

February 19, 2016

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

**Re: *Special Access for Price Cap Local Exchange Carriers, WC
Docket No. 05-25, AT&T Corporation Petition for Rulemaking to
Reform Regulation of Incumbent Local Exchange Carrier Rates
for Interstate Special Access Services, RM-10593***

Dear Ms. Dortch:

I hereby submit this Reply Declaration on behalf of Level 3 Communications, LLC, Windstream Services, LLC and XO Communications, LLC in this proceeding. I am currently serving as an outside consultant to the above-mentioned parties and am a Senior Consultant for a subsidiary of FTI Consulting.

The attached Reply Declaration contains Highly Confidential Information under the Protective Orders and should not be made publicly available. Parties who are admitted to the Protective Orders can request a copy of the Highly Confidential version of the Reply Declaration by contacting John Nakahata at Harris, Wiltshire & Grannis LLP (JNakahata@hwglaw.com).

Please do not hesitate to contact me at 202-274-4315 if you have any questions regarding this submission.

Sincerely,



Jonathan Baker

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

In the Matter of)
)
Special Access Rates for Price Cap Local) WC Docket No. 05-25
Exchange Carriers)
)
AT&T Corporation Petition for Rulemaking to) RM-10593
Reform Regulation of Incumbent Local)
Exchange)
Carrier Rates for Interstate Special Access)
Services)

**REPLY DECLARATION OF JONATHAN B. BAKER ON MARKET POWER IN
THE PROVISION OF DEDICATED (SPECIAL ACCESS) SERVICES**

I. Introduction

1. I have been asked by three competitive local exchange carriers (CLECs) – Level 3 Communications, Windstream, and XO Communications – to reply to various comments submitted in this proceeding on or around January 27, 2016. This reply supplements the declaration I submitted then.¹
2. Section II of this reply explains why the presence of competitive local exchange carriers (CLECs) with facilities near but not within buildings does not change my view that incumbent local exchange carriers

¹ Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services (dated Jan. 22, 2016) (attached to Letter from Jonathan B. Baker to Marlene H. Dortch, Secretary, FCC, WCC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (Baker Decl.).

(ILECs) would be expected to charge supracompetitive prices to customers in those buildings. Section III explains that a market is not automatically competitive simply because sellers obtain business by negotiating with buyers. Section IV discusses the incentive and the ability of ILECs to foreclose CLECs and harm retail competition by charging high wholesale prices. Section V concludes.

II. Nearby CLECs Do Not Prevent Supracompetitive ILEC Prices

3. Most buildings in which one or more customers purchase dedicated services are served by a single firm, almost all are served by no more than two firms, and when there is only one in-building provider, it is nearly always an ILEC.² In the special access data made available by the FCC, most markets (defined as dedicated services provided over a wireline connection to a customer location³) are either ILEC monopolies or duopolies served by an ILEC and a CLEC.⁴ In their comments in this proceeding, the ILECs raise the possibility that competition from potential entrants – CLECs not providing service within a building but with fiber

² Baker Decl. ¶¶ 44-46.

³ Each customer location is appropriately defined as a geographic market, and providers offering service to any customer in a building are viewed as market participants serving that location. Baker Decl. ¶¶ 36-40. Defining individual customer locations as geographic markets does not rule out also defining broader geographic markets. *Id.* at ¶ 36 & ¶ 36 n.20.

⁴ Some CLECs are cable providers offering dedicated services.

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facilities near by – would prevent supracompetitive pricing in these monopoly and duopoly markets.

4. The ILECs count firms offering best-efforts broadband as providers (as well as counting CLECs with fiber facilities).⁵ But firms providing best-efforts broadband are not market participants because best-efforts broadband lacks service quality features required by most dedicated services customers and may lack the dedicated bandwidth (in both directions) those customers require.⁶ In addition, the ILECs assert that their conclusions are not contingent on counting cable connections.⁷ For these reasons, cable providers are not considered in-building providers or nearby providers in the analyses in this declaration unless they are offering dedicated services using fiber facilities.⁸
5. AT&T's comments are predicated on the assumption that so long as at least one CLEC within a census block provides dedicated services to a

⁵ Comments of Verizon (dated Jan. 27, 2016) (attached to Letter from Evan T. Leo to Marlene H. Dortch, Secretary, FCC, WCC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (Verizon Comments) at 38; *see* Comments of AT&T Inc. (dated Jan. 22, 2016) (attached to Letter from Christopher T. Shenk to Marlene H. Dortch, Secretary, FCC, WCC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (AT&T Comments) at 12-13; Mark Israel, Daniel Rubinfeld & Glenn Woroch, Competitive Analysis of the FCC's Special Access Data Collection (dated Jan. 26, 2016) (attached to Letter from Glenn Woroch to Marlene H. Dortch, Secretary, FCC, WCC Docket No. 05-25 (filed Jan. 27, 2016) (ILEC Economic Comments) at 16; Comments of CenturyLink (dated Jan. 28, 2016) (attached to Letter from Russell P. Hanser to Marlene H. Dortch, Secretary, FCC, WCC Docket No. 05-25, RM-10593 (filed Jan. 28, 2016) at 9. More specifically, the ILECs count all firms identified on the National Broadband Map as DOCSIS 3.0 or Ethernet broadband providers. This broad definition includes, among other things, firms providing broadband service to residences (along with firms providing broadband service to businesses).

⁶ *See* Baker Decl. ¶¶ 31-33 (explaining why best efforts broadband is excluded from a product market defined as dedicated services provided over a wireline connection).

⁷ AT&T Comments at 15; ILEC Economic Comments at 6, 17.

⁸ Dedicated services provided by such firms are included in the FCC's special access data.

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building over its own facilities or has deployed fiber facilities, the price that an ILEC charges for dedicated services to any retail or wholesale customer within that census block is competitive.⁹ Verizon appears to assume that so long as at least one CLEC has deployed fiber facilities anywhere in a metropolitan area – a region much broader than a census block – prices are constrained to be competitive throughout the entire metropolitan area, or at least in those parts of the metropolitan area where demand is concentrated.¹⁰ The economic report referenced by the AT&T and Verizon comments supposes, similarly to what AT&T asserts, that a CLEC with a presence anywhere within a census block competes to serve all buildings within that block,¹¹ but is more cautious than AT&T in drawing out the implications of this supposition for prices.¹²

⁹ See AT&T Comments at 6 (“the presence of [sunk facilities deployed by competitors] ensures that ILEC prices will remain at just and reasonable levels and deters ILECs from attempting exclusionary or predatory pricing practices”), 7 (“it is not necessary that a competitor have a connection from its transport network to every single building in an area for that competitor to constrain ILEC prices in that area”), 16 (“even in the most unlikely extreme instance where a competitor has deployed only to a small corner of a census block, that competitor would generally be able to compete for the establishments that demand special access in the rest of the census block as well”).

¹⁰ See Verizon Comments at 20 (“facilities-based competitors typically enter markets at the level of a metropolitan area and not in small geographic areas like an individual office building or city block”), 21-22 (“when competitors announce the availability of their services, they do so in terms of broad geographic areas, such as entire metropolitan areas” and “deploy networks that are within reach of all or most of the concentrated demand within a given metropolitan area,” indicating that “competition is possible throughout that concentrated area”). Verizon appears to define areas where demand is concentrated variously as census blocks that account for 80% of U.S. business establishments, *id.* at 2, 25, or as those that account for the “majority” of high-capacity revenues. *Id.* at 22.

¹¹ ILEC Economic Comments at 4-5 (“even if only a single competitor has deployed facilities to just one building in a far corner of a census block, that competitor generally would be able to extend those facilities to all or most other buildings that have demand for special access services in that census block, and thus could compete for business at those other locations as well”).

¹² The ILEC Economic Comments state that multiple CLECs with nearby fiber (not just one), each making more than a limited investment, are needed to assure competitive prices. *Id.* at 8 (“when *multiple* carriers make *abundant* investments in sunk network facilities, competitive outcomes can be assured”) (emphasis

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6. The ILECs are not correct in supposing that the presence of a nearby CLEC makes dedicated services markets competitive, and prevents ILECs from charging supracompetitive prices for dedicated services, for three reasons. First, it would be impractical and uneconomic for a CLEC to connect every potential dedicated services customer in every building in a census block with a fiber ring passing through that census block. The fiber ring might not even have a node in the census block; it may be configured to provide transport rather than to provide service to buildings. Even if it has a node, the node might not be close enough to every building in the census block for connection to be cost-effective, the ring may not have sufficient capacity to connect every building close to a node, the CLEC may be unable to obtain building access or rights of way, or it may not be profitable for the CLEC to serve the end users in some buildings.¹³ Not surprisingly, CLECs offer dedicated services in only **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED] **[END HIGHLY CONFIDENTIAL]** of commercial buildings¹⁴ located in census blocks in which at least one CLEC reports that it serves dedicated services customers or reports that it has fiber facilities.¹⁵ Even in urban centers (where demand for dedicated

added). The ILEC Economic Comments do not indicate how many nearby firms would be sufficient to assure competitive pricing or how much investment by each would be required.

¹³ See Baker Decl. ¶¶ 97-104 (discussing impediments to facilities-based CLEC entry).

¹⁴ Commercial buildings are defined for this purpose as buildings with at least one dedicated services customer.

¹⁵ By contrast, the ILEC economists claim that CLECs have deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED] **[END HIGHLY CONFIDENTIAL]** of census blocks with special access (dedicated services) demand. ILEC Economic Comments at 16 & Tbl. C. They concede that when the

services within cities is likely on average the most concentrated), more than **[BEGIN HIGHLY CONFIDENTIAL]** **[REDACTED]** **[END HIGHLY CONFIDENTIAL]** of buildings with a dedicated services connection are not served by *any* CLEC.¹⁶

7. Contrary to what the ILECs appear to suppose, a CLEC that has built a fiber ring near a building has not made all the sunk expenditures required to serve that building with its facilities. The additional sunk expenditures include the cost of the lateral, the cost of the electronics, and expenditures required to obtain building access. After accounting for these and other costs, a recent study found that CLECs would not be able to obtain the revenue required to justify entry in most locations.¹⁷ Hence, nearby fiber providers would be expected to offer less of a competitive constraint than providers already serving a building with their own

count is limited to CLECs offering dedicated services connections using fiber facilities (removing, among other things, cable providers offering best-efforts broadband, which are not market participants), this figure declines to **[BEGIN HIGHLY CONFIDENTIAL]** **[REDACTED]** **[END HIGHLY CONFIDENTIAL]**. *Id.* at 17. The ILEC economists report penetration rates greater than **[BEGIN HIGHLY CONFIDENTIAL]** **[REDACTED]** **[END HIGHLY CONFIDENTIAL]** because they erroneously assume that a CLEC could serve any dedicated services customer in any commercial building and would find it profitable to do so. Their additional claim that CLECs have deployed facilities in the census blocks that include nearly **[BEGIN HIGHLY CONFIDENTIAL]** **[REDACTED]** **[END HIGHLY CONFIDENTIAL]** of the establishments with potential dedicated services demand, *id.* at 17 & Tbl. C, misleads for the same reasons.

¹⁶ In the urban center of the median of six cities (Chicago, Minneapolis, Rochester, Nashville, Tampa, and Washington D.C.), the FCC's special access data indicate that one or more CLECs served **[BEGIN HIGHLY CONFIDENTIAL]** **[REDACTED]** **[END HIGHLY CONFIDENTIAL]** of buildings with a dedicated services connection.

¹⁷ The study found that a CLEC would not find it profitable to build out its own last-mile facilities unless it can attain substantial end user density and penetration. CostQuest, Analysis of Fiber Deployment Economics for Efficient Provision of Competitive Service to Business Locations, Attachment A to Letter from Jennie Chandra, Windstream Corporation, to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 13-5 & 12-353, WC Docket Nos. 05-25 and 15-1, and RM-10593 (filed June 8, 2015).

facilities, and, in general, are better seen as potential entrants than as market participants.¹⁸

8. Second, when a CLEC is providing service to a multi-location customer, it frequently cannot reach every location with its facilities. Often some locations are served only by an ILEC's facilities.¹⁹ In order to serve those locations, and thus in order to compete for the multi-location customer's business, the CLEC must lease dedicated services from the ILEC at wholesale rates, or, if the option is available, add electronics to a suitable loop leased from the ILEC as an unbundled network element (UNE).²⁰

9. It can be costly and risky for CLECs to rely on an ILEC in order to serve some locations of multi-location customers. As discussed below in Section IV, ILECs often charge high wholesale prices for leased connections relative to retail prices, consistent with their incentive to limit retail competition from CLECs.²¹ CLECs leasing connections also bear

¹⁸ Baker Decl. ¶ 40.

¹⁹ Some such locations are outside areas where Verizon claims demand is concentrated, and thus are in areas that Verizon would not expect CLECs to serve. Other locations, whether inside or outside the areas where Verizon claims demand is concentrated, cannot be served by the CLEC for the reasons set forth in the previous two paragraphs. Moreover, CLEC last-mile dedicated services connections (including cable) are not widely available, Baker Decl. ¶ 38, so cannot be expected to provide alternative sources of wholesale connections.

²⁰ A UNE is often not available as an alternative. See Baker Decl. ¶ 37.

²¹ High wholesale prices for leased connections raise the CLEC's overall cost of serving a multi-location retail customer. This may discourage the CLEC from cutting price aggressively to win the customer's retail business and potentially make it uneconomic for the CLEC to serve the customer, even when the ILEC charges supracompetitive retail prices.

risks that the connections will become unavailable.²² Accordingly, even if potential competition from nearby CLECs were sufficient to prevent ILECs from exercising market power in providing dedicated services within a census block or area of concentrated demand, as the ILECs (erroneously) assume, such competition would still not be sufficient to prevent the ILECs from exercising market power in providing dedicated services to multi-location customers that have some locations within those areas and some locations outside them.

10. Third, the empirical analyses set forth in my initial declaration

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[REDACTED]

[REDACTED]

[REDACTED]

²² Baker Decl. ¶ 37 (UNEs), ¶ 38 (non-UNE facilities).

²³ I measure the number of nearby providers using a slightly broader definition than that employed in the ILEC Economic Comments. I identify a CLEC as nearby a customer location if it is not presently providing service to the location but has fiber within either the same census block or a census block with a boundary less than 0.5 miles away. Baker Decl. ¶ 43. The ILECs count as nearby only those providers with facilities within the same census block. ILEC Economic Comments at 11. The regression results reported in Table 2 of my initial declaration are qualitatively similar if the ILEC's definition of nearby provider is used instead of the definition I employed (in both cases excluding connections recorded in the National Broadband Map data that the ILECs added to the special access data).

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HIGHLY CONFIDENTIAL] [REDACTED]
[REDACTED]
[REDACTED]
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III. “Bidding Markets” Are Not Necessarily Competitive

11. The ILEC Economic Comments describe markets for dedicated services (apparently both wholesale and retail, though that is not stated explicitly) as “bidding markets.”²⁵ This description appears intended to motivate their focus on the possible competitive significance of potential entry by nearby providers in constraining ILEC prices, discussed above.

12. Wholesale customers and larger retail customers purchasing dedicated services do often negotiate prices with firms selling those services (*i.e.* purchase from sellers “bidding” to supply them).²⁶ But that fact does not automatically make the markets competitive. Indeed, the very authority on bidding markets cited in the ILEC Economic Comments “explodes” the “myth,” which it describes as “heavily pushed by legal and

²⁴ Baker Decl. ¶ 63. [BEGIN HIGHLY CONFIDENTIAL] [REDACTED]
[REDACTED] [END HIGHLY
CONFIDENTIAL] *Id.* at ¶ 68.

²⁵ ILEC Economic Comments at 8-9.

²⁶ Baker Decl. ¶ 20.

economic consulting firms," that "in 'bidding markets', market share does not imply market power; that the existence of two firms is enough to imply perfect competition, or even that just one firm is enough."²⁷ The market need not be perfectly competitive if some or all actual or potential rivals pose a limited competitive constraint, as when rivals experience impediments to expanding output.²⁸ Adding such a rival may make little difference to a dominant firm's ability to maintain supracompetitive retail prices.

13. For this reason, characterizing markets for dedicated services as bidding markets does not mean that ILEC prices are competitive wherever CLECs are present nearby. CLECs may vary in the extent to which they constrain ILEC retail pricing, regardless of whether they provide dedicated services nearby a customer (potential entrants) or provide dedicated services to other customers in a building (market participants).²⁹ As detailed in Section II above, **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED]

[REDACTED]

[REDACTED]

²⁷ Paul Klemperer, Bidding Markets 4 (June 2005), <http://www.nuff.ox.ac.uk/users/klemperer/biddingmarkets.pdf>. Klemperer's report is referenced in ILEC Economic Comments at 8 n. 15.

²⁸ More generally, sellers in markets where prices are determined by negotiation may differ in the competitive constraint they impose on each other because of differences in their costs and other competitive advantages such as product features or quality of service, differences in their information about each others' costs and other competitive advantages, and differences in their information about buyer preferences. U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines § 6.2 (2010).

²⁹ See Baker Decl. ¶¶ 78-79 (CLECs may experience impediments to expanding output).

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IV. ILECs Have an Incentive and the Ability to Foreclose CLECs and Harm Retail Competition by Charging High Wholesale Prices

14. When CLECs obtain dedicated connections or dedicated services in wholesale markets, they usually lease those services from an ILEC that also competes with them in providing dedicated services at retail.³⁰ Other markets are structured similarly: it is not uncommon for vertically-integrated firms (in this case, ILECs) to sell inputs (in this case, leased dedicated connections or dedicated services) to their downstream competitors (in this case, CLECs), even when the vertically-integrated firm is the primary or the only source of those inputs.³¹

³⁰ Baker Decl. ¶¶ 17-18; *see id.* at ¶ 16 (describing ways that CLECs may obtain the facilities it uses to provide dedicated services).

³¹ The Telecommunications Act of 1996 encouraged entrants to compete at retail with vertically integrated incumbent telephone providers by requiring the incumbents to make services and infrastructure available to new competitors at regulated rates. STUART MINOR BENJAMIN & JAMES B. SPETA, TELECOMMUNICATIONS LAW AND POLICY 224 (4th ed. 2015) (discussing statutory requirements for resale and unbundling of ILEC services and facilities). Competition between vertically integrated firms and downstream rivals to which they provide inputs is not limited to ILECs and CLECs. For example, Comcast, which accounts for a high share of video distribution in much of its cable footprint, provides NBCU content to video distributors (*e.g.* DISH) with which it competes. Franchisees such as fast-food or gasoline retailers often purchase key inputs from the company that owns the brand name, while located near company-owned outlets with which they compete. Manufacturers of durable products such as office equipment may sell replacement parts to independent service organizations, while also providing those parts to their own service departments which compete with the independents. In closely-related situations, an integrated firm may produce two products that must be used together, such as computers and peripheral equipment (*e.g.* printers), while a rival produces only one (*e.g.* printers). In such cases, the rival competes with the integrated firm but also relies on the integrated firm to sell the complementary product to its customers. (The two products that must be used together are demand complements from the perspective of the final customer. Upstream and downstream products are also demand complements, but the downstream firm bundles the upstream product before resale to the final customer.)

15. When a vertically-integrated firm sells a key input to its downstream rivals, it can exclude those rivals and harm retail competition by setting a high wholesale price relative to its retail price (*i.e.*, by creating a “price squeeze”).³² A vertically-integrated firm may employ this anticompetitive exclusionary strategy even when subject to downstream price regulation.³³

16. In dedicated services markets, an ILEC that benefits from foreclosing retail competition may recognize that benefit when setting the wholesale price where it has pricing flexibility or sells dedicated services not subject to *ex ante* price regulation.³⁴ By doing so, the ILEC can discourage aggressive retail price competition from CLECs or preclude such competition altogether, thereby preventing rivalry with CLECs from eroding the ILEC’s supracompetitive retail prices. In addition, by preventing retail competition, the ILEC may be able to prevent a CLEC from obtaining a “toehold” in the retail market that it might use in order to enter the wholesale market, and thereby maintain its market power at

³² Steven C. Salop, *Refusals to Deal and Price Squeezes by an Unregulated, Vertically Integrated Monopolist*, 76 *Antitrust L.J.* 709, 711 & 711 n. 7 (2010); MASSIMO MOTTA, *COMPETITION POLICY: THEORY AND PRACTICE* 491 (2004); JEAN TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* 194 (1988).

³³ See Mark Armstrong & David E.M. Sappington, *Recent Developments in the Theory of Regulation*, in 3 *HANDBOOK OF INDUSTRIAL ORGANIZATION* 1557, 1681 (Mark Armstrong & Robert Porter, eds. 2007) (a vertically-integrated upstream monopolist subject to price regulation that gives it some downstream pricing flexibility can exclude efficient rivals and entrants from downstream competition through a price squeeze).

³⁴ Baker Decl. at ¶ 38 n. 31.

wholesale.³⁵ Consistent with these incentives, ILECs often charge high wholesale prices for leased dedicated services connections relative to retail prices for similar connections.³⁶

V. Conclusion

17. Nothing in the comments filed by any ILEC, or the ILEC Economic Comment, leads me to question the conclusion I reached in my initial report that ILECs likely exercise market power in most dedicated services markets and would be expected to charge prices above competitive levels unless prevented by regulation.

³⁵ Salop, *supra* note 32 at 711 n. 7.

³⁶ Baker Decl. ¶ 38 & ¶ 38 n. 32.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my information and belief.

A handwritten signature in blue ink, appearing to read "Jonathan Baker". The signature is fluid and cursive, with the first name "Jonathan" and last name "Baker" clearly distinguishable.

Jonathan B. Baker

Executed on February 17, 2016