expense and time required for Verizon to identify and obtain approval to use alternate infrastructure that substitutes for FirstEnergy's poles. Verizon has facilities attached to three FirstEnergy poles for every one Verizon pole with FirstEnergy facilities attached.

Q. Do you agree with Mr. Coleman that the typical attachments of cable companies and CLECs are different from the typical attachments of ILECs?

A. No. For more than a decade, Verizon has deployed (and continues to deploy) essentially the same light-weight copper and fiber optic cables its competitors use.

[163] FE Statement 3-R at 4:1-3 (Coleman Rebuttal Testimony).

[164] Ex. SCM-32 (Response to Verizon Interrogatory Set III, No. 1).

Q. Mr. Coleman suggests Verizon places its facilities higher on a pole to ensure appropriate mid-span clearance. What is mid-span clearance?

A. Mid-span clearance is the distance of aerial facilities above ground at the mid-point between two utility poles.

Q. Does Verizon place its facilities higher on a pole to ensure appropriate mid-span clearance?

A. I would not say it is the typical reason for where Verizon's facilities are placed on a pole. More often, Verizon places its facilities as far above ground as possible to accommodate the preference of local authorities and electric utilities. As Mr. Schafer noted, when Verizon's aerial facilities are snagged by an oversized vehicle, it can break the pole and impact all attachers.[165] Verizon, therefore, respects the preference for higher aerial facilities when it makes its attachments, and then lowers its facilities when doing so will accommodate another attaching entity.

Q. Does Verizon occupy more space on a pole because of sag in its facilities?

A. No. All aerial facilities sag to some extent, but they do so mid-span; the space occupied on the pole remains the same.

Q. Mr. Coleman says the sag of Verizon's facilities "pushes the Verizon attachment up the pole" and "causes future attachers to pay for pole replacements or other extreme measures." Is this true?

A. No. I disagree Verizon's facilities typically sag more than other aerial facilities. I also disagree sag is the reason for the location of Verizon's facilities on a pole. And I

[165] *See* FE Statement 1-R at 39:12-13 (Schafer Rebuttal Testimony).

disagree Verizon's location on the pole requires others to replace poles. FirstEnergy's poles are generally tall enough to accommodate additional attachers.

Q. Do you agree with Mr. Coleman that Verizon's facilities are generally heavier, sag more, or place materially greater load on FirstEnergy's poles than Verizon's competitors' facilities?

A. Not at all. Verizon and its competitors today deploy comparable lightweight facilities. Mr. Coleman says Verizon installed copper cable decades ago and assumes they weigh more and take up more space than the facilities of Verizon's competitors. But Verizon's competitors have overlashed their facilities for decades, which creates bundles of comparable size.

Q. Is Mr. Coleman's comparison of Verizon's facilities to its competitor's facilities supported by evidence specific to actual facilities?

A. No. FirstEnergy decided a "comparison between Verizon and other attachers was not needed" because it thinks Verizon's "attachments are obviously much larger than other attachment cables."[166] FirstEnergy did not conduct a pole by pole weight analysis of Verizon's facilities or its competitor's facilities.[167] FirstEnergy did not conduct a pole loading calculation for a specific location.[168] FirstEnergy did not determine typical ice and wind conditions.[169] FirstEnergy "did not find it useful to conduct analysis on each

[166] Ex. SCM-33 (Response to Verizon Interrogatory Set II, No. 11).

[167] Ex. SCM-34 (Response to Verizon Interrogatory Set III, No. 8).

[168] Ex. SCM-35 (Response to Verizon Interrogatory Set III, No. 9).

[169] Ex. SCM-36 (Response to Verizon Interrogatory Set II, No. 10).

specific case."[170] FirstEnergy also did not determine the sag of its own facilities.[171] FirstEnergy thus bases its broad comparative claims on a one-sided analysis using "published specifications for cables like the Verizon attachments" based on what FirstEnergy considered "the most common Verizon attachments."[172]

D. Mr. Pryatel's Rebuttal Testimony (Statement 5-R)

Q. What would you like to address in Mr. Pryatel's rebuttal testimony?

A. Mr. Pryatel is incorrect when he says "FirstEnergy does not have superior bargaining power over Verizon as alleged by Mr. Mills and Dr. Tardiff."[173] Mr. Pryatel bases this claim on his understanding that "it is not feasible for FirstEnergy to remove its facilities from Verizon's poles and construct duplicate facilities."[174] But like Mr. Coleman, Mr. Pryatel ignores it would be far less feasible for Verizon, which has facilities attached to three FirstEnergy poles for every one Verizon pole with FirstEnergy attached.

E. Mr. Carlin's Rebuttal Testimony (Statement 6-R)

Q. What would you like to address in Mr. Carlin's rebuttal testimony?

A. I previously discussed issues with the quick review of poles FirstEnergy had Mr. Carlin perform after Verizon's complaint was filed, so will not repeat them here.

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[170] Ex. SCM-37 (Response to Verizon Interrogatory Set II, No. 8).

[171] Ex. SCM-35 (Response to Verizon Interrogatory Set III, No. 9); Ex. SCM-33 (Response to Verizon Interrogatory Set II, No. 11).

[172] Ex. SCM-33 (Response to Verizon Interrogatory Set II, No. 11).

[173] FE Statement 5-R at 2:20-23 (Pryatel Rebuttal Testimony).

[174] *Id.*

F. Mr. Guo's Rebuttal Testimony (Statement 7-R)

Q. What would you like to address in Mr. Guo's rebuttal testimony?

A. Mr. Guo's analysis of field data is unreliable because it is based on the quick review of poles which itself is unreliable. It also bears noting he offered his analysis without questioning or explaining gaps in the underlying data. For example, [redacted] Mr. Guo did not investigate [redacted]. Instead, he [redacted].[175]

Q. Does this conclude your surrebuttal testimony?

A. Yes, although I reserve the right to supplement my surrebuttal testimony should it become necessary to do so.

[175] *See* Ex. MSC-15 (Response to Verizon Interrogatory Set III, No. 19) ("some of the fields have missing or non-numerical data"); *see also* Ex. MSC-16 (Response to Verizon Interrogatory Set III, No. 20).

Exhibit SCM-8
Redacted Public Version

Before the
Federal Communications Commission
Washington, DC 20554

VERIZON PENNSYLVANIA LLC and VERIZON NORTH LLC, Complainants, v. METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY, and PENN POWER COMPANY, Defendants.	Proceeding No. 19-354 Bureau ID No. EB-19-MD-008

JOINT STATEMENT

Pursuant to 47 C.F.R. § 1.733(b)(2), the Commission's November 26, 2019 Notice of Complaint, and the scheduling request granted on December 9, 2019, Complainants Verizon Pennsylvania LLC and Verizon North LLC ("Verizon") and Defendants Metropolitan Edison Company, Pennsylvania Electric Company, and Penn Power Company (collectively, "FirstEnergy"), through undersigned counsel, submit the following Joint Statement regarding (I) stipulated facts, (II) disputed facts, (III) key legal issues, (IV) discovery matters, (V) scheduling, and (VI) settlement prospects.

I. Stipulated Facts

1. Complainants Verizon Pennsylvania LLC and Verizon North LLC (collectively, "Verizon") are incumbent local exchange carriers ("ILECs") that provide telecommunications and other services in areas of Pennsylvania.

2. Defendants Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), Pennsylvania Power Company ("Penn Power") (collectively,

"FirstEnergy") are operating subsidiaries of FirstEnergy Corp. Defendants are utilities within the meaning of 47 U.S.C. § 224(a)(1) because each is an electric utility that owns or controls poles used, in whole or in part, for wire communications. Defendants are not owned by any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.

3. Verizon and FirstEnergy are party to ten joint use agreements that contain the rates, terms, and conditions for each party's use of the other party's utility poles. The joint use agreements were entered into with Verizon's predecessor companies between 1958 and 1988 and were amended between 1999 and 2009 to include the currently operative pole attachment rate provisions. Five of the ten joint use agreements are with Met-Ed,[1] four are with Penelec,[2] and one is with Penn Power.[3] The joint use agreements are still in effect.

4. The 2018 rental year is the most recent year that all three defendants—Met-Ed, Penelec, and Penn Power—invoiced and collected annual pole attachment rental fees or an "annual Deficiency Rate rental fee" from Verizon. (Penn Power has also invoiced and collected a pole attachment rental fee for the 2019 rental year). The 2018 invoices cover 412,697 poles jointly used by the parties, with FirstEnergy owning 301,854 (73%) and Verizon owning 110,843 (27%). The 2018 invoices associated with Met-Ed's service area cover 159,448 poles jointly used by the parties, with Met-Ed owning 129,421 (81%) and Verizon owning 30,027 (19%), and with the annual Deficiency Rate rental fee being applied only to so-called "deficiency poles"; the 2018 invoices associated with Penelec's service area cover 220,259 poles jointly used by the

[1] *See* Compl. Exs. 1-6 at VZ00165-317.

[2] *See* Compl. Exs. 7-11 at VZ00318-466.

[3] *See* Compl. Ex. 12 at VZ00467-485.

parties, with Penelec owning 146,859 (67%) and Verizon owning 73,400 (33%); and the 2018 invoices associated with Penn Power's service area cover 32,990 poles jointly used by the parties, with Penn Power owning 25,574 (78%) and Verizon owning 7,416 (22%).

5. Met-Ed sends Verizon five annual invoices based on four Memoranda of Understanding entered in 2009. *See* Compl. Ex. 6 at VZ00296-317. Penelec sends Verizon five annual invoices based on four Memoranda of Understanding entered in 2009. *See* Compl. Ex. 11 at VZ00451-466. Penn Power and Verizon send each other one annual invoice based on an amendment to the joint use agreement entered in 1999. *See* Compl. Ex. 12 at VZ00484-485.

6. Under the Penelec and Penn Power joint use agreements, each party pays a per-pole rate for use of the other party's poles.[4] In contrast, under the Met-Ed joint use agreement, Met-Ed charges Verizon an "annual Deficiency Rate rental fee" for so-called "deficiency poles," which is the difference between the number of joint use poles Verizon owns (19%) and the higher number of joint use poles Verizon would own if Verizon owned 45% of the joint use poles.[5] For comparative purposes, the annual Deficiency Rate rental fee Met-Ed charges can be converted into "reciprocal" per-pole rental rates that can be calculated based on the assumption that both parties charge the same per-pole rental rate for use of the other party's poles.

7. For the 2011 to 2018 rental years, Penelec charged Verizon pole attachment rental rates of [redacted] per pole; Penn Power charged Verizon pole attachment rental rates of [redacted] per pole; and Met-Ed charged Verizon "annual Deficiency Rate rental fees" for so-called "deficiency poles" of [redacted] per "deficiency" pole. For comparative

[4] *See, e.g.*, Compl. Ex. 16 at VZ00542-547.

[5] *See, e.g.*, *id.* at VZ00532-541; Compl. Ex. 6 at VZ00298, VZ00301, VZ00304, VZ00306, VZ00309, VZ00311, VZ00314, VZ00316 (MOUs).

purposes, these Met-Ed rental fees are the same as "reciprocal" pole attachment rental rates of [redacted] per pole, respectively, assuming both parties charge the same per-pole rental rate for use of the other party's poles.

8. The following table shows the total net rental amounts FirstEnergy charged and Verizon paid to date for the 2011 through 2019 rental years:

Rental Year	Met-Ed	Penelec	Penn Power	Total
2011	[redacted]			
2012				
2013				
2014				
2015				
2016				
2017				
2018				
2019				

9. Executives of Verizon and FirstEnergy met on April 11, 2018, and continued discussions thereafter. Verizon and one or more of the defendant FirstEnergy utilities also exchanged correspondence about their rate negotiations before and after the April 11, 2018 meeting, including without limitation correspondence attached to Verizon's Complaint as Exhibits 17 through 29 at VZ00549-692, and attached to FirstEnergy's Answer as Attachments A, J, and N at FE0002-3, FE00117-120, and FE00200-201.

II. Disputed Facts

The parties could not reach agreement on disputed facts to include in this filing. All facts from the parties' pleadings that are not stipulated above are disputed.

III. Key Legal Issues

The parties could not reach agreement on key legal issues to include in this filing. Please refer to the parties' pleadings for legal issues.

IV. Discovery

FirstEnergy believes that Verizon has failed adequately to respond to FirstEnergy's Interrogatory requests, and that these responses and significant additional discovery are necessary to enable FirstEnergy to address certain FirstEnergy claims that Verizon has comparative advantages over its competitors.

Verizon does not believe that additional discovery is necessary, appropriate, or permitted by the Commission's rules. FirstEnergy has not identified any interrogatory or other discovery that is within "the scope of permissible inquiry related to the material facts in dispute in the proceeding" and is "both necessary to the resolution of the dispute and not available from any other source."[6]

V. Schedule for Pleadings

To the extent the Commission believes additional briefing on a particular issue or issues would be helpful to its understanding of this case under 47 C.F.R. § 1.732(a), the November 26, 2019 Notice of Complaint, as amended on December 9, 2019, sets Friday, April 17, 2020 as the deadline for all briefing. FirstEnergy is willing to agree to extend this deadline to enable additional discovery, further briefing, and the additional submissions requested by FirstEnergy. Verizon does not believe additional discovery or the briefing and submissions requested by FirstEnergy in its Motion for Leave to File Response to Reply and Motion for Leave to Supplement and Correct Answer are necessary, appropriate, or permitted by the Commission's

[6] 47 C.F.R. § 1.730(a), (b).

rules. Verizon opposes an extension of the current deadlines, which would delay resolution of this matter, unnecessarily increase the cost and expense to the parties, and impose an undue burden on the Commission.

VI. Settlement

At this time, the parties do not believe that settlement is possible given the irreconcilable merits positions taken by the parties.

Respectfully and jointly submitted,

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Attorneys for Metropolitan Edison Company, Pennsylvania Electric Company, and Penn Power Company

Dated: March 18, 2020

CERTIFICATE OF SERVICE

I hereby certify that on March 18, 2020, I caused a copy of the foregoing Joint Statement to be served on the following (service method indicated):

Marlene H. Dortch, Secretary
Federal Communications Commission
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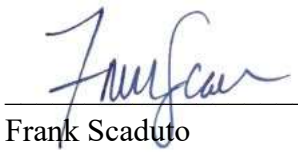

Frank Scaduto

Exhibit SCM-9

Before the
Federal Communications Commission
Washington, DC 20554

VERIZON MARYLAND LLC, Complainant, v. THE POTOMAC EDISON COMPANY, Defendant.	Proceeding No. 19-355 Bureau ID No. EB-19-MD-009

JOINT STATEMENT

Pursuant to 47 C.F.R. § 1.733(b)(2), the Commission's November 26, 2019 Notice of Complaint, and the scheduling request granted on December 9, 2019, Complainant Verizon Maryland LLC ("Verizon") and Defendant The Potomac Edison Company ("Potomac Edison"), through undersigned counsel, submit the following Joint Statement regarding (I) stipulated facts, (II) disputed facts, (III) key legal issues, (IV) discovery matters, (V) scheduling, and (VI) settlement prospects.

I. Stipulated Facts

1. Complainant Verizon Maryland LLC ("Verizon") is an incumbent local exchange carrier ("ILEC") that provides telecommunications and other services in areas of Maryland.

2. Defendant The Potomac Edison Company ("Potomac Edison") is an operating subsidiary of FirstEnergy Corp. Potomac Edison is a utility within the meaning of 47 U.S.C. § 224(a)(1) because it is an electric utility that owns or controls poles used, in whole or in part, for wire communications. Potomac Edison is not owned by any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.

3. Verizon and Potomac Edison are parties to a joint use agreement that contains the rates, terms, and conditions for each party's use of the other party's utility poles. *See* Compl. Ex. 1 at VZ00108-120. The joint use agreement was entered into with Verizon's predecessor company in 1959 and amended in 1998 to include the currently operative pole attachment rate provision. The joint use agreement is still in effect.

4. The 2019 rental year is the most recent year that Potomac Edison invoiced and collected pole attachment rent from Verizon. The 2019 invoice covers 100,898 poles jointly used by the parties, with Potomac Edison owning 79,264 (79%) and Verizon owning 21,634 (21%).

5. Potomac Edison sends Verizon one annual invoice based on an amendment to the joint use agreement entered in 1998. *See* Compl. Ex. 1 at VZ00120.

6. Under the joint use agreement, each party pays a per-pole rate for use of the other party's poles. *See* Compl. Ex. 5 at VZ00167-168.

7. For the 2017 to 2019 rental years, Potomac Edison charged Verizon [redacted] per pole.

8. The total net rental amounts Potomac Edison charged and Verizon paid for the 2017 to 2019 rental years were [redacted] respectively.

9. Executives of Verizon and FirstEnergy met on April 11, 2018, and continued discussions thereafter. Verizon and one or more of the FirstEnergy utilities in Maryland and Pennsylvania—specifically, Potomac Edison, Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), and Penn Power Company ("Penn Power")—also exchanged correspondence about their rate negotiations before and after the April 11, 2018 meeting, including without limitation correspondence attached to Verizon's Complaint as

Exhibits 6 through 18 at VZ00169-312, and attached to Potomac Edison's Answer as Attachments A, J, N, Q, and R at PE0001-3, PE00103-107, PE00171-173, PE00213-217, and PE218-220.

II. Disputed Facts

The parties could not reach agreement on disputed facts to include in this filing. All facts from the parties' pleadings that are not stipulated above are disputed.

III. Key Legal Issues

The parties could not reach agreement on key legal issues to include in this filing. Please refer to the parties' pleadings for legal issues.

IV. Discovery

Potomac Edison believes that Verizon has failed adequately to respond to Potomac Edison's Interrogatory requests, and believes that these responses and significant additional discovery are necessary to enable Potomac Edison to address certain Potomac Edison claims that Verizon has comparative advantages over its competitors.

Verizon does not believe that additional discovery is necessary, appropriate, or permitted by the Commission's rules, and believes that Potomac Edison has not identified any interrogatory or other discovery that is within "the scope of permissible inquiry related to the material facts in dispute in the proceeding" and is "both necessary to the resolution of the dispute and not available from any other source."[1]

V. Schedule for Pleadings

To the extent the Commission believes additional briefing on a particular issue or issues would be helpful to its understanding of this case under 47 C.F.R. § 1.732(a), the November 26,

[1] 47 C.F.R. § 1.730(a), (b).

2019 Notice of Complaint, as amended on December 9, 2019, sets Friday, April 17, 2020 as the deadline for all briefing. Potomac Edison is willing to agree to extend this deadline to enable additional discovery, further briefing, and the additional submissions requested by FirstEnergy. Verizon does not believe additional discovery or the briefing and submissions requested by Potomac Edison in its Motion for Leave to File Response to Reply and Motion for Leave to Supplement and Correct Answer are necessary, appropriate, or permitted by the Commission's rules. Verizon opposes an extension of the current deadlines, which would delay resolution of this matter, unnecessarily increase the cost and expense to the parties, and impose an undue burden on the Commission.

VI. Settlement

At this time, the parties do not believe that settlement is possible given the irreconcilable merits positions taken by the parties.

Respectfully and jointly submitted,

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Dated: March 20, 2020

CERTIFICATE OF SERVICE

I hereby certify that on March 20, 2020, I caused a copy of the foregoing Joint Statement to be served on the following (service method indicated):

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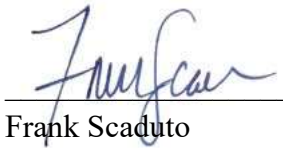


Frank Scaduto

Exhibit SCM-10

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 25

Reference Answer to Complaint ¶ 51. For each entity with facilities attached to FirstEnergy's poles since 2011, identify by year the amount FirstEnergy invoiced the entity for safety violation fees, the amount FirstEnergy collected from the entity in safety violation fees, and the total number of FirstEnergy distribution poles to which the entity currently has facilities attached. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power, and provide all documents, work papers, analyses, invoices, cost records, and payment records concerning the analysis.

RESPONSE:

No safety violation fees have been charged to entities by Met-Ed, Penelec, or Penn Power since 2011.

Exhibit SCM-11
Proprietary Exhibit Omitted

Exhibit SCM-12

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 13

Reference Answer Brief ¶ 95 and Answer Attachment B ¶ 23.

(a) Describe in detail the basis for FirstEnergy's allegation that "FirstEnergy inspects Verizon's pole plant" and that such inspections "provide a significant benefit to Verizon."

(b) Identify the location and pole identification number for each of "Verizon's pole plant" that FirstEnergy inspected since 2011, identify all other entities with facilities attached to that pole, state whether and how FirstEnergy's inspection provided Verizon a benefit that was different from that provided other facilities attached to the pole, and quantify the "benefit" provided Verizon and provided other entities with facilities attached to the pole.

(c) Provide all documents concerning the allegation that "FirstEnergy inspects Verizon's pole plant" and that such inspections "provide a significant benefit to Verizon," including all studies, analyses, invoices, cost records, and payment records concerning the allegation.

5/18/2020 ORIGINAL RESPONSE:

(a) The FirstEnergy conducts a 5-year visual inspection of all electric assets, including poles where FirstEnergy is attached. These inspections include a visual review of the structure (pole), low hanging cable(s) and guy wire marking. FirstEnergy regularly reports to Verizon areas of concern or noted failures for corrective actions.

(b) Attached is a report of 1,278 identified concerns on Verizon-owned poles of various types. These concerns are communicated to Verizon through various systems including SPANS, local operational relationships and similar means. *See* Verizon Interrogatory Set II, No. 13, Attachment A.

(c) The available electronic retrievable records for inspection are referenced in Verizon Interrogatory Set II, No. 13, Attachment A. The inspection is completed with internal company labor. There is no specific labor code available to accurately determine the effort and labor costs

to inspect Verizon-owned poles as a subset of the inspection program. *See* Verizon Interrogatory Set II, No. 13, Attachment A.

5/28/2020 SUPPLEMENTAL RESPONSE:

(b) FirstEnergy notes that the identified concerns are listed in Column F of the spreadsheet (e.g., 2-pole condition, pole severely leaning, pole damaged / deteriorated). FirstEnergy also clarifies that the number is actually 456, not 1,278. See Revised Attachment A to Verizon Interrogatory Set II, No. 13, which is a pole damage report for Met-Ed, Penelec, and Penn Power showing 456 visual findings of defective Verizon poles from the Companies' overhead inspection program.

Attachment A shows when the concerns were recorded in the field. Specifically, Column A of Attachment A sets forth the time and date each finding was recorded in the field. As explained in the response, "[t]hese concerns are communicated to Verizon through various systems including SPANS, local operational relationships and similar means." However, due to COVID-19 restrictions on FirstEnergy's office buildings, FirstEnergy cannot obtain its personnel's paper logs and notes to determine precisely when those concerns were communicated to Verizon.

FirstEnergy does not have a list of all other entities attached to Verizon's poles where FirstEnergy performed inspections, so it cannot speculate about which entities are attached or how they may have benefited from the inspections. The "benefit" to Verizon is obvious - inspecting the poles to help ensure safe and reliable operation of facilities and to identify areas of concern and maintenance. Moreover, Verizon benefits from FirstEnergy performing those inspections at no cost to Verizon, although as explained in answer to subpart (c), the inspection is completed with internal company labor, and there is no specific labor code available to accurately determine the effort and labor costs to inspect Verizon-owned poles as a subset of the inspection program.

(c) FirstEnergy clarifies that Revised Attachment A to Interrogatory Set II, No. 13 contains the available electronically retrievable records.

Row Labels	Count of NAME
Ok	174,093
Pole damaged / deteriorated	403
Pole severely leaning	24
(blank)	
Grand Total	**174,520**

Exhibit SCM-13

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 20

Reference Answer to Complaint ¶ 17. Describe in detail the basis for FirstEnergy's allegation that "Verizon does in fact receive considerable benefits over its competitors that materially advantage Verizon" and identify each such benefit with reference to the relevant Joint Use Agreement and License Agreement language and FirstEnergy's cost records. Provide all documents concerning FirstEnergy's allegation that "Verizon does in fact receive considerable benefits over its competitors that materially advantage Verizon," including all studies, analyses, invoices, cost records, and payment records concerning the allegation.

RESPONSE:

The basis for FirstEnergy's statement in its Answer comprises years of administering and implementing both Joint Use Agreements with Verizon and License Agreements with Verizon's competitors. FirstEnergy did not compile a record or comparison of individual provisions for nearly 2,000 matchups of the ten joint use agreements between the parties and the 185 license agreements between FirstEnergy and cable and CLEC entities. Additional information about the benefits Verizon receives under its Joint Use Agreements will be provided in FirstEnergy's rebuttal testimony, which will be served on May 21, 2020

Exhibit SCM-14

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 5

Reference Answer Brief ¶ 76. For each entity with facilities currently attached to FirstEnergy's poles, separately identify whether the entity, or its predecessor in interest, has facilities attached to FirstEnergy's poles that have been overlashed and identify the first known year in which the entity, or its predecessor in interest, had facilities attached to FirstEnergy's poles that were overlashed. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power. Provide all documents and work papers concerning the analysis.

RESPONSE:

FirstEnergy neither requires nor maintains records of this information.

Exhibit SCM-15

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 6

Reference Answer Brief ¶ 76. For each entity with facilities currently attached to FirstEnergy's poles, separately identify whether the entity has fiber optic cables attached to FirstEnergy's poles that contain dark fiber capacity and identify the first known year in which the entity, or its predecessor in interest, had fiber optic cables attached to FirstEnergy's poles that contain dark fiber capacity. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power. Provide all documents and work papers concerning the analysis.

RESPONSE:

FirstEnergy neither requires nor maintains records of this information.

Exhibit SCM-16

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 3

Reference Answer Brief ¶ 84 and Answer Attachment B ¶ 20.

(a) Provide all documents concerning the allegation that the fees for SPANS "amount to $20 per application plus $0.65 per pole," including all invoices and payment records concerning fees for SPANS.

(b) For the 2011 through 2019 years for each entity attached to FirstEnergy's poles, identify by year and by entity the total number of FirstEnergy distribution poles to which the entity has facilities attached, the number of its SPANS applications, and the SPANS fees it paid FirstEnergy. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power.

(c) Provide all documents, work papers, invoices, cost records, and payment records concerning the analysis.

5/18/2020 ORIGINAL RESPONSE:

(a) Documents provided include invoices from Wind Lake Solutions, SSP – Wind Lake or SSP to Met-Ed, Penelec and Penn Power, respectively, for the SPANS fees for the period of 2014-19 for Penn Power and 2016-19 for Met-Ed and Penelec. The fees are passed through to the entities as derived from terms of the pole attachment agreement. There are no documents that define the SSP costs per application nor cost per pole. *See* Verizon Interrogatory Set II, No. 3, CONFIDENTIAL Attachment A.

(b) *See* response to Verizon Interrogatory Set II, No. 2(b) and data in Verizon Interrogatory Set II, No. 3, Attachments B through M. Note that data is limited to the years that Met-Ed, Penelec and Penn Power have had SPANS.

(c) *See* response to Verizon Interrogatory Set II, No. 3(a) and (b).

5/28/2020 SUPPLEMENTAL RESPONSE:

(a) FirstEnergy clarifies that "SSP" refers to SSP Innovations. The interrogatory asked FirstEnergy to "[p]rovide all documents concerning the allegation that the fees for SPANS 'amount to $20 per application plus $0.65 per pole,' including all invoices and payment records concerning fees for SPANS." FirstEnergy provided the invoices from Wind Lake Solutions, SSP – Wind Lake or SSP to Met-Ed, Penelec and Penn Power, respectively, for the SPANS fees for the period of 2014-19 for Penn Power and 2016-19 for Met-Ed and Penelec. The Companies also stated that "[t]he fees are passed through to the entities as derived from terms of the pole attachment agreement" and that "[t]here are no documents that define the SSP costs per application nor cost per pole." Based on Verizon's Motion to Compel, it appears Verizon is confused as to "who is passing fees to whom and under what agreement terms." FirstEnergy clarifies that Met-Ed, Penelec, and Penn Power pass through the SPANS fees to attaching entities, other than Verizon, pursuant to the terms of their pole attachment agreements. Met-Ed, Penelec, and Penn Power absorb the costs of Verizon's SPANS fees.

Exhibit SCM-17

All attaching companies shall abide by the rules and requirements provided in this document in addition to the terms and conditions stated in its Pole Attachment Agreement. The following rules and requirements are used for FEOC standard make-ready process. This document does not apply to One Touch Make Ready (OTMR). Mandatory rules in this document are those that identify action that are specifically required or prohibited and are characterized by the terms shall or shall not**.**

1. Attaching company shall execute a Pole Attachment Agreement. To establish a Pole Attachment Agreement, contact FirstEnergy Corporate Joint Use by email at corpjointuse@firstenergycorp.com.
2. A Complete Application is required before survey / engineering is started. See Complete Application Requirements.
3. For Joint Use poles, attachment applications shall be submitted to both FEOC and the ILEC. Please note that CEI, PP, WPP, and MP have jointly owned pole areas.
4. The attaching party shall be billed separately by both FEOC and the ILEC for all make-ready work.
5. Ride-outs shall be at the sole expense of the attaching party.
6. Survey / Engineering expenses shall be billable irrespective of acceptance of make-ready estimate with additional fees associated with reviewing requests for transmission structure attachments.
7. Applications for transmission structures shall only be allowed where distribution underbuild is present.
8. Transmission survey / engineering and / or make-ready billing shall be issued separately by the transmission organization.
9. Outage / emergency events, including storm restoration, may delay scheduled work.
10. Pole replacement may be denied at FEOC sole discretion.
11. Boxing, bracketing, and extension arms shall not be permitted. See Joint Use and Engineering Policy for Boxing and Extension Arms.
12. Additional equipment is prohibited on the pole (e.g. control boxes, meter bases, continuous power supply).
13. Strand-mounted equipment shall not qualify for overlashing.
14. Overlashing of communications attachments requires:
    a. Maryland, Pennsylvania, and West Virginia
        i. 15-days' advance notice of overlash submitted through SPANS
        ii. 15-days' notice upon completion of overlash submitted through SPANS
        iii. Post-inspection costs, including pole-loading analysis shall be paid by overlashing party
    b. Ohio
        i. Complete application submitted through SPANS
        ii. Engineering review
        iii. Acceptance and payment of make-ready estimate (when needed)
        iv. Post-inspection costs, including pole-loading analysis shall be paid by overlashing party
        v. Rental fee
    c. New York
        i. Advance notice of overlash submitted through SPANS by overlashing party
        ii. Complete application including pole-loading analysis submitted through SPANS by primary attacher (whose facilities are being overlashed)
    d. New Jersey
        i. Overlashing is prohibited
15. The National Electrical Safety Code (NESC), regulations (i.e., local, state, federal), and FirstEnergy policy and FirstEnergy Construction Standards shall be adhered to at all times.
16. Attaching party shall pay all costs incurred to correct its attachments in violation of National Electric Safety Code, and/or FirstEnergy Construction Standards.
17. Attaching party is required to obtain own right-of-way (ROW).

Exhibit SCM-18

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 7

Reference Answer Brief ¶ 88 and Answer Attachment B ¶ 22.

(a) Describe in detail the nature, scope and schedule for completing the field audit FirstEnergy "will be conducting" in the Met-Ed, Penelec, and Penn Power service territories, and identify by service territory when the field audit will commence and conclude, when the last field audit was conducted, what contractor will be conducting the field audit, the information that will be gathered during the field audit and the basis on which the data will be collected, how the field audit will differ from the field audit conducted in Toledo Edison's service territory, and the field audit contractor's projected cost for the field audit.

(b) Provide all documents governing the field audit, all documents communicating about the field audit with entities attached FirstEnergy's poles, and all other documents concerning the allegation that "FirstEnergy will be conducting field audits on a five-year cycle for all of its operating utilities that is similar to the field audit it has conducted in The Toledo Edison Company's service territory."

RESPONSE:

(a) The field audit of pole attachments in the Penn Power service territory is being conducted now. The field audit of pole attachments for Penelec and Met-Ed service territories is tentatively scheduled to begin in late 2020 and run through 2021. The contractor used for the field audits will be Davey Resource Group. The scope of the field audit includes identification of attachments to all Penn Power, Penelec and Met-Ed poles within their respective service territories. There will be no direct cost to Met-Ed, Penelec or Penn Power. There is no appreciable difference between these field audits and the Toledo Edison field audit. The scope of the field audits include identification of attachments to all Met-Ed, Penelec and Penn Power poles within the respective service territories. The cost of the field audit will be paid for by third-party attachers in accordance with applicable pole attachment agreements. FirstEnergy does not have a record of its last field audit.

(b) See Verizon Interrogatory Set II, No. 7, Attachments A through G.

Pole Attachment Audit: A Collaborative Approach

DAVEY Resource Group

Overview for Attachers and Pole Owners
December 2018

Contact: Jeremey Sadler
315-447-2132
jeremy.sadler@davey.com

Introduction

DAVEY Resource Group

- **Goal is to establish an accurate baseline of attachment records that all parties agree to.**
- **Approach is to audit all poles in which participating owners have an ownership interest.**

Overview of the Whole Process

DAVEY Resource Group

- **Pole owner notifies attachers of the audit**
  - General Timelines and Start Date
- **DRG (as Owner's agent) works with attachers to secure participation**
- **DRG confirms current attachment numbers with attachers (Written Permission)**
  - Based on current attachment invoices

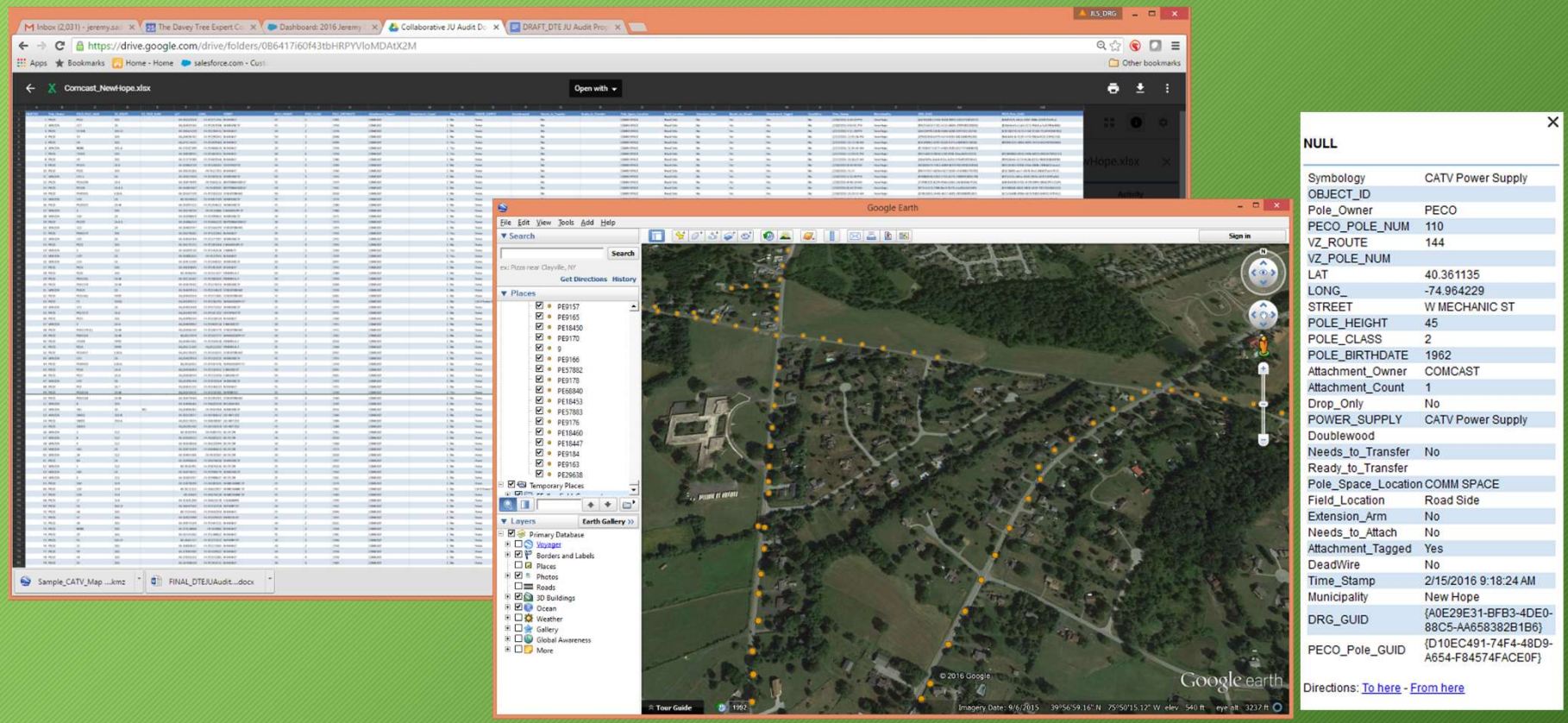
Overview of the Whole Process

DAVEY Resource Group

- **DRG audits the poles in that geographic area**
  - Poles are corrected electronically with an accurate location collected
- **DRG delivers data to Third Party attachers, and confirms final attachment counts**
- **Data delivered and Owner's GIS or JU database is updated**
- **DRG invoices attachers**
- **Owner updates annual billing for future cycles**

Data Options

Owners and attachers can receive updates in GIS, database, spreadsheet, and Google Earth files



Program Recap

- **DRG's goal is to involve all parties interested in the pole**
  - Broad participation from pole owners and attachers allows all to benefit
- **Identify and capture all owner and attacher asset locations**
- **Establish an agreed-upon baseline for rental billing**
- **Establish a joint use database that improves operational processes**

Past and Current Programs

DAVEY Resource Group

- **MA, RI, PA, NY, OH, NJ**
  - National Grid, NSTAR, FirstEnergy, Exelon
  - Verizon
  - Comcast, Cox, TWC, Charter, Cablevision, Buckeye
  - Crown Castle/Lightower/Fibertech/Sunesys, AT&T, Frontier, Windstream, Zayo
- **Since 2013, this process has been used with**
  - 2 Million+ Poles
  - 200+ attaching companies

Funding and Terms: Basics

DAVEY Resource Group

- DRG is contracted as an agent of the pole owner and will negotiate the following with attaching companies:
  - Attachment Audit Fee: per pole fee assessed to attacher for each pole **attached** to.
  - Unauthorized Attachments Fee:
    - In place of existing back billing provisions, attacher is assessed an unauthorized attachment fee per pole over the ***current invoiced*** pole count
    - Any application fee or penalty for unauthorized attachments is waived.
  - Other Key Points:
    - Any Post Audit Inspection is waived, and attachment is automatically permitted to the pole.
    - Attaching company is still responsible for remediation of any construction violations

Attachers' Audit Goals

DAVEY Resource Group

- Predictable Costs of Audit
- Updated Data for Plant Records
- Clarity About Who to Pay
- Confidence About What to Pay

Pole Owners' Audit Goals

DAVEY Resource Group

- Update Attachment Counts
- Eliminate Unlicensed/Unauthorized Attachments
- Approve and Resolve Quickly

What Happens Next?

DRG will work with each of you on the following:

1. Execute (or update) Audit Agreements (Jeremy Sadler)
2. Kick off the project and perform the field audit (Nathan Post)
3. Reconcile audit results and finalize billing records (Tom Hudock)

Thank You!

DAVEY Resource Group

Questions?

Exhibit SCM-19

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 24

Reference Answer to Complaint ¶ 51. For each entity with facilities attached to FirstEnergy's poles since 2011, identify by year the amount FirstEnergy invoiced the entity for unauthorized attachment fees, the amount FirstEnergy collected from the entity in unauthorized attachment fees, and the total number of FirstEnergy distribution poles to which the entity currently has facilities attached. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power, and provide all documents, work papers, analyses, invoices, cost records, and payment records concerning the analysis.

RESPONSE:

Unauthorized attachment fees have not been charged by Met-Ed, Penelec or Penn Power since 2011. The reason for this is that no field audits of pole attachments have been performed by those companies since that time.

Exhibit SCM-20

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 5

Reference Answer Brief ¶ 87. Describe in detail the basis for the allegations of Answer Brief ¶ 87 and provide all documents concerning the allegations, including the identity of each "customer," the location of each "customer," the identity of each "Verizon competitor," and the location of each FirstEnergy pole referenced in Answer Brief ¶ 87, and all documents, studies, analyses, cost records, and work papers performed or considered.

RESPONSE:

Paragraph 87 of FirstEnergy's Affirmative Defenses describes a hypothetical example of how the speed to market benefit might be quantifiable if appropriate data were obtained through discovery and available to include in a response. As a hypothetical example, the response to the rest of the parts to this question is "not applicable."

Exhibit SCM-21

Brian Hurley
Vice President of Regulatory Affairs
ACA Connects–America's Communications Association
2415 39th Place, NW
Washington, DC 20007

bhurley@acaconnects.org
(202) 573-6247

March 26, 2020

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Ex Parte* Presentation of ACA Connects—America's Communications Association; *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84; *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79; *Implementation of State and Local Governments' Obligation to Approve Certain Wireless Facility Modification Requests Under Section 6409(a) of the Spectrum Act of 2012*, WT Docket No. 19-250

Dear Ms. Dortch:

On March 24, 2020, Ross Lieberman of ACA Connects—America's Communications Association ("ACA Connects"); Tom Cohen of Kelley Drye & Warren LLP, outside counsel to ACA Connects; and the undersigned (collectively, "ACA Connects Representatives") met, by teleconference, with the following staff of the Federal Communication Commission ("Commission") Wireline Competition Bureau: Adam Copeland, Michael Ray, Matthew Collins, Elizabeth Drogula, and Janice Gorin. The meeting was in reference to the above-captioned proceedings.

In the meeting, ACA Connects Representatives discussed how the spread of COVID-19 has brought with it widespread "social distancing" practices that have led to increased reliance on its members' broadband networks for telework, distance learning, and telehealth. To participate in these activities, broadband customers must be able to stay connected,[1] and those Americans that lack broadband service today, including students, workers, and others, must get connected as rapidly as possible. ACA Connects members are working tirelessly to meet these

[1]ACA Connects, and many of its member companies, support the "Keep Americans Connected" Pledge. *See, e.g.*, Federal Communications Commission, News Release, "Chairman Pai Launches the Keep Americans Connected Pledge" (rel. Mar. 13, 2020).

urgent demands for broadband in their communities, while also ensuring the health and safety of their employees and consumers.

To help get new customers connected quickly, ACA Connects Representatives requested that the Commission affirm common industry practice by ruling that "customer drop" pole attachments—which are adjuncts to existing, approved attachments—can be performed without providing advance notice to investor-owned utilities. In other words, on an "attach-and-notify" basis. ACA Connects Representatives explained that this targeted action, which has been well-vetted by the Commission in pending proceedings, would provide greater clarity for attachers and utilities and is an immediate step the Commission can take to help new broadband customers get online rapidly—a matter that has taken on heightened urgency during the COVID-19 epidemic.

"Customer Drop" Pole Attachments

In building out their networks, many broadband providers attach wires to utility poles that line a street, often pursuant to Commission or state pole attachment rules.[2] Lighter cables are then connected from these poles to homes or businesses along the route to provide service to customers, usually after a customer signs up for service. In making these "customer drops," the broadband provider sometimes must connect the customer line to additional poles – for instance, to cross a street to reach a home on the other side. Because providers operate in a competitive environment, they need to turn on service promptly or they will lose the sale. In addition, franchising authorities or regulators may require providers to turn up service within a limited time. As a result, providers generally advertise "same-day installation" or "rapid installation," which in many cases can be achieved only if the provider can make a drop – attaching to additional poles if necessary – immediately after the customer places its order.

Because of the need to connect customers quickly, many broadband providers seek to install a customer drop (with the express permission of a pole owner) on an "attach-and-notify" basis rather than follow the ordinary, months-long timeline and process for pole attachments. That is, the provider notifies the pole owner after the fact that it has attached a customer line to additional poles for the sole purpose of completing a drop. The pole owner then has the right to inspect the attachment to ensure it complies with safety and reliability requirements and, in the rare event it does not, to seek modifications. This policy is reasonable for pole owners because customer drop pole attachments put far less strain on poles than normal attachments,[3] and there is no need to rearrange existing wires. Moreover, customer drop attachments are only performed after a provider has secured approval from a utility to attach to its poles, as an adjunct to the provider's approved attachments. Those ACA Connects members that are able to attach-and-

[2] *See Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment* et al., WC Docket No. 17-84 et al., Report and Order, FCC 18-111, ¶ 5 (2018) (explaining the scope of the Commission's jurisdiction over utility poles and the right of states to "reverse preempt" that jurisdiction).

[3] The lighter cables used for customer drops are typically "j-hooked" or clamped to poles rather than through-bolted, resulting in *de minimis* impacts on pole loading and *de minimis* risks to public safety.

notify for their customer drops find that this practice helps meet customer expectations to get service initiated promptly.

As ACA Connects Representatives discussed in the meeting, some investor-owned utilities have used their leverage in negotiations with ACA Connects members to insert provisions in pole attachment agreements requiring that the member notify the utility in advance, or even file a new application, when making customer drops.[4] Where they are applied, these unreasonable policies present ACA Connects members with a dilemma: either follow the utility's policy (and risk losing the new customer) or else face the legal consequences of violating the policy. This is an unfair outcome, and one that runs counter to the Commission's broadband deployment objectives in this proceeding.

Overly restrictive utility policies regarding customer drops pose an added concern during the COVID-19 epidemic. With telework, telehealth, and distance learning having become "the new normal," and likely to persist for months, there is heightened urgency to connect homes that lack broadband connectivity today, and to do so quickly. A months-long timetable for customer drops directly undermines this goal. In addition, the normal pole attachments process involves a complex series of coordinated steps involving many parties. Resources are better spent elsewhere at any time but especially during the COVID-19 epidemic.

Streamlining Customer Drops to Help Get More Americans Connected

The Commission can take a step to help get customers online by ruling that attaching parties have the right to perform customer drop pole attachments on an "attach-and-notify" basis. This could take the form of a Bureau-level Order interpreting the Commission's existing pole attachment rules to provide that customer drop pole attachments are adjuncts to a provider's existing, approved attachments, and so investor-owned utilities' requirements to receive advance notice of such drops are unreasonable. In other words, drop attachments can lawfully be performed through an "attach-and-notify" process.[5] Under the ruling we propose, investor-owned utilities would retain their existing right to inspect any attachments to their poles, including drop attachments, and to demand that the attacher correct any violations. This approach balances the benefits of getting more Americans online as fast as possible, especially during this epidemic, while respecting pole owners' rights to manage the safety and integrity of

[4] *See* Comments of American Cable Association, WC Docket No. 17-84 et al., at 10-11 (filed June 15, 2017).

[5] Alternatively, the Commission could adopt a Report and Order codifying an "attach-and-notify" rule for customer drops. The Commission has already provided adequate notice and gathered a sufficient record to move immediately to a final rule on this issue. However, it could take the Commission a few months to bring any new rule into effect.

their poles.[6] Moreover, the rule would eliminate the risk of legal consequences for many smaller providers who prioritize meeting the public need for broadband services in a timely manner.

Over the years, the Commission has adopted pole attachment reforms to meet the need for more rapid connectivity. The targeted reform proposed above would further advance this goal, particularly during the COVID-19 epidemic,[7] and we encourage the Commission to adopt it expeditiously.

This letter is being filed electronically pursuant to Section 1.1206 of the Commission's rules. Please address to the undersigned any questions regarding this filing.
.

Sincerely,

Brian Hurley

Cc: Adam Copeland
Michael Ray
Matthew Collins
Elizabeth Drogula
Janice Gorin

[6] Notably, though a few utilities have challenged factual assertions in ACA Connects' filings in this docket related to customer drops, we are not aware of any commenter that has defended the view that a process other than attach-and-notify is the most reasonable and balanced process for customer drop pole attachments.

[7] *See* Federal Communications Commission, "More Ways the FCC is Keeping Americans Connected", https://www.fcc.gov/keep-americans-connected (last visited Mar. 26, 2020) (identifying recent steps the Commission has taken to meet enhanced connectivity needs during COVID-19).

Exhibit SCM-22

Tree Maintenance Practices

Why We Prune Trees

To provide safe and reliable electric service for our customers, trees must be properly maintained and kept clear of electric power lines.

Trees are a leading cause of electrical power outages. In fact when trees and power lines touch it creates a very dangerous situation that may even be deadly to anyone in close proximity.

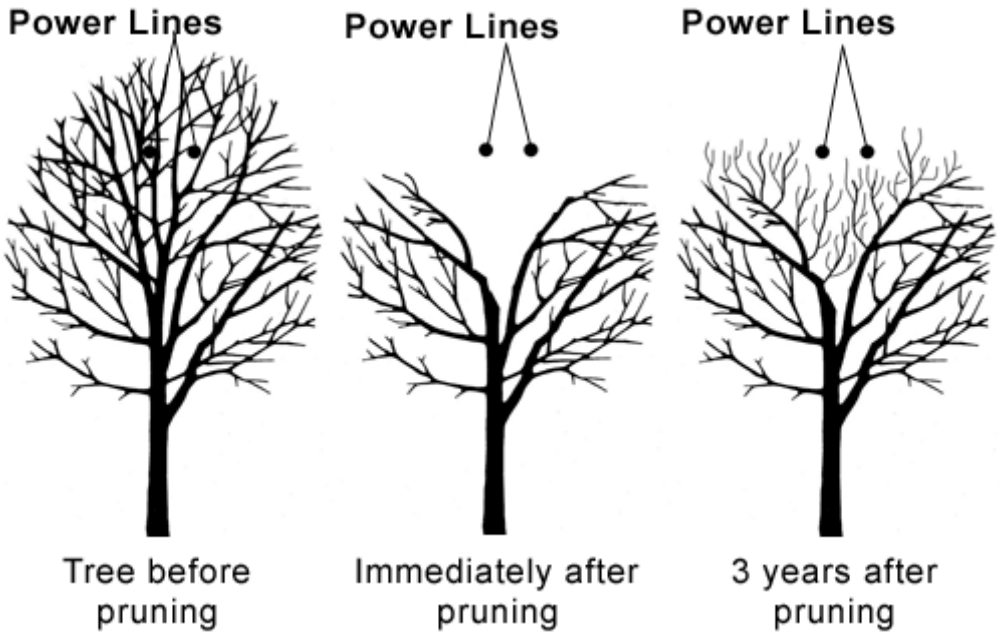
To help maintain safe, reliable electric service, FirstEnergy's Vegetation Management Program controls trees, shrubs and brush growing around our facilities and equipment - including power lines. Every four years or so, trained, qualified line clearance experts visit your neighborhood looking for trees that may come in contact with electrical conductors.

If a tree needs pruning, the property owner is notified - either in person or through a door card - before work is started. An approximate time frame for completion of the work is noted on the card.

Immature trees and other forms of vegetation that potentially might come in contact with electric lines are removed as well. Vines growing on poles, guy wires or other equipment are cut near the ground. Low growing shrubs and ornamental trees are usually left undisturbed unless they hinder access to power lines or facilities.

How Trees are Pruned

Tree care professionals under contract to FirstEnergy use "directional" pruning techniques. These techniques were developed by the National Arborist Association and are published by the American National Standards Institute (ANSI). Directional pruning is the accepted industry standard endorsed and promoted by the National Arbor Day Foundation and the International Society of Arboriculture.



Directional pruning removes entire branches and limbs back to the main trunk of the tree, where trees normally shed them. In this way, future tree growth is directed away from power lines and weakly attached re-growth is minimized. Directional pruning takes advantage of strong points in the tree's structure. Branches growing away from electric lines or facilities are usually left undisturbed. Directional pruning does not harm the tree's natural defense systems and other natural processes that protect the tree from decay and aggressive re-sprouting.

Before branches growing near electric lines are removed, pruning crews evaluate a tree's structure and growth patterns. Crews also consider the tree species, growth rates common to our service area, proximity to electric lines and the height and voltage of the lines.

Benefits of directionally pruned trees

Directionally pruned trees may look odd at first. In the long run, however, such trees are less susceptible to pest and decay problems and less likely to drop branches and cause damage during storms. In fact, compared to other methods such as topping, stubbing or pollarding, directional pruning is better for the protection of the tree's health.

Why Some Tress Are Removed

To provide adequate clearance around distribution power lines, some trees require more pruning than others. If a tree cannot be pruned effectively without significantly impacting its health or shape, it should be removed. Trees that present a danger or are diseased may also be removed. More information about our vegetation management practices for distribution lines, including tips for homeowners, can be found in this brochure .

On transmission right-of-ways, clearing, rather than pruning, established trees from the right-of-way reflects our continuing commitment to maintaining safe and reliable electric service to all of our customers. So long as they do not obstruct safe access, some low-growing shrubs are allowed to remain in the transmission corridor and provide a viable habitat for wildlife. Additional information about vegetation management practices and maintaining a safe and reliable transmission system can be found here.

In cases of tree removal, the property owner is notified in person or in writing before the work is done.

Maintaining Trees and Vegetation with Herbicides

Years of experience and study show that the safest and most efficient way to keep electric rights-of-way clear of trees and vegetation is through the careful use of herbicides. FirstEnergy uses a selective herbicide program that assures safe and easy access for our service and maintenance needs while preserving natural surroundings – including wildlife habitat – for all to enjoy.

With less competition for moisture, sunlight and nutrients, a meadow-like setting filled with beneficial grasses and wildflowers thrives. Studies show this actually enhances wildlife habitat by promoting grasses, low growing shrubs and other ground cover preferred by birds, deer and other small animals.

Safe for people and animals

The herbicides FirstEnergy uses work on enzymes found only within plants, not people or animals. These compounds enter through leaves and stems to control the plant from the inside. What's more, the products we use have undergone years of testing. The EPA registers such products for use only after determining they will not adversely affect people, animals or the environment when properly applied.

Certified applicators

FirstEnergy requires crews that apply herbicides to follow strict usage guidelines. Workers who apply herbicides must be trained and work under the direct supervision of a certified applicator. Furthermore, they must conform to all state and federal laws.

Emerald Ash Borer

The emerald ash borer (*Agrilus planipennis*) is a destructive wood-boring pest of ash trees (*Fraxinus* spp.). Native to China, Mongolia, North Korea, South Korea, Japan, Taiwan, and the Russian Far East, the emerald ash borer beetle (EAB) was unknown in North America until its discovery in southeast Michigan in 2002. Today, EAB infestations have been detected in 25 states; Arkansas**,** Colorado, Connecticut, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin.

EAB is a significant threat to our urban, suburban, and rural forests as it kills stressed and healthy ash trees. EAB is so aggressive that ash trees may die within two or three years after they become infested.

Symptoms of an infestation may include any or all of the following: dead branches near the top of a tree, leafy shoots sprouting from the trunk, bark splits exposing larval galleries, extensive woodpecker activity, and D-shaped exit holes.

FirstEnergy has been managing the effects of the EAB since 2003 when it was first detected in Ohio. Every FirstEnergy operating company has now been infested to some degree by the EAB.

Much has been learned about this pest and new information becomes available from many sources. To best serve our customers, we believe that the best source of information for reference is the USDA APHIS website*, which is continually updated with new information.

Nationally Recognized Practices

For eighteen consecutive years, FirstEnergy has been recognized as a Tree Line USA utility by the National Arbor Day Foundation, in cooperation with the National Association of State Foresters.

The awards recognize the tree care programs run by FirstEnergy's 10 electric utility companies in Ohio, Pennsylvania, New Jersey, West Virginia and Maryland. The Tree Line USA program honors investor-owned and public utility companies that strive to promote the dual goals of dependable utility service and abundant, healthy trees along America's streets and highways. To achieve the Tree Line USA designation, companies must meet five program standards:

- Follow industry criteria for quality tree care
- Provide annual training for employees in best tree-care practices
- Sponsor tree-planting and public education programs on appropriate plantings
- Maintain a tree-based energy conservation program
- Participate in Arbor Day events

Vegetation Management Contractors

We carry out the Vegetation Management Program with the assistance and expertise of contracted tree care professionals. All of our contractors are required to follow overhead line clearance guidelines and specifications developed by our Forestry Staff to ensure proper, professional service. Vegetation management contractors include:

- A.L.L. Construction Inc
- ACRT
- Aerial Solutions Inc.
- Arbor Metrics Solution
- Aspen Tree
- Asplundh Tree Experts
- Davey Resource Group
- Davey Tree Experts
- Energy Group Inc.
- Environmental Consultants Inc.
- Hazlett Tree Service
- Industrial Helicopter Company
- Innovative Environmental Solutions
- Jaflo
- Kelli Corp
- Lewis Tree Service
- Midwest Land Clearing Inc.
- Nelson Tree Service
- NG Gilbert

- Northeast Service Company
- Penn Line Service
- Phillips & Jordan Inc.
- Progressive Solutions
- Rotorblade
- TCS Forestry
- Terry Tree Service Llc
- Townsend Tree
- Tree Smiths
- Trees Inc.
- Utilities Forestry Services Inc.
- Wright Tree Service Inc.
- York Tree Service

To confirm whether a contractor is working for us, call our Contact Center.

Still need help?

Contact us with your questions.

Last Modified: February 4, 2020

Exhibit SCM-23

Number	INIT	Summary	Reason	Action(s)	FC Area	Own	Ht	Condition	Action
17-VzP0131	VzPA	ROTTED POLE VZ REPLACE	Danger Pole	Replace RESP Pole - Take Ownership	New Castle	PP	40'	Rotted	Replace RESP Pole - Take Ownership
19-VzN0291	VzN	vz removed attachment. notify penelec bad pole	Field Audit	Remove Attachment	Erie	PN	35'		Remove Attachment
18-VzN0014	VzN	VZ REPLACED POLE	Routine	Replace RESP Pole	Somerset	PN	35'	Rotted	Replace RESP Pole
16-VzN0161	VzN	POLE IS NOT SAFE NEEDS REPLACED TO GET CUSTOMER BACK IN-SERVICE	Customer Call	Request Replace Pole	Erie	PN	35'	Insufficient	Request Replace RESP Pole
16-VzN0179	VzN	19690-e31 needs replaced to prevent future accidents	Danger Pole	Request Replace Pole	Erie	PN	40'	Insufficient	Request Replace RESP Pole
16-VzN0202	VzN	VZ TO REPLACE POLE	Danger Pole	Mixed	Oil City	PN	40'	Broken	Request Replace RESP Pole
18-VzN0192	VzN	pole is unsafe needs replaced ASAP please	Danger Pole	Replace RESP Pole	Dillsburg	ME	55'	Rotted	Replace RESP Pole
18-VzP0071	VzPA	VZ REPLACED POLE	Danger Pole	Replace RESP Pole - Take Ownership	New Castle	PP	40'	Rotted	Replace RESP Pole - Take Ownership
18-VzP0293	VzPA	Replace poles for clearance and safety	Danger Pole	Request Replace Pole	Reading	ME	40'	Leaning	Request Replace RESP Pole
18-VzP0293	VzPA	Replace poles for clearance and safety	Danger Pole	Request Replace Pole	Reading	ME	40'	Leaning	Request Replace RESP Pole
18-VzP0293	VzPA	Replace poles for clearance and safety	Danger Pole	Request Replace Pole	Reading	ME	40'	Cracked	Request Replace RESP Pole
18-VzP0293	VzPA	Replace poles for clearance and safety	Danger Pole	Request Replace Pole	Reading	ME	40'	Cracked	Request Replace RESP Pole
18-VzP0293	VzPA	Replace poles for clearance and safety	Danger Pole	Request Replace Pole	Reading	ME	35'	Cracked	Request Replace RESP Pole
19-VzN0184	VzN	power pole 19513-s12 is broke needs replced 9083-s12 & 9084-s12 needs replaced with higher poles	Danger Pole	Request Replace Pole	Somerset	PN	40'	Broken	Request Replace RESP Pole
20-VzN0022	VzN	REQ PENELEC TO REPLACE ROTTED POLE	Danger Pole	Request Replace Pole	Oil City	PN	40'	Rotted	Request Replace RESP Pole

Exhibit SCM-24

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 23

Reference Answer to Complaint ¶ 49.

(a) Describe in detail the basis for FirstEnergy's allegation that "the lowest attachment on the pole" is "easier to access" than other communications facilities on the same pole, including how many facilities were considered in FirstEnergy's analysis, how ease of access was measured, and the person(s) who conducted the measurements.

(b) For each facility considered, identify the pole location and pole identification number, the facilities that were considered and compared, and the person(s) performing the comparison.

(c) Provide all documents concerning the allegation that "the lowest attachment on the pole" is "easier to access" than other communications facilities on the same pole, including all studies, analyses, and work papers concerning the allegation.

RESPONSE:

(a) The Occupational Safety and Health Administration requires workers climbing higher than four feet above grade on a pole to utilize an approved fall arrest device (climbing belt) to prevent injury from falling. As such, while passing through on the way to higher attachments, every lower communication attachment requires detaching and reattaching climbing belts, which is time consuming and adds risk.

Additionally, the lowest attachment on a pole is also farther away from energized power lines than other communications facilities on the same pole, meaning that the lowest attachment on a pole need not take the extra care to avoid damaging the attachments of lower communications facilities that would otherwise be required. Also considered were decades of unrecorded conversations with thousands of linemen across the corporate footprint.

The measurement was qualitative and not quantitative, and incorporates input from Thomas Pryatel, Stephen Schafer, and Randal Coleman.

(b) Not applicable. See response to (a) above.

(c) Not applicable. See response to (a) above.

Exhibit SCM-25

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 28

Reference Answer to Complaint ¶ 53.

(a) For each entity with facilities attached to FirstEnergy's poles since 2011, state whether the entity posted a security bond under its License Agreement.

(b) For each entity that posted a security bond, identify the amount of the security bond, the cost of the security bond, and the total number of FirstEnergy distribution poles to which the entity currently has facilities attached. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power.

(c) Provide all documents, work papers, invoices, cost records, and payment records concerning the analysis.

RESPONSE:

(a) FirstEnergy has not compiled a list or record of each entity that has posted a security bond under its License Agreement.

(b) FirstEnergy has not performed an analysis of the kind described in this interrogatory.

(c) See response to (b).

Exhibit SCM-26

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 26

Reference Answer to Complaint ¶ 52.

(a) Identify every difference FirstEnergy contends exists between the insurance provision in each Joint Use Agreement and the insurance provision in each License Agreement and explain the basis for FirstEnergy's conclusion.

(b) Provide all documents concerning the allegation that "differences exist between the insurance … provisions that apply to Verizon and those that apply to Verizon's competitors," including all studies, analyses, and work papers concerning the allegation.

RESPONSE:

(a) FirstEnergy has not compiled a list or record comparing insurance provisions in each of the ten joint use agreements with each of the 185 cable and CLEC agreements. FirstEnergy's experience implementing the various is agreements is that most or all cable and CLEC agreements require insurance coverage while most or all of the joint use agreements do not.

(b) Verizon already has in its possession all of the joint use agreements between FirstEnergy and Verizon, and FirstEnergy previously produced all of its License Agreements to Verizon.

Exhibit SCM-27

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 27

Reference Answer to Complaint ¶ 52.

(a) Identify every difference FirstEnergy contends exists between the indemnification provision in each Joint Use Agreement and the indemnification provision each License Agreement and explain the basis for FirstEnergy's conclusion.

(b) Provide all documents concerning the allegation that "differences exist between the … indemnification provisions that apply to Verizon and those that apply to Verizon's competitors," including all studies, analyses, and work papers concerning the allegation.

RESPONSE:

(a) FirstEnergy has not compiled a list or record comparing the indemnification provisions in each of the 10 Joint Use Agreements with each of the 185 License Agreements. FirstEnergy notes its general observation that the Joint Use Agreements provide reciprocal indemnification while License Agreements require unilateral indemnification.

(b) Please reference the Joint Use Agreements and License Agreements already in Verizon's possession.

Exhibit SCM-28

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 14

Reference Answer Brief ¶ 95 and Answer Attachment B ¶ 24.

(a) Describe in detail the basis for FirstEnergy's allegation that FirstEnergy "incurs significant unreimbursed expense responding to emergency events on Verizon-owned poles," including the expense that was unreimbursed.

(b) For each such "unreimbursed expense," identify the location and pole identification number for the Verizon-owned pole, the work performed, the amount of the "unreimbursed expense," all other entities with facilities attached to that pole, and state whether and how FirstEnergy's work provided Verizon a benefit that was different from that provided other facilities attached to the pole.

(c) Also for each "unreimbursed expense," identify the "emergency event" and all efforts to notify Verizon of the "emergency event" and state whether FirstEnergy took ownership of the pole following the "emergency event."

(d) Provide all documents concerning the allegation that FirstEnergy "incurs significant unreimbursed expense responding to emergency events on Verizon-owned poles," including all accident reports, studies, analyses, invoices, cost records, and payment records concerning the allegation.

5/18/2020 ORIGINAL RESPONSE:

(a) Where Verizon poles have failed due to car pole accidents, storm events or undetected rot, the poles need urgent repair or replacement. Verizon is given a reasonable amount of time to commit to making timely repairs and replacements. Where Verizon is unresponsive or late, FirstEnergy will replace the pole.

(b) Attached is a listing of the poles located from FirstEnergy's outage management system. *See* Verizon Interrogatory Set II, No. 14, Attachments A and B.

(c) The outage management listing includes comments where dispatchers have attempted to contact Verizon.

(d) The outage management system provides the most complete record available with such limited access to written logs and employee interviews.

5/28/2020 SUPPLEMENTAL RESPONSE:

(a) FirstEnergy originally answered the question that was asked by describing the basis for its allegation that FirstEnergy "incurs significant unreimbursed expense responding to emergency events on Verizon-owned poles." The question did not ask FirstEnergy to explain whether the referenced expenses are unreimbursed. However, the quoted passage from FirstEnergy's Answer clearly states that the Companies incur "significant unreimbursed expense." Nor did the question ask FirstEnergy why the expenses are unreimbursed. Notwithstanding, FirstEnergy clarifies that the referenced expenses are unreimbursed. However, due to the COVID-19 pandemic, FirstEnergy's personnel currently do not have access to the physical files that would be required to provide a breakdown of (1) the expenses that were invoiced by FirstEnergy and not paid by Verizon and (2) the expenses that were not invoiced by FirstEnergy.

(b) FirstEnergy's original response to subpart (b) also should have referenced Attachment C to Interrogatory Set II, No. 14.

FirstEnergy observes that it does not have a list of all other entities attached to Verizon's poles where FirstEnergy responded to emergency events, so it cannot speculate about which entities are attached or how they may have benefited from the inspections.

FirstEnergy clarifies that Attachment A to Interrogatory Set II, No. 14 is the best available electronic record Penelec has that allows a search of Verizon-owned poles that have been replaced and that Attachment B to Interrogatory Set II, No. 14 is the best available electronic record Met-Ed has of emergency event pole replacements. Moreover, Attachment C to Interrogatory Set II, No. 14 is the best available electronic record Penn Power has of emergency event pole replacements.

FirstEnergy provided the records that it had available. FirstEnergy does not have a version of Attachment A that is limited to the parties' overlapping service areas in Pennsylvania and is limited to "emergency events." However, Attachment A provides the Verizon pole numbers in Column A and a description of the event in Column C, so Verizon can perform its own analysis about whether the poles are located in the parties' overlapping service areas in Pennsylvania and whether the incidents were emergency events.

(c) Due to COVID-19 restrictions on FirstEnergy's office buildings, FirstEnergy cannot obtain its personnel's paper job sleeves to confirm whether invoicing was issued or payment was received. FirstEnergy also notes that the question did not ask FirstEnergy to, as alleged in Verizon's email dated May 20, 2020, provide information about "efforts after the

emergency to seek reimbursement." Notwithstanding, FirstEnergy avers that due to the COVID-19 pandemic, FirstEnergy's personnel currently do not have access to the physical files that would be required to provide all of the details on FirstEnergy's efforts to seek reimbursement from Verizon after the emergencies. In addition, FirstEnergy clarifies that the "outage management listing" referenced in the original response are the outage management system records set forth in Attachments A, B, and C to Interrogatory Set II, No. 14. Furthermore, Penelec's and Met-Ed's PowerOn records of communications with Verizon about the notification of and response to emergency events for the periods 2011-2014 and 2015-2020 are attached as Attachments D and E, respectively. Attachments A through E are the best records currently available to FirstEnergy personnel given the current restrictions due to the COVID-19 pandemic.

(d) FirstEnergy clarifies that the outage management system records were provided in Attachments A, B, and C to this original response. FirstEnergy has limited access to written logs and employee interviews because the Companies have been working from home due to the COVID-19 pandemic and do not have remote access to those documents.

Exhibit SCM-29

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 19

Reference Answer Brief ¶ 111, Answer Attachment B ¶ 27, and Answer Attachment K.

(a) Describe in detail the field audit referenced in Answer Brief ¶ 111, Answer Attachment B ¶ 27, and Answer Attachment K including the person(s) who determined the scope of the field audit, the information that would be collected, and the manner in which the study would be performed.

(b) Describe the instructions FirstEnergy gave Davey Resource Group regarding the field audit, identify the date FirstEnergy retained Davey Resource Group to perform the field audit, the date the Davey Resource Group began the field audit, the date Davey Research Group finished the field audit, and the date FirstEnergy received the results of the field audit, including preliminary results.

(c) For each pole reviewed by Davey Resource Group, identify the pole's location and identification number and provide all data collected regarding the pole.

(d) Provide all documents exchanged between FirstEnergy and Davey Resource Group regarding the field audit described in Answer Brief ¶ 111, Answer Attachment B ¶ 27, and Answer Attachment K, including all preliminary and final field audit data.

RESPONSE:

(a) The field audit is described in detail in the Affidavit and Report by Scott Carlin of Davey Resource Group and in Mr. Carlin's rebuttal testimony. The scope of the audit, information that would be collected, and the manner in which the study would be performed was determined by counsel in consultation with Thomas Pryatel, Stephen Schafer, and Randal Coleman.

(b) The instructions that FirstEnergy gave Davey Resource Group regarding the field audit were to collect the information as described in FirstEnergy Exhibit SC-1. DRG was retained on December 16, 2019. Data collection began on December 19, 2019, and concluded with delivery of the report on January 28, 2020.

(c) See Verizon Interrogatory Set II, No. 34, Attachments F and G.

(d) *See* FirstEnergy Exhibit SC-1 and Verizon Interrogatory Set II, No. 19, Attachments A and B.

From:	Johnston, Steven
To:	Schafer, Stephen F; Endris, Robert M; DeWitt, Deanna R; Bowen, Andrew R; Magee@khlaw.com; Pryatel, Thomas R.; McClain, Dominic R
Cc:	Scott Carlin; Nadine Machunis
Subject:	[EXTERNAL] Davey Resource Group / First Energy data collection parameters
Date:	Thursday, December 19, 2019 4:51:41 PM

All:

DRG has begun today field data collection on the Verizon owned poles north of Pittsburgh and we are progressing with no issue through the system. Below is documentation of the scope of work as DRG understands. We have put into place all of the needed configurations / schemas to collect and deliver data as documented here. Please review and comment on the scope. With your comments, we will finalize all data collection parameters and begin collection of First Energy owned poles.

DRG would like to discuss further the collection of the midspan heights to assure that the data being collected is appropriate for the intended use of First Energy. Otherwise, we believe that the documented scope addresses all that First Energy requires.

We have documented all data that we will collect in the field to assure one visit to the field to capture needed information. We would like to finalize this scope tomorrow for our crew to deploy on the First Energy owned poles.

Scope of Work for First Energy / Verizon Pole Data Collection

Verizon Owned Poles
Field visit each of 1,519 poles owned by Verizon and provided as a source material by First Energy @95%.
First Energy Space Measurement. Provide a measurement of First Energy electric space used on Verizon owned pole. To determine the space occupied by FirstEnergy on the Verizon-owned poles, the Auditor will count the distance from the top of the pole down to the lowest FirstEnergy attachment in the usable space (i.e., nothing in or below the communication worker safety zone; this does not include electric risers). Any street light bracket or street light drip loop will be measured and documented if it is the lowest attachment on the pole.

First Energy Owned Poles
Field visit each of 1,519 poles owned by First Energy and provided as a source material by First Energy @95%.
First Energy Space Measurement. Provide a measurement of First Energy electric space used on Verizon owned pole. To determine the space occupied by FirstEnergy on the Verizon-owned poles, the Auditor will count the distance from the top of the pole down to the lowest FirstEnergy attachment in the usable space (i.e., nothing in or below the communication worker safety zone; this does not include electric risers). Any street light bracket or street light drip loop will be measured and documented if it is the lowest attachment on the pole.
Pole Height. To calculate pole height, the Auditor will measure from ground level to the top of the pole, then add the standard pole depth of 10% of the pole height plus 2 feet, so that the pole height equals one of the five-foot increments. Additionally, pictures of the birthmark and pole tags will be taken (if available) of each pole and the height on the birthmark will be recorded as an attribute of the pole.
Unusable Space. To calculate the amount of unusable space, the pole depth underground will be added to the FCC's presumptive height above ground of 18 feet. DRG will calculate the unusable space as 10% final pole height + 2 feet + 18 feet of presumptive height.
Attachment Location on Pole. Each individual attaching entity will be documented from top of pole to bottom of pole. Only First Energy and Verizon will be denoted by name; others will be denoted by Company1, Company2, Company3, etc.
Average Number of Attaching Entities. The number of attaching entities per pole will be calculated based on the number of different companies documented as being attached to the pole irregardless of the number of actual attachments on the pole.
Space Occupied. For each attacher on the pole, the Auditor will count any individual attachers equipment located in the usable space on the pole, except for riser covers. Communications attachers are deemed to occupy six (6) inches of

clearance above its highest attachment and six (6) inches below its lowest attachment. For example, if Verizon has two adjacent attachments separated by ten (10) inches, then Verizon is deemed to occupy 10” + 6” below + 6” above for total of 22”. If Verizon has more than two (2) adjacent attachments in the usable space, then the auditor will count the distance between six (6) inches below the lowest adjacent attachment to six (6) inches above the highest adjacent attachment. If Verizon has non-adjacent attachments (which might be connected with a riser cable), then Verizon is deemed to occupy 6” below + 6” above each non-adjacent attachment. J-hooks and equipment will be used to calculate the space used on the pole when they are attached outside of the +/- 6" of the trunk line thru bolt. No holiday attachments or festooned outlets will be captured. Adjacent attachment owners will be denoted as Company1a, Company1b, etc. as needed.
MidSpan Heights. The northeastern most mainline midspan will be visited and captured in conjunction with each pole location. This one midspan location will have the lowest First Energy line height recorded and all communication trunk line heights recorded and denoted to match Company1, Company2, Company3, etc. at the pole. The ground is the reference point for all measurements.
*****No inspections or NESC violations are being documented at each pole as part of this project.**

Thanks,

Steven

Steven C. Johnston
Division Manager, Asset Management Services
Davey Resource Group, Inc.
2035 Grassland Parkway
Alpharetta, GA 30004

(770) 619-5545 x8112 office
(404) 216-6332 cellular
(770) 619-5282 facsimile

From: Schafer, Stephen F
To: Carlin, Scott
Subject: FE PAA (FCC Complaint)
Date: Wednesday, December 11, 2019 9:12:00 AM

Hello Scott
Good catching up with you this morning. Tom Magee provided the following information, which was shared with the statistician. Please note that the first section represents the VZ vs. FE pole ownership by FEOC.

- **Sample Population - The audit will include only poles that are jointly used by FirstEnergy (FE) and Verizon (VZ)**
  - Potomac Edison: 80,000 FE-owned; 21,000 VZ-owned
  - Penelec: 147,000 FE-owned; 73,000 VZ-owned
  - Met-Ed: 130,000 FE-owned; 30,000 VZ-owned
  - Penn Power: 29,000 FE-owned; 8,000 VZ-owned
- **For the FirstEnergy-owned poles the audit will identify (1500 poles):**
  - Pole height
  - Number of attaching entities
  - Space on the pole occupied by each attacher (including FirstEnergy)
  - Number of attachments for each communications attacher on the pole
  - Location on the pole of each attachment (including FirstEnergy)
  - The amount of sag of each attacher's facilities
  - The amount of "unusable" space on the pole
- **For the Verizon-owned poles the audit will identify only (1500 poles):**
  - Space on the pole occupied by FirstEnergy

I will be in touch once I have the pole data and deadline.

Steve

Stephen F. Schafer
Manager, Joint Use & Cable Locating
Energy Delivery - Operations Services
FirstEnergy Service Company
76 South Main Street A-GO-9
Akron, Ohio 44308
330.384.3711
SSchafer@FirstEnergyCorp.com

Exhibit SCM-30
Redacted Public Version

Met-Ed
A FirstEnergy Company

08/23/2013 Cust / Acct Number 800143281 / 120001612221

Invoice No. 90383487

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR
15 E MONTGOMERY AVE
PITTSBURGH PA 15212

Total due by 09/22/2013
To avoid a possible Late Payment Charge being added to your bill,please pay by the due date.

General Description

Attention: Ms. Debbie Delia

Annual billing for Pole Attachments for Agreement dated 9/28/1973 and the Memorandum of Understanding dated August 2009.

CIN 11001
Invoice Period: January 1, 2012 through December 31, 2012
Total Poles: 31,576
Met-Ed Poles: 26,827
Verizon (Bell North) Poles: 4,749
Telco share per contract: 14,209
Deficiency: 9,460

Comp Rate: [redacted]

Net Amount Due: [redacted]

Item	Description	Qty	Total
1	Joint Use - Annual Rent Billing	1.000	[redacted]

(Description Continued - Next Page)

General Information

Written correspondence may be mailed to:
Business Services
Met-Ed
PO Box 16001 2800 Pottsville Pike
Reading PA 19612

Questions regarding this invoice may be directed to Accounts Receivable:

1-610-921-6927

Met-Ed
A FirstEnergy Company

Return this part with a check or money order payable to:
MET-ED
Write name, phone, or address changes on back and check here: ☐

Invoice No.	Customer PO No.	Your Check Number/Date	Contract No.
90383487			120001612221

Amount Paid	
Please Pay	[redacted]
Due By	09/22/2013

MET-ED
PO BOX 3612
AKRON OH 44309-3612

VERIZON
DEBBIE DELIA
2ND FLOOR
15 E MONTGOMERY AVE

Met-Ed
A FirstEnergy Company

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR

Date/Doc. no.
08/23/2013 / 90383487

General Description (Continued)

Subtotal
Total Amount Due [redacted]

Met-Ed
A FirstEnergy Company

08/23/2013 Cust / Acct Number 800042287 / 120000459608

Invoice No. 90383486

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR
15 E MONTGOMERY AVENUE
PITTSBURGH PA 15212

Total due by 10/07/2013
To avoid a possible Late Payment Charge being added to your bill,please pay by the due date.

General Description

Attention: Ms. Theresa Baker

Annual billiing for Pole Attachments for Agreement dated 9/28/1973 and the Memorandum of Understanding dated August 2009.

CIN 11002
Invoice Period: January 1, 2012 through December 31, 2012

Total Poles: 49,154
Met-Ed Poles: 39,052
Verizon (Bell South) Poles: 10,102
Telco Share per contract: 22,119
Deficiency: 12,017

Comp Rate: [redacted]

Net Amount Due: [redacted]

Item	Description	Qty	Total
1	Joint Use - Annual Rent Billing	1.000	[redacted]

(Description Continued - Next Page)

General Information

Written correspondence may be mailed to:
Business Services
Met-Ed
PO Box 16001 2800 Pottsville Pike
Reading PA 19612

Questions regarding this invoice may be directed to Accounts Receivable:

1-610-921-6927

Met-Ed
A FirstEnergy Company

Return this part with a check or money order payable to:
MET-ED
Write name, phone, or address changes on back and check here. ☐

Invoice No.	Customer PO No.	Your Check Number/Date	Contract No.
90383486			120000459608

Amount Paid	
Please Pay	[redacted]
Due By	10/07/2013

MET-ED
PO BOX 3612
AKRON OH 44309-3612

VERIZON
DEBBIE DELIA
2ND FLOOR
15 E MONTGOMERY AVENUE
PITTSBURGH PA 15212

02120000459608000000000903834869000808503760808503767

Met-Ed
A FirstEnergy Company

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR

Date/Doc. no.
08/23/2013 / 90383486

General Description (Continued)

Subtotal	[redacted]
Total Amount Due	

Met-Ed
A FirstEnergy Company

08/23/2013 Cust. / Acct. Number 800307395 / 120003560972

Invoice No. 90383488

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE
PITTSBURGH PA 15212

Total due by 10/07/2013
To avoid a possible Late Payment Charge being added to your bill,please pay by the due date.

General Description

Attention: Ms. Debbie Delia

Annual billing for Pole Attachments for Agreement dated 3/17/1972 and Memorandum of Understanding dated August 2009.

CIN #11007
Invoice Period: January 1, 2012 through December 31, 2012
Total Poles: 883
Met-Ed Poles: 776
Verizon (Central) Poles: 107
Telco share per contract 397
Deficiency: 290

Comp Rate: [redacted]

Net Amount due: [redacted]

Item	Description	Qty	Total
1	Joint Use - Annual Rent Billing	1.000	[redacted]

(Description Continued - Next Page)

General Information

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Business Services
Met-Ed
PO Box 16001 2800 Pottsville Pike
Reading PA 19612

Questions regarding this invoice may be directed to Accounts Receivable:

1-610-921-6927

Met-Ed
A FirstEnergy Company

Return this part with a check or money order payable to:
MET-ED
Write name, phone, or address changes on back and check here. ☐

Invoice No.	Customer PO No.	Your Check Number/Date	Contract No.
90383488			120003560972

Amount Paid	
Please Pay	[redacted]
Due By	10/07/2013

MET-ED
PO BOX 3612
AKRON OH 44309-3612

VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE

Met-Ed
A FirstEnergy Company

Bill for:	Date/Doc. no.	Page
VERIZON DEBBIE DELIA 2ND FLOOR	08/23/2013 / 90383488	2 of 2

General Description (Continued)

Subtotal	[redacted]
Total Amount Due	

Met-Ed
A FirstEnergy Company

08/23/2013 Cust / Acct Number 800307395 / 120003560972

Invoice No. 90383489

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE
PITTSBURGH PA 15212

Total due by 10/07/2013
To avoid a possible Late Payment Charge being added to your bill,please pay by the due date.

General Description

Attention: Ms. Debbie Delia

Annual Billing for Pole Attachments for Agreement dated 3/17/1972 and Memorandum of Understanding dated August 2009.

CIN 11008
Invoice Period: January 1, 2012 through December 31, 2012
Total Poles: 12,988
Met-Ed Poles: 10,894
Verizon (Quaker State) Poles: 2,094
Telco Share per contract, 5,844
Deficiency: 3,750
Comp Rate: [redacted]

Net Amount Due: [redacted]

Any questions regarding this invoice please contact Katherine Patrick (610) 921-6921.

Item	Description	Qty	Total
1	Joint Use - Annual Rent Billing	1.000	[redacted]

(Description Continued - Next Page)

General Information

Written correspondence may be mailed to:
Business Services
Met-Ed
PO Box 16001 2800 Pottsville Pike
Reading PA 19612

Questions regarding this invoice may be directed to Accounts Receivable:

1-610-921-6927

Met-Ed
A FirstEnergy Company

Return this part with a check or money order payable to:
MET-ED
Write name, phone, or address changes on back and check here. ☐

Invoice No.	Customer PO No.	Your Check Number/Date	Contract No.
90383489			120003560972

Amount Paid	
Please Pay	[redacted]
Due By	10/07/2013

MET-ED
PO BOX 3612
AKRON OH 44309-3612

VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE

Met-Ed
A FirstEnergy Company

Bill for:	Date/Doc. no.	Page
VERIZON DEBBIE DELIA 2ND FLOOR	08/23/2013 / 90383489	2 of 2

General Description (Continued)

Subtotal	[redacted]
Total Amount Due	

Met-Ed
A FirstEnergy Company

08/23/2013 Cust / Acct Number 800307385 / 120003560972

Invoice No. 90383490

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE
PITTSBURGH PA 15212

Total due by 10/07/2013

To avoid a possible Late Payment Charge being added to your bill,please pay by the due date.

General Description

Attention: Ms. Debbie Delia

Annual billing for Pole Attachments for Agreement dated 5-22-1967 and the Memorandum of Understanding dated August 2009.

CIN 11011
Invoice Period: January 1, 2012 through December 31, 2012
Total Poles: 64,705
Met-Ed Poles: 51,739
Verizon (GTE) Poles: 12,966
Telco Share per contract: 29,117
Deficiency: 16,151

Comp Rate: [redacted]

Net Amount Due: [redacted]

Item	Description	Qty	Total
1	Joint Use - Annual Rent Billing	1.000	[redacted]

(Description Continued - Next Page)

General Information

Written correspondence may be mailed to:
Business Services
Met-Ed
PO Box 16001 2800 Pottsville Pike
Reading PA 19612

Questions regarding this invoice may be directed to Accounts Receivable:

1-610-921-6927

Met-Ed
A FirstEnergy Company

Return this part with a check or money order payable to:
MET-ED
Write name, phone, or address changes on back and check here. ☐

Invoice No.	Customer PO No.	Your Check Number/Date	Contract No.
90383490			120003560972

Amount Paid	
Please Pay	[redacted]
Due By	10/07/2013

VERIZON
DEBBIE DELIA
2ND FLOOR
15 E. MONTGOMERY AVENUE

MET-ED
PO BOX 3612
AKRON OH 44309-3612

Met-Ed
A FirstEnergy Company

Bill for:
VERIZON
DEBBIE DELIA
2ND FLOOR

Date/Doc. no.
08/23/2013 / 90383490

General Description (Continued)

Subtotal
Total Amount Due [redacted]

Exhibit SCM-31

Roy E. Litland
Associate General Counsel
Federal Regulatory Affairs

verizon

July 26, 2018

1300 I St NW Ste 500E
Washington, DC 20005-7101

Phone 202.515.2464
Mobile 202.615.1869
roy.litland@verizon.com

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Deployment, WC Docket No. 17-84

Dear Ms. Dortch:

As we have previously explained,[1] the Commission's proposed adoption of one-touch make-ready[2] will spur broadband deployment. We continue to support that approach and have urged the Commission to reject attempts to undermine it.

Here, we provide additional information in support of multiple parties' suggestion that the Commission consider some revisions to Part III.C of the *Draft Order* to better implement its intention to address outdated rate disparities. The Commission is appropriately working to eliminate the outdated rate disparities that continue to thwart competition and broadband deployment by incumbent LECs, including Verizon. These disparities apply not just to new agreements, but to the "existing agreements" entered prior to the Commission's *2011 Pole Attachment Order*.[3] Such existing agreements govern the vast majority of Verizon's incumbent LEC pole attachments, are responsible for most of the ongoing rate disparities, and have proven nearly impossible to renegotiate.

Based on our experience in addressing and litigating pole attachment matters, we believe that to best achieve the Commission's goal of eliminating outdated rate disparities, the Commission should extend the new telecom rate presumption to all joint use agreements, including existing agreements. If the Commission declines to do so, we ask that the Commission, at a minimum, extend the new telecom rate presumption to those joint use agreements that were entered (or the rate term was amended) at a time that the incumbent LEC did not have equivalent bargaining power as defined by the Commission in the *2011 Pole*

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[1] *See*, *e.g.*, Verizon Ex Parte (July 25, 2018).
[2] *See Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Draft Third Report and Order and Declaratory Ruling, WC Docket No. 17-84 & WT Docket No. 17-79; FCC-CIRC1808-03 (rel. July 12, 2018) ("*Draft Order*").
[3] *Implementation of Section 224 of the Act*; *A National Broadband Plan for Our Future*, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240 ¶ 218 (2011) ("*2011 Pole Attachment Order*").

Attachment Order and affirmed in paragraph 13 of the *Dominion Order*.[4] This will ensure that the Commission does not unintentionally perpetuate rate disparities by making it more difficult for incumbent LECs to obtain relief simply because their "inferior bargaining positions have continuously impacted their ability to negotiate a just and reasonable rate over time."[5] It will also provide needed standards for the industry, which could streamline negotiations and reduce the number of disputes requiring the Commission's intervention. And it will appropriately place the burden of proving and quantifying the value of alleged competitive benefits on the party that claims they exist.

This extension of the new telecom rate presumption is warranted because existing joint use agreements were not categorically, or even usually, negotiated by parties with relatively equal bargaining power. Instead, many were negotiated by small predecessor regional telephone companies that were at a distinct negotiating disadvantage relative to the power company. The records of the Pole Attachment Complaints filed by incumbent LECs since 2011, include, for example, joint use agreements entered into in 1961, 1979, and 2006 by incumbent LECs that then owned 7.8 percent,[6] 3.08 percent,[7] and 8 percent[8] of the relevant joint use poles. These Complaints also show that the rate provisions in older joint use agreements were typically amended when the incumbent LEC was at a significant or even greater disadvantage as measured by pole ownership numbers. For example, in one dispute, the rate provisions in five agreements were amended when the incumbent LECs owned 3 percent, 9 percent, 10 percent, 21 percent, and 25 percent of the relevant joint use poles.[9] And relative pole ownership numbers tell only part of the story, as many existing agreements were entered in a very different competitive and regulatory landscape that did not guarantee "just and reasonable" rates even between parties with roughly equivalent bargaining power. There were then typically just two entities attached to each pole, and each was highly regulated, had the same customer base, and was guaranteed a specified rate of return. Today, the landscape is far different. Many power companies continue to operate as monopoly providers with a guaranteed a rate of return, while incumbent LECs must compete with the other attachers for the right to provide services to the same customers, but must pay far higher pole attachment rental rates to do so.

Extending the new telecom rate presumption to existing agreements will further the Commission's policy goals. To date, Verizon's efforts to obtain competitively neutral rates for attachments governed by existing agreements have been consistently opposed by power companies, which have relied on so-called "evergreen clauses" that state that an existing

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[4] *See Verizon Va., et al. v. Va. Elec. and Power Co.*, 32 FCC Rcd 3750 ¶ 13 (EB 2017) ("*Dominion Order*").
[5] *Id*. ¶ 13 n.53.
[6] Pole Attachment Complaint Response Ex. A ¶¶ 8-9, *Verizon Fla. v. Fla. Power and Light Co.*, Docket No. 14-216 (EB-14-MD-003) (Apr. 4, 2014) ("*Verizon Fla. v. FPL*").
[7] Pole Attachment Complaint Response Ex. 1 ¶¶ 6, 14, *Frontier Commc'ns v. Duke Energy Carolinas*, Docket No. 14-215 (EB-14-MD-002) (Feb. 28, 2014) ("*Frontier v. Duke Energy Carolinas*").
[8] Pole Attachment Complaint ¶¶ 16-17, *Commonwealth Tel. Co., et al. v. Metropolitan Edison Co., et. al*, Docket No. 14-218 (EB-14-MD-008) (June 11, 2014) ("*Commonwealth Tel. v. Met-Ed*").
[9] *Id*.

agreement's terms and conditions will continue to govern all existing attachments if the agreement is terminated. Power companies argue that these clauses mean that incumbent LECs are "obligated to continue to honor their obligations under the Agreement, with respect to existing attachments, unless and until a new agreement can be reached or those attachments are removed from the poles."[10] At the same time, power companies "respectfully decline[]" to negotiate a new rate for existing attachments[11] and insist that they can "not be forced to accept a lower rate than that for which it bargained."[12]

Power companies have, as a result, tried to force incumbent LECs into an impossible choice between paying unreasonable rates or removing existing attachments. One company, for example, stated that "the existing joint use network [will] be governed by the existing agreements" and informed the incumbent LEC that it had the option to "remove its attachments from the . . . poles at any time."[13] Another claimed that a new rate could not "appl[y] to attachments made pursuant to the terms of the [existing] agreement."[14] Still another stated that it would consider providing Verizon "a pole attachment agreement similar to their competitors" but only "for new attachments."[15]

Termination of existing agreements, as a result, has not reduced rental rates for existing attachments. It has, however, negatively impacted broadband deployment, since some power companies have declined to negotiate a new agreement, even for future attachments. According to some power companies, "nothing in the FCC's order *requires* [utilities] to negotiate a new agreement"[16] because "granting ILECs access is not required by law."[17] Some power companies, as a result, have informed incumbent LECs that "the parties will not be negotiating a new agreement at all"[18] or that the utility did "not presently intend to enter into an agreement covering future attachments."[19] The incumbent LEC, therefore, would be required "to employ options other than joint use for any future deployment of services."[20]

Nor do provisions in agreements that allow either party to request renegotiation of the rental rate resolve the problem. Power companies have stalled or ignored requests to negotiate

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[10] Pole Attachment Complaint Response at 8, *Verizon Fla. v. FPL*.
[11] Pole Attachment Complaint Ex. 9 at 2, *Frontier Commc'ns v. Duke Energy Carolinas*, Docket No. 14-214 (EB-14-MD-001) (Jan. 17, 2014) ("*Frontier v Duke*"); *see also* Pole Attachment Complaint Ex. 40, *Commonwealth Tel. v. Met-Ed* ("FirstEnergy . . . is not inclined to renegotiate [the] agreement.").
[12] Mot. to Dismiss at 4, *Fla. Power & Light Co. v. Verizon Fla.*, No. 13-14808 (Fla. 11th Cir. Ct. Dec. 5, 2013).
[13] Pole Attachment Complaint Ex. 13 at 2, *Frontier v. Duke*.
[14] Pole Attachment Complaint Response at 24, *Commonwealth Tel. Co. v. UGI Utilities, Inc. – Elec. Div.*, Docket No. 14-217 (EB-14-MD-007) (Aug. 25, 2014).
[15] Pole Attachment Complaint Response Ex. A ¶ 46, *Verizon Fla. v. FPL*.
[16] Pole Attachment Complaint Ex. 22 at 1, *Frontier Commc'ns v. Duke Energy Progress*, No. 14-213 (EB-13-MD-007) (Dec. 9, 2013) ("*Frontier v Duke Energy Progress*").
[17] Pole Attachment Complaint Response Ex. A ¶ 46, *Verizon Fla. v. FPL*.
[18] *See*, *e.g.*, Pole Attachment Complaint Ex. 19 at 1, *Frontier v. Duke Energy Progress*.
[19] Pole Attachment Complaint Ex. 6 at 2, *Frontier v. Duke Energy Carolinas*.
[20] *Id.*

for years.[21] They have challenged renegotiation provisions as unenforceable agreements to agree that "cannot bind the parties with respect to renegotiation."[22] And they have taken the position that the only way for an incumbent LEC to obtain a new rental rate for existing attachments is through a Pole Attachment Complaint.[23] One argued, for example, that "for the 2011 Pole Attachment Order to have any effect on the express contracts *between these parties*, the FCC would need to specifically examine the terms and conditions of the parties' joint use agreements and make a determination specific to those agreements."[24] Another claimed that "an FCC complaint is Verizon's sole legitimate avenue for redress, if it believes the contract rate is unfair and unreasonable. . ."[25] Verizon thus remains locked into existing rates, even though the Commission held in 2011 that "where incumbent LECs have . . . access" to power company poles pursuant to an existing agreement, "they are entitled to rates, terms and conditions that are 'just and reasonable' in accordance with section 224(b)(1)."[26]

The Commission should revise the *Draft Order* to remove statements that the Commission "previously found"[27] that existing agreements provide material benefits to incumbent LECs. The Commission did not previously make such a finding,[28] and doing so now would contradict the evidence and undermine the Commission's rate parity goals.

A main sticking point during negotiations has been whether incumbent LECs enjoy "competitive benefits" under its existing agreements. In our experience, power companies routinely assert that the incumbent LEC is advantaged over its competitors without quantifying

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[21] *See*, *e.g.*, Pole Attachment Complaint ¶ 29, *Verizon Va., et al. v. Va. Elec. and Power Co.*, Docket No. 15-190 (EB-15-MD-006) (Aug. 3, 2015) ("*Verizon Va. v. Dominion*") (noting that the power company's first rate offer was made over one year into the negotiations, and sought to increase the rate paid by Verizon); Pole Attachment Complaint ¶¶ 21-38, *Verizon Fla. v. FPL* (describing years-long effort beginning in June 2011 to obtain a new rental rate).

[22] Mot. for Summ. J. at 11, *Tampa Elec. Co. v. Verizon Fla.*, Civ. No. 12-016329 (Fla. Cir. Ct. Mar. 25, 2014); *see also* Mot. to Seal Ex. 2 at 16, *Va. Elec. and Power Co. v. Verizon Va., et al.*, Case CL-15003029-00 (Va. Cir. Ct. Mar. 10, 2017) ("Although this article does provide for readjustment of the parties' Joint Use Agreements' rental rate, under Virginia law, it does not impose a binding obligation on either of the parties.").

[23] *See*, *e.g.*, Mot. for Summ. J. at 15, *Tampa Elec. Co. v. Verizon Fla.*, Civ. No. 12-016329 (Fla. Cir. Ct. Mar. 25, 2014) ("If Verizon believes the rate provisions within the Joint Use Agreement are unjust and unreasonable . . ., the proper course of action is to file a FCC pole attachment complaint."); Pole Attachment Complaint Response at 19, *Commonwealth Tel. v. Met-Ed* (arguing that the Commission must "analyze on a case-by-case [basis] whether bargaining power exists").

[24] Mot. to Seal Ex. 2 at 12, *Va. Elec. and Power Co. v. Verizon Va., et al.*, Case. CL-15003029-00 (Va. Cir. Ct. Mar. 10, 2017) (emphasis in original).

[25] Mot. to Dismiss Reply at 8, *Fla. Power & Light Co. v. Verizon Fla.*, No. 13-14808 (Fla. 11th Cir. Ct. Jan. 17, 2014).

[26] *2011 Pole Attachment Order* ¶ 202.

[27] *Draft Order* ¶ 119; *see also* ¶¶ 115, 117 n.393, 118.

[28] *See 2011 Pole Attachment Order* ¶ 216, n.654 (summarizing, but not adopting, commenters' claims about alleged competitive benefits).

or providing evidentiary support for the claim.[29] Indeed, power companies have hampered incumbent LECs' ability to test power company claims of advantage by denying access, even on a confidential basis, to the company's signed license agreements.[30] In most negotiations, the power company has shared only a draft "template" license agreement that may not have been accepted by any attacher.[31] But even compared to these best-case scenario terms, we have not yet identified an existing agreement that provides us a net material advantage over competitors as the power companies claim.

Instead, power companies often rely on alleged "advantages" that are, and always will be, unavoidable because they are the result of historic circumstance, such as the incumbent LEC's position at the lowest point on the pole (which is, in fact, a more costly position)[32] or one-time decisions made decades ago when facilities were initially placed. Power companies have seized on these alleged benefits to assert that incumbent LECs can never "obtain the same rate as a CLEC attacher" because it "is not possible" for an incumbent LEC to "somehow retroactively, relinquish each and every one of its historical joint use benefits, including remaining at the lowest spot on the pole."[33] They thus seek to justify high rates for all incumbent LEC attachments because networks "cannot be 'unbuilt' and reconstructed under new agreements more akin to [a utility]'s agreements with CLECs."[34]

Power companies also ignore the Commission's prior instruction that the comparative analysis must "weigh, and account for, the different rights *and responsibilities*" imposed on incumbent LECs under joint use agreements.[35] The *2011 Pole Attachment Order* thus required that the incumbent LEC enjoy a "net" material advantage over its competitors to justify a higher rate.[36] This distinction is important because, under most agreements, the incumbent LEC (but not its competitors) is required to provide to the power company each alleged "benefit" that it receives. The cost to the incumbent LEC to provide that "benefit" cancels out any alleged benefit received, making it improper for power companies to charge higher rates by "identifying as alleged 'benefits' to Verizon services that Verizon is likewise required to extend to Dominion under the Joint Use Agreements."[37]

Power companies also improperly claim that incumbent LECs are advantaged because they incur the same cost in a different way. For example, they allege that incumbent LECs pay

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[29] *See*, *e.g.*, *Dominion Order* ¶ 20 (noting that, "with only a few exceptions, Dominion does not quantify the purported material advantages that Verizon receives").
[30] *See, e.g.*, Pole Attachment Complaint Reply at 24, *Commonwealth Tel. v. Met-Ed*.
[31] *See, e.g.*, Pole Attachment Complaint ¶¶ 22, 25, *Verizon Va. v. Dominion*; Pole Attachment Complaint ¶ 63, *Frontier v. Duke*; Pole Attachment Complaint ¶ 58, *Frontier v. Duke Energy Carolinas*.
[32] *See* Pole Attachment Complaint ¶¶ 64-67, *Verizon Va. v. Dominion*; Pole Attachment Complaint ¶¶ 52-57, *Verizon Fla. v. Fla. Power and Light Co.*, Docket No. 15-73 (EB-15-MD-002) (Mar. 13, 2015).
[33] Pole Attachment Complaint Response at 30, *Verizon Fla. v. FPL*.
[34] Pole Attachment Complaint Response at 3, *Frontier v. Duke Energy Progress*.
[35] *See 2011 Pole Attachment Order* ¶ 216, n.654 (emphasis added).
[36] *Id.* ¶ 218.
[37] *Dominion Order* ¶ 21.

to power companies "significantly lower make-ready costs" and do not pay "post-attachment inspection costs" because incumbent LECs do not pay power companies to complete those tasks at cost, as their competitors do.[38] But that does not mean that incumbent LECs, in fact, incur fewer costs. Instead, the incumbent LEC "performs [the] service itself and incurs costs comparable to its competitors in performing that service."[39] To construe this difference as a benefit and "charge a higher rate on this basis would effectively double charge [the incumbent LEC]."[40]

Power companies improperly rely on other alleged benefits that do not advantage incumbent LECs. Some alleged benefits amount to trivial one-time fees for attachments made long ago, such as a one-time application fee, that the power company wants to collect and recollect on every pole every year by embedding it into the incumbent LEC's rental rate. Others seek to impose on incumbent LECs costs that the power company is not permitted to charge any attacher, such as per-attachment rental rates.[41] The Commission's telecom formula "determines the maximum just and reasonable rate *per pole*,"[42] as it must under a statute that requires that the unusable space on a pole be equally divided among all attaching entities – not attachments.[43]

The Commission, therefore, should delete language from the *Draft Order* that states that existing agreements provide competitive benefits, and implies that the alleged benefits have, in fact, benefited incumbent LECs.[44] At a minimum, the Commission should ensure that its *Draft Order* does not pre-judge whether competitive benefits are inherent in existing agreements or whether the alleged competitive benefits will justify a higher rate in new agreements. It should also reinforce its prior holding that a higher rate for an incumbent LEC is only justified if the incumbent LEC enjoys a *net* material advantage over its competitors and should confirm that it will be the exception – and not the rule – that an incumbent LEC is so advantaged. Strong language clarifying that certain alleged benefits do not justify a higher rate will also help negotiations and reduce the need for further litigation on these topics. For example, a power company should not be able to receive a rate higher than the new telecom rate based on costs that it has not incurred (such as make-ready costs and inspection fees), amounts that it has no right to receive from any attacher (such as per-attachment rental rates), costs that it also imposes on the incumbent LEC, or one-time costs that may have been incurred – if ever – years ago when the network was built.

More appropriately, the Commission should insert language directly in its *Draft Order* to make clear that even for existing agreements, incumbent LECs should be presumptively entitled to the new telecom rental rate. Doing so will appropriately place the burden to prove and quantify the value of alleged benefits on the entity that claims they exist. It will also eliminate

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[38] *See Draft Order* ¶¶ 115, 117 n.393, 118, 119.
[39] *Dominion Order* ¶ 18.
[40] *Id*. ¶ 18 n.67.
[41] *See Draft Order* ¶ 117 n.393.
[42] *Amendment of Commission's Rules and Policies Governing Pole Attachments*, Consolidated Partial Order on Reconsideration, 16 FCC Rcd 112103, ¶ 31 (2001) (emphasis added).
[43] *See* 47 U.S.C. § 224(e).
[44] *See Draft Order* ¶¶ 115, 117 n.393, 118, 119.

some of the many issues that have complicated negotiations, required extensive litigation, perpetuated outdated rate disparities, and undermined Verizon's broadband deployment goals.

Sincerely,

Roy Litland

Roy E. Litland

cc: Annick Banoun
Matthew Collins
Adam Copeland
Nick Degani
Lisa Hone
Dan Kahn
Erin McGrath
Betsy McIntyre
Kris Monteith
Michael Ray
Jay Schwarz
Jamie Susskind

Exhibit SCM-32

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 1

Reference Answer Brief ¶¶ 42-50, Answer Attachment F ¶¶ 7-28, and Answer Attachment RC-3:

(a) Provide FirstEnergy's 2014 calculation of the "cost per mile to remove its electric distribution facilities from Verizon's poles and to relocate them to either: (a) new duplicate pole lines constructed by FirstEnergy, or (b) new underground facilities constructed by FirstEnergy," including all underlying calculations and assumptions;

(b) Identify who performed the 2014 calculation, who chose the assumptions used in the calculation, and explain why the calculation was prepared in 2014;

(c) For each Verizon-owned pole used in the 2014 calculation or upon which the calculation was based, identify the location of the pole, the pole identification number, and the FirstEnergy operating company with facilities attached to the pole;

(d) Provide all documents, workpapers, analyses, invoices, cost records, and payment records considered when performing the 2014 calculation, including all documents, workpapers, analyses, invoices, cost records, and payment records supporting all assumptions used in the calculation.

RESPONSE:

(a) *See* Paragraphs 42 to 52 of FirstEnergy's Answer to Verizon's Complaint, Paragraphs 7 to 29 of Attachment F to FirstEnergy's Answer to Verizon's Complaint, Attachment RC-3 to FirstEnergy's Answer to Verizon's Complaint, FirstEnergy Statement No. 4-R, and FirstEnergy Exhibit RC-3.

(b) The study was performed by Eric Jonke at the direction of Randal J. Coleman. Mr. Coleman developed or approved all assumptions based on his industry experience and the typical conditions of urban and rural pole line construction. The study was conducted to evaluate the cost to FirstEnergy should it need to eliminate the use of pole attachments by FirstEnergy on Verizon poles.

(c) No specific pole or line was used to conduct the study. As explained in subpart (b), Mr. Coleman developed or approved all assumptions based on his industry experience and the typical conditions of urban and rural pole line construction.

(d) No additional records were located from the 2014 cost per mile study. A review of files did not locate any additional information other than what has already been provided in the documents referenced in response to subpart (a). Further, as explained in subpart (b), Mr. Coleman developed or approved all assumptions based on his industry experience and the typical conditions of urban and rural pole line construction.

Exhibit SCM-33

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 11

Reference Answer Brief ¶ 89 and Answer Attachment F ¶ 34.

(a) Describe in detail the basis for FirstEnergy's allegation that "Verizon's attachments create more sag than do the attachments of Verizon's competitors," including how many attachments were considered, how sag was measured, where sag was measured in relation to a pole, and the person(s) who conducted the measurements.

(b) For each Verizon and other communications attachment considered, identify the sag measured, the owner of the attachment, and the pole location and pole identification number of the attachment.

(c) For each Verizon attachment considered, identify the location, amount of sag, and owner of the attachment to which it was compared, and the person(s) who performed the comparison.

(d) Provide all documents concerning the allegation that "Verizon's attachments create more sag than do the attachments of Verizon's competitors," including all studies, analyses, and work papers concerning the allegation.

5/18/2020 ORIGINAL RESPONSE:

(a) FirstEnergy used "SAG10" software to calculate the sag required to safely and securely install the Verizon cables. Calculations were run under the direction of Randal J. Coleman for five of the most common Verizon attachments.

(b) *See* Verizon Interrogatory Set II, No. 11, Attachment A. The study was completed by DRG for the company.

(c) The comparison between Verizon and other attachers was not needed. Verizon attachments are obviously much larger than other attachment cables. *See* page 1 of Verizon Interrogatory Set II, No. 8, Attachment B, for cable size and weight.

(d) *See* Verizon Interrogatory Set II, No. 9, Attachment A. All data for this calculation came from Verizon Interrogatory Set II, No. 8, Attachments A and B.

5/28/2020 SUPPLEMENTAL RESPONSE:

(a) As a supplement to FirstEnergy's answer to subpart (a), the Companies provide the following clarifications:

Attachment A to Verizon Interrogatory Set II, No. 8 identifies the Verizon attachments by measured diameter.

As shown in Attachment A to Verizon Interrogatory Set II, No. 9, the sag was calculated for representative spans of 150 ft., 200 ft., and 250 ft.

The 1,129 poles with Verizon attachments were measured and cataloged in Attachment A to Verizon Interrogatory Set II, No. 9. The measurements were taken by Davey Resource Group ("DRG") under the supervision of Scott Carlin.

As shown in Attachment A to Verizon Interrogatory Set II, No. 9, the five most common Verizon cables measured in the DRG study were:

> 6M (6,000 ultimate breaking strength span / support cable) – 250 (0.25 inches in diameter)
> 6M (16,000 lbs ultimate breaking strength span / support cable) – 500 (0.50 inches in diameter)
> 6M (16,000 lbs ultimate breaking strength span / support cable) – 750 (0.75 inches in diameter)
> 6M (16,000 lbs ultimate breaking strength span / support cable) – 1250 (1.250 inches in diameter)
> 6M (16,000 lbs ultimate breaking strength span / support cable) – 1500 (1.500 inches in diameter)

The cables were measured and compared to common manufacturer specifications, as shown in Attachment A to Verizon Interrogatory Set II, No. 8.

(b) FirstEnergy is providing the Excel copy of Attachment A, which should be more legible. FirstEnergy clarifies that the listing of pole numbers and GPS locations in Attachment A to Verizon Interrogatory Set II, No. 11 provides the location and number of poles. The SAG was not calculated or measured for each location. SAG is a function of surface area, cable type, size, and tension applied. A SAG10 calculation was performed for span lengths of 150 ft., 200 ft., and

250 ft. using the published specifications for cables like the Verizon attachments. The location of the lowest sag point will be at the center where the attachment elevations are the same.

(c) FirstEnergy clarifies that the original response meant to refer to Attachment A to Interrogatory Set II, No. 8, which was served on May 20, 2020. There is no Attachment B to Interrogatory Set II, No. 8. A detailed comparison between Verizon and other attachers was not performed because, as explained in the original response, such a comparison was unnecessary given that Verizon's attachments are obviously much larger than other attachment cables.

(d) FirstEnergy clarifies that the original response's reference to "Attachments A and B" for Interrogatory Set II, No. 8 should have been a reference to Attachment A to Interrogatory Set II, No. 8. As for the other document referenced in the original response, *i.e.*, Attachment A to Interrogatory Set II, No. 9, please see FirstEnergy's answer to Interrogatory Set II, No. 9 that was served on May 20, 2020.

Exhibit SCM-34

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 8

Reference Answer Brief ¶ 89 and Answer Attachment F ¶ 34. For each pole reviewed, evaluated, or relied upon for FirstEnergy's allegation that "Verizon's facilities weigh much more than the facilities of other communications attachers," identify the weight of FirstEnergy's facilities attached to said pole and explain in detail the method by which the weight of FirstEnergy's facilities were calculated. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power. Provide all documents and work papers concerning the analysis.

RESPONSE:

FirstEnergy did not conduct a pole by pole weight analysis of the system.

FirstEnergy used a weight per unit foot of cables from manufacturers of communication cable. Mr. Coleman found by observation that the weight per thousand foot in many Verizon cables was much higher, which matched the observations in the Davey Resource Group study pictures and Mr. Coleman's experience as well.

For additional information and the requested documents concerning the analysis, please see FirstEnergy's Answer to Verizon Interrogatory Set II, No. 8.

Exhibit SCM-35

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 9

Reference Answer Brief ¶ 89 and Answer Attachment F ¶ 34. For each pole reviewed, evaluated, or relied upon for FirstEnergy's allegation that the "load on the pole created by Verizon's attachments is greater than the load on the pole created by Verizon's competitors," identify the load on said pole created by FirstEnergy's attachments and explain the method by which the load was calculated. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power. Provide all documents and work papers concerning the analysis.

RESPONSE:

Pole loading was not calculated for a specific location to arrive at this conclusion. For additional information and the documents concerning FirstEnergy's analysis, please see FirstEnergy's Answer to Verizon Interrogatory Set II, No. 9.

Exhibit SCM-36

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 10

Reference Answer Brief ¶ 89 and Answer Attachment F ¶ 34.

(a) Describe in detail the study or analysis undertaken by FirstEnergy to determine the "ice and wind conditions typically experienced in Pennsylvania," including the person(s) who performed the study or analysis, the ice and wind conditions FirstEnergy contends are typical, the basis of FirstEnergy's contention that they are typical, and the area or areas of Pennsylvania included in FirstEnergy's analysis.

(b) Provide all documents concerning FirstEnergy's determination of the "ice and wind conditions typically experienced in Pennsylvania," including all studies, analyses, and work papers concerning the allegation.

RESPONSE:

(a) Ice and wind standards are incorporated in the National Electrical Safety Code ("NESC"). FirstEnergy uses these standards to calculate attachment tension. FirstEnergy did not conduct an independent study of the NESC typical ice and wind conditions.

(b) *See* NESC section 25.

Exhibit SCM-37

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set II, No. 8

Reference Answer Brief ¶ 89 and Answer Attachment F ¶ 34.

(a) Describe in detail the basis for FirstEnergy's allegation that "Verizon's facilities weigh much more than the facilities of other communications attachers," including how many facilities were considered, how the weight was measured, and the person(s) who conducted the measurements.

(b) For each Verizon and other communications facility considered, identify the weight of the facility, the owner of the facility, and the pole location and pole identification number to which the facility is attached.

(c) For each Verizon facility considered, identify the location, weight, and owner of the facility to which it was compared and the person(s) performing the comparison.

(d) Provide all documents concerning the allegation that "Verizon's facilities weigh much more than the facilities of other communications attachers," including all studies, analyses, and work papers concerning the allegation.

RESPONSE:

(a) The weight of any cable is directly proportional to the size, material and length of the span. Cables are composed of various plastic composites, aluminum and copper and frequently a steel messenger. The newest entrant in the cable family is fiberoptic cable, which replaces the conductive element with multiple glass fibers. The common communication attachments as observed by FirstEnergy fall into three classes: Coaxial Cable, Multi Strand Fiberoptic Cable, and Multi Strand Copper Conductor. Simply stated, the weight per cubic inch of aluminum is 0.098 lb/in^3, Steel is 0.284 lb/in ^3 and Copper is 0.324 lb/in^3. Larger Verizon cables typically contain hundreds or thousands of copper conductors.

FirstEnergy has not been provided specific data on the weights of cables by Verizon. To determine the weight of the Verizon cables, FirstEnergy employed a contractor to use a Katapult Camera measurement device. The device takes high resolution pictures that provide precise point to point measurements. The diameter of each Verizon cable in the study was measured. These

measurements were correlated to manufacturer catalogs of popular communication cables to determine the weight per unit of measure. FirstEnergy is providing the structure identification as recorded by the contractor from the field collection.

(b) FirstEnergy did not find it useful to conduct analysis on each specific case. In FirstEnergy's experience, the weight of the cable is directly proportional to the material and volume used to construct the cable. In this case, there were a few principle materials to consider, casings and coverings typically a form of plastic, and conductive or optical cores typically glass, aluminum or copper and the sizes of the cable. The largest diameter cables are known to be multiple stranded copper pairs for telephone transmission as observed at termination points, from storm damage and car pole accidents. Once the weights of the cables were correlated to the field measurements, the span length multiplied by weight per foot can easily be calculated.

(c) FirstEnergy is providing an attachment which correlates the Davey Resource Group data to the per unit weight of each cable identified. *See* also Verizon Interrogatory Set II, No. 11, Attachment A for locations of each measured cable.

(d) *See* Verizon Interrogatory Set II, No. 8, Attachment A.

	Cable	wt/ft	Source		
CATV	Coax rg58	24 lbs/1000ft	https://catalog.belden.com/	0.3	
CATV	Coax RG59	35 lbs/1000ft	https://catalog.belden.com/		
CATV	Coax RG 223	36 lbs/1000ft	https://catalog.belden.com/		
CATV	Coax rg8	102 lbs/1000ft	https://catalog.belden.com/		
Vz	6m -250	134 lbs/1000ft	General Cable	0.25	
Various	Fiber optic 2 -60 count self supporting loose tube	237 lbs/1000ft	https://html5.dcatalog.com/?docid=16cbefc9-7d86-4853-8075-a7a00152959e&page=22		
Various	Fiber optic 72 count self supporting loose tube	255 lbs/1000ft	https://html5.dcatalog.com/?docid=16cbefc9-7d86-4853-8075-a7a00152959e&page=22		
Various	Fiber optic 96 count self supporting loose tube	295 lbs/1000ft	https://html5.dcatalog.com/?docid=16cbefc9-7d86-4853-8075-a7a00152959e&page=22		
Various	Fiber optic 120-144 count self supporting loose tube	339 lbs/1000ft	https://html5.dcatalog.com/?docid=16cbefc9-7d86-4853-8075-a7a00152959e&page=22		
Various	Fiber optic 192-216 count self supporting loose tube	335 lbs/1000ft	https://html5.dcatalog.com/?docid=16cbefc9-7d86-4853-8075-a7a00152959e&page=22		
Vz	16m-500	412 lbs/1000ft	General Cable	0.5	
Vz	16m-750	562 lbs/1000ft	General Cable	0.75	
Vz	16m-1000	712 lbs/1000ft	General Cable	1	
Vz	16m-1250	1012 lbs/1000ft	General Cable	1.25	
Vz	16m-1500	1562 lbs/1000ft	General Cable	1.5	11.65672

Link to General Cable Catalog

http://general-cable.dcatalog.com/v/TELECOMMUNICATIONS/?page=50

Company	Cable	wt/ft
Others	Coax rg8	102 lbs/1000ft
	Coax rg58	24 lbs/1000ft
	Coax RG 223	36 lbs/1000ft
	Coax RG59	35 lbs/1000ft
	Fiber optic 2 -60 count self supporting loose tube	237 lbs/1000ft
	Fiber optic 72 count self supporting loose tube	255 lbs/1000ft
	Fiber optic 96 count self supporting loose tube	295 lbs/1000ft
	Fiber optic 120-144 count self supporting loose tube	339 lbs/1000ft
	Fiber optic 192-216 count self supporting loose tube	335 lbs/1000ft
Verizon	6m -250	134 lbs/1000ft
	16m-500	412 lbs/1000ft
	16m-750	562 lbs/1000ft
	16m-1000	712 lbs/1000ft
	16m-1250	1012 lbs/1000ft
	16m-1500	1562 lbs/1000ft

Wire & Cable › Coax & Triax Cable › 50 Ohm Transmission Cable › 8262

8262 - 50 Ohm, RG58, 20 AWG Stranded TC, TC Braid, Non-contaminating PVC Jacket, Commercial Non-QPL Product

50 Ohm, RG-58C/U, 20 AWG stranded (19x33) .035" tinned copper conductor, polyethylene insulation, tinned copper braid shield (95% coverage), non-contaminating PVC jacket, commercial non-QPL product

Request Quote

Compare Data Sheet Add To Share

DETAILS DOWNLOADS ACCESSORIES

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Stranded	TC - Tinned Copper	0.035 in	1

Conductor Count:	1

Mechanical Characteristics

UV Resistance:	Yes - Black only
Bulk Cable Weight:	24 lbs/1000ft
Max Recommended Pulling Tension:	42 lbs
Min Bend Radius/Minor Axis:	2 in

Loose Tube Single Jacket Armored Self-Supporting (Figure-8) Cable

Product Construction:

Fiber:
- 2–216 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598 B

Central Strength Member:
- Epoxy/glass rod

Armor:
- Corrugated coated steel tape

Outer Jacket:
- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Messenger Wire:
- 1/4" stranded EHS galvanized steel
- MRCL with messenger** = 14,923 N/ 3,350 kF

Features:
- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Self-supporting figure-8 design

Performance:
- Temperature:
  Storage -40°C (-40°F) to +75°C (+167°F)
  Installation -30°C (-22°F) to +60°C (+140°F)
  Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
  20 X OD—Installation
  10 X OD—In-Service
- Maximum Crush Resistance:
  Short - 125 lbs/in (220 N/cm)
  Long - 63 lbs/in (110 N/cm)

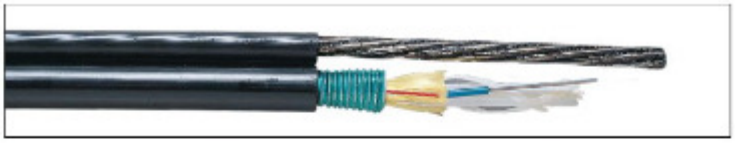
Applications:
- Interbuilding voice or data communication backbones
- Installed aerially

Compliances:
- Tested in accordance with EIA/TIA-455 FOTPs
- ICEA S-87-640
- GR-20
- RoHS Compliant Directive 2002/95/EC

Options:
- Alternate 6-fiber per tube available upon request

*Sequential meter markings available upon request

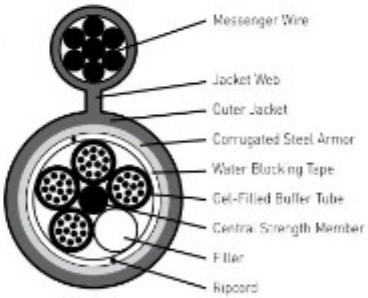
**Installation load should be lower than maximum rated cable load to allow for wind and ice loading in accordance with NESC guidelines.



CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER X CABLE HEIGHT		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD WITHOUT MESSENGER			
								SUB-UNIT		CABLE	
				IN	mm	LBS/1000'	kg/km	LBS	N	LBS	N
XX0023M1N-DWB	2	2	3	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0044M1N-DWB	4	1	4	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0064M1N-DWB	6	1	4	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0084M1N-DWB	8	1	4	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0124M1N-DWB	12	1	4	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0184M1N-DWB	18	2	3	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0244M1N-DWB	24	2	3	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0364M1N-DWB	36	3	2	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0484M1N-DWB	48	4	1	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0604M1N-DWB	60	5	0	0.469 x 0.929	11.9 x 23.6	237	352	600	2700	180	800
XX0724M1N-DWB	72	6	0	0.535 x 0.996	13.6 x 25.3	255	379	600	2700	180	800
XX0964M1N-DWB	96	8	0	0.602 x 1.063	15.3 x 27.0	275	409	600	2700	180	800
XX1204M1N-DWB	120	10	2	0.752 x 1.213	19.1 x 30.8	339	498	600	2700	180	800
XX1444M1N-DWB	144	12	0	0.752 x 1.213	19.1 x 30.8	339	498	600	2700	180	800
XX1924M1N-DWB	192	16	2	0.764 x 1.228	19.4 x 31.2	335	505	600	2700	180	800
XX2164M1N-DWB	216	18	0	0.764 x 1.228	19.4 x 31.2	335	505	600	2700	180	800

XX denotes glass type.
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



48 Fiber

Installation Notes:
The Maximum Tensile Load in the data table refers to the cable core only. Users should base sag and tension calculations on 1/4" EHS messenger per local guidelines and practices. Additional data is available upon request.

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.
For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Ordering Part Number Example

AQ0244M1N-DWB

Singlemode, 24 fibers, loose tube SJ armored (figure 8)

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

NEXTGEN BRAND EIA/TIA 455 RoHS Compliant Directive 2002/95/EC General Cable

Here is the General Cable catalog section for the Copper paired communication cable:

Telecommunications — Filled Core Cables

Filled Foam Skin ALPETH Cable

Spec. 2111

BELL SYSTEM TYPE ANBA (19 AWG) ANMA (24 AWG)
ANAA (22 AWG) ANTA (26 AWG)

Nominal Cable Data

CATALOG NUMBER	PAIRS	AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2036300	25	19	0.83	392	5000
2036301	50	19	0.98	717	2500
2036302	100	19	1.50	1316	2500
2036303	200	19	2.00	2585	1250
2036307	25	22	0.61	208	5000
2036308	50	22	0.77	387	5000
2036309	100	22	1.02	683	2500
2036310	200	22	1.37	1286	2500
2036311	300	22	1.66	1887	1250
2036312	400	22	1.95	2503	1250
2036313	600	22	2.40	3747	1250
2036314	900	22	3.00	5653	1000
2036320	25	24	0.53	147	5000
2036321	50	24	0.64	245	5000
2036322	100	24	0.83	438	5000
2036323	200	24	1.10	815	2500
2036324	300	24	1.31	1165	2500
2036325	400	24	1.50	1532	2500
2036326	600	24	1.81	2304	1250
2036327	900	24	2.21	3436	1250
2036328	1200	24	2.50	4531	1000
2036329	1500	24	2.84	5617	1000
2036330	1800	24	3.09	6525	1000
2036331	2100	24	3.35	7897	750
2036334	25	26	0.45	104	5000
2036335	50	26	0.59	179	5000
2036336	100	26	0.75	314	5000
2036337	200	26	0.98	570	5000
2036338	300	26	1.20	833	2500
2036339	400	26	1.29	1082	2500
2036340	600	26	1.60	1534	1250
2036341	900	26	1.90	2248	1250
2036342	1200	26	2.14	2986	1250
2036343	1500	26	2.37	3677	1250
2036344	1800	26	2.57	4389	1000
2036345	2100	26	2.90	5181	1000
2036346	2400	26	3.00	5876	1000

Data subject to change without notice. Contact your Customer Service Representative for latest information.

Core Construction:

Conductors:
- Solid, annealed copper; sizes 19, 22, 24 and 26 AWG

Insulation:
- Dual insulation consisting of an inner layer of foamed polyolefin surrounded by a solid polyolefin skin, color-coded in accordance with telephone industry standards

Twisted Pairs:
- Insulated conductors are twisted into pairs with varying lay lengths to minimize crosstalk

Core Assembly:
- 25 pairs and less: pairs are assembled together in a single group
- More than 25 pairs: pairs are arranged in groups, each group having a color-coded unit binder
- 1200 pairs and larger are mirror image color code

Filling Compound:
- The entire core assembly is completely filled with ETPR compound, filling the interstices between the pairs and under the core tape

Core Wrap:
- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Sheath:

Aluminum Shield:
- Corrugated, 0.008" aluminum tape applied longitudinally with an overlap
- The sheath interfaces are flooded with an adhesive water-blocking compound

Jacket:
- Black, linear low density polyethylene

Application(s):
- Intended for duct and direct buried installations where protection against water and moisture entry is required and may also be installed aerially

Compliances:
- Telcordia (Bellcore) Specification GR-421-CORE
- RoHS Compliant (effective 1/1/10)

Packaging:
- Standard lengths are shipped on returnable steel reels or on non-returnable wood reels when requested
- Non-standard packaging is also available

RoHS Compliant Effective 1/1/10 — 17 FREE — Made in U.S.A. — General Cable

Exhibit SCM-38

METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY
v.
VERIZON PENNSYLVANIA LLC AND VERIZON NORTH LLC
Docket No. C-2020-3019347

Verizon Interrogatory Set III, No. 7

Reference Answer Brief ¶ 86 n.96 and Answer Attachment J. For each entity with facilities attached to FirstEnergy's poles, separately identify for each year from 2011 through present the amount FirstEnergy charged in addition to pole attachment rent, the amount FirstEnergy collected in addition to pole attachment rent, and the number of poles for which FirstEnergy's charges were associated, with respect to the following: (a) make-ready costs, (b) survey costs, (c) attachment transfer costs, (d) audit costs, (e) identification tags, (f) unauthorized attachment penalties, (g) safety violation penalties, (h) bonds or other security, (i) agreement preparation fees, (j) attachment application fees, (k) insurance provisions, and (l) indemnification provisions. Separately present the information for poles owned by Met-Ed, Penelec, and Penn Power. Provide all documents and work papers concerning the analysis.

RESPONSE:

For subparts (a) through (c), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 2. FirstEnergy notes that survey costs are included in the engineering/make-ready costs. For subpart (d), please see FirstEnergy's Response to Verizon Interrogatory Set II, Nos. 7 and 24. For subpart (e), FirstEnergy neither provides nor charges for identification tags. For subpart (f), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 24. For subpart (g), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 25. For the information about bonds requested in subpart (h), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 28. FirstEnergy is unaware of "other security" charges. For subpart (i), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 22. For subpart (j), please see FirstEnergy's Response to Verizon Interrogatory Set II, No. 3. For subparts (k) and (l), FirstEnergy notes that "insurance provisions" and "indemnification provisions" require the attaching entity to incur external costs directly rather than being charged by FirstEnergy for such costs, and FirstEnergy does not require such cost incurrence to be reported to FirstEnergy.

Exhibit SCM-39
Proprietary Exhibit Omitted

Exhibit SCM-40
Proprietary Exhibit Omitted

Exhibit SCM-41
Proprietary Exhibit Omitted

Exhibit SCM-42
Proprietary Exhibit Omitted

Exhibit SCM-43
Proprietary Exhibit Omitted

Exhibit SCM-44
Proprietary Exhibit Omitted