



August 6, 2018

Via ECFS

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

Re: *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks*, WC Docket No. 18-141

Dear Ms. Dortch:

In accordance with the *Protective Order*¹ for the above-referenced proceeding, Sonic Telecom, LLC (“Sonic”) herein submits a redacted version of the attached opposition in the above-referenced proceeding.

Sonic has designed for confidential treatment the marked portions of the attached documents pursuant to the *Protective Order*.

Pursuant to the *Protective Order*, Sonic is filing a redacted version of the documents electronically via ECFS, one copy of the documents containing the confidential information with the Secretary’s Office, and sending two copies of the documents containing the confidential information to Pamela Megna, Competition Policy Division, Wireline Competition Bureau.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Veach".

Julie A. Veach
Counsel to Sonic Telecom, LLC

Attachment

cc: Pamela Megna

¹ *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks*, WC Docket No. 18-141, DA 18-575 (Wireline Comp. Bur. rel. June 1, 2018) (“*Protective Order*”).

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petition of USTelecom for Forbearance)	WC Docket No. 18-141
Pursuant to 47 U.S.C. § 160(c) to Accelerate)	
Investment in Broadband and Next-Generation)	
Networks)	

**OPPOSITION OF SONIC TELECOM, LLC TO PETITION FOR FORBEARANCE OF
USTELECOM**

Dane Jasper
Chief Executive Officer and Founder
SONIC TELECOM, LLC
2260 Apollo Way
Santa Rosa, CA 95407
(707) 522-1000

Julie A. Veach
HARRIS, WILTSHIRE & GRANNIS LLP
1919 M Street, N.W., 8th Floor
Washington, D.C. 20036
(202) 730-1300

Counsel for Sonic Telecom, LLC

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I. INTRODUCTION AND SUMMARY

USTelecom seeks to reduce local competition and prevent other providers from deploying fiber networks. The Commission should reject USTelecom’s request for forbearance from the remaining unbundled network element requirements.¹ Facilities-based competitors like Sonic Telecom, LLC (“Sonic”) continue to use unbundled loops and transport from the incumbent local exchange carriers’ (“ILECs”) legacy networks as critical inputs into their own voice and broadband offerings, providing speeds up to 400 Mbps over copper loops and 240 Gbps over two dark fiber transport facilities today with plans to upgrade to speeds of 520 Gbps. This competition today benefits consumers and the public interest by giving customers an alternative to the incumbents’ offerings and pressuring ILECs as well as cable providers to deploy fiber and upgrade service.

Using unbundled loops and transport also leads to new fiber-to-the-premises deployment, over which residential consumers enjoy gigabit speeds and business can have virtually unlimited capacity. This deployment would not have been possible without access to unbundled DS0 copper loops and dark fiber transport elements, and continued fiber deployment depends on their availability.

The Commission must reject USTelecom’s Petition for failing to demonstrate that any of the criteria for forbearance under Section 10 of the Act are met. Critically, forbearance would stifle local competition, lead to higher prices for residential and business consumers, and prevent Sonic and others from continuing to deploy new fiber facilities.

¹ Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141 (filed May 4, 2018) (“Petition”).

II. BACKGROUND

A. Sonic's Services and Customers

Sonic Telecom, LLC ("Sonic") and its parent company have been providing service in California since 1994. Today, Sonic provides retail voice and high-speed internet access services to about 100,000 residential, small business, and enterprise customers in California. The vast majority—88 percent—are residential customers. The remainder are very small business (9 percent) and enterprise (3 percent) customers. Sonic also provides wholesale internet access, transport, and backhaul services to other providers.

Sonic's primary product is Fusion Broadband+Phone, an internet access and voice telephone service that it offers for \$50 per month to residential customers, with an option for faster service through a bonded (two-line) offering for \$70. A similar offering with bonded (two-line) broadband speed is offered to very small business locations for \$90 per month. Depending upon location, the voice services may be POTS (when the last mile connection is an unbundled network element, or "UNE") or VoIP (when the last mile connection is fiber-to-the-premises or -node). The voice services include unlimited nationwide calling, unlimited calling to fixed lines in sixty-six countries, and all voice features including RoboCall blocking, caller ID, and voicemail, all at no extra charge. The broadband component of Fusion provides internet access at up to 1 Gbps when provided over Sonic's own fiber.² As of December 2016, Sonic was the only provider of broadband internet access service at 25/3 Mbps or higher in 523 census blocks.³

² See Attach. A ¶¶ 3-4.

³ See Declaration of William P. Zarakas, at 6, Table 4 ("Zarakas Declaration"), attached to Opposition of INCOMPAS, FISPA, Midwestern Association of Competitive

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Where Sonic relies on DS0 UNE loops purchased from the incumbent local exchange company (AT&T/Pacific Bell), Sonic typically offers up to 50/15 Mbps using VDSL2 over a single loop or up to 100/30 Mbps over a bonded pair of loops (for an additional \$20 per month). In some locations, Sonic offers lower speeds using ADSL2+ technology due to the length of the loop.

In other cases, Sonic provides services over DS1 UNE loops. The xDSL-capable DS0 loop is not available if the wire length is more than 17,500 feet. For customers too far from a central office to be served by a DS0 loop, Sonic purchases DS1 loops as an alternative. Sonic serves rural businesses as well as rural residential customers over the DS1 UNE loop, which supports speeds of 1.544 Mbps. Multiple DS1 loops can be combined to deliver 12 Mbps. Finally, Sonic also relies on access to the 911/E911 database through the ILEC.

In other areas without Sonic fiber or where DS0 copper loops do not have the reach or capacity required to provide Sonic's services, Sonic offers broadband over a wholesale arrangement, limited to speeds of up to 12 to 50 Mbps download.⁴

For enterprise customers, Sonic offers services over its own fiber, where it is available. Customers can obtain speeds of up to 10 Gbps or can purchase dark fiber for virtually unlimited capacity. In other areas, Sonic offers Ethernet over Copper ("EoCu") services both symmetric (up to 100 Mbps) and asymmetric (up to 400 Mbps/50 Mbps) using UNE DS0 loops and e.SHDSL, VDSL2, or ADSL2+ technologies. Sonic also offers EoCu over UNE DS1 loops at speeds up to 12 Mbps.⁵

Communications, and the Northwest Telecommunications Association, WC Docket No. 18-141, Attach. 1 (filed Aug. 6, 2018).

⁴ See Attach. A ¶ 4.

⁵ See *id.* ¶ 5.

Sonic offers a variety of wholesale services to ISPs and carriers. It offers an affordable backhaul option over its network connecting 195 central office wire centers in the San Francisco, Sacramento and Los Angeles areas, 116 of which are of which are classified as “Tier 3” under the Commission’s unbundling rules.⁶ This backhaul service provides an affordable way for other carriers and ISPs to connect their local networks to distant interconnection and internet peering points. This is especially useful for providers deploying service in more rural areas, as discussed below.⁷ Sonic also offers many of its residential and very small business services at wholesale to other competitive providers around the state.⁸

B. Sonic’s Use of UNEs Leading to Fiber Deployment

Sonic uses a combination of facility types to serve its customers, but in all cases, access to UNEs is key—both for providing service to customers using UNE loops and for transport and backhaul of *all* of Sonic’s customers’ traffic.

The first step to providing service in a market is to establish a connection to and presence in the ILEC’s central office. Sonic collocates facilities in the new central office and leases dark fiber interoffice transport UNEs from the ILEC to connect to another central office where Sonic also has a presence. Using Ethernet, Sonic deploys equipment to light the fiber and carry up to 240 Gbps per central office today (with plans to increase that capacity to 520 Gbps or more). With Sonic’s own electronics powering this amount of capacity, Sonic can very efficiently provision transport that supports a whole community. For example, in one central office, Sonic uses just two dark fiber interoffice transport UNEs to transport traffic to and from over 8,500

⁶ By definition, a Tier 3 wire center does not serve 24,000 business lines and does not have 3 or more fiber-based collocators. 47 C.F.R. § 51.319(d)(3).

⁷ See *infra* at 7-8.

⁸ See Attach. A ¶ 8.

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fiber customers, each of which subscribes to Sonic's 1 Gbps symmetric broadband and telephone service. Sonic is now collocated in 195 central offices, each of which is connected to the rest of Sonic's network in adjacent central offices with Ethernet over dark fiber interoffice transport UNEs.

Once Sonic has established transport and collocation, it prepares to offer service to the customers whose locations are located in the wire center territory served by the central office. Sonic looks first to UNE loops. Sonic typically reaches customers' premises via xDSL-conditioned DS0 unbundled loops. Sonic invests in and installs its own electronics to enable high-speed broadband and voice services over the loop. For residential customers, Sonic provisions electronics that enable VDSL2 or ADSL2+ and POTS voice. For enterprise customers, Sonic deploys its own electronics to enable these xDSL and POTS technologies, plus Ethernet over copper, which is delivered using e.SHDSL technology. Sonic provisions the service using anywhere from four to twenty-four bonded copper pairs to deliver a symmetric service, generally from 5 Mbps to 100 Mbps (download and upload). Also for enterprise customers, Sonic delivers asymmetric Ethernet over copper using VDSL2 and ADSL2+, with four to twelve bonded copper pairs. This delivers an asymmetric product from 50 Mbps download/5 Mbps upload to 400 Mbps download/50 Mbps upload. Sonic currently serves just under half of its customers using over 66,000 unbundled DS0 copper loops leased from AT&T, the ILEC in all of Sonic's service areas.⁹

In some areas, the DS0 copper loops do not have the reach or capacity required. In these areas, Sonic serves the customer using a commercial wholesale ILEC service, but Sonic's offerings in these locations are much more limited because, unlike with UNE DS0s, it cannot

⁹ See Attach. A ¶¶ 5-6.

innovate by deploying its own equipment and customizing the loop. Sonic's residential service bundle in these areas includes internet access at up to 12-50 Mbps (download) plus voice service for \$50-\$70/month. Sonic also offers a small business bundle with up to 12-50 Mbps (download) plus voice service for \$70-90/month. Less than a quarter of Sonic's customers are served through this type of commercial wholesale arrangement. Customers served on this wholesale platform must wait nearly three weeks for service delivery (versus three days for UNE service delivery), must commit for a full year (versus no term commitment for UNE service delivery), and must provide a full month's notice prior to disconnection (versus no notice for UNE service delivery.) For residential customers, waiting nearly three weeks for a service with slower speeds, plus the other onerous terms, makes this product less desirable than services delivered via UNE loops.¹⁰

Once Sonic has established itself in a new area and has gathered a sufficient customer base, it looks to deploy its own last-mile fiber network. Where it has deployed its own fiber, Sonic offers 1 Gbps broadband internet access services plus voice to residential customers for \$50 per month and a similar bundle to small business customers for \$90 per month. Nearly thirty percent of Sonic's customers are now served over Sonic's own last-mile fiber facilities in San Francisco, Berkeley, Albany, Brentwood, and cities in Sonoma and Marin counties, California.¹¹

In some areas, low density means that fiber deployment is not economic. In other areas, though, there is a business case for deploying fiber but other impediments prevent fiber deployment. For example, in some areas, the ILEC joint-owned utility pole is overloaded, and the ILEC will not permit Sonic to reinforce the pole to resolve the preexisting safety issue, and to

¹⁰ See *id.* ¶ 15.

¹¹ See Attach. A ¶¶ 4, 9.

support Sonic’s own fiber attachments. In other cases, the ILEC created obstacles to access to conduit, such as requiring separate Sonic vaults instead of allowing Sonic to place splice cases to accommodate fiber in the conduit and vault system.¹² States and local municipalities, too, can impede fiber deployment, such as by disallowing industry-standard trenchless construction methods such as directional boring or microtrenching.¹³ In these areas, Sonic continues serving its customers over the ILEC’s loop even where it is otherwise prepared to deploy its own fiber.

C. Sonic’s Impact on the Quality and Availability of Robust Broadband Services

Sonic offers innovative services at low cost. Sonic’s decision to enter a market typically causes other providers in that market—the ILEC or, in some markets, the incumbent cable provider—to improve their services and lower their prices. In San Francisco, after Sonic deployed fiber-to-the-home, AT&T also deployed fiber-to-the-home in many of the same neighborhoods.

Even though Sonic focuses on urban and suburban markets, it is the only provider of fixed terrestrial broadband services in at least two census blocks.¹⁴ Notably, while the ILEC itself does not offer any broadband internet access in this area, Sonic provisions its own electronics over the ILEC’s unbundled DS0 copper loops to offer up to 100 Mbps to homes, and

¹² Other obstacles include delayed processing of routine applications, delayed access to information about the locations of poles and conduit, changing and undisclosed procedural requirements, and other artificial barriers to competitive fiber deployment. *See id.* ¶ 11.

¹³ *See* San Francisco Public Works, DPW Order No: 187005, Regulations for Excavating and Restoring Streets in San Francisco, § 9.2(C) (“Public Works Order”) (prohibiting “tunneling, drilling, jacking, rock wheel, trench-less technology, etc.” without special permission). In Sonic’s experience, the City has not granted permission for use of these alternative methods.

¹⁴ The two census blocks are 060971543023000 and 060971543023027. *See* Fixed Broadband Deployment Data from FCC Form 477, US – Fixed Without Satellite – Dec 2016, <http://transition.fcc.gov/form477/BroadbandData/Fixed/Dec16/Version%201/US-Fixed-without-Satellite-Dec2016.zip>.

up to 400 Mbps to businesses, in addition to voice services. More broadly, as of December 2016, Sonic was the *only* fiber-based provider in 342 of the census blocks where it offers service over fiber.¹⁵

In addition, Sonic supports deployment to additional unserved and underserved areas. Using dark fiber interoffice transport UNEs and its own investments in modern equipment, Sonic has deployed sufficient backhaul capacity that it can offer that capacity at very affordable rates to others. For example, Race Communications obtained a grant from the California Advanced Services Fund to deploy fiber services to premises that previously had not had any type of terrestrial broadband service.¹⁶ Sonic was able to provide Race with affordable backhaul to peering points in San Francisco. This backhaul relies on UNE interoffice facilities. Similarly, Sonic provides backhaul service to Ukiah Wireless, a provider offering fixed wireless internet service to premises in several rural communities in Northern California, some of which have no other terrestrial broadband provider. Another Sonic customer, Cruzio Internet, resells Sonic's UNE DS0 broadband services and is also building out its own fiber network in Santa Cruz. In Berkeley and Albany, Sonic provides copper services to LMI.net, and because Sonic is deploying fiber in those communities, LMI.net and Sonic are both migrating their customers from copper to fiber in that area. Sonic provides similar wholesale services to a variety of small ISPs and carriers, including Mendocino Community Network in Mendocino and Fort Bragg,

¹⁵ See Zarakas Declaration at 4, Table 2.

¹⁶ See Declaration of Raul Alcaraz ¶¶ 6-8, attached to Opposition of INCOMPAS, FISPA, Midwestern Association of Competitive Communications, and the Northwest Telecommunications Association, WC Docket No. 18-141, Attach. 13 (filed Aug. 6, 2018) (“Competitive Carriers Group Opposition”).

Pacific Internet in Ukiah, Coastside.net in Half Moon Bay, and DSLExtreme in Los Angeles.

Each of these regional service providers relies on Sonic's CLEC facilities.

D. The Lack of Wholesale Alternatives

There are no wholesale alternatives that could substitute for the bare copper DS0 UNE loops and dark fiber UNE transport that Sonic leases from the ILEC.

No provider—not ILECs and not cable providers—offers bare copper loops on a wholesale basis other than as UNEs. Bare copper loops are an entirely different product than leased lit circuits or resale. With bare xDSL-conditioned copper loops, Sonic and other CLECs can deploy their own modern electronics to offer POTS and achieve truly high-speed broadband services—50 Mbps on a single circuit and 400 Mbps using bonded copper pairs. No other wholesale product allows the provider to use the loop with its own electronics to achieve those speeds.

In some markets, ILECs choose to offer access to their fiber-to-the-node or fiber-to-the-premises networks. These are not substitutes for bare copper DS0 loops, because they do not allow for the customization that comes from deploying electronics and, thus, cannot support the same speeds and capabilities that the CLEC can offer over the UNEs. Moreover, they are not required to be made available and are not price-regulated, making them an inconsistently-available and unreliable alternative even for providing less robust broadband services.

Where Sonic relies on unbundled DS1 UNE loops to serve customers in rural areas, a DS1 special access service is available from the ILEC. However, special access services are far more expensive and provided on terms and conditions that make them poor substitutes for the unbundled DS1 loop. Sonic pays \$70 per month for an unbundled DS1 loop. The equivalent

charge for a wholesale DS1 loop from AT&T—with a three-year term commitment—is \$211 per month.¹⁷

Similarly, there are no available wholesale alternatives that match the quality, flexibility, and price of the interoffice dark fiber UNE. Sonic uses its own electronics to obtain up to 240 Gbps over a single pair of dark fiber interoffice transport UNEs today and has plans to more than double that capacity by deploying new electronics. Leased lit fiber services by contrast, support nothing like those speeds. AT&T's Ethernet service, for example, provides only 100 Gbps—a fraction of the capacity Sonic achieves, yet these lit services are hundreds of times more expensive than interoffice dark fiber UNEs.¹⁸ Using ILEC retail transport services also puts the incumbent's equipment into the path of traffic, reducing reliability and Sonic's ability to design, manage, and troubleshoot the transport network. Deployment of new (overbuilt) interoffice fiber that can match what Sonic achieves off the ILEC's spare unlit fibers would be prohibitively expensive. Sonic estimates that to deploy new interoffice fiber to replace the existing interoffice network it has lit using dark fiber interoffice transport UNEs would cost more than \$580 million¹⁹—far more than a CLEC of Sonic's size can afford to take on and a wasteful use of resources to replace existing and otherwise excess facilities.

Leased services other than UNEs typically require volume and term commitments of at least three years to avoid paying the highest price (or in some cases, simply to enter into a lease agreement). Volume and term commitments make leased services unsuitable for temporary or transitional connections, such as when fiber deployment is in progress but not yet complete,

¹⁷ See AT&T California, U-1001-C § 7.

¹⁸ See Attach. A ¶ 16.

¹⁹ See Attach. A ¶ 17.

because even after the CLEC has constructed its own facility, it must continue to pay for the ILEC facility that it no longer needs. This effectively raises the cost of deploying the CLEC's own facilities. UNEs, by contrast, do not require volume and term commitments and provide CLECs with flexibility to purchase only the number of loops or dark fiber elements needed.

III. THE COMMISSION MUST NOT FORBEAR SECTION 251(C)(3) UNBUNDLING REQUIREMENTS FOR DS0S, DARK FIBER TRANSPORT, AND OTHER CRITICAL UNES

The Commission must deny USTelecom's petition for forbearance and continue to require ILECs to unbundle their DS0 and DS1 loops, interoffice dark fiber transport, and 911/E911 databases.²⁰ USTelecom has failed to meet any of the statutory criteria for forbearance. Moreover, forbearance is wholly inconsistent with Congress's mandate that the Commission "shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans."²¹ To the extent that ILECs believe that they need relief from their unbundling requirements, they need look no further than their own business plans: under the current rules, they are relieved from copper loop unbundling requirements as soon as they deploy last-mile fiber and retire their copper.

Section 10 of the Communications Act requires and permits the Commission to forbear from applying a regulation or provision of the Act *only* if the Commission determines that:

- (1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;

²⁰ Sonic does not endorse forbearance from other UNE or resale requirements but focuses here on the critical elements that it relies on in its own business.

²¹ 47 U.S.C. § 1302(a).

- (2) enforcement of such regulation or provision is not necessary for the protection of consumers; *and*
- (3) forbearance from applying such provision or regulation is consistent with the public interest.²²

The Commission cannot forbear if any one of these requirements is not met. In determining whether forbearance is in the public interest, Section 10 further instructs that “the Commission shall consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services.”²³

The *Qwest Phoenix Forbearance Order* provides the framework for the Commission to apply in assessing petitions for forbearance based on assertions that competition renders regulation unnecessary.²⁴ The *Qwest Phoenix Forbearance Order* established a detailed framework for analyzing whether loop and transport unbundling requirements are necessary and in the public interest. Rejecting “generalized claims about competition,” the Commission held that it will define the affected specific product and geographic markets, and will analyze the impact of forbearance in those specific markets.²⁵ The *Qwest Phoenix Forbearance Order* also recognized wholesale markets for loops and dedicated transport as separate from retail product

²² 47 U.S.C. § 160(a) (emphasis added).

²³ *Id.* § 160(b).

²⁴ *See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, Memorandum Opinion and Order, 25 FCC Rcd. 8622, 8635 ¶ 28 (2010) (“*Qwest Phoenix Forbearance Order*”).

²⁵ *Id.* & *id.* ¶ 28 n.82.

markets.²⁶ Thus, a proper analysis to determine whether to grant forbearance for the wholesale market must rely on data and test results from the wholesale market, not a retail product market.

In this proceeding, it is USTelecom that bears the burden of proof. USTelecom must provide “convincing analysis and evidence to support its petition for forbearance,” including “both the burden of production and the burden of persuasion.”²⁷ As explained below, USTelecom has failed to meet its burden, and the Commission must deny forbearance of ILEC obligations under 251(c)(3) of the Act to provide unbundled access to DS0 copper loops, interoffice transport, and other critical UNEs.

A. UNEs Remain Necessary To Ensure Just and Reasonable Rates and To Prevent Unjust and Unreasonable Discrimination.

The key question under the Commission’s *Qwest Phoenix* analysis is whether the forbearance criteria are met with regard to the relevant product and geographic market, which here include the wholesale markets for loop and transport inputs. USTelecom has not shown that there are alternatives in the product market for wholesale DS0 loops and for transport capable of hundreds of gigabits anywhere.²⁸ Nor has USTelecom shown that there are alternative wholesale sources in the relevant local geographic markets. Nor could it.

As explained above, there are no commercial alternatives to the unbundled DS0 xDSL-capable loop. This facility—a pair of bare copper wires from the central office to the premises—uniquely allows the CLEC to attach its own electronics to provide higher capacities than the ILEC offers over copper facilities and to customize the offering for its customer. Sonic obtains

²⁶ *Id.* ¶ 28.

²⁷ *Petition to Establish Procedural Requirements to Govern Proceedings for Forbearance Under Section 10 of the Communications Act of 1934, as Amended*, Report and Order, 24 FCC Rcd. 9543, 9554-56 ¶¶ 20-21 (2009).

²⁸ *See Qwest Phoenix Forbearance Order* at 8648-49 ¶¶ 48-49.

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asymmetrical speeds up to 50 Mbps (download) over a single unbundled copper loop, and up to 100 Mbps (download) over a bonded pair of unbundled copper loops, and up to 400 Mbps (download) over multiple bonded loops for enterprise customers needing that amount of capacity. For enterprise customers requiring symmetrical speeds, Sonic can provide up to 100 Mbps. There is *no* wholesale last-mile product consistently available from the ILEC or from any other source that would allow Sonic to offer these speeds to all customers in Sonic's service areas. Without regulation requiring that the DS0 copper loop be unbundled, for many customers there would be no provider offering this service.

In some areas, AT&T offers a wholesale commercial product that allows Sonic to sell AT&T's finished broadband internet access service (BIAS) via AT&T's fiber-to-the-home or fiber-to-the-node network. Notwithstanding that AT&T has deployed fiber into part or all of that transmission facility, it is not comparable to the DS0 bare copper loop. Sonic lacks the ability to provision its own electronics, and thus cannot obtain the same speeds that it can achieve over a bare copper loop. In addition, Sonic is impeded in its ability to provide the same level of customer service. For example, while UNE loops are typically delivered in three days, the typical installation interval for a resold AT&T service is nearly three weeks. AT&T also requires a one-year term commitment, whereas UNEs have no term commitment. There is also the issue that service is installed at the home by an AT&T technician, who arrives in an AT&T truck, and the service requires an AT&T-provided and -branded modem. All of this reduces Sonic to a simple reseller of AT&T internet service, with little ability to differentiate and improve the product for subscribers. Finally, when households want to discontinue service, they

must provide a full month's notice. For all of these reasons, the commercial service is not the same product as the UNE bare copper loop.²⁹

While there are cable operators and other CLECs operating in Sonic's service areas, they do not make available a service like the DS0 bare copper loop.³⁰ To the extent that other CLECs have built out last-mile facilities that could theoretically be made available on a competitive basis, Sonic is aware of very limited facilities in the largely residential areas that it serves. The cable operators do not offer their last-mile networks to others on a wholesale basis.

Similarly, for customers in rural areas, the DS1 UNE loop is the only economic option for providing affordable service. The commercial alternative is three times the cost of a DS1 UNE loop. Sonic is unaware of any provider other than the ILEC that offers a wholesale last-mile product that reaches these more remote locations.

Likewise, there is no other wholesale transport product that competes with unbundled interoffice dark fiber, over which Sonic deploys equipment to light at up to 240 Gbps today. Planned upgrades to this equipment will increase capacity to 520 Gbps or more. By contrast, DS1s provide 1.544 Mbps (0.0006% of the capacity of dark fiber), while DS3s provide 44.736 Mbps (0.0186%). While there are some other providers of metro fiber within Sonic's service areas, these providers do not serve the same areas that Sonic serves. Because Sonic's customers are predominantly residential (and many are suburban), they tend to be located outside of the dense core urban areas where CLECs deploy their own metro fiber to serve large business customers. Every dark fiber interoffice transport UNE that Sonic purchases, by definition,

²⁹ See Attach. A ¶ 15.

³⁰ See *id.* ¶ 14.

connects to an AT&T wire center that serves fewer than 24,000 business lines and does not have three or more fiber-based collocators.³¹ Moreover, alternative providers rarely sell dark fiber capacity. Sonic therefore would not be able to purchase the same product. Rather, it would be limited to the speeds offered by these other providers. Finally, alternative providers generally do not collocate in AT&T's wire centers. To utilize these alternative sources, where they exist, Sonic would need to purchase connections from both of the AT&T wire centers to the interconnection points of the other provider. These additional circuits, with the additional electronics required, would greatly increase the cost of the service and would still not provide the same capacity Sonic achieves today over unbundled interoffice dark fiber.³²

Simply put, there are no comparable wholesale options to these elements. UNEs help to ensure that retail rates are just and reasonable by allowing providers like Sonic to enter the market and, in many areas, deploy fiber. As explained below, those offerings discipline the ILECs' own retail prices and generate competitive responses in the form of investment and new offerings not only from the ILEC but also from incumbent cable providers. Higher costs for wholesale inputs—or the complete loss of suitable inputs—will necessarily mean higher costs for Sonic's customers, less investment by Sonic as well as other providers serving the same markets, and a less competitive and more expensive market for voice and high-speed broadband services.³³

³¹ Dark fiber interoffice transport UNEs are only available in Tier 3 wire centers. 47 C.F.R. § 51.319(d)(3).

³² See Attach. A ¶ 16.

³³ The loss of UNEs would also strand investment worth tens of millions of dollars in equipment that Sonic has deployed to light and operate DSOs and dark fiber.

B. Forbearance from UNE requirements would violate the public interest.

As part of its evaluation of USTelecom’s petition, the Commission must consider whether forbearance from applying the unbundling requirements “is consistent with the public interest.”³⁴ As part of that evaluation, the Commission must consider whether ending unbundling requirements “will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services.”³⁵ Ending the DS0, DS1 loop, and dark fiber transport unbundling obligations is not in the public interest and will decidedly *not* promote competition for voice and high-speed broadband services.

Forbearance is not in the public interest for several reasons. First, the loss of loop and interoffice dark fiber UNEs would frustrate fiber deployment, in some cases stopping it entirely. Investment in fiber is highly capital intensive. To acquire the necessary capital, any provider must have a reliable stream of revenue. By using UNEs to provide service (and receive revenue), a competitive provider has a chance to obtain the capital needed for the one-time up-front costs to deploy fiber last-mile facilities. The loss of critical UNEs would limit or shut down Sonic’s ability to serve *current* customers, as well as to add additional customers near to current customers that will help make additional fiber deployments economically feasible. As a result, Sonic would be less able to attract the capital needed to deploy its own fiber facilities—which is its ultimate goal for all customers. Indeed, frustrating Sonic’s investment in fiber would be a particularly bad outcome, given that Sonic is currently investing *****BEGIN**

³⁴ 47 U.S.C. § 160(a)(3).

³⁵ *Id.* § 160(b).

CONFIDENTIAL [REDACTED] END

CONFIDENTIAL*** of AT&T.³⁶

The loss of this new fiber deployment means not only that customers will not have the ability to subscribe to Sonic's fiber-based services. It also means that they are less likely to have the opportunity to subscribe to fiber-based services from *any* provider or upgraded cable modem services from a cable operator. To the best of Sonic's knowledge, in most of the markets where it has deployed fiber, it has been the first in a market to broadly do so, often soon followed by AT&T's fiber deployment or by upgrades by Comcast or Wave, the other cable company that provides service in areas where Sonic has deployed fiber.³⁷ Indeed, within census blocks where Sonic offers service over its own fiber or DS0 loops, Sonic has deployed fiber to more census blocks than AT&T and the cable operator combined.³⁸ Sonic's fiber deployments trigger a robust competitive response, which leads to consumer benefits in the form of lower prices and better quality services. Forbearance would limit or end Sonic's fiber deployments and, therefore, end Sonic's ability to trigger these pro-consumer responses from the incumbent providers.

In addition, without UNEs, Sonic and other similarly situated CLECs would face the prospect of raising their prices and providing reduced-quality services. As explained above, there is no available wholesale alternative to the bare copper DS0 loop UNE. In some areas,

³⁶ See Attach. B. (comparing Sonic's and AT&T's ratios of capital expenditures to operating expenses).

³⁷ See Attach. A ¶ 19. Wave, for example, deployed gigabit service in portions of Sonic's service area less than a year ago. See Wave Broadband Gigabit Footprint Expanded (Nov. 16, 2017), <https://business.wavebroadband.com/wave-broadband-gigabit-footprint-expanded/>.

³⁸ In the 20,266 census blocks where Sonic reports service on Form 477 as of December 2016, Sonic reported service over its own fiber facilities in 1,337 census blocks. AT&T reported service over fiber in 910 census blocks, and cable in 198. See Zarakas Declaration at 3, Table 1.

without unbundling obligations, Sonic might be able to obtain wholesale finished internet access product inputs from the ILEC. That is uncertain, however, and would not allow for the customization and innovation that Sonic currently achieves with the DS0 UNE by attaching its own electronics. As a result, Sonic's customers would not experience the same customized, high-speed services that Sonic offers today over UNEs but instead would be limited to what the wholesale provider—Sonic's direct competitor—allows. Similarly, Sonic is aware of no commercial alternative to the interoffice dark fiber UNE and would be required to purchase great quantities of special access or BDS at \$70,000 a month per central office to be able to achieve less capacity that Sonic achieves today over the dark fiber interoffice transport UNE, for which it pays less than \$100 to connect one central office.³⁹

Further limiting competition, the loss of UNEs would end the ability of providers like Sonic to provide the services they offer today in areas where there are other, artificially imposed barriers to fiber deployment. In San Francisco, for example, pole owners (including AT&T) have declared 8 percent of poles to be over capacity and will not permit Sonic to reinforce these poles so that it can attach its own fiber facilities. Similarly, the ILEC has imposed unreasonably burdensome requirements on access to its conduit, such as by requiring separate vaults instead of allowing Sonic to place splice cases in the AT&T vault (this issue is now resolved, but was a barrier for many years). Sonic is engaged in the ICA dispute resolution process and will bring the pole reinforcement and replacement issues to the California Public Utilities Commission if the issues are not resolved. (The State of California is a reverse-preemption state that regulates its own poles, ducts, and conduits.)

³⁹ See Attach. A ¶ 16.

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Similarly, in some areas, localities impose requirements that limit the ability of a willing and ready provider to deploy fiber. For example, in San Francisco, all modern trenchless construction methods are currently in practice disallowed by the Department of Public Works. The limitations include use of directional boring, a commonly used technique that limits the costs and impacts of construction on existing paving. Microtrenching is also not permitted, despite its use in many large and small cities around the United States.⁴⁰ As a result of these limitations, in these areas, Sonic is currently unable to deploy fiber no matter what its market share, its capital resources, and its readiness. UNEs must be used to serve customers in these areas, until these issues can be resolved with each municipality.⁴¹

These areas, without UNEs, will not have the benefit of Sonic's robust DS0-based service and are unlikely to see fiber from Sonic or any competitive response that Sonic's fiber deployment would have caused. As an example, Sonic deployed fiber to San Francisco's Mission District (along with portions of Noe Valley, Delores Heights and Potrero Hill) and had planned to pass 100% of the premises within the project area with its fiber network. Due to barriers imposed by pole owners (AT&T and Pacific Gas & Electric) and the moratoria on trenchless underground construction, Sonic was unable to deploy to almost 30% of the locations in this region. These locations could be benefitting from competition from a fully facilities-based provider. But without UNEs, the residents and businesses in these locations would not be

⁴⁰ See Public Works Order § 9.2(C).

⁴¹ Sonic is encouraged by the Commission's recent decision to preempt moratoria. See *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment et al.* FCC 18-111, WC Docket No. 17-84 et al., ¶¶ 144-60 (rel. Aug. 3, 2018) ("Accelerating Deployment Order"). These issues unfortunately represent only a few of the many hurdles to deployment of additional fiber.

able to obtain services from Sonic at all, which include Fusion over DS0s at speeds of up to 50/15 Mbps with voice for \$50 (or up to 100/30 Mbps using a pair of UNE DS0s for \$70), in addition to business services at up to 400 Mbps.⁴²

Forbearance would also double prices for UNE DS1-served customers, for many to the point where they would be unable to afford service. Sonic and other providers would be forced to pass the increased cost to serve rural customers over special access DS1s on to the customers. Rural customers should not have to choose between paying substantially more for 1.544 to 12 Mbps service or going back to the ILEC.

Finally, forbearance would disserve the public interest and reduce competition by taking away a powerful incentive for the ILEC to deploy fiber. Under the current unbundling rules, once an ILEC deploys either fiber-to-the-premises or fiber-to-the-node and retires its copper loops, it is no longer required to offer any unbundled loop option that is capable of supporting broadband to the affected locations.⁴³ Put another way, forbearance from the loop unbundling requirement is built into the existing rules. If ILECs do not want to unbundle their broadband-capable loops, they need only deploy fiber and retire the copper. By forbearing from the loop unbundling requirement, the Commission would not only make it more difficult or impossible for CLECs like Sonic to deploy fiber to new areas. The Commission would also *reduce* the incentive of the ILECs to deploy fiber, thus making it even less likely that customers will be

⁴² See Attach. A ¶ 12.

⁴³ See 47 C.F.R. § 51.319(a)(3) (relieving ILECs of obligations to unbundle fiber-to-the-home and fiber-to-the-curb loops that are (1) greenfield builds; or (2) overbuilds, once the ILEC has retired the copper). If an ILEC overbuilds an existing copper loop with fiber and retires the copper, it must offer a 64 kbps channel capable of voice grade service over the fiber on an unbundled basis; that channel, however, would not support broadband. See *id.* § 51.319(a)(3)(iii)(C).

served by *any* fiber provider. While the copper remains, however, the Commission should allow it to be used to its full potential by permitting innovative CLECs to invest in its best use and offer truly high-speed services over it.

Indeed, forbearance from the unbundling obligations would erect an artificial deadline by which time CLECs can no longer use UNE loops. As the rules already provide, the loop unbundling requirements dissolve when the ILEC retires its copper loops. The ILECs have not been undertaking copper retirements on a territory-wide basis. The ILEC plans its transition to fiber months or years in advance, and no large ILEC plans to transition its entire network to fiber at once. Yet USTelecom’s petition seeks to impose on CLECs what the ILECs would never do—transition their entire networks off of copper all at once by a date certain. This is neither feasible nor practical—the construction and engineering resources simply do not exist to allow CLECs to deploy a full fiber network in every market, all at once. The deployment of fiber is capital intensive; it is highly doubtful that CLECs could all raise the necessary financing to deploy fiber to their entire UNE-served service area all at once (assuming there is a business case for fiber deployment). This type of transition is not in the public interest and is at odds with how the ILECs approach fiber deployment in their own networks.

C. Forbearance would undermine consumer protection.

As the Commission has recognized time and time again, competition provides the best insurance that consumers will enjoy innovative and high-quality service at affordable rates.⁴⁴

⁴⁴ See, e.g., *Accelerating Deployment Order* ¶ 156 (“[M]oratoria on deployment that violate section 253(a) decrease competition—thereby dampening the ability of a free and open market to act as a check against unfair or deceptive practices”); *Encouraging the Provision of New Technologies and Services to the Public*, Notice of Proposed Rulemaking, 33 FCC Rcd. 2512, 2514 ¶ 6 (2018) (“[T]he forces of competition and technological growth work together to enable the development and deployment of many new technologies and

Competition encourages the incumbents and other competitors to increase service quality in order to attract and retain customers. As explained above, the loss of DS0 unbundled loops or dark fiber interoffice transport UNEs would cause Sonic to scale back its operations and curtail planned fiber deployments. Thus, the incumbents in Sonic's service area would have less need to maintain service quality. Similarly, in areas where Sonic would have been able to deploy fiber but becomes unable to do so because it loses the ability to serve customers initially over UNEs, the incumbents will not face a facilities-based fiber provider that would have disciplined their quality of service and prices.

services to the public"); *Business Data Services in an Internet Protocol Environment et al.*, Report and Order, 32 FCC Rcd 3459, 3499 ¶ 86 (2017) ("We intend to apply ex ante rate regulation only where competition is expected to materially fail to ensure just and reasonable rates. As a matter of policy we prefer reliance on competition rather than regulation"); *Fostering Innovation and Investment in the Wireless Communications Market et al.*, Notice of Inquiry, 24 FCC Rcd. 11,322, 11,324 ¶ 9 (2009) ("Because competition itself has been a driver of innovation in wireless service, determinations of the most effective comprehensive strategy to encouraging wireless innovation and deployment will necessarily look in part to the state of competition in the wireless market.").

IV. CONCLUSION

USTelecom has failed to meet its burden to show that the statutory criteria for forbearance are met. The Commission should expeditiously deny USTelecom's petition for forbearance from critical unbundling obligations. Denying forbearance will serve the public interest by promoting investment and competition, bringing robust and innovative voice and broadband services to American consumers and businesses.

Respectfully submitted,



Dane Jasper
Chief Executive Officer and Founder
SONIC TELECOM, LLC
2260 Apollo Way
Santa Rosa, CA 95407
(707) 522-1000

Julie A. Veach
HARRIS, WILTSHIRE & GRANNIS LLP
1919 M Street, N.W., 8th Floor
Washington, D.C. 20036
(202) 730-1300

Counsel for Sonic Telecom, LLC

August 6, 2018

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ATTACHMENT A

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petition of USTelecom for Forbearance)	WC Docket No. 18-141
Pursuant to 47 U.S.C. § 160(c) to Accelerate)	
Investment in Broadband and Next-Generation)	
Networks)	

DECLARATION OF DANE JASPER

1. My name is Dane Jasper. I serve as Chief Executive Officer at Sonic Telecom, LLC (“Sonic”). I have been with the company and its parent Sonic.net, LLC for 24 years. My responsibilities include strategic leadership, product design and planning, public relations, and customer service.

2. Sonic provides voice and broadband services to about 100,000 residential, small business and enterprise business customers in California.

3. Sonic’s primary product is Fusion Broadband+Phone, an internet access and voice telephone service that it offers for \$50 per month to residential customers, with an option for faster service through a bonded (two-line) offering for \$70. A similar offering with bonded (two-line) broadband speed is offered to very small business locations for \$90 per month. Depending upon location, the voice service may be POTS (when the last mile connection is an unbundled network element, or “UNE”) or VoIP (when the last mile connection is fiber-to-the-premises or -node). The voice services include unlimited nationwide calling, RoboCall blocking, caller ID, and voicemail, all at no extra charge.

4. The broadband component of Fusion provides internet access at up to 1 Gbps over Sonic’s own fiber. Where Sonic relies on DS0 UNE loops purchased from the incumbent local

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exchange company (AT&T/Pacific Bell), Sonic typically offers up to 50/15 Mbps using VDSL2 over a single loop or up to 100/30 Mbps over a bonded pair of loops (for an additional \$20 per month). In some locations, Sonic offers lower speeds using ADSL2+ technology due to the length of the loop. In areas without Sonic fiber or where DS0 copper loops do not have the reach or capacity required to provide Sonic's services, Sonic offers broadband over a wholesale arrangement, limited to speeds of up to 12 to 50 Mbps download. Less than 25% of Sonic's customers are served over this wholesale arrangement.

5. For enterprise customers, Sonic offers services over its own fiber, where it is available. Customers can obtain speeds of up to 10 Gbps or can purchase dark fiber for virtually unlimited capacity. In other areas, Sonic offers Ethernet over Copper ("EoCu") services. Sonic offers symmetrical service using e.SHDSL technology over four to twenty-four bonded copper pairs to deliver a symmetric service, generally from 5 Mbps/5 Mbps to 100 Mbps/100 Mbps. Sonic also offers asymmetrical service using VDSL2 and ADSL2+ technologies over four to twelve bonded copper pairs, delivering speeds from 50 Mbps/5 Mbps to 400 Mbps/50 Mbps. Sonic also offers EoCu over UNE DS1 loops at speeds up to 12 Mbps.

6. Sonic currently serves just under half of its customers using over 66,000 unbundled DS0 copper loops from AT&T.

7. For all of its transport needs, Sonic purchases dark fiber interoffice transport as UNEs from AT&T (in addition to colocation space, tandem services, and 911 interconnection). With these UNEs, Sonic has created a network connecting 195 central office wire centers in the San Francisco, Sacramento, and Los Angeles areas, 116 of which are classified as "Tier 3" under the Commission's unbundling rules.⁴⁵ The dark fiber is lit with Sonic equipment at up to 240

⁴⁵ 47 C.F.R. § 51.319(d)(3).

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Gbps (over two fiber strands), allowing for the deployment of a robust, reliable transport network connecting all central offices. Sonic has planned upgrades to increase these speeds to 520 Gbps. In one central office, Sonic uses just two dark fiber interoffice transport UNEs to transport traffic to and from over 8,500 fiber customers, each of which subscribes to Sonic's 1 Gbps symmetric broadband and telephone service.

8. Sonic offers many of its residential and very small business services at wholesale to other competitive providers around the state and also offers affordable backhaul over its UNE dark fiber transport network.

9. The use of UNEs enables Sonic to enter new markets, establish a market share to justify fiber construction, and create revenue flows that fund debt for fiber construction. In several markets including San Francisco, Berkeley, Albany, and cities in Sonoma and Marin Counties, California, Sonic began offering service using UNEs but after gaining a sufficient customer base was able to deploy its own fiber facilities. Sonic has also deployed fiber to businesses, cell towers, and schools—providing affordable and reliable connectivity to these locations. This “investment ladder” approach and race to build is key to Sonic's deployment-focused business model. Today 28% of Sonic's customers are served over its own fiber. Two years ago Sonic served just 4% of its customers over its own fiber.

10. UNEs uniquely assist our ability to build fiber facilities because we can begin to serve the customer, then build the fiber. This allows Sonic to make a reasonable business judgment, based on its service in the area over UNEs, that the deployment of fiber is a sound investment. UNEs also provide Sonic timing flexibility, which lowers the effective cost of deploying fiber: when purchasing business data services, a customer is required to make extended term commitments in order to lower the cost of the services it purchases from AT&T.

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When these term commitments extend beyond the period needed to deploy fiber, the customer ends up paying for business data services even after the fiber is built, adding to the cost of the fiber project. All of the markets where Sonic has built fiber optic networks to date have been feasible because of the preexisting UNE infrastructure and existing customers.

11. UNEs are also critical because deployment of fiber can be impeded even where there is an economic case for deployment. Where deployment is prevented by overloaded poles, inadequate conduit space, local moratoria, and permitting delays, UNEs allow Sonic to extend UNE-based DSL services to new areas notwithstanding these other impediments. For example, in some areas, the joint-owned utility pole is overloaded and the owner will not permit Sonic to reinforce the pole to resolve the preexisting safety issue, and to support Sonic's own fiber attachments. In other cases, the ILEC created obstacles to access to conduit, such as requiring separate Sonic vaults instead of allowing Sonic to place splice cases to accommodate fiber in the conduit and vault system. Other obstacles include delayed processing of routine applications, delayed access to information about the locations of poles and conduit, changing and undisclosed procedural requirements, and other artificial barriers to competitive fiber deployment. The City of San Francisco also has policies that impede the deployment of fiber. The City does not currently permit industry-standard trenchless construction methods such as directional boring or microtrenching. While the City's Order states that these trenchless technologies may be approved upon application to the Director, in Sonic's experience they are never approved.⁴⁶ In these areas, UNEs are absolutely critical last-mile facilities.

⁴⁶ See San Francisco Public Works, DPW Order No: 187005, Regulations for Excavating and Restoring Streets in San Francisco, § 9.2(C).

12. As an example, Sonic deployed fiber to San Francisco’s Mission District (along with portions of Noe Valley, Delores Heights and Potrero Hill) and had planned to pass 100% of the premises within the project area with its fiber network. Due to barriers imposed by pole owners (AT&T and Pacific Gas & Electric) and the moratoria on trenchless underground construction, Sonic was unable to deploy to almost 30% of the locations in this region. Without UNEs, the residents and businesses in these locations would not be able to obtain services from Sonic at all, which include Fusion over DS0s at speeds of up to 50/15 Mbps with voice for \$50 (or up to 100/30 Mbps using a pair of UNE DS0s for \$70), in addition to business services up to 400 Mbps.

13. Our entry utilizing UNEs has pushed other broadband providers to upgrade their services. Where Sonic deployed fiber in San Francisco for example, AT&T has followed with its own deployments. Sonic employees have been told by contractors working for AT&T that they were “rushing to catch up with Sonic.” Since Sonic’s deployment of fiber in San Francisco, Comcast and Wave cable have upgraded their cable networks to deliver gigabit service, and AT&T has deployed significant fiber-to-the-home there. One cable operator, Wave, deployed gigabit service in portions of Sonic’s service area less than a year ago.⁴⁷

14. The wholesale alternatives to UNEs available in Sonic’s service area are far more expensive and do not support the same capabilities as the UNEs that Sonic uses. Sonic is not aware of any wholesale commercial offerings in our service area that would provide us with the functionality of the DS0 loop. Unlike a commercial offering such as a special access service, DS0 copper loops do not include ILEC electronics that determine what services can be offered

⁴⁷ See Phil Britt, *Wave Broadband Gigabit Footprint Expanded*, Wave Business, Nov. 16, 2017, <https://business.wavebroadband.com/wave-broadband-gigabit-footprint-expanded/>.

over the loop. Rather, Sonic can deploy its own electronics on either end of the DS0 loop. In this way, Sonic can customize and control the services provided over the loop, including service quality and security.

15. In some areas, AT&T offers a wholesale commercial product that allows Sonic to sell AT&T's finished broadband internet access service. It is an inferior solution to using DS0 loops. Sonic cannot obtain the same speeds that it can over a bare copper loop. The typical installation interval is nearly three weeks. The service requires a one-year term commitment. Discontinuing service requires a full month's notice. The service is installed by an AT&T technician and is provided using an AT&T-branded modem.

16. Wholesale transport alternatives are also far more expensive and less functional than the dark fiber interoffice transport UNE. For example, to achieve capacity approaching what Sonic engineers of two dark fiber interoffice transport UNEs (240 Gbps), Sonic would need to purchase two dedicated Ethernet connections from AT&T of 100 Gbps each. With a 36-month term commitment, the monthly recurring charge is \$35,000 per end, or a total of \$70,000 per month for just one connection.⁴⁸ By contrast, Sonic pays less than \$100 per month for two dark fiber interoffice transport UNEs, which can each carry many hundreds of gigabits. Moreover, alternative providers rarely sell dark fiber capacity. Sonic therefore would not be able to purchase the same product. Rather, it would be limited to the speeds offered by these other providers. Finally, alternative providers generally do not collocate in AT&T's wire centers. To utilize these alternative sources, where they exist, Sonic would need to purchase connections from both of the AT&T wire centers to the interconnection points of the other provider. These

⁴⁸ See, e.g., AT&T Business Service Guide, AT&T Dedicated Ethernet (TCAL), at 26 (Rate Table ADE-PC-CHRG: AT&T Dedicated Ethernet (TCAL) – Port Connection – EPP Monthly Charges).

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additional circuits, with the additional electronics required, would greatly increase the cost of the service and would still not provide the same capacity Sonic achieves today over unbundled interoffice dark fiber.

17. It would also be very costly to build fiber to replace the dark fiber interoffice transport UNEs. Sonic pays \$23,373.48 per month for dark fiber interoffice transport, or under \$50 per dark fiber UNE per month. Sonic purchases interoffice dark fiber strands connecting 195 wire centers with an aggregate length totaling 51,568,630 feet. Even at an aggressive 4:1 sheath sharing ratio (that is, four of those strands on any one physical path), a replacement network would require 12,892,157 feet (over 2441 miles) of construction. At typical fiber construction costs of \$45 per foot, a replacement dark fiber network would cost over \$580 million to build (or monthly payments of \$3.5 million for 20 years, assuming 4% interest).

18. Higher input costs (assuming alternatives are available) would necessarily mean higher retail prices for Sonic's customers and less investment by Sonic. Loss of UNE DS0 loops and dark fiber would limit or end Sonic's ability to serve current customers, as well as to add additional customers near to current customers that will help make additional fiber deployments economically feasible. As a result, Sonic would be less able to attract the capital needed to deploy its own fiber facilities—which is its ultimate goal for all customers.

19. Loss of UNEs would also result in less fiber deployment from other providers. In most of the markets where it has deployed fiber, Sonic has been the first in a market to broadly do so, often soon followed by AT&T or by upgrades by Comcast or Wave.

20. Sonic would also face increases in costs without access to the 911/E911 database UNE. Without that access (or at higher rates), Sonic would likely turn to a third party for E911 services. That third-party service would likely cost \$50,000 per month.

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I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.

/s/ Dane Jasper

Dane Jasper
Chief Executive Officer
Sonic Telecom, LLC
SONIC TELECOM, LLC
2260 Apollo Way
Santa Rosa, CA 95407

August 6, 2018

Date

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ATTACHMENT B

INVESTMENT DATA

year	Sonic capex to revenue ratio	AT&T capex to revenue ratio
	CONFIDENTIAL	
2013		16%
2014		16%
2015		14%
2016		14%
2017		13%

Source for AT&T capex to revenue ratio: AT&T Inc., 2017 Annual Report, at 14 (Selected Financial and Operating Data, capital expenditures and operating revenues entries for 2013 through 2017).