FirstEnergy
Statement No. 2-R

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Verizon Pennsylvania LLC and Verizon North LLC

v.

Metropolitan Edison Company, Pennsylvania Electric Company, and Pennsylvania Power Company
Docket No. C-2020-3019347

Rebuttal Testimony of William P. Zarakas

List of Topics Addressed

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REBUTTAL TESTIMONY
OF
WILLIAM P. ZARAKAS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is William P. Zarakas. My business address is The Brattle Group, One Beacon Street, Suite 2600, Boston, MA 02108.

Q. By whom are you employed and in what capacity?

A. I am a Principal with The Brattle Group, an economic consulting firm, where I work primarily on economic and regulatory matters concerning the communications and energy industries.

Q. Please describe your professional experience.

A. I have been involved in the economic analysis of issues facing the communications and energy industries for roughly 30 years. I have provided reports and/or testimony before the Federal Communications Commission ("FCC"), the Federal Energy Regulatory Commission ("FERC"), the Securities and Exchange Commission ("SEC"), the Copyright Royalty Judges ("Library of Congress"), the U.S. Congress, state regulatory agencies, arbitration panels, foreign governments, and courts of law. I have previously provided testimony and/or expert reports to the FCC on a range of issues and proceedings, including the economic issues associated with mergers and acquisitions (e.g., Sprint/TMobile, AT&T/Time Warner, Tribune/Nexstar); the economics and feasibility of deploying broadband networks; competitive analysis with respect to the

market for business data services ("BDS"); market share and churn analyses; cost models; foreclosure and bargaining models; and pole attachment matters. My curriculum vitae is attached hereto as Attachment A.

Q. Have you previously testified as a witness before the Pennsylvania Public Utility Commission ("Commission")?

A. No.

Q. Have you been retained by Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), and Pennsylvania Power Company ("Penn Power") (collectively, "FirstEnergy" or the "Companies") to testify on behalf of the Companies in this proceeding involving the Formal Complaint filed by Verizon Pennsylvania LLC and Verizon North LLC (collectively, "Verizon")?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony will respond to certain allegations made in the direct testimony submitted by Verizon and provide my assessment concerning whether FirstEnergy held bargaining leverage and exercised bargaining power in its negotiations with Verizon with respect to the terms, conditions, and rates for pole attachments. As an initial matter, I will provide an overview of the regulation of pole attachments by the FCC, the policy implications of the Commission's recent exercise of jurisdiction over pole attachments in Pennsylvania, and highlight the key issues that, in my view, the Commission should consider in its deliberation of Verizon's Formal Complaint.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes, I am sponsoring FirstEnergy Exhibit WZ-1, which provides relevant information with respect to the FCC's cable and telecom rate formulas.

II. BACKGROUND

A. OVERVIEW OF FEDERAL POLE ATTACHMENT REGULATIONS

Q. When did the regulation of pole attachments begin?

A. Regulation of pole attachments began in 1978 when the U.S. Congress passed the Pole Attachment Act, which added Section 224 to the Communications Act of 1934. This legislation was initiated because of the growth of the cable television industry, which uses a largely wires-based technology and requires access to pole and conduit infrastructure in order to connect to customers. Under the 1978 Pole Attachment Act, the FCC was granted the authority to "regulate the rates, terms, and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable."[1] Section 224(d) of the Communications Act provided a cost-based methodology for attachments "used by a cable television system solely to provide cable service." This became known as the "cable rate formula."[2]

[1] 47 U.S.C. § 224(b)(1).

[2] The FCC implemented the cable rate formula over the course of orders, including "*In the Matter of ADOPTION OF RULES FOR THE REGULATION OF CABLE TELEVISION POLE ATTACHMENTS*, CC Docket No. 78-144, 68 F.C.C.2d 1585 (First Report and Order adopted Aug. 8, 1978) (adopting complaint procedures); *In the Matter of Adoption of Rules for the Regulation of Cable Television Pole Attachment*, CC Docket No. 78-144, 77 F.C.C.2d 187 (Memorandum Opinion and Order adopted Feb. 28, 1980) (defining, e.g., safety space, average usable space, attachment as occupying 12 inches of space, and make-ready as non-recurring cost); *In the Matter of Amendment of Rules and Policies Governing the Attachment of Cable Television Hardware to Utility Poles*, CC Docket No. 86-212, 2 FCC Rcd 4387 (Report and Order corrected Aug. 21, 1987). The cable rate formula was codified *In the Matter of Implementation of Section 703(e) of the Telecommunications Act of 1996; Amendment of the Commission's Rules and Policies Governing Pole Attachments*, CC Docket No. 97-151, 13 FCC Rcd 6777 (Report

Federal regulation of pole attachments was not necessary prior to the advent of the cable television industry because electric utilities and telephone companies (the predecessors of today's incumbent local exchange carriers, or "ILECs") were the only parties that needed access to pole and conduit infrastructure – and they were the owners of this infrastructure.[3]

Q. Please describe the type of pole attachment arrangements that were in place among electric utilities and telephone companies.

A. Electric utilities and telephone companies were serving the same customer locations since roughly the initiation of their businesses. Shortly thereafter, they began sharing their pole infrastructure by way of joint use agreements. The primary motivation behind electric utilities and telephone companies entering into such agreements included the goal of reducing each parties' costs of pole infrastructure, and, as both electric utilities and telephone companies were then regulated under a rate-of-return framework, these lower costs would, in turn, benefit customers. In addition to cost savings, zoning and other restrictions made building a largely duplicative pole network a difficult proposition with local governments even then; duplicating pole infrastructure would be still more challenging, if not impossible, today.

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and Order adopted Feb. 6, 1998) ("1998 Implementation Order") at 47 C.F.R. § 1.1409(e)(1). *In the Matter of Implementation of Section 224 of the Act, a National Broadband Plan for Our Future*, WC Docket No. 07-245, GN Docket No. 09-51, 26 FCC Rcd 5240, ¶ 129, n. 391(Report and Order and Order on Reconsideration adopted April 7, 2011) ("2011 Pole Attachment Order").

[3] I use the term "telephone company" to refer to the vertically integrated communications carriers that were in place prior to the 1982 Consent Decree which broke up AT&T and the development of other types of telecommunications carriers, such as competitive local exchange carriers ("CLECs").

The above referenced joint use agreements were (and are) bilateral contractual arrangements between the subject parties, designed to enable sharing of infrastructure and costs. When these agreements were initially effectuated, telephone companies owned about the same number of poles as did electric utilities,[4] resulting in roughly equal sharing of poles and costs.

Q. What was the next major development in the regulation of pole attachments?

A. The Telecommunications Act of 1996 granted providers of telecommunications services (other than ILECs) with non-discriminatory access to poles, conduit and rights-of-way owned or controlled by electric utilities and ILECs. The Telecommunications Act of 1996 also added Section 224(e) to the Communications Act of 1934. Section 224(e) provided that a cost-based methodology be applied to "attachments used by telecommunications carriers to provide telecommunications services" – which became known as the "telecom rate formula." "Telecommunications carriers" in this context, however, excluded ILECs.

A key difference between the cable formula rate and the telecom formula rate methodologies concerned the allocation of common pole costs; that is, the space on a pole that is necessarily unusable to any attacher.[5] Under the cable rate formula, the cost of unused space on a pole is borne by the electric utility, with a portion of the cost of

[4] *In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment; Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, WC Docket No. 17-84, 33 FCC Rcd 7705, ¶ 207 (Third Report and Order and Declaratory Ruling adopted August 2, 2018) ("2018 Pole Attachment Order").

[5] Unusable space is defined to include: a) the pole space below grade (buried); and b) the ground clearance above grade for the safety of the general public. Such space is thus a necessary element of pole construction, and cannot be used by any attacher, electric utility or otherwise.

unused space (i.e., 2/3rds) included in the telecom rate formula.[6] This resulted in the telecom formula rate producing a higher pole attachment rate than did the cable rate formula for the same jurisdiction. However, the pole attachment rates produced under the telecom rate formula were nonetheless less than the rates that would have been produced under a fully allocated cost methodology.[7]

In reviewing the rate disparity at a later time, the FCC found that "under the cable formula, each attacher, other than the pole owner, pays about 7.4% of the annual cost of a pole. Under the telecom rate formula, each attacher, other than the pole owner, pays between about 11.2% of the annual cost of a pole in urban areas to about 16.9% in non-urban areas."[8]

Q. Did the FCC address the disparity in rates resulting from the application of the cable formula and telecom formula?

A. Yes, the FCC addressed the rate disparity among non-pole owner attachers in its 2011 Pole Attachment Order. The FCC had considered whether to raise the cable rate to

[6] *Implementation of Section 703(e) of the Telecommunications Act of 1996, Amendment of the Commission's Rules and Policies Governing Pole Attachments*, CS Docket No. 97-151, 1998 FCC LEXIS 613 (Report and Order adopted February 6, 1998) ("Telecom Order"). "To determine the rate that a telecommunications carrier must pay for pole attachments, Section 224(e)(2) provides that: "A utility shall apportion the cost of providing space on a pole, duct, conduit, or right-of-way other than the usable space among entities so that such apportionment equals two-thirds of the costs of providing space other than the usable space that would be allocated to such entity under an equal apportionment of such costs among all attaching entities." This statutory language requires an equal apportionment of two-thirds of the costs of providing other than usable (''unusable'') space among all attaching entities." Telecom Order, ¶ 11.

[7] The FCC discussed the difference between the approach included in its telecom rate formula and rates produced under a fully allocated cost methodology in the 2011 Pole Attachment Order, ¶¶ 155-166. The FCC noted that "The formula itself and the basis for Congress' selection of the two-thirds allocator for unusable space are not explained in the legislative history; rather it appears to be the unexplained result of a political compromise." 2011 Pole Attachment Order, ¶ 163.

[8] *In the Matter of Implementation of Section 224 of the Act, a National Broadband Plan for Our Future*, WC Docket No. 07-245, GN Docket No .09-51, 30 FCC Rcd 13731, ¶ 7, n.23 (Order on Reconsideration adopted Nov. 17, 2015 ("2015 Order on Reconsideration"). The FCC also notes that the above estimated rate disparities are based on its "rebuttable presumptions of 37.5 feet for height of a pole, 24 feet for unusable space on a pole, 13.5 feet for usable space, 1 foot occupied by an attachment, 3 attachers in non-urban areas, and 5 attachers in urban areas."

approximate the telecom rate. However, it instead chose to lower the telecom rate, assuming that lower attachment rental rates would spur greater broadband deployment.[9] Specifically, the FCC reduced the apportionment of common pole costs included in the telecom rate formula, creating what has been referred to as the "new telecom rate."[10] The FCC further modified this new telecom rate in its 2015 Order on Reconsideration, by adding cost allocators to ensure that pole attachment rates are consistent and bringing the rates charged to telecommunications providers to parity with the rates charged to cable companies.[11]

Q. Please summarize the differences among the various pole attachment rates that you discussed thus far.

A. I discussed three pole attachment rate formulas that are applied to non-ILEC attachers by the FCC: the cable rate formula, the old telecom rate formula and the new telecom rate formula. I have also attached a brief reference document which summarizes the key aspects of these formulas as FirstEnergy Exhibit WZ-1.

As shown in the exhibit, the total height of the subject joint use poles can be divided into three physical parts: (a) the "usable" space that is available for attachments; (b) the segment of usable space that is available for non-electric utility and non-ILEC

[9] 2011 Pole Attachment Order, ¶¶ 133-134.

[10] The FCC modified the definition of cost as included in Section 224 to reflect 66% of the fully allocated costs for urban areas and 44% of fully allocated costs for non-urban areas. 2011 Pole Attachment Order, ¶ 149. This had the effect of making pole owners bear a greater share of the pole costs than was the case under the previous version of the telecom rate.

[11] In the FCC's telecom rate formula, cost allocators (i.e., 66% urban / 44% non-urban of fully allocated cost referenced earlier) are paired with the presumptive number of attachers to produce a key cost input into the rate equation to cause the outcome to approximate the cable rate. The 2015 Order on Reconsideration added cost allocators and interpolation for 2 and 4 attaching entities to the cost allocators for 3 and 5 attaching entities included under the telecom rate developed in the 2011 Pole Attachment Order. 2015 Order on Reconsideration, ¶¶ 12-16.

attachments; and (c) the "unusable" space on a pole that is either underground (in order to secure and hold the pole up) or designated for clearances and/or safety. By way of example, an average pole height is roughly 37.5 feet, of which 24 feet (or about 65% of the total pole length) is unusable, due to 6 feet that is buried and 18 feet needed for safety clearances. The remainder, 13.5 feet, is usable space that can be used for attachments by the electric utility, the ILEC, a cable company and other telecommunications and/or broadband providers.

The calculation of pole attachment rates under each of the three formulas consists of multiplying the annual cost associated with a pole by the space assigned to the attaching entity (generally referred to as the "space factor"). The annual cost of a pole consists of net investment costs that are multiplied by a factor that represents the costs of pole maintenance and administration as well as a carrying charge which covers depreciation and a return on equity. The calculation of the annual cost of an electric utility pole is prescribed by the FCC, with formula inputs defined in terms of the FERC Uniform System of Accounts ("USoA") which are used by utilities in the preparation of annual filings (such as FERC Form 1) and for filings before state regulators.

The annual pole cost represents the total annual cost associated with a typical pole in its entirety, and attachers are only required to pay for a portion of the pole's annual cost. The three rate formulas differ in how they define the percentage of total pole space assigned to the attacher, specifically with respect to whether the rate includes a contribution to the pro rata cost associated with the unusable space on the pole. The key differences among the three rates in this regard are summarized below.

- Cable Rate Formula: The space factor included in the cable formula rate is equal to the space occupied by the cable attacher divided by the usable space. Cable attachers thus make no contribution to the costs associated with the unusable portion of the pole.
- Old Telecom Rate Formula: The space factor included in the old telecom rate was specified in a formula that included the space occupied by the telecom attacher and a contribution towards 2/3rds of the pole's unusable space.[12] Under this rate, telecom attachers pay a rate that covers a portion of the pro rata costs associated with unusable space, but the rate formula falls short of the fully allocated cost methodology that is typically used in utility ratemaking matters.
- New Telecom Rate: A cost allocator factor is incorporated into the old telecom rate, which has the effect of bringing this rate closer to the cable formula rate; that is, erasing the accounting of pro rata unusable space that was included in the old telecom rate formula.

As shown above, some accommodation was made for telecom attachers to contribute toward the cost of the unusable space on a pole under the FCC's old telecom rate formula, even though the contribution was less than what would be the case under a fully allocated cost methodology. On the other hand, under the cable and new telecom rate formulas, attachers make no contribution to the unusable space costs.

[12] As referenced earlier, and is shown in FirstEnergy Exhibit WZ-1, the calculation of the space factor in the old and new telecom rate formulas also incorporates the number of attaching entities in determining the space assigned to each attacher.

Q. Did the FCC address joint use cost-sharing rates charged by electric utilities to ILECs?

A. Yes, in its 2011 Pole Attachment Order. The nature of the arrangements for pole attachment rates charged to cable companies and non-cable providers of telecommunication services are specified in section 224 of the Communications Act of 1934, as modified, but ILECs "have no statutory right to nondiscriminatory pole access under section 224(f)(1)."[13] As noted above, electric utilities and ILECs were (and are) owners of poles (which typically overlap in the same geography) and had entered into joint use prior to the assertion of federal pole attachment regulation. The FCC noted that joint use agreements "reflect a decades-old contractual responsibility of incumbent LECs to share in infrastructure costs and also account for the fact that incumbent LECs still own many poles today."[14]

Nonetheless, in its 2011 Pole Attachment Order, the FCC reinterpreted portion of Section 224 and concluded that the ILECs "are entitled to rates, terms and conditions that are 'just and reasonable' in accordance with section 224(b)(1)."[15] The FCC thus allowed the ILECs to file complaints with the FCC challenging the rates, terms and conditions of pole attachment agreements with electric utilities. However, the FCC also concluded it would not be appropriate to treat ILECs "identically to telecommunications carrier or cable operator attachers in all circumstances" as the ILECs "often can be differently

[13] 2011 Pole Attachment Order, ¶ 207.
[14] *Id.*, ¶ 216 n.654.
[15] *Id.*, ¶ 202.

situated from other attachers, both due to the terms of existing joint use agreements and because of their continuing pole ownership."[16]

In its 2011 Pole Attachment Order, the FCC drew a distinction between existing versus new agreements between electric utilities and ILECs. These existing agreements were negotiated before the FCC asserted jurisdiction over pole attachment rates and thus reflect the results of private negotiations. The FCC found that many joint use agreements between utilities and ILECs were entered into at a time when the parties had more balanced negotiating positions, and concluded that it was "unlikely to find that the rates, terms and conditions in existing joint use agreements unjust or unreasonable."[17]

With respect to new agreements, the FCC found that, when an ILEC can demonstrate that "it is obtaining pole attachments on terms and conditions that leave them comparably situated to telecommunications carriers or cable operators," then "competitive neutrality counsels in favor of affording incumbent LECs the same rate as the comparable provider."[18] On the other hand, in circumstances when the pole attachment agreement provides the ILEC with a material advantage over telecommunications carriers or cable operators, the FCC found that a higher rate can be charged, and that the old telecom rate formula (i.e., the telecom rate formula in place prior to the FCC's modification of such in its 2011 Pole Attachment Order) could serve as a reference point in making such a determination.[19]

[16] *Id*., ¶ 203.
[17] *Id*., ¶ 207.
[18] *Id*., ¶ 217.
[19] The FCC uses the term "high-end telecom rate" in ¶ 217 of its 2011 Pole Attachment Order, which has since been referred to as the "old telecom rate."

Q. What does the FCC mean by "competitive neutrality"?

A. In this case, competitive neutrality refers to the assurance of a level playing field with respect to input prices. Specifically, ILECs currently compete with CLECs and cable companies to provide a range of communications services, notably including broadband internet access, to customers. Competitive neutrality suggests that each should be charged the same price for the same service – in this case, pole attachments. However, the FCC recognized that the arrangements associated with attaching to poles may differ across contracts, and that superior arrangements (from the attacher's standpoint) provide them with greater value than do other pole attachment arrangements, and accordingly should come at a higher price. The FCC noted that the joint use agreements between ILECs and electric utilities "implicate rights and responsibilities that differ from those in typical pole lease agreements between utilities and telecommunications carriers and cable operators."[20] Accordingly, the FCC placed the burden of proving that their pole attachment arrangements are similarly situated (to the arrangements provided to non-ILECs) with the ILECs.

Q. Did the FCC provide guidance concerning how it will handle complaints by ILECs with respect to the pole attachment rates that they are charged by electric utilities?

A. In its 2011 Pole Attachment Order, the FCC indicated that it intended to address such complaints on a case-by-case basis. The FCC indicated that it will "consider the incumbent LEC's evidence that it is in an inferior bargaining position to the utility

[20] *Id.*, ¶ 217.

against which it has filed the complaint."[21] With respect to the justification of higher pole attachment rates (than the rates charged by electric utilities to non-ILECs), the FCC noted that these may be due to particular arrangements that provide advantages to incumbent LECs relative to cable operators or telecommunications carriers."[22] In addition, the FCC indicated that it would also factor in the pole attachment rates that the ILEC charges the electric utility in its considerations.[23]

Q. Does the FCC base its formulas for pole attachment rates on electric utility costs?

A. Only in part. The FCC acknowledged that section 224 of the Communications Act indicated that just and reasonable pole attachment rates can range from "a statutory minimum based on the additional costs of providing pole attachments to a statutory maximum based on fully allocated costs."[24] However, ultimately, the FCC decided to base the pole attachment rates that it applied to non-ILECs on the minimum cost approach; that is, the cable and new telecom rates are not based on fully distributed costs.

The FCC investigated rate making methodologies initially in its Pole Attachment Notice, in which it sought comments concerning the disparity between then cable formula and telecom formula rates.[25] Specifically, the FCC queried whether it was appropriate that "the cable rate should apply to all pole attachments, particularly because … the cable

[21] *Id*., ¶ 215.
[22] *Id*., ¶ 218.
[23] *Id*.
[24] *Id*., ¶ 127.
[25] *Implementation of Section 224 of the Act; Amendment of the Commission's Rules and Policies Governing Pole Attachments*, WC Docket No. 07-245; RM-11293; RM-11303, 22 FCC Rcd 20195 (Notice of Proposed Rulemaking adopted Oct. 31, 2007) ("Pole Attachment Notice").

rate does not include an allocation of the cost of unusable space."[26] The FCC indicated that, at the time it issued its Pole Attachment Notice, it was leaning toward a decision to increase the cable rate to a level closer to the old telecom rate in order to bring the cable rates closer to the associated cost of service. However, the FCC opted to take the opposite path, and decided to lower the telecom rate – in order to lower the input costs for deploying broadband across the country.[27]

Q. Does the FCC provide guidance concerning how it will determine whether ILECs have an equivalent bargaining position with electric utilities?

A. In part. The FCC began its discussion about ILEC-electric utility relative bargaining positions by examining a single indicator of the pole marketplace: the relative percentages of pole ownership. Specifically, the FCC found that the relative percentage ownership of ILECs has declined relative to that of electric utilities over time, which may place ILECs in an unequal bargaining position vis-à-vis their electric utility counterparts.[28] Importantly, the FCC also recognized that additional factors come into play when assessing bargaining positions. Citing foundational academic literature, the FCC added "if there were less-costly alternatives for the incumbent LEC to pole deployment, or additional costs that the electric utility would need to consider under the best outside alternative, this would reduce the disparity in the relative bargaining power

[26] Pole Attachment Notice, ¶ 22.
[27] 2011 Pole Attachment Order, ¶¶ 133-134.
[28] *Id*., ¶ 206.

of the parties."[29] As I discuss further below, the availability of a less-costly option to Verizon is an important consideration in the subject case.

Q. Why have the relative pole ownership percentages for ILECs and electric utilities changed over time?

A. The most direct answer is that the ILECs opted not to construct new poles when opportunities arose and/or opted to sell or transfer some of their poles to electric utilities. Joint use agreements typically allow each party to adjust its pole ownership to predetermined percentage levels.[30] Over time, however, ILECs replaced fewer of their own damaged poles and declined the opportunity to take ownership of new pole lines. This decline in the percentage of ILEC pole ownership also coincides with the change in regulation away from a rate of return framework in which earnings are based on a rate base – which may have shifted ILEC priorities from earning returns on rate base to other measures of financial performance.

Q. Did the FCC's 2018 Pole Attachment Order further address the rates that electric utilities charge ILECs for pole attachments?

A. Yes. In its 2018 Pole Attachment Order, the FCC emphasized that ILECs "may not be in equivalent bargaining position with electric utilities in pole attachment negotiations in some cases" and switched the burden of establishing whether there are similarly situated circumstances from the ILECs to the utilities for purposes of its review of newly-

[29] *Id*., ¶ 206, n.618.
[30] *Id*., ¶ 216, n.651.

negotiated and newly-renewed pole attachment agreements.[31] Specifically, it adopted a presumption that, "for newly-negotiated and newly-renewed pole attachment agreements between incumbent LECs and utilities, an incumbent LEC will receive comparable pole attachment rates, terms and conditions as a similarly-situated telecommunications carriers or a cable television system."[32] In cases in which the utility is able to rebut the similarly-situated presumption, the FCC ruled that the pre-2011 Pole Attachment telecommunications carrier rate (i.e., the "old telecom rate") is the maximum rate that an electric utility and ILEC may negotiate.[33]

Q. Did the FCC provide its rationale for its conclusions regarding the pole attachment rates charged by electric utilities to ILECs in its 2018 Pole Attachment Order?

A. Yes. The primary reasons for switching the burden of proof from the ILECs to the electric utilities, with respect to new agreements, involves the FCC's conclusion that, in general, ILEC "bargaining power vis-à-vis utilities has continued to decline"[34] and that ILECs were, thus, unable to effectively negotiate with their electric utility counterparts in new joint use agreements. The FCC relied on two key findings as the basis for their conclusion: (1) ILECs currently own fewer poles than they did at the onset of the joint use agreements; and (2) ILECs pay higher rates for pole attachment than do other telecommunications providers and cable companies. The FCC did not assess the extent to which the presence of less-costly alternatives and/or outside options available to ILECs

[31] 2018 Pole Attachment Order, ¶ 124.
[32] *Id*., ¶ 123.
[33] *Id*., ¶ 129.
[34] *Id*., ¶ 126.

could reduce the disparity in the relative bargaining power of the parties. Nor did the FCC consider the extent to which the current joint use cost-sharing rates remain consistent with the original bargains made when, as the FCC acknowledged, ILECs and electric utilities were more equally positioned in terms of relative pole ownership. I believe such considerations are particularly relevant to this case.

Q. Did the FCC's 2018 Pole Attachment Order further clarify its guidance on resolving complaints by ILECs with respect to the pole attachment rates that they are charged by electric utilities?

A. No. As I discussed above, the FCC adopted a rebuttable presumption applicable to new and newly-renewed agreements between electric utilities and ILECs that the subject joint use agreements are comparably situated to the arrangements provided other telecommunications carriers. At the same time, however, the FCC recognized that "there may be some case in which incumbent LECs may continue to possess greater bargaining power than other attachers…Therefore, we establish a presumption that may be rebutted, rather than a more rigid rule."[35] Thus, whether ILECs receive comparably situated pole attachment arrangements to those provided to non-ILECs needs to be determined on a case-by-case basis.

In addition, the FCC established a range of acceptable rates (with respect to new and newly-renewed agreements) that an electric utility can charge an ILEC. The low end

[35] *Id*., ¶ 126. The FCC also provided an example of a situation in which ILECs may have greater bargaining power than other attachers: … "for example, in geographic areas where the incumbent LEC continues to own a large number of poles." However, as I discussed above, the FCC also recognized that, importantly, academic literature has concluded that the presence of a less-costly alternative to the subject joint use agreement available to the ILEC would serve to reduce the disparity in the relative bargaining power of the parties. 2011 Pole Attachment Order, ¶ 206, n.618.

of the range equals the rate produced under the new telecom rate formula and is applicable to circumstances in which the attachment terms and conditions under the joint use agreement are comparable to the leasing arrangements under which non-ILECs are able to attach to electric utility poles. The high end of the range equals the rate produced under the FCC's old telecom rate and is applicable to circumstances in which the ILEC receives net benefits that materially advantage it over other telecommunications attachers. The FCC left it to the parties (i.e., the electric utility and the ILEC) "to negotiate the appropriate rate or tradeoffs to account for such additional benefits."[36] While this is a sound direction in concept, it has proven to be challenging in implementation, and has been the source of complaints filed before the FCC and, with respect to the current case, before the Commission.

B. POLE ATTACHMENT REGULATION IN PENNSYLVANIA

Q. Please provide your understanding concerning the motivation underlying the pole attachment regulation being undertaken by the Pennsylvania Public Utility Commission.

A. The Commission articulated its reasoning for asserting jurisdiction over pole attachments in the associated Notice of Proposed Rulemaking and Final Rulemaking Order.[37] As did the FCC, the Commission referenced National Broadband Plan, which highlighted that access to existing poles, conduits and rights-of-way are critical elements of deploying

[36] *Id*., ¶ 128.

[37] *Assumption of Commission Jurisdiction Over Pole Attachments from the Federal Communications Commission*, Docket No. L-2018-3002672 (Notice of Proposed Rulemaking entered July 12, 2018) ("2018 NOPR"); *Assumption of Commission Jurisdiction Over Pole Attachments from the Federal Communications Commission*, Docket No. L-2018-3002672 (Final Rulemaking Order entered Aug. 29, 2019) ("2019 Final Rulemaking Order")).

broadband. The National Broadband Plan noted that "Government also controls and influences the availability and cost of other resources, such as pole attachments and rights-of-way. As with spectrum, ensuring these assets are allocated and managed as efficiently as possible can reduce the costs borne by firms [that deploy broadband] and foster competition and investment."[38] Accordingly, the National Broadband Plan made a series of recommendations concerning the access and pricing of pole attachments, with the objective of enhancing broadband deployment.[39]

The Commission indicated that the availability of a local forum and access to the Commission's mediation process should serve to reduce the time involved in resolving pole attachment disputes, thereby expediting the deployment of broadband services in Pennsylvania.

The Commission also emphasized that it is in the unique position to understand and balance the interests of customers of broadband and electricity services, likely more so than is the FCC. The Commission acknowledged that Section 224 of the Communications Act requires that the regulators of pole attachments (the FCC and state commissions) consider the interests of both types of customers, but that the Pennsylvania PUC has "knowledge and expertise regarding telecommunications and electric distribution systems, which will allow it to balance statewide broadband goals against [electric distribution companies'] EDCs' concerns for safety and reliability of electric service and infrastructure."[40]

[38] National Broadband Plan, p. 29.
[39] *See* 2011 Pole Attachment Order, ¶ 129.
[40] 2019 Final Rulemaking Order, p. 9.

Q. How are the interests of electricity ratepayers potentially in conflict with the interests of broadband consumers?

A. The cable and new telecom rates are below the fully allocated costs that are typically used by regulators in determining rates for electricity. As I discussed earlier, the FCC acknowledged that the cable rate formula – and the new telecom rate formula – does not fully include an allocation of the cost of unusable space on a utility pole,[41] while the rates to electricity customers are typically derived using a fully allocated cost methodology. Therefore, from a cost of service standpoint, the cable and CLEC broadband companies that attach to electric utility poles are being subsidized by electric utility ratepayers.[42] The Commission also recognized the presence of such subsidies in its 2018 NOPR when referring to cable rates as "perhaps subsidized."[43]

Q. Do consumers benefit from subsidized pole attachment rates?

A. Perhaps, depending upon the extent that this input cost drives broadband deployment decisions. With respect to ILECs, the FCC noted that ILECs' identified benefits (to consumers) from lower pole attachment rates include, among others: "increased broadband deployment in areas where incumbent LECs currently do not provide broadband due to the improved business case"; the "use of cost savings to improve service and/or lower prices for broadband services in areas with competition; and,

[41] Pole Attachment Notice, ¶ 22.
[42] I assume that revenues from pole attachments are subtracted from an electric utility's revenue requirements and that this net amount is used in setting rates to electricity customers. Reducing pole attachment revenues results in an increase in revenue requirements and higher rates to electricity customers.
[43] 2018 NOPR, p. 4.

"source of capital for expansion."[44] The FCC also stated that it "would be concerned if these consumer benefits were not realized."[45] That is, setting pole attachment rates to cover incremental costs (but not fully allocated costs) is justifiable provided that such action provides benefits to consumers; it was not intended to enrich broadband providers.[46]

The Commission indicated that its goals concerning broadband deployment are in line with those articulated by the FCC, and stated that its assertion of jurisdiction over pole attachments is a "natural outgrowth of the goals of Chapter 30 of the Public Utility Code[47] which is intended to promote and encourage the provision of advanced telecommunications services and broadband deployment in the Commonwealth."[48]

Q. In your view, what are the key issues that the Commission should consider in this case?

A. I believe that the Commission should consider two key factors in this case. First, the Commission is in the unique position to factor the interests and benefits of both Pennsylvania's electricity and broadband customers into its decision making. Second, the Commission is also in the position to assess the extent to which FirstEnergy would be able to exert any bargaining power arising from its majority ownership of poles under the subject joint use agreement from a very practical perspective.

[44] 2011 Pole Attachment Order, ¶ 208.
[45] *Id*.
[46] The FCC also lists two other consumer benefits: reduced demand on the universal service fund arising from reduced ILEC costs, and automatic flow-through of cost reductions to the regulated rates of rate-of-return ILECs.
[47] 66 Pa.C.S. §§ 3001 *et. seq.*
[48] 2018 NOPR, p. 8.

Q. Please discuss your point above concerning the interests and benefits of both Pennsylvania's electricity and broadband customers.

A. While the FCC considers the impact of its actions on all consumer groups (including customers of electricity services), its primary objectives involve developing measures to expedite the deployment of broadband and the benefits that such actions may provide to consumers of broadband services. In its 2018 NOPR and its 2019 Final Rulemaking Order, the Commission also expressed its intentions to advance the Commonwealth's goals concerning advancing broadband infrastructure and services. However, the Commission is also able to see the impact of subsidies on electric utility revenue requirements and rates.

The joint use agreements under review in the current case involve sharing of a pole network in its entirety, a situation which is amenable to the sharing of all costs, including common costs and unusable space, as reflected in the agreements. However, the rates produced under the FCC's (old and new) telecom rate formulas exclude such common costs, in whole or in part. Accepting the FCC's rate formulas in their entirety would mean the Commission would be precluded from applying the same approach that it applies to electricity rates to the calculation of pole attachment rates. Even under the FCC's rate regulation framework – which would result in the rate approach used for pole attachments differing from the rate approach used to develop electricity rates – the Commission is equipped to assess the benefits afforded Verizon under the subject joint use agreement. As discussed later in my testimony and in the rebuttal testimony of FirstEnergy's Stephen Schafer (First Energy St. 1-R), Verizon revealed that it values the attachment terms enjoyed under the joint use agreement beyond those conveyed under

leasing arrangement. The resulting rates for pole attachments should thus be commensurately higher than those derived under the new telecom rate.

Q. Please discuss your point above concerning practical considerations with respect to assertions of bargaining power.

A. By focusing on the percentage of pole ownership in its determination of bargaining power, the FCC applied a traditional market power analysis, i.e., for markets in which there are clearly defined buyers and sellers of a product or service. However, this is not the case for the joint usage of poles. Here, both parties are each buyers and sellers of the same service and are mutually dependent upon each other for pole access. Traditional bargaining power models of the buyer-seller relationship seek to determine which party would experience greater harm from foreclosure – or, in other words, which party has more to lose. But in this case, both parties stand to incur substantial and unacceptable harm from the dissolution of mutual pole access arrangements, and relative pole ownership, by itself, is not an indication of market power or lack thereof.

For the case at hand, the percentage of pole ownership metric, standing alone, suggests that Verizon would realize greater harm than would FirstEnergy because it would need to find another way to connect to more poles (than would FirstEnergy) if the joint use arrangements were dissolved (even though telecommunications facilities are less difficult and expensive to re-locate than electric facilities). However, in practice, FirstEnergy would hardly be better off under such circumstances. FirstEnergy would need to find alternative way to connect to one-quarter of its poles in Pennsylvania; this would be both unprecedented and exceptionally damaging, as explained further in the rebuttal testimony of Thomas R. Pryatel (FirstEnergy St. 5-R). Thus, any bargaining

power from a higher percentage ownership of poles would be erased as it would be irrational for FirstEnergy to accept the risk of being unable to meet its service obligations to customers, even if the theoretical harm (resulting from foreclosure) would be greater for Verizon than it would be for FirstEnergy.

III. VERIZON'S ALLEGATIONS ABOUT BARGAINING POWER ARE WITHOUT MERIT

A. OVERVIEW OF BARGAINING POWER ALLEGATIONS

Q. Please provide an overview of Verizon's allegations about its negotiations with FirstEnergy regarding the terms, conditions, and rates under the Joint Use Agreements.

A. In the current Complaint, Verizon claims that FirstEnergy is overcharging for pole attachments because, according to Verizon, the Joint Use Agreements under which Verizon is able to attach to FirstEnergy poles are similarly situated to the arrangements provided by FirstEnergy to non-ILECs, while the rates for pole attachments that FirstEnergy charges Verizon exceed those that FirstEnergy charges non-ILECs under lease arrangements. Verizon claims that FirstEnergy was able to charge these higher rates because FirstEnergy owns more poles than does Verizon in the shared pole network covered by the Joint Use Agreements, which enabled FirstEnergy to exert bargaining power over Verizon. That is, Verizon claims that FirstEnergy did not accommodate Verizon's proposals when negotiating pole attachment rates because FirstEnergy's higher percentage of pole ownership gave it bargaining power over Verizon.

Verizon further claims that this resulted in an impasse, which led Verizon to seek recourse with the FCC and, ultimately, with the Commission in the current proceeding.

Review of correspondence between Verizon and FirstEnergy indicates that the parties were unable to reach resolution.[49] However, Verizon asserts that FirstEnergy's ownership of more poles (in the pole network covered under their joint use agreements) than Verizon gives FirstEnergy the clear upper hand in negotiations.[50] Therefore, Verizon has asked the Commission to adjudicate the dispute by considering what the result of a negotiation between Verizon and FirstEnergy would have produced if, as alleged by Verizon, the bargaining leverage between the two parties were more balanced. Verizon asserts that the lack of a balanced negotiation entitles it to be charged the pole attachment rate that FirstEnergy charges non-ILEC pole attachers (under a leasing arrangement) combined with the contractual attachment treatment included in the current joint use agreements.

Q. Does FirstEnergy have bargaining power over Verizon?

A. No. Verizon's claim that FirstEnergy has bargaining power is without foundation. Verizon has based its conclusion concerning bargaining power on a cursory review of the number of poles (i.e., FirstEnergy has more poles than Verizon). However, in its 2011 Pole Attachment Order, the FCC recognized that there is more to determining bargaining power than simply looking at relative percentages of pole ownership. Consideration of the following factors serves to negate assertions that FirstEnergy holds bargaining

[49] For example, in email correspondence between Verizon and FirstEnergy, a Verizon representative concluded that due to "fundamental areas of disagreement, I didn't think it would be productive since any offer is grounded in First Energy needing to ultimately accept that the new telecom rate formula, with appropriate inputs, applies." *See* Verizon Exhibit SCM-5, pp. 144-145.

[50] *See* Verizon St. 1, p. 2; *see also* Verizon Exhibit SCM-1, pp. 5-13.

leverage and is able to exercise bargaining power in negotiating pole attachment rates with Verizon.

- Verizon has a less-costly alternative to attaching to FirstEnergy's poles under the Joint Use Agreements. FirstEnergy offered to provide pole attachments to Verizon under the leasing arrangements provided to non-ILECs and charge Verizon the associated lower rate. Verizon rejected FirstEnergy's offer.

- FirstEnergy would suffer considerable harm if it was unable to connect to Verizon's poles, which makes dissolution of mutual pole attachment agreements impractical. Theoretically, Verizon would realize even more harm (than would FirstEnergy) if both parties were unable to attach to each other's poles. However, the disruption and harm to FirstEnergy would be unprecedented and unacceptable, as FirstEnergy stated publicly in a prior Complaint proceeding before the FCC.[51] As a result, Verizon was fully aware that FirstEnergy would be unable to act on any threat to dismantle the pole sharing arrangement.

- Economic and practical factors also negate the potential of FirstEnergy exercising bargaining power. Constructing a duplicate pole network is an expensive undertaking and likely an impossible one. Even if FirstEnergy was able to replace Verizon's poles, it would be highly unlikely that the Commission would deem expenditures to construct a duplicate pole network to be prudent or reasonable, as explained in the rebuttal testimony of Thomas R. Pryatel (FirstEnergy Statement No. 5-R).

- Finally, the evergreen provision in the current Joint Use Agreements prevents FirstEnergy from unilaterally disconnecting Verizon's attachments from its poles. This means that FirstEnergy could not actually take any actions that are typically associated with the exercise of bargaining power.

In addition, Verizon's argument is severely undercut by its preference for the terms and conditions included in the Joint Use Agreements over switching to a leasing arrangement. By not accepting FirstEnergy's offer to switch Verizon to the leasing arrangement that FirstEnergy provides to non-ILECs, Verizon has revealed that it does

[51] *In the Matter of Commonwealth Telephone Company LLC d/b/a Frontier Communications, et. al., Complainants v. Metropolitan Edison Company, et.al., Respondents*, Docket No. EB-14-MD-008 (Response to Pole Attachment Complaint dated July 11, 2014) ("Whatever the scenario, the costs to remove FirstEnergy's electric facilities and transfer them to a newly-constructed pole or underground distribution system are prohibitively expensive relative to remaining on Frontier's poles, even if WVPSC or PaPUC would allow it (which they likely would not).").

not consider the two pole attachment arrangements to be similarly-situated. Otherwise, Verizon would have readily accepted, or at least explored, the offer of similarly-situated pole attachment arrangements at a lower price.

Q. Has FirstEnergy's bargaining power changed since its last joint use negotiation with Verizon?

A. No. Verizon represents that, during the relevant period of review, FirstEnergy owned 73% of the poles included under the Verizon-FirstEnergy joint use agreements, and Verizon owned the remaining 27%. The ownership percentages varied among the FirstEnergy utility operating companies, with Met-Ed owning 81% of the poles included under the Verizon-FirstEnergy Joint Use Agreements, Penelec owning 66%, and Penn Power owning 78% of such poles.

The percentages of pole ownership under the Joint Use Agreements have not materially changed since the time of the last negotiation between Verizon and FirstEnergy for joint use rates in 2009, two years before the FCC asserted its jurisdiction to include the pole attachment rates between electric utilities and ILECs under joint use agreements.[52] At that time, Verizon indicated that the joint use rate issue was "amiably resolved" and that "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."[53] Verizon's letter to FirstEnergy plainly states that Verizon was satisfied with the results of its negotiations with FirstEnergy and does not convey any view that (in

[52] In 2009, Verizon owned 27% and FirstEnergy owned 73% of the combined poles. Likewise, in 2019, Verizon owned 27% and FirstEnergy owned 73% of the combined poles.
[53] Letter to FirstEnergy Joint Use Team from Norman L. Parish, Verizon, Manager – Network Engineering, August 12, 2009. *See* FirstEnergy Exhibit SFS-1.

Verizon's opinion) FirstEnergy exerted bargaining power. The percentage of pole ownership, therefore, did not appear to unduly influence the outcome of negotiations in 2009 – which is in line with the FCC's acknowledgement that the percentage of pole ownership alone is not the sole determinant of bargaining power and corresponds with basic economic practicalities, which I discuss later in my rebuttal testimony. Verizon has failed to present any evidence as to why circumstances differ today.

B. A LESS-COSTLY ALTERNATIVE AVAILABLE TO VERIZON HAS "REDUCED THE DISPARITY IN THE RELATIVE BARGAINING POWER" BETWEEN FIRSTENERGY AND VERIZON

Q. What else does the FCC consider when evaluating the parties' bargaining power in ILEC pole attachment complaints?

A. As mentioned previously, the FCC stated that although evidence of bargaining power in setting pole attachment rates is an important consideration, it is not the sole indicator of bargaining power.[54] In its 2011 Pole Attachment Order, the FCC explained that well-established bargaining theories "predict that each party will consider its best alternative to a negotiated agreement when negotiating."[55] The FCC noted that, although pole ownership percentage may be an initial indicator of bargaining power, "if there were less-costly alternatives for the incumbent LEC to pole deployment, or additional costs that the electric utility would need to consider under the best outside alternative, this would reduce the disparity in the relative bargaining power of the parties."[56]

[54] *See* 2018 Pole Attachment Order, ¶ 126.
[55] 2011 Pole Attachment Order, ¶ 206 n.618.
[56] *Id.*

Thus, for the case at hand, Verizon cannot establish that FirstEnergy has superior bargaining power by simply demonstrating that FirstEnergy owns more poles than Verizon. Indeed, consideration of a less-costly alternative, sometimes referred to as an "outside option", is an important factor to account for in assessing bargaining power because it can mitigate or negate the bargaining power that a supplier may otherwise hold. Therefore, the Commission needs to take into account whether there were less-costly alternatives for Verizon to deploy poles, or additional costs that FirstEnergy would need to consider under the best outside alternative.

Q. Is there a less-costly alternative available to Verizon that reduces the disparity in the relative bargaining power between Verizon and FirstEnergy?

A. Yes. Verizon had, and continues to have, a lower-cost alternative to the current Joint Use Agreements with FirstEnergy. Specifically, FirstEnergy offered to Verizon the opportunity to exit the joint use agreement and for Verizon to receive pole attachments services under the same arrangements and rates that FirstEnergy charges non-ILECs (i.e., under the FCC's telecom rates), and to "transition Verizon out of the pole-owning business in FirstEnergy service territories"[57] This provided Verizon with a lower-cost alternative (compared to the rates under the Joint Use Agreements) that, as the FCC indicated in its 2011 Pole Attachment Order, serves to mitigate any bargaining power differential that might otherwise arise from pole ownership percentages. FirstEnergy's offer is also contrary to the type of behavior that would be expected from a party that indeed holds bargaining power. Instead, a party with bargaining power would not be

[57] Email from Stephen F. Schafer (Verizon, Manager, Joint Use & Cable Locating) to James Slavin (Verizon), Subject: [E] FirstEnergy Counterproposal, May 2, 2018. *See* FirstEnergy St. 1-R, Section V.

motivated to provide rate accommodation to a captive counterparty (i.e., a party with no bargaining power).

In his rebuttal testimony, Stephen Schafer indicates that Verizon did not recognize FirstEnergy's proposal as an "actual offer" which, in Verizon's view, removes any consideration of a lower cost option. However, Mr. Schafer also represented that FirstEnergy made the idea of its proposal clear to Verizon, including on a conference call in July 2019. Verizon, instead, opted to file a pole attachment complaint with the FCC rather than discuss and flesh out this option with FirstEnergy.[58]

Q. Does Verizon's refusal to accept this less-costly alternative demonstrate that Verizon does not perceive the Joint Use Agreements as being similarly situated to FirstEnergy's non-ILEC leasing arrangements?

A. Yes. Verizon's rejection of the less-costly alternative also provides a practical test as to whether the attachment arrangements of the joint use agreements are similarly situated to those provided to non-ILECs under the telecom rate. As indicated above, Verizon rejected FirstEnergy's offer to transition Verizon out of the pole-owning business and provide pole attachments under the same conditions and rates that are provided to non-ILEC attachers. Thus, Verizon must have recognized that it receives net benefits under the Joint Use Agreements that are above and beyond those that it would receive under the leasing arrangements that FirstEnergy provides to non-ILECs. Otherwise, Verizon would have readily accepted what it perceived to be the same treatment (i.e., similarly-situated arrangements) for a lower price.

[58] *See* FirstEnergy St. 1-R, Section V.

Q. What are some benefits that Verizon and other ILECs receive under joint use agreements that are not provided under the non-ILEC leasing arrangements?

A. The FCC has recognized that benefits realized by ILECs under joint use agreements include the value associated with the ILEC occupying the lowest usable space on a pole, utility accommodation of ILEC space needs by installing taller poles, and waived make-ready costs and post-inspection fees.[59] The FCC also recognized that ILECs receive value from access (to utility poles) itself,[60] which would likely be significant in monetary terms. In addition to these ongoing benefits, ILECs, such as Verizon, also realized considerable benefits over time in terms of cost and deployment efficiencies associated with joint pole use arrangements. Verizon's Joint Use Agreements formed cost-sharing arrangements through which each party was able to reduce its costs of service without compromising quality. This gave Verizon ready and unfettered access to the joint pole network as if it were its own. Seamless access to a pole network in the era before implementation of the Telecommunications Act of 1996 also allowed Verizon to establish itself as a reliable service provider in the eyes of its customers, which was a key factor in enabling Verizon to maintain a strong market share in the evolving market.

The value of rapid access to customers was accentuated by a request made to the FCC by America's Communications Association ("ACA Connects") that broadband providers be allowed to attach the customer drop segment of a pole attachment on an

[59] In the Matter of Verizon Florida LLC, Complainant v. Florida Power and Light Company, Respondent. Docket No. 14-216 File No. EB-14-MD-003, February 11, 2015, ¶ 24.

[60] *Id*. As indicated earlier, the Commission recognized that ILECs "have no statutory right to nondiscriminatory pole access under section 224(f)(1)." 2011 Pole Attachment Order, ¶ 207.

"attach-and-notify" basis.[61] ACA Connects, a national association representing cable and other broadband providers, asserted that rapid installation (of broadband service) is critical for its members to be able to win customers, and that the ability to quickly attach to poles is imperative in order for broadband service to be installed. ACA Connect has, thus, directly pointed to a valuable benefit that Verizon currently enjoys under the joint use agreement that other non-ILEC attachers do not, the absence of which, according to ACA Connects, would cause broadband providers to lose customers.

C. PRACTICAL AND IMPLEMENTATION CONSIDERATIONS NEGATE ANY BARGAINING POWER FROM OWNING A MAJORITY OF POLES

Q. Are there any other considerations that undercut Verizon's bargaining power allegations?

A. Yes. Verizon's reliance on the percentage of pole ownership as a primary indicator of bargaining power is also misleading because it does not consider the limitations in the mechanism through which FirstEnergy can exert such power. Verizon's claim that FirstEnergy exerted bargaining power relies on the presumption that, in controlling a majority of pole resources, FirstEnergy could withhold and/or discontinue pole access if Verizon did not agree to the terms and rates that FirstEnergy demands. In practice, however, FirstEnergy would be subject to concomitant foreclosure actions by Verizon if it were to withhold and/or discontinue pole access. As a result, and as I discuss more

[61] March 26, 2020 Letter to Marlene H. Dortch, Secretary FCC from Brian Hurley, Vice President of Regulatory Affairs, ACA Connects, 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.

fully below, FirstEnergy would thus not be able to follow through with any threat of foreclosure, thereby negating any prospect of exerting bargaining power.

First, as I discussed earlier, FirstEnergy would be subject to significant harm if the joint use arrangements were terminated, even if Verizon would theoretically suffer even more harm. Losing access to approximately one-quarter of the poles it currently has access to in Pennsylvania would be unprecedented and would be damaging to FirstEnergy, making it exceptionally irrational for FirstEnergy to accept the risk of being unable to meet its service obligations to customers.

Second, FirstEnergy is obligated to provide service to its customers, and if it lost access to the 27% of poles under the joint use agreements that are owned by Verizon, FirstEnergy would immediately need to take steps to replace them. By definition, this would cost FirstEnergy much more than is the case today under the Joint Use Agreements, assuming it was physically possible to perform such a task. A firm operating outside of financial regulation may be able to pass part, or even all, of these higher costs onto customers (assuming that there was sufficient headroom in market prices). However, this would not be the case for FirstEnergy. FirstEnergy is a utility that is regulated by the Commission. The Commission routinely reviews FirstEnergy's (specifically, each of FirstEnergy's utility operating companies') revenue requirement during base rate proceedings, which establish the rates that the Companies can charge their customers in Pennsylvania. It is exceptionally unlikely that the Commission would conclude that higher pole costs (i.e., stemming from FirstEnergy dismantling of its joint use agreements with Verizon) were reasonable or prudent expenditures, as explained by Thomas Pryatel (FirstEnergy St. 5-R). If the Commission disallowed recovery of these

costs, then FirstEnergy stockholders would in turn have to absorb them; the potential for disallowance, therefore, provides a significant disincentive for FirstEnergy to exert any bargaining power that FirstEnergy may have had due to its ownership of more poles than Verizon.

Third, it is highly unlikely that FirstEnergy would be able to actually replace the 27% of poles owned by Verizon, even if FirstEnergy irrationally decided that it was willing to: (1) risk interrupting service to its electricity customers; and (2) forego recovering any cost differential in the rates charged to customers. Constructing poles and incorporating them into a pole infrastructure requires gaining and perfecting rights-of-ways, involves procuring approvals and permits from local governments, and tends to disrupt residents, businesses and traffic. Furthermore, as explained in the rebuttal testimony of Thomas Pryatel (FirstEnergy St. 5-R), the Commission only permits electric utilities to construct dual pole lines in extremely limited circumstances. It is almost certain that neither the Commission nor local governments would not allow FirstEnergy or Verizon to construct a duplicative pole network on such a large scale while the original joint use network remains in place and usable.[62]

Fourth, while Verizon claims the evergreen provision included in the Joint Use Agreements hinders them in negotiations, the evergreen provision also prevents

[62] The FCC's 2018 Pole Attachment Order included a Declaratory Ruling clarifying that state and local regulation cannot "prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service," and banned state and local moratoria related to wired and wireless telecommunications equipment deployment. However, it does not appear that the FCC had the construction of duplicative pole networks in mind when it composed its ruling. Furthermore, the FCC's Declaratory Order does not address the deployment of equipment used in the transmission and distribution of electricity. 2018 Pole Attachment Order, ¶ 140. FirstEnergy witness Thomas Pryatel further explains why the installation of duplicate facilities is simply not feasible in his rebuttal testimony, FirstEnergy St. 5-R.

FirstEnergy from disconnecting Verizon attachments from its poles.[63] Thus, any bargaining power that FirstEnergy might hold from having more poles than Verizon would be negated because the evergreen provision prevents FirstEnergy from exercising such power.[64]

IV. CONCLUSION

Q. Would you please summarize your conclusions?

A. Bargaining theory and FirstEnergy's negotiations with Verizon provide strong evidence that FirstEnergy does not hold bargaining leverage and did not exert bargaining power. Both parties would face substantial harm if they were unable to access the pole network covered by the Joint Use Agreements. FirstEnergy has no option other than continue its relationship with Verizon. On the other hand, Verizon was offered a less-costly option—change its access arrangements from that under the Joint Use Agreements to a leasing arrangement identical to that provided by FirstEnergy to non-ILECs. The combination of the less-costly option available to Verizon and the inability of FirstEnergy to viably replace its access to Verizon's poles with alternative arrangements erases any bargaining power that FirstEnergy may have had as a result of owning more poles than Verizon (in the pole network under the joint use agreements).

Thus, any impasse in the negotiations between Verizon and FirstEnergy with respect to pole attachment rates appears to stem more from Verizon's demands –

[63] For example, the Terms of Agreement (Article XIX) included in the Agreement between Metropolitan Edison Company and Bethel & Mt. Aetna Telephone and Telegraph Company Covering Joint Use of Poles (included as Exhibit 2 in Verizon's Complaint) state: "…notwithstanding such termination this agreement shall remain in full force and effect with respect to all poles jointly used by the parties at the time of such termination."

[64] FirstEnergy witness Stephen Schafer discusses this issue in further detail in his rebuttal testimony, FirstEnergy St. 1-R.

retaining the conditions associated with the joint use agreements while paying the rate associated with a differently situated pole attachment arrangement – than it does with FirstEnergy's bargaining power.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

Attachment A

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Principal

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William Zarakas is an expert on economic and regulatory matters in the telecom, media, and energy industries.

Mr. Zarakas holds a leadership role in Brattle's Telecommunications, Internet, and Media practice. He has provided expert reports and testimonies in a range of regulatory proceedings concerning the economic analysis of mergers among telecom carriers and media companies; competition in telecom markets; forbearance from price regulation; infrastructure access, sharing and pricing arrangements; the economics and financial feasibility of deploying broadband networks; analysis and valuation of wireless spectrum bands and holdings; and the distribution of royalties and retransmission fees in the cable and satellite TV industries.

Mr. Zarakas also leads much of Brattle's work related to evolving utility regulatory and business models, including the application of performance-based regulation (PBR) and regulatory reform and incentives designed to improve efficiencies and advance policy goals, such as decarbonization and customer engagement. He works extensively on benefit-cost analyses, particularly with respect to investments in grid modernization, reliability, resilience, and smartening the grid. He has authored a wide range of reports and articles on PBR, "utility of the future" visions and implementation, the utility platform and multi-sided markets, and competition in the retail electricity sector.

Additionally, Mr. Zarakas has led special investigations on behalf of corporate boards of directors, as well as audits of management practices and operational and financial performance on behalf of regulatory commissions. He has provided expert testimony and reports before the Federal Communications Commission, the Federal Energy Regulatory Commission, the Securities and Exchange Commission, the Copyright Royalty Judges (Library of Congress), the US Congress, state regulatory agencies, arbitration panels, and foreign governments and courts of law.

Competition and Antitrust. Recent work includes:

- Conducted merger simulation analysis, submitted testimony and provided ongoing support on the potential effects of the merger of mobile wireless carriers Sprint and T-Mobile, under review before the US Federal Communications Commission, the Department of Justice, and various state Attorneys General on behalf of DISH Network.
- Conducted merger analysis, submitted testimony and provided ongoing support on the potential effects of the merger of Sinclair Broadcast Group and Tribune Media, under review before the US Federal Communications Commission on behalf of DISH Network.
- Conducted merger analysis, submitted testimony and provided ongoing support on the potential effects of the mergers of Comcast-Time Warner Cable; AT&T-Time Warner; and, Disney-Fox.
- Conducted competitive analysis, submitted testimony, and provided expert support in a regulatory proceeding before the Federal Communications Commission on competition issues in dedicated internet bandwidth services, including possession of market power and assessment of market power abuse on behalf of Sprint Corporation.
- Analyzed effectiveness of retail competition in U.S. electricity markets.

- Analyzed market structure and degree of competition in U.S. retail telecom markets and authored expert reports with regard to Petitions for FCC to forbear from price regulating resale services and UNEs on behalf of Granite Telecom and Incompas.
- Analyzed acquisition price premium in merger of cross-state gas and electric utilities on behalf of TECO Energy, Inc., New Mexico Gas Company, Inc in a matter before the New Mexico Public Regulatory Commission.
- Analyzed prospective merger savings and divestiture losses for electric and gas utilities in merger applications before the U.S. Securities and Exchange Commission (SEC).

Spectrum Valuation and Due Diligence. Work includes:

- Led numerous analyses of the values of wireless spectrum in the U.S., Canada, the Middle East and North Africa (MENA), and other geographic markets. Scope of analyses included: PCS, AWS, 2.3-2.5 GHz, SMR, PLMR, IVDS, MSS and Big Leo spectrum bands, among others, for purposes of planning, transactional analysis, regulatory proceedings, domestic and international arbitration, and commercial litigation.
- Conducted analyses and authored expert reports concerning utility use of private networks vs. leased spectrum, and valuations of 900 MHz spectrum.
- Led due diligence of acquisition of spectrum holdings and telecom assets for major telecom carrier.
- Led due diligence of northwestern U.S. electric and gas utility on behalf of buyer; analysis included comprehensive sales, revenue, and operating and capital cost modeling and scenarios.

Telecom Regulatory and Compliance. Work includes:

- Analyzed and provided testimony in matters concerning acces and foreclosure of network elements and services.
- Developed cost and revenue models to estimate costs, feasibility and customer rates associated with deploying wireless broadband to Alaska and rural areas in the continental U.S. on behalf of GCI Communications for FCC proceedings regarding the Connect America Fund and Mobility Fund.
- Analysis and expert reports on matters concerning pole attachment rates before the FCC on behalf of electric utilities.
- Led comprehensive modeling concerning costs and rates for unbundled network elements (UNEs), undertaken in fulfillment of requirements associated with the Telecommunications Act of 1996, using the Total Element Long Run Incremental Cost (TELRIC) methodology

Utility Regulatory and Business Models. Analyzed, advised and/or testified on matters concerning regulatory frameworks, performance-based regulation (PBR) and utility business models, notably with respect to emerging competitive alternatives and network integration. Recent work includes:

- Analyzed implementation of New York's Reforming the Energy Vision by modeling the economics of the utility platform model, access pricing and financial impacts of retail competition on utility.
- Analyzed, advised and/or testified on matters concerning performance incentive mechanism (PIMs); e.g., analyses of: New York's "earnings adjustment mechanisms" on behalf of New York's six investor owned utilities) and performance measures and incentive structures on behalf of the Hawaiian Electric Companies.

- Surveyed and analyzed PBR frameworks and applications, including multi-year rate plans (MRPs), PIMs and other alternative regulatory mechanisms, including the U.K.'s "RIIO" model.
- Surveyed and analyzed regulatory approaches to setting electric distribution reliability standards around the world on behalf of the Australian Energy Market Commission (AEMC).
- Modeled multi-variate "utility of future" scenarios using system dynamic approach on behalf of utilities and industry groups.
- Advised Board of Directors of a major generation and transmission (G&T) cooperative and its member electric distribution cooperatives on matters concerning: asset valuations, risk management strategy, merger and acquisition options, and outlook for retail electric markets.

Infrastructure and Investment Analysis. Analyzed and testified on matters concerning infrastructure economics and financial feasibility. Work includes:

- Led benefit-cost and economic "break-even" analysis of utility system reliability and resilience investment using a value of lost load (VOLL) methodology on behalf of Public Service Electric & Gas Company (PSE&G).
- Conducted financial feasibility analysis concerning deployment of a broadband communications network for an Asian electric utility.
- Analyzed economics and financial feasibility of providing (wholesale) transport and (retail) broadband services for multiple U.S. electric utilities.

Management Analysis and Audits. Recent work includes:

- Led strategic organizational options analysis for the Board of Trustees of the Long Island Power Authority (LIPA).
- Led special investigations; e.g., economic analysis of "swap" transaction for the Special Committee of the Board of Directors of Global Crossing.
- Led management and/or regulatory audits of utilities and telecommunications carriers on behalf of state regulatory commissions Alabama, Kentucky, Maryland, New York and Pennsylvania.

Other Regulatory Analyses. Recent work includes:

- Led benchmarking studies of utility costs and regulatory practices.
- Analyzed markets for and costs of providing utility pole attachments.
- Calculated total factor productivity (TFP) and X factors in price regulation proceedings involving utilities before state regulatory commissions and incumbent telecommunications carriers before the FCC.
- Analyzed costs and value of retransmitted television programming in cable and satellite video markets on behalf of Music Claimants in proceedings involving distribution of royalty funds.
- Examined impact of regulatory fees and constraints on economic output in 22 countries in the Middle East and Africa for international mobile carrier.

Expert Testimony

Expert reports entitled Comments on Commissioner Anthony's Principles for Performance Incentive Mechanisms Before the Rhode Island Public Utilities Commission (May 7, 2020).

Declaration of William Zarakas Verizon Maryland LLC, Complainant v. The Potomac Edison Company, Defendant, in a Pole Attachment Complaint Before the Federal Communications Commission, Proceeding No. 19-355, Bureau ID No. EB-19-MD-009 (February 1, 2020)

Declaration of William Zarakas Verizon Pennsylvania LLC and Verizon North LLC, Complainants v. Metropolitan Edison Company, Pennsylvania Electric Company, and Penn Power Company, Defendant, in a Pole Attachment Complaint Before the Federal Communications Commission, Proceeding No. 19-354, Bureau ID No. EB-19-MD-008 (February 1, 2020)

Declaration of William P. Zarakas BellSouth Telecommunications, LLC d/b/a AT&T Florida, Complainant, v. Florida Power & Light Company, Respondent, in a Pole Attachment Complaint Before the Federal Communications Commission, Proceeding No. 19-187, Bureau ID No. EB-19-MD-006 (September 12, 2019).

Direct Testimony of William Zarakas In the Matter of the Application of Potomac Electric Power Company for the Authority to Implement a Multiyear Rate Plan for Electric Distribution Service in the District of Columbia, Formal Case No. 1156 (May 30, 2019); Second Supplemental Direct Testimony (January 21, 2020); Rebuttal Testimony (April 6, 2020).

Declarations of Coleman Bazelon, Jeremy Verlinda, and William Zarakas Before the Federal Communications Commission In the Matter of Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 18-197

- May 1, 2019, Response to Israel, Katz, and Keating April 12, 2019 Declaration
- March 28, 2019, Response to Compass Lexecon February 20, 2019 Declaration and Mark McDiarmid March 6, 2019 Declaration
- March 25, 2019, Response to Applicants' February 7 Filings on Diversion Ratios
- March 18, 2019, Reply to Cornerstone's "Response to Dish's February 19 and 25 Submissions"
- February 19, 2019, Reply to Cornerstone "Response to Dish and CWA Comments"
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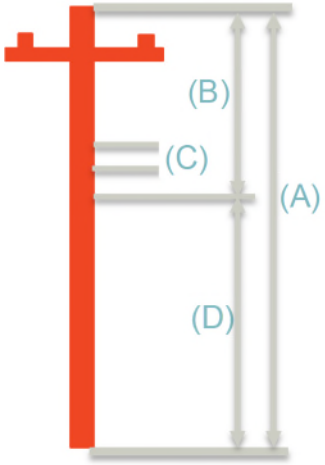
FirstEnergy Exhibit WZ-1

FCC Pole Attachment Rates Reference

Pole Fundamentals



Legend	Average Pole
(A) Total pole length	37.5’
(B) Usable space	13.5’
(C) Space allocated to attaching entity	1.0’
(D) Unusable space	24.0’

- “Unusable” space consists of buried portion of pole (6’) plus clearance and safety space (18’); unusable space is a structurally necessary component of a pole; unfortunately, a pole cannot be constructed with only usable space.
- “Usable” space is the area available for attachments – the reason that the pole was constructed in the first place. By 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.
- Space allocated to (non-ILEC) attachers is presumed to be 1’, but may be otherwise depending on the application.
- “Attachers” are non-owners (i.e., not electric utilities or ILECs), who lease the attaching space from the pole owner.
- Lessors are pole owners, electric utilities or ILECs. (Discussion notes here centered on electric utilities.)
- Basic concept behind pole attachment leasing rates involves: 1) determination of the annual cost associated with a pole and 2) determination of the percentage of the annual cost that should be paid by the attacher.
- Rate making approach is similar in concept to the fully distributed costing methodology used in rate-of-return based utility rate making.
- Determination of annual cost are prescribed by FCC in formulas with inputs specified by Uniform System of Account (USoA) code. (FERC codes for electric utilities; ARMIS codes for ILECs).
- More contentious issue involves how much of the total pole space should be included in the rate formula.
- Options vary from: the increment of space occupied by the attacher, to some contribution for the total space (and hence cost) of the pole.

Annual Pole Costs

Net Pole Investment = Gross Pole Investment (Account 364) − Accumulated Depreciation (Account 108)(Poles) − Accumulated Deferred Income Taxes (Account 190,281-283)(Poles)

Carrying Charge Rate = Administrative + Maintenance + Depreciation + Taxes + Return

$$\text{Administrative Element} = \frac{\text{Total General and Administrative (Accounts 6710 \&6720)}}{\text{Gross Plant Investment (Electric)} - \text{Accumulated Depreciation (Account 108-Electric)} - \text{Accumulated Deferred Taxes (Electric Plant) (Accounts 190,281-283)}}$$

$$\text{Maintenance Element} = \frac{\text{Account 593}}{\text{Pole Investment in Accounts 364, 365, \& 369} - \text{Depreciation (Poles) Related to Accounts 364, 365, \& 369} - \text{Accumulated Deferred Income Taxes related to Accounts 364,365, \& 369}}$$

$$\text{Depreciation Element} = \frac{\text{Gross Pole Investment (Account 364)}}{\text{Net Pole Investments}} \times \text{Depreciation Rate for Gross Pole Investment}$$

$$\text{Taxes Element} = \frac{\text{Accounts 408.1 + 409.1 + 410.1 + 411.4 - 411.1}}{\text{Gross Plant Investment (Total Plant)} - \text{Accumulated Depreciation (Account 108)} - \text{Accumulated Deferred Taxes (Plant) (Accounts 190,281-283)}}$$

Return Element = Applicable Rate of Return (initial default set = 11.25%)

Source: FCC 2001 Partial Order on Reconsideration, In the Matter of Amendment of Commission's Rules and Policies Governing Pole Attachments.

Annual Pole Costs (cont'd)

- The annual pole costs included in the various FCC pole attachment rate formulas are derived from actually incurred cost as reported by electric utilities in its annual ERC Form 1 filings and by ILECs in ARMIS.
- Calculation of annual pole costs starts with the net pole investment, which is gross pole investment less accumulated depreciation and accumulated deferred income taxes for the relevant pole-related accounts.
- Net pole investment divided by the number of poles in place provides the average capital cost of a pole, sometimes referred to as the "net cost of a bare pole."
- Derivation of the annual pole cost involves multiplying the net pole cost by "carrying charges," or the costs that are incurred annually for pole maintenance, administration and taxes – which, from an accounting perspective, are annual expenses.
- The annual pole cost also includes the annual costs associated with the physical pole investment itself, which includes annual depreciation and a return on the net capital investment in poles.

Cable Rate Formula

Maximum Rate Per Pole		Space Occupied Usable Space	x	Net Pole Investment Total Number	x	0.85	x	Carrying Charge Rate

Source: FCC 2001 Partial Order on Reconsideration, In the Matter of Amendment of Commission's Rules and Policies Governing Pole Attachments.

- Space factor in cable rate formula is equal to a percentage of usable space only.
- The space factor is multiplied by a formula for determining the total annual cost associated with a pole – specifically, the net capital cost for a single pole annualized by multiplying by the rate associated with annual carrying charges.
- Cable rate formula also includes a factor adjustment applied to the net cost of a bare pole; factor is .85 used in calculating pole attachment rates for electric utilities, and .95 used in calculating pole attachment rates for ILECs.
- Key point here is that cable companies pay only for their portion of the usable space.
- Effect is that leasing rates under the cable rate formula are less than would be the case if they were also charged for a portion of the unusable space on the pole.

Old Telecom Rate

$$\text{Rate} = \text{Space Factor} \times \text{Net Cost of a Bare Pole} \times \left(\text{Maintenance and Administrative Carrying Charge Rate}\right)$$

$$\text{Where Space Factor} = \frac{\left(\text{Space Occupied}\right) + \left(\frac{2}{3} \times \frac{\text{Unusable Space}}{\text{No. of Attaching Entities}}\right)}{\text{Pole Height}}$$

Source: FCC 2011 Pole Attachment Order.

- Initial telecom rate set by FCC (subsequently superseded) is referred to as the "old telecom rate."
- Conceptually similar to rate making methodology applied in cable rate formula; that is, space factor multiplied by the total annual cost associated with a pole.
- Key difference: under the old telecom rate formula, the attacher's rate includes a contribution toward the cost associated with the unusable space on a pole.
- Formula reduces the unusable space included by 1/3rd; that is, 2/3rds of the unusable space is included in the formula.
- Closer to fully allocated costing methodology than is the cable rate formula, however not fully allocated costs when compared to utility fully distributed costing methodologies.
- Result is the pole attachment rates produced under the old telecom rate formula are higher than rates produced under the cable rate formula, but less than would be the case under a fully allocated cost methodology.

New Telecom Rate

$$\text{Rate} = \text{Space Factor} \times \text{Net Cost of a Bare Pole} \times \left(\text{Maintenance and Administrative Carrying Charge Rate}\right)$$

$$\text{Where Space Factor} = \left(\frac{\left(\text{Space Occupied}\right) + \left(\frac{2}{3} \times \frac{\text{Unusable Space}}{\text{No. of Attaching Entities}}\right)}{\text{Pole Height}}\right)$$

Cost Allocation Factor is then multiplied by (Net Cost of a Bare Pole x Annual Carrying Charge), with Cost Factors specified with respect to their pairing with the Number of Attaching Entities:

# Attaching **Entities**	Factor
5	.66
4	.56
3	.44
2	.31
N	Interpolated

Source: FCC 2011 Pole Attachment Order and 2015 Order on Reconsideration In the Matter of Implementation of Section 224 of the Act.

- The new telecom rate is specified as the space factor multiplied by the annual pole cost (as was the case in the old telecom rate), and also multiplied by the appropriate cost allocation factor.
- Formulaically, the new telecom rate can be simplified as the old telecom rate multiplied by the appropriate cost allocation factors.
- The incorporation of cost allocators into the old telecom rate formula has the effect of reducing the resulting rate and making it roughly equal to the rates produced under the cable rate formula.
- The new telecom rate formula, thus, does not include any contribution to the costs of unusable space.

- The new telecom rate undoes the partial inclusion of fully allocated pole costs included in the old telecom rate.