TESTIMONY

BEFORE A JOINT HEARING OF THE

HOUSE CONSUMER AFFAIRS & SENATE COMMUNICATIONS & TECHNOLOGY COMMITTEES

SUBMITTED BY

DQE COMMUNICATIONS

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STATEWIDE BROADBAND COMMUNICATIONS EXPANSION & RELIABILITY

Good morning Chairman Marshall, Chairman Matzie, Chairwoman Phillips-Hill, Chairman Kane and members of the House Consumer Affairs and Senate Communications & Technology Committees. On behalf of DQE Communications, I would like to thank you for the opportunity to provide our perspective on how to address the challenges of connecting communities which are currently underserved by broadband communications infrastructure. We very much appreciate the Committees' willingness to examine this issue.

My name is Jim Morozzi. I serve as the President and Chief Executive Officer (CEO) of DQE Communications (DQE), a broadband communications company based in Pittsburgh and operating a network that currently consists of more than 4,000 fiber route miles, connecting 2,490 lit buildings, 118 business parks, and 17 data centers. We are a customer-focused single point of contact organization which takes pride in reliability, responsiveness, and diligence in delivering effective, technologically advanced solutions to our customers.

Since taking the helm at DQE in 2013, we have been focused on growth, expanding our network, and our workforce. During this time, we have added more than 1,500 route miles to the overall fiber network, including our most recent expansion into Central PA, and we have nearly doubled our employee count. To date, we have invested over $200 million in Pennsylvania to serve our customers on our fiber optic data network. It is this growth mindset through which I view the opportunity ahead for Pennsylvania.

DQE Communications

DQE is a leading regional fiber optic Internet and data networking provider for businesses and telecommunication carriers in Pennsylvania, Ohio, and West Virginia. We provide solutions to companies and organizations of every size and industry, including healthcare, government, 911 centers, research and technology, universities, K-12 education and intermediate units, manufacturing, business parks, and data centers. To date, we have not been active as a provider in residential settings. However, as a result of DQE's service to local governmental entities and, hearing their desire to expand broadband capabilities to their constituents, we are in the process of evaluating the opportunity to expand in order to better serve our neighbors in the communities where we currently operate.

As a subsidiary of Duquesne Light Holdings, DQE was established in 1997 to provide businesses with secure, reliable, and customizable network services. DQE builds, owns, and maintains fiber optic network architecture, so the fiber is separate from existing telephone and cable company networks and because of this, we invest heavily in maintaining its integrity and reliability.

While we have operated as a separate affiliate only since 1997, DQE traces our history back to when it was created to build out the fiber optic communications infrastructure to connect Duquesne Light's substations and other electrical facilities to provide real-time monitoring and controls for transmission and distribution operations. Since that time, we have broadened our reach, and we now deliver dependable high-speed communication to serve other critical, life-sustaining customers. Hospitals, seats of government, schools and other vital community institutions which are so important to our daily lives – evermore so in the midst of a pandemic – are some of the customers that depend on us, because our communities depend on them. We live and breathe our duty to connect our communities to a fast, reliable fiber optic communications infrastructure.

It is that broadband connectivity and how we are positioning our communities for the future that I would like to discuss before the Committee today.

Broadband Challenges – Solving the "Middle Mile"

At the heart of any connectivity infrastructure initiative is the two-part question of what we are trying to connect and how far we need to go to achieve the connection. As I have mentioned, DQE is adept at designing customized solutions to help meet the needs of any entity or institution who needs a high-speed fiber optic connection. Unfortunately, it is the second part of the question – how far we need to go with new fiber – that too often drives a project beyond financial feasibility.

What makes those segments between dense areas – which are sometimes only 10- to 15-miles – the most fundamental of broadband deployment challenges? In large part, it is a simple matter of a lack of available funds. The technology exists and is readily available; the skilled workforce needed to deploy large, complex projects is trained and ready to begin; broadband expansion projects can quickly be construction-ready because fiber optic network companies like DQE have the resources to make this happen; but at a cost of tens of thousands of dollars per mile for fiber, not including switchgear and other necessary equipment, broadband is a high-value proposition. In dense areas, those large capital investments can be amortized across more customers. In areas with fewer customers, the cost burden is a puzzle that is more difficult to solve.

As we have expanded, DQE has found creative solutions to leverage existing infrastructure and customer installations as jumping off points to connect to nearby resources. However, as the distances between customers increase, our options become more limited and our ability to establish much-needed connections is constrained. DQE is in good company with others across industries who are diligently searching for solutions to this well-established dilemma.

In its January 2021 report, *Middle Mile Broadband*, the Edison Electric Institute (EEI) states:

> *Today, a deep inequity around broadband access exists across the country. The Federal Communications Commission (FCC) estimates that there are nearly 21 million Americans*

> *who do not have access to high-speed internet[1]. A recent study by BroadbandNow Research, however, concludes that the digital divide is much greater than that and is, in reality, closer to 42 million Americans[2].*

In its report, EEI advocates for leveraging the existing "middle mile" infrastructure owned and operated by the nation's electric utilities, which are already obligated to serve rural and other areas currently underserved by broadband service. EEI suggests that creative partnerships across public and private sectors can be critical to achieving solutions, which is just one example of how effective partnerships can leverage existing infrastructure to maximize impact.

January 2021 also saw the release of the County Commissioners Association of Pennsylvania's (CCAP) list of county government priorities, with broadband expansion as a top priority[3]. CCAP asserts that no less than "… the collective future of Pennsylvania hinges on addressing the challenges to broadband expansion that are preventing access to opportunities and information to many of our residents." CCAP warns that a delay in action to solve the connectivity challenge will result in rural areas increasingly struggling to attract new residents and businesses. They suggest that these areas may in fact lose population to regions which better meet the broadband needs that have become fundamental to nearly every facet of their daily lives.

CCAP's priority report also suggests policymakers leverage partnerships, pointing to cooperatives as a model for regional collaboration:

> *The commonwealth must develop partnerships among federal, state, and local government, as well as the private sector, that can help to deploy the resources and data needed to make meaningful progress on broadband expansion to all areas of the commonwealth, rural and urban. Counties can also learn from the best practices and innovative ideas, such as regional cooperative models, that have seen success in Pennsylvania and throughout the country, to be leaders in this area going forward.*

There is no shortage of suggestions for policymakers to consider in how to meet the challenges of solving middle mile connectivity. DQE itself is eager to serve as a resource as your respective teams consider how to move forward to adequately prepare the Commonwealth for broadband expansion and we will add our voice to the chorus singing the praises of leveraging partnerships to bring innovative solutions to bear on this challenge.

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[1] Federal Communications Commission, "2019 Broadband Deployment Report Shows America's Digital Divide Narrowing Substantially," May 29, 2019, https://docs.fcc.gov/public/attachments/DOC-357699A1.pdf.

[2] Busby, John and Julia Tanberk. "FCC Reports Broadband Unavailable to 21.3 Million Americans, BroadbandNow Study Indicates 42 Million Do Not Have Access." BroadbandNow.com. Feb. 3, 2020. https://broadbandnow.com/research/fcc-underestimates-unserved-by-50-percent.

[3] County Commissioners Association of Pennsylvania, "2021 County Government Priorities | Broadband Expansion," January 13, 2021, https://www.pacounties.org/getmedia/4019130d-d8cc-45dd-be8e-9cbf985b4e95/2-BroadbandExpansionPriorities2021.pdf.

Broadband Opportunities – Setting the high-speed standard and expanding connectivity

Robust, reliable, fast internet is essential for Pennsylvanians today as it is a necessity for quality education, conducting commerce such as banking and shopping and for staying informed and connected. The pandemic has made that very clear. These services are equally important in rural areas as they are in major metropolitan areas where high speed broadband is more ubiquitous.

Dial-up and slow internet are no longer acceptable and hamper our ability to be an engaged, informed, and productive commonwealth. To deliver a quality broadband service, we must move beyond today's outdated definition of 25 Megabit per second (Mbps) download/ 3 Mbps (25/3) upload speeds for what qualifies as true 'broadband'. These levels are simply not good enough to meet the demands of our digitally connected lives and it certainly won't position our communities for the future. In fact, those insufficient levels could undermine our competitiveness. We must strive for speeds of 1 Gigabit per second (Gbps), but at a minimum, no less than 100 Mbps/ 500 Mbps delivered to homes and businesses.

Equally important, we must endeavor for broadband service to be *symmetrical* in download and upload speeds to accommodate how we use the internet today. Consider the student that needs to participate in virtual classroom in real time, or the remote worker who needs to deliver a presentation to clients or colleagues over interactive video conferences, or the many other high-data-demand streaming activities that have quickly become such a natural part of our daily routines. Symmetrical, high-speed bandwidth provides for this. Asymmetrical, inadequate 25/3 service does not.

This symmetrical, high-speed standard is best accomplished by building and expanding fiber optic networks. Fiber optics' transmission capabilities are far superior to copper or coaxial cable facilities. While no technology or delivery platform is future-proof, fiber is the closest we come to building a future-ready network. Fiber-optic broadband solutions are scalable and adaptable, but we must view our opportunity now as one where we can address the future demands of our commonwealth – not just the present. Quite simply, fiber is an investment in the future. I encourage our commonwealth to find opportunities to make the strategic investments in areas where these networks are lacking.

Readiness

As a result of last week's passage of the $1.2 Trillion Infrastructure in Washington, we have a unique opportunity to make a meaningful improvement in broadband deployment in Pennsylvania. With $65 billion in support for broadband in the bill – including $42 billion in funding directly committed to broadband infrastructure projects – this is the single most significant economic investment ever available to help bring fiber optic broadband service to underserved and less densely populated areas of the state. The reality is that it is very expensive to build miles of fiber when there are very few homes or farms per mile along a construction route. Now that this infrastructure bill has come to fruition, Pennsylvania must mobilize and be ready to put forward outstanding broadband projects and advocate for these

investments across the commonwealth, specifically in areas that are underserved. This truly is the opportunity of a generation to address such a fundamental connectivity problem faced by rural and underserved communities. I encourage policymakers to focus on this opportunity and dedicate the resources necessary to advocate and secure funding so that providers like DQE have the resources needed to build fiber infrastructure that will bring robust broadband to these underserved areas.

With adequate funding support, the promise of universal access to affordable, reliable, high-speed fiber broadband can be made reality. As the ink dries on the pages of the federal infrastructure bill, the critical work for state leaders has only just begun. We believe that three activities will be essential to successfully delivering on this promise:

1. State leaders should define a framework for how Pennsylvania will compete favorably to win the broadband funding we need. We ask that you define that policy framework clearly and empower counties where the need for connectivity is greatest.

2. Facilitating regional collaboration will be a significant element of defining and effectively communicating the needs in underserved areas across the commonwealth.

3. Your leadership and advocacy on behalf of the counties you represent will be one of the single most important factors if Pennsylvania is to be successful at the federal level.

Moving forward, we will gradually emerge from COVID-19 pandemic restrictions. However, we fully expect that remote operations of businesses and schools will likely continue to present challenges for underserved communities where broadband expansion has yet to reach.

We are committed to investing in infrastructure and technology that enable us to meet the increasing demand for communication and connectivity across the Commonwealth. While our infrastructure has served customers well for decades, we will continue to work to maintain the levels of service and reliability that our customers have come to expect.

Again, Chairman Marshall, Chairman Matzie, Chairwoman Phillips-Hill, and Chairman Kane, thank you for allowing me the opportunity to join you here today. On behalf of my entire team at DQE, I would also like to offer my sincere thanks to you, Committee members, and your staff for providing us with this opportunity to offer our perspective and insight on the issue of broadband connectivity in the Commonwealth. At this time, I would be glad to respond to questions from members of the Committees.