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REDACTED – FOR PUBLIC INSPECTION

June 28, 2016

VIA ECFS

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

Re: ***Business Data Services in an Internet Protocol Environment*, WC Dkt. No. 16-143; *Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans*, WC Dkt. No. 15-247; *Special Access for Price Cap Local Exchange Carriers*, WC Dkt. 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**
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Dear Ms. Dortch:

On behalf of Birch Communications, Inc., EarthLink, Inc., and Level 3 Communications, LLC (collectively, the "Joint CLECs"), I hereby submit the redacted version of the Joint CLECs' comments in response to the *Order and Further Notice of Proposed Rulemaking* released on May 2, 2016 in the above-referenced proceeding.[1] These redacted materials are being submitted pursuant to the terms of the *Modified Protective Order*,[2] *Second Protective Order*,[3] *Data*

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[1] *Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Tariff Investigation Order & Further Notice of Proposed Rulemaking, 31 FCC Rcd. 4723 (2016).

[2] *Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Modified Protective Order, 25 FCC Rcd. 15168 (2010).

Collection Protective Order,[4] *Business Data Services Data Collection Protective Order*,[5] and the *Tariff Investigation Protective Order*[6] in effect in this proceeding, as well as the *Protective Order Extension Order*.[7] Pursuant to instructions from Commission staff, the original Highly Confidential version and two copies of this submission have been submitted to the Secretary's Office, and an electronic copy of the Highly Confidential version of this submission has been delivered to Mr. Christopher Koves in the Pricing Policy Division of the Wireline Competition Bureau under separate cover.

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[3] *Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Second Protective Order, 25 FCC Rcd. 17725 (2010).

[4] *Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order and Data Collection Protective Order, 29 FCC Rcd. 11657 (2014); *see also Wireline Competition Bureau Now Receiving Acknowledgments of Confidentiality Pursuant to Special Access Data Collection Protective Order*, Public Notice, 30 FCC Rcd. 6421 (2015).

[5] *Investigation of Certain Price Cap Local Exchange Carrier Business Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order and Protective Orders, 30 FCC Rcd. 13680, App. A (2015).

[6] *Id.* at App. B.

[7] *Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593, DA 16-722 (rel. June 24, 2016).

Please contact me at (202) 303-1111 if you have any questions regarding this submission.

Respectfully submitted,

/s/ Thomas Jones
Thomas Jones

Counsel for Birch Communications, Inc., EarthLink, Inc., and Level 3 Communications, LLC

Attachment

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

In the Matter of	)	
	)	
Business Data Services in an Internet Protocol Environment	)	WC Docket No. 16-143
	)	
Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans	)	WC Docket No. 15-247
	)	
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 Internet Special Access Services	)	RM-10593

COMMENTS OF
BIRCH, EARTHLINK, AND LEVEL 3

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June 28, 2016

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COMMENTS OF
BIRCH, EARTHLINK, AND LEVEL 3

Birch Communications, Inc., EarthLink, Inc., and Level 3 Communications, LLC ("Level 3") (collectively, the "Joint CLECs"), through their undersigned counsel, submit these comments in response to the Order and Further Notice of Proposed Rulemaking ("*Order and FNPRM*") released on May 2, 2016 in the above-referenced proceeding.[1]

[1] *Business Data Services in an Internet Protocol Environment, Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans, Special Access for Price Cap Local Exchange Carriers, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Tariff Investigation Order & Further Notice of Proposed Rulemaking, 31 FCC Rcd. 4723 (2016) ("*Order and FNPRM*").

I. INTRODUCTION AND SUMMARY.

This proceeding presents an opportunity for the Commission to adopt reforms that could dramatically enhance consumer welfare. The regulatory regime for Business Data Services has been failing American businesses and consumers for decades. It does not establish the appropriate preconditions for competition, and it does not ensure that businesses pay reasonable Business Data Services prices where competition is not possible. As the Commission well knows, the harms caused by these shortcomings increase daily as Business Data Services become more and more central to the country's information economy.

The need for reform has become so apparent that Verizon and INCOMPAS, two parties that have taken opposing positions in this proceeding in the past, have now submitted a joint proposal for reform.[2] Under that proposal, the Commission would adopt a technology-neutral, competitor-neutral regime under which *ex ante* rate regulation would apply in non-competitive Business Data Services markets. All Business Data Services of capacity at or below a threshold not lower than 50 Mbps of capacity would be classified as non-competitive. All Business Data Services of capacity above one Gbps would be classified as competitive. Business Data Services of capacities between these thresholds would be subject to a market competition test under which Business Data Services offered in a census block would be deemed non-competitive unless four facilities-based competitors (the incumbent LEC and three non-incumbent LECs) are present in the census block. *Ex ante* rate regulation would apply in markets classified as non-competitive. That *ex ante* rate regulation would include price caps for TDM-based Business Data Services

[2] *See* Letter from Kathleen Grillo, Senior Vice Pres., Pub. Policy & Gov't Affairs, Verizon, and Chip Pickering, Chief Exec. Officer, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143 & 05-25 (filed June 27, 2016) ("June 27 Verizon-INCOMPAS Letter").

(hereafter referred to as circuit-based dedicated services or "CBDS"), a one-time reduction in CBDS rates to account for the freeze in the price caps under the *CALLS Order*, and application of a prospective X Factor of 4.4 percent minus inflation. As to packet-based Business Data Services (hereafter referred to as packet-based dedicated services or "PBDS"), the parties agree that the prices in non-competitive areas should be reduced. The parties would support a benchmark pricing approach if it satisfies the objectives of Sections 201 and 202 of the Act, and they agree that the benchmark should be reduced annually by 4.4 percent minus inflation.

The Verizon-INCOMPAS proposal provides a roadmap for the Commission to establish a sound regulatory regime for Business Data Services, which the Joint CLECs support. Of course, the proposal does not address all of the many details associated with the adoption of a new regime. These comments address the key issues that the Verizon-INCOMPAS proposal leaves unresolved, and, where the aspirational goals set forth in that proposal present special challenges, these comments discuss those challenges.

Competition does not constrain prices in most Business Data Services markets. The departure point for a sound regulation framework for Business Data Services must be an accurate assessment of competition in relevant Business Data Services markets. That assessment must begin with the recognition that, as of 2013, there was only one connection to 77.2 percent of locations and only two connections to 21.8 percent of locations.[3] Only a total of 2,148 locations

[3] *Order and FNPRM* at 222 tbl. 7. As used in these comments, the terms "connection" and "location" have the meaning defined in the special access mandatory data request. *See Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Order on Reconsideration, 29 FCC Rcd. 10899, App. A (2014) (defining (1) "connection" as "a wired 'line' or wireless 'channel' that provides a dedicated communication path between a *Location* and the first *Node* on a *Provider*'s network" and (2) "location" as "a building, other man-made structure, a cell site on a building, a free-standing cell site, or a cell

nationwide – fewer than 0.2 percent of such locations – had a total of four or more competitors with connections. There is no reason to believe that this situation has changed materially since then. Thus, actual competition in the provision of Business Data Services exists in only a tiny number of locations. Among the remaining locations, Business Data Services competition exists only where reasonably efficient competitive carriers can be expected to deploy connections to a customer location. However, significant barriers to entry prevent competitive carriers from deploying connections to most locations.

In the *FNPRM*, the Commission rightly finds that incumbent LECs possess market power in the provision of BDS. But the Commission also expresses the view that there may be widespread competition above 50 Mbps and that there are some pockets of competition below 50 Mbps. These assessments of the market overstate the level of BDS competition in several important respects.

No meaningful competition for Business Data Services of 100 Mbps or less. Given the absence of actual competition, the Commission's findings of Business Data Services competition must be based on the conclusion that prices are disciplined by the credible threat that competitors will deploy connections to customer locations. But there is no such credible threat for Business Data Services of 100 Mbps capacity or below. As John Merriman, Vice President of Finance for North America at Level 3, explains in a declaration filed with these comments, Level 3 cannot generally deploy connections to customers that demand Business Data Services of 100 Mbps capacity and below. **[BEGIN HIGHLY CONFIDENTIAL]**

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site on some other man-made structure where the *End User* [i.e., the purchaser of Business Data Service] is connected").

[END HIGHLY CONFIDENTIAL] In addition, the fact that incumbent LECs have no headroom under their price caps for CBDS further indicates the absence of competition for lower-bandwidth Business Data Services.

Market conditions are mixed above 100 Mbps. There is strong evidence that the market is not competitive at capacities above 100 Mbps in many situations. Mr. Merriman's build feasibility analysis indicates that Level 3 can sometimes deploy connections to end users that demand Business Data Services products with capacities above 100 Mbps when those customers are located sufficiently near a splice point in the Level 3 network. Moreover, Level 3 finds that it is generally feasible to build loops to locations where a customer demands Business Data Services above one Gbps in areas served by the Level 3 network.

The regression analyses tell a similar story. While the Commission appears to interpret the results of the regressions performed by its outside economics consultant, Dr. Marc Rysman, as supporting the inference that nearby fiber disciplines incumbent LEC prices for Business Data Services above 50 Mbps in every location, Dr. Rysman saw little statistical relationship between prices and the presence of nearby competitors for Business Data Services above 45 Mbps. The absence of such a finding does not indicate that competition exists for all Business Data Services above 45 Mbps or 50 Mbps. **[BEGIN HIGHLY CONFIDENTIAL]**

[END HIGHLY CONFIDENTIAL]

The Business Data Services regulatory regime should constrain prices in Business Data Services markets with insufficient competition. The Commission should adopt a regime that accurately identifies non-competitive Business Data Services markets and that effectively constrains leading competitors' prices in those markets.

Definition of Business Data Services. The Commission should define Business Data Services in a manner that accords with customer demand characteristics. In particular, the Commission should define Business Data Services in the same way it defined dedicated services in the *Data Collection Order*, except that the definition should include the requirement that the service be offered pursuant to a service level agreement requiring performance levels that support real-time applications. This will ensure that the Commission only classifies firms as market participants to the extent that they provide services that are true Business Data Services substitutes.

Business Data Services classified as common carrier service. The Commission should adopt its tentative conclusion to treat Business Data Services providers as common carriers. This makes sense given the importance of Business Data Services to business and carrier customers and the fact that even small Business Data Services providers may have the incentive to charge unreasonable prices or to refuse to offer service to some potential customers, such as those they compete with in other markets, in some circumstances.

Framework for identifying competitive and non-competitive markets. The Commission should adopt a framework for identifying non-competitive markets that is rooted in actual market conditions but that is also administratively simple. The competition framework should seek to

identify circumstances in which enough competitive carriers can be expected to deploy connections to a building such that prices will be set at the competitive level. Since it is infrequently the case that a competitive carrier can deploy a connection to provide a customer Business Data Services of 100 Mbps of capacity or below, the Commission should classify Business Data Services of 100 Mbps capacity and below as non-competitive in all geographic areas. Similarly, because competitive carriers can generally deploy a connection to serve a customer that demands Business Data Services of greater than one Gbps, the Commission should classify Business Data Services of a capacity above one Gbps as competitive in all geographic areas. To be sure, these national rules would not account for the small number of individual buildings at which competition exists for Business Data Services of 100 Mbps and below or at which competition does not exist for Business Data Services above one Gbps. But this appears to be an acceptable trade off given the simplicity of national rules.

Because competitive carriers sometimes can and sometimes cannot deploy Business Data Services of bandwidths above 100 Mbps and at or below one Gbps, the Commission should adopt a market competition test to identify circumstances in which these mid-bandwidth services are likely subject to competition. The market competition test should assess whether there are enough competitive carriers that likely are able to build connections to a building such that prices charged for the service at issue are likely to be constrained. Consistent with the Verizon-INCOMPAS proposal and established principles of competition policy and Commission precedent, a building should not be classified as competitive unless there are at least four competitors able to serve the building.

The most appropriate way of assessing whether a competitor can serve a building is to determine whether the building is close enough to a splice point on the competitor's network that

the competitor can profitably deploy a connection to the customer. Unfortunately, reliable information as to the location of splice points is unavailable. Accordingly, unless and until such data are available, the Commission should instead assess a competitor's ability to deploy a connection to a location based on whether the competitor has already deployed a connection within the vicinity of the customer's building.

Consistent with the Verizon-INCOMPAS proposal, the Commission can use census blocks as the geographic areas for the market competition test as applied to Business Data Services with capacity above 100 Mbps. Census blocks are generally small enough that if a competitor has deployed a connection to one location in a census block the competitor may well be able to deploy a connection to a second location in the same census block. This is an admittedly imprecise proxy, because there are many circumstances in which a competitor may be able to deploy a connection to one location in a census block (e.g., because the customer demands a 10 Gbps Business Data Service that justifies deployment of a fairly long connection) but not to another location in the same census block (e.g., because the customer demands only a 200 Mbps service that justifies deployment of a much shorter connection).

Nevertheless, customer connections are a better measure of competition than the available alternatives. For example, the presence of competitors with fiber in a census block is an inappropriate means of determining whether the competitors can build a connection to a Business Data Services customer location. Many providers have fiber that transits census blocks that the provider has no intention of using to provide Business Data Services. Furthermore, a competitor that has deployed fiber in a location may not have a splice point on its fiber network near enough to the customer to justify deployment of a connection to that customer. Splice points can only be established where a competitor has access to its fiber, e.g., via a manhole.

Absent such access, there is no chance that the competitor will deploy a connection to a customer location. In addition, there are many circumstances in which competitors deploy fiber to provide services other than Business Data Services and they do not deploy connections to Business Data Services customers in those circumstances. In fact, an analysis of the fiber location information in the data enclave shows that four or more competitors have deployed fiber in more than 540,000 census blocks in which there is not a single Business Data Services connection. It is therefore clear that the presence of fiber alone does not reliably indicate that the competitor can or will use that fiber to provide Business Data Services.

Accordingly, the Commission should only classify Business Data Services with bandwidth above 100 Mbps and at or below one Gbps as competitive in a census block in which four or more carriers have each deployed a connection. Under this test the Commission should assume that the incumbent LEC serves every location, and it should not count competitors that rely on unbundled network element loops to serve the customer.

Rerunning the test with updated data. The Commission should establish a process for collecting data on the location of Business Data Services connections on a regular basis, perhaps by modifying the Form 477 to mandate collection of this information. The Commission could then rerun the test using up-to-date information on a regular, e.g., annual, basis.

Review of the competition framework after three years. While the framework proposed herein for classifying markets as competitive and non-competitive is reasonable, it may not produce accurate results in every case or as the market may change in the future. The Commission should address this by periodically assessing the extent to which the framework should be modified so that it is more closely aligned with market conditions. Establishing a systemic review process is crucially important because, as the Commission's past attempts to

identify competitive Business Data Services markets have shown, there is a significant chance that any market competition test that relies on a proxy for competition will classify some or many markets incorrectly.

Application of ex ante rate regulation to leading competitors. The Commission should establish a technology-neutral and competitor-neutral regime for applying *ex ante* rate regulation in non-competitive markets. Under this regime, the Commission should define the leading competitor in each relevant Business Data Services market. Where that market is classified as non-competitive, the leading competitor would be subject to *ex ante* rate regulation. In current market conditions, the incumbent LEC is the leading competitor in all Business Data Services markets in its in-region territory, but this may not always be the case. As part of its periodic review of the competition framework the Commission should consider whether another class of competitors (or a single competitor) has emerged as a more powerful competitor in one or more relevant Business Data Services markets. If this is the case, those competitors should replace the incumbent LECs as the leading competitors in the relevant markets.

The Commission should not apply *ex ante* rate regulation as described herein to non-leading competitors. Such regulation is usually unnecessary because non-leading competitors usually have no choice but to charge prices at or below the level charged by leading competitors. It is also likely to be harmful, as non-leading competitors would be forced to incur unnecessary compliance costs. Moreover, to the extent that regulated rates are set based on some measure of the leading competitors' costs, imposing those rates on non-leading competitors would be especially harmful since non-leading competitors' costs are likely to be higher than leading competitors' costs.

Price caps and benchmarks. Price caps appear to be a less intrusive, more efficient form of *ex ante* rate regulation than benchmarks or anchor prices. For example, price caps give the regulated firm the flexibility to set rates to account for market conditions at any level as long as its average prices for services in a price cap basket do not exceed the price cap index. In contrast, benchmarks and anchor prices apply a specific price to each regulated service. Under price caps, the Commission would only need to set the price attributable to regulated Business Data Services once, after which prices would be constrained by operation of the cap and an X Factor. In contrast, a benchmark approach would require that the Commission periodically update the rate levels applicable to each regulated service. In price caps, the Commission allows carriers to establish pricing zones so that prices vary based on differences in average costs. In a benchmark or anchor regime, the Commission would presumably be required to design those pricing zones and to set the prices for each zone.

Nevertheless, consistent with the Verizon-INCOMPAS proposal, the Joint CLECs would support a benchmark approach to *ex ante* rate regulation for PBDS which satisfies the objectives of Sections 201(b) and 202(a) of the Act, i.e., one that ensures that rates are just, reasonable, and not unjustly or unreasonably discriminatory. But there are significant challenges associated with satisfying these objectives. Because it is likely impossible to set a price for every PBDS service in a non-competitive market, the Commission would need to apply the benchmark approach to a subset of services whose prices are supposed to constrain the prices for other services (similar to an anchor approach). It would be difficult to select which services to subject to regulation. And, that list of services would need to be revised as market conditions change. The regime would also be susceptible to forms of regulatory evasion that are difficult to police. For example, leading firms would have the incentive to improve the features and quality of the unregulated

services at the expense of the regulated services. In contrast, these problems do not arise under price caps because that approach subjects all of a service provider's services in a relevant market to regulation. Addressing these challenges would likely require a much more onerous and intrusive framework than the flexible framework of incentive regulation under price caps. Thus, at present, price caps appear to be the appropriate means of applying *ex ante* rate regulation to PBDS.

Setting price levels. The Commission must set the price levels of Business Data Services subject to *ex ante* rate regulation. In the case of CBDS, the Commission should require that incumbent LECs set prices for services currently subject to Phase II pricing flexibility at the level of the prices for services subject to price caps. Those services should then be incorporated into price caps at the reduced price levels. The Commission should then adopt a one-time reduction to the price cap indices to account for the absence of an appropriately set X Factor since 2003 (the year the X Factor was set equal to inflation under the *CALLS Order*). Finally, on a prospective basis, the Commission should apply an annual X Factor of 4.4 percent minus inflation.

As to PBDS, the most practical way to set prices would be to establish leading competitors' current prices in non-competitive markets and then reduce those prices by the differential shown in the regression analyses for services subject to at least some competition. In order to establish the level of current incumbent LEC PBDS prices, the Commission should require that the incumbent LECs file with the Commission the prices they charge their five largest wholesale and their five largest retail customers. The weighted average of those prices in each non-competitive area would comprise the incumbent's current prices. Those current prices would then be reduced by the amount by which regression analyses have shown incumbent LECs

reduce their Business Data Services prices in response to the presence of competitors, which is at least 19.7 percent. The resulting price would be used to set the level of the price cap index under price caps or the level of the benchmark or anchor under those regimes. Going forward, the Commission should develop a cost model so that it can adjust the prices under the applicable *ex ante* rate regime to correspond with the leading competitor's costs.

The benefits of tariffs. The Commission should require that leading competitors file tariffs setting forth the rates, terms, and conditions on which they offer Business Data Services in non-competitive markets. This is a more effective approach than alternatives such as publicizing rates on carrier websites because tariffs give customers and the Commission the benefit of the suspension, investigation, and prescription provisions set forth in Sections 204 and 205 of the Act. Those provisions provide an efficient and effective means of monitoring and correcting leading competitors' prices, one in which the tariffing party bears the legal burden (though not a significant practical burden) of demonstrating the newly filed or revised prices are lawful. In contrast, under a non-tariff regime, customers would need to rely on some form of adjudication regime, which will almost certainly be slower and more expensive. Moreover, in an adjudication the complainant bears the burden of proof, meaning that customers are less likely to achieve a favorable result and less likely to challenge the leading carrier's rates.

Tariffs have other advantages as well. Tariffs and the associated enforcement provisions of the Act are an important part of the existing price cap regime since that regime relies on the threat that above-band and above-cap rates will be subject to suspension and investigation as a means of enforcing price regulation. Moreover, by requiring leading competitors to file individually negotiated agreements as contract tariffs, the Commission can limit leading competitors' ability to engage in unreasonable discrimination without detection.

Preventing price squeezes. As the Commission recognizes in the *FNPRM,* competitors with market power over upstream inputs have the incentive and ability to engage in price squeeze tactics to prevent other competitors from competing effectively in downstream markets. There is evidence in this proceeding that incumbent LECs have done just that. The optimal means of preventing this conduct is to require that the leading competitor charge cost-based rates for wholesale Business Data Services. In the absence of this requirement, the Commission should require that leading competitors offer tariffed volume discount plans that set tiered discounts (setting higher discounts for larger volume tiers) that pass through to customers cost saving associated with selling large volumes of Business Data Services. These plans should be subject to the requirements governing volume and term plans described herein.

Ensuring reasonable prices for multi-location customers. Multi-location customers generally seek to have their Business Data Services provider serve all of their locations. Competitors that have not and cannot deploy connections to all of the customer's locations often cannot compete for the customer. Since the leading competitor is often the only Business Data Services provider that can serve all of a multi-location customer's locations, the leading competitor likely has the incentive and ability to force multi-location customers to pay unreasonably high Business Data Services prices in areas classified as competitive. To address this problem, the Commission should adopt a presumption that it is unreasonable for a leading competitor to charge a multi-location customer a price for Business Data Services that is above the regulated price for the same service in the closest non-competitive area.

The Commission should prevent leading competitors from using lock-up plans to suppress competition. *Ex ante* rate regulation addresses the harms caused by leading competitors' market power, but the Commission should strive to establish the preconditions for

increased competition that reduces the need for rate regulation. Accordingly, it is critical that the Commission complete the work it began in the Tariff Investigation by adopting a comprehensive bulwark against exclusionary conduct by incumbent LECs (or any other leading competitor).

Application of all-or-nothing prohibition. In the *Order*, the Commission rightly held that all-or-nothing provisions harm Business Data Services customers and competition by preventing customers from defining the volume of Business Data Services encompassed by a volume commitment. The Commission therefore held that it is unreasonable for incumbent LECs to condition the availability of the tariffed volume or term plans subject to investigation on the customer's commitment to include all of its Business Data Services purchases from the incumbent LEC under the plan. These requirements are equally harmful when included in any tariff or commercial agreement governing incumbent LECs' sale of Business Data Services in non-competitive markets. The Commission should therefore rule that all-or-nothing provisions in a leading competitor's arrangements for the sale of Business Data Services in non-competitive markets are unjust and unreasonable regardless of whether those arrangements are included in a standard tariff, contract tariff, or a non-tariffed commercial agreement for the provision of CBDS or PBDS.

Shortfall and Early Termination Penalties. In the *Order*, the Commission held that shortfall or early termination penalties in the tariffs subject to investigation are unreasonable to the extent that they exceed expectation damages. While an improvement, this ruling does not go far enough because setting these penalties at the level of expectation damages perversely causes incumbent LECs to make *more* money when a customer fails to meet its volume commitment than when the customer meets its volume commitment. This is inappropriate given that incumbent LECs bear essentially no risk under volume plans when selling Business Data

Services in areas where they face no competition. Thus, the Commission should replace the expectation damages standard with a presumption that shortfall and early termination penalties should be no higher than 50 percent of expectation damages for Business Data Services (CBDS or PBDS) sold by a leading competitor in non-competitive areas. This approach is reasonable because, as the Commission recognizes, incumbent LECs have voluntarily set shortfall and early termination penalties at, or even below, the 50 percent level in their tariffs.

Counting PBDS Toward Volume Commitments. Business Data Services customers generally cannot count their PBDS purchases toward their volume commitments for CBDS under incumbent LEC tariffs. Declining demand for CBDS has exposed customers to high shortfall and early termination penalties. Incumbent LECs have exploited this situation by conditioning some relief from shortfall and early termination penalties on customers' commitments to purchase large volumes of PBDS from the incumbent LECs, thereby threatening to lock up the wholesale PBDS market. This is likely to continue to be a problem even if the Commission adopts the reforms proposed herein. Thus, the Commission should require that any leading competitor permit customers to count PBDS purchases toward any volume commitment for CBDS in a non-competitive market.

Tying Arrangements. Leading competitors have the incentive to leverage their market power in non-competitive markets in ways that harm competitive markets. To prevent them from acting on this incentive, the Commission should prohibit leading competitors from conditioning the sale or the availability of a discount on Business Data Services in non-competitive markets on a customer's agreement to purchase Business Data Services in competitive areas or to purchase non-Business Data Services services. Notwithstanding these prohibitions, when an area encompassed by a leading competitor's Business Data Services

volume plan (either in the form of a tariff or commercial agreement) is reclassified from non-competitive to competitive, the customer should be given the right to (1) require the volume commitment under the plan to be reduced by the volume of Business Data Services purchased by the customer in the reclassified area or (2) count Business Data Services purchased by the customer during the life of the plan in the reclassified area toward the volume commitment in the plan.

Long-Term Commitments. Incumbent LECs frequently require that customers commit to purchase a volume of Business Data Services for many years (e.g., seven years under the Verizon Commitment Discount Plan) under existing tariffs. These multi-year commitments harm customers in at least two ways. They require that a customer predict the volume of Business Data Services that it will need to purchase from the incumbent LEC many years into the future. Where a customer experiences unanticipated declines in demand, it incurs shortfall penalties. Similarly, where a customer has the opportunity during the term commitment to substitute purchases from the incumbent LEC with self-deployed Business Data Services or Business Data Services purchased from a competitive carrier, the threat of shortfall penalties may cause the customer to forego those alternatives. Accordingly, the Commission should, among other things, adopt a presumption that the term associated with a Business Data Services volume commitment made to a leading competitor (including those for CBDS and PBDS) should be no longer than one year in non-competitive Business Data Services markets.

Automatic Renewal and Evergreen Provisions. As the Commission observes in the *FNPRM*, incumbent LEC tariffs and commercial agreements governing the sale of Business Data Services that require automatic renewal of customer volume commitments or, in the alternative, the payment of high monthly payments upon expiration, perpetuate the lock up effect of volume

commitments. Importantly, competitive carriers generally do not include provisions such as these in their sales contracts for Business Data Services. The Commission should therefore establish a rebuttable presumption that a leading competitor must permit customers to purchase Business Data Services on a month-to-month basis after expiration of a term commitment on the same rates, terms, and conditions that applied under the term agreement.

Fresh Look and Tariff Revisions. The Commission should adopt measures that are designed to ensure that the reforms described herein take effect as soon as possible, including that (1) incumbent LECS must modify their standard tariffs (i.e., tariffs other than contract tariffs) to comply with the new requirements so that they take effect for current customers; (2) customers currently purchasing CBDS pursuant to volume and term plans under standard tariffs or contract tariffs have a right to either reduce their volume commitments without penalties or terminate their plans or contract tariffs without penalty; and (3) customers currently purchasing PBDS under commercial agreements have a right to terminate their agreements without penalty. The Commission should extend similar fresh look rights to customers purchasing any services pursuant to commercial agreements that affect, directly or indirectly, the price paid for any Business Data Service. Customers should be given the right to exercise these rights any time within 180 days of the effective date of the new rules.

II. COMPETITION DOES NOT CONSTRAIN PRICES IN MOST BUSINESS DATA SERVICES MARKETS.

Analysis of Business Data Services market structure and data submitted in response to the mandatory data request confirms that there is virtually no actual competition in the provision of Business Data Services. According to Dr. Rysman's analysis of location data, as of 2013, 77.2 percent of locations were monopolies, and an additional 21.8 percent of locations were

duopolies.[4] In other words, only one percent of commercial buildings had more than two competitors in the building. Given the slow pace at which competitive carriers deploy connections, it is unlikely that the level of actual competition has either changed materially since 2013 or will change in the foreseeable future.[5]

Thus, the only form of competition that might discipline the prices of the leading competitor in the market is potential competition. That is, competition in the provision of Business Data Services exists only where reasonably efficient competitive carriers can be expected to deploy loop facilities to a customer location.[6] But significant barriers to entry, comprehensively documented in the record of this proceeding,[7] have prevented competitive

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[4] *Order and FNPRM* at 222 tbl. 7.

[5] For example, as explained in a previous filing in this proceeding, Level 3 aims to deploy connections to between 3,000 and 4,000 to new locations per year. Yet there are over one million locations at which customers demand Business Data Services. *See* Comments of Birch, BT Americas, EarthLink, and Level 3, WC Docket No. 05-25, RM-10593, at 7 (filed Jan. 27, 2016) ("Joint CLEC Comments").

[6] *See, e.g.*, Declaration of John Merriman on Behalf of Level 3 Communications, LLC, ¶ 12 tbl. 3, attached as an Appendix to Reply Comments of Birch, BT Americas, EarthLink, and Level 3, WC Docket No. 05-25, RM-10593 (filed Feb. 19, 2016) ("First Merriman Decl."). Approximately **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** percent of the commercial buildings in the ten most populous MSAs in the U.S. either meet Level 3's potential target criteria for loop deployment or are buildings to which Level 3 has already deployed a loop. *Id.* This confirms that the prospect of future competitive LEC connection deployment cannot possibly discipline incumbent LECs in their provision of Business Data Services.

[7] *See, e.g.*, XO Communications, LLC Comments, WC Docket No. 05-25, RM-10593, at 14 (filed Jan. 27, 2016) ("[A]dditional and unexpected costs or hurdles arising from public ROW access and dealing with building owners and landlords often lead XO to cancel a build that otherwise may be economic."); Windstream Services, LLC, Comments, WC Docket No. 05-25, RM-10593, at 36, 39 (filed Jan. 27, 2016) ("[E]ven the largest competitive providers have not been able to build their own last-mile facilities to more than a small fraction of all the business buildings to which the ILECs have connectivity by virtue of their incumbency . . . [because]

LECs and cable companies from deploying connections to new locations. These providers can do so only where customer locations are near a point in their fiber transport facilities from which a connection can be deployed, where the customer at the location is suitable for the competitive carrier's service offerings, and where the revenues associated with the location are sufficient to make connection deployment profitable. Moreover, incumbent LEC lock-up plans have limited the extent to which wholesale customers can switch to competitive providers of Business Data Services.[8]

The results of Dr. Baker's regression analysis of billing data confirm that incumbent LECs "are likely able to exercise market power in most markets, and would be expected to charge prices above competitive levels unless prevented by regulation."[9] In many markets, some, if not most or all, competitive LECs provide only a limited constraint on incumbent LEC prices, and the prospect of entry is unlikely to deter incumbents from charging supracompetitive prices. Bias in the data used in the regressions likely masks the full extent to which incumbent LECs exercise market power in the provision of Business Data Services. That is, the magnitude of the inverse relationship between the number of competitors and the prices incumbent LECs charge for Business Data Services likely is even greater than Dr. Baker observed.

In the *FNPRM*, the Commission rightly finds that incumbent LECs possess market power in the provision of Business Data Services, in part relying on Dr. Rysman's econometric analysis. Dr. Rysman's regressions of incumbent LEC rates for DS1 and DS3 rates "show that

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widespread CLEC last mile build-outs to business customers remain economically infeasible today.").

[8] Joint CLEC Comments at 42.

[9] *Id.* at 49.

competition in the building, and the census block, consistently lowers prices in economically and statistically significant ways,"[10] and while he sees "some effects of competitive fiber in the census block, even if that fiber is not connected to any buildings in the block[,] . . . regressions for higher bandwidth lines show muddled and conflicting effects of competition, often at low levels of statistical significance."[11]

Notwithstanding these conclusions, the Commission suggests in the *FNPRM* that "fiber-based competitive supply within at least half a mile generally has a material effect on prices of BDS with bandwidths of 50 Mbps or less,"[12] while "[s]upply of BDS with a bandwidth in excess of 50 Mbps tends to be more competitive than supply of BDS with lower bandwidths."[13] However, as demonstrated below, 100 Mbps is the appropriate capacity threshold for distinguishing between low-bandwidth and high-bandwidth Business Data Services. Competition at and below that threshold is *de minimis*, and above that threshold it is mixed.

There is no meaningful Business Data Services competition at or below 100 Mbps. The evidence regarding competitive carriers' ability to deploy connections to customer locations **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** strongly supports the conclusion that there is little competition for Business Data Services with bandwidths of 100 Mbps or less.

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[10] *Order and FNPRM* at 212.

[11] *Id.*

[12] *Id.* ¶ 161.

[13] *Id.* ¶ 162.

First, Level 3's experience demonstrates that competitive carriers generally cannot deploy fiber connections to customers that demand Business Data Services with capacity of 100 Mbps or less. Thus, the presence of nearby fiber has virtually no effect on competition at 100 Mbps and below. As described in his attached declaration, John Merriman analyzed the maximum distance in linear feet at which Level 3 finds it economically justified to construct fiber connections between a splice point on Level 3's transport network and the location of a Business Data Services customer (these maximum distances are referred to as "construction feasibility limits").[14] The analysis was prepared using (1) the average cost per linear foot of constructing fiber connections between a Level 3 splice point and a customer location for products ranging from T1 connections to 10 Gigabit Ethernet connections for the central business district and areas outside the central business district of each of the top 10 MSAs, and (2) the monthly recurring charge for each Business Data Services product, which increases as the bandwidth of the connection increases.[15] Accordingly, the capacity or bandwidth of a Business Data Service is a proxy for the potential revenue associated with providing the service. The MRCs for each indicated Business Data Services product and the associated per-linear foot costs were used to calculate the construction feasibility limits, in each case assuming that the

[14] Second Declaration of John Merriman on Behalf of Level 3 Communications, LLC, ¶ 2, attached hereto as an Appendix ("Second Merriman Decl.").

[15] These costs include the per-foot cost of deploying fiber, as well as the fixed costs of electronics and risers, etc. These fixed costs, although somewhat variable among deployments, are not distance sensitive and were estimated to equal **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** per deployment. *Id.* ¶ 3(a).

investment in new facilities would be recovered over an **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** period.[16]

Mr. Merriman explains that for each product and MSA (both inside and outside the central business district), "Level 3 generally would consider economically justified construction distances less than the construction feasibility limits shown in the table[.]"[17] He further explains that connecting prospective customers at distances equal to or slightly greater than the specified construction feasibility limit would require further evaluation, while construction of facilities to connect customers located at a materially greater distance than the specified construction feasibility limit generally would not be considered economically justified.[18]

Of particular significance when assessing potential competition, Mr. Merriman emphasizes that the construction feasibility limit must be "measured from a splice point on Level 3's transport network, not merely from any point along the relevant fiber route."[19] This is because "Level 3 must have readily available access to its installed fiber transport network to be able to construct a new connection to that network," and "[s]uch access is only available at splice points, which can be accessed using nearby manholes and similar physical access portals."[20] Thus, the construction feasibility limit for each product effectively describes the geographic area surrounding a splice point in Level 3's transport network that, at least hypothetically, could be

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[16] *Id.* ¶ 3(c).

[17] *Id.* ¶ 4.

[18] *Id.*

[19] *Id.* ¶ 5.

[20] *Id.*

subject to competitive influence from Level 3's provision of service in a given census block. In this way, Mr. Merriman's declaration supports the conclusion that the capacity of the service that a customer demands can be used to define the relevant product market and effectively determines the geographic extent to which competitive services are available.

Mr. Merriman's analysis shows that Level 3 cannot economically deploy new connections at capacities of 100 Mbps or less to most locations, demonstrating that nearby providers have little or no competitive impact at bandwidths of 100 Mbps or less. Indeed, Mr. Merriman confirms that "it is infrequently the case that Level 3 can deploy a new fiber connection to serve a customer demanding only 100 Mbps of bandwidth or below. This is because the distance between a customer location and a splice point on Level 3's network usually exceeds the construction feasibility limits for bandwidths of 100 Mbps and below."[21] For example, the construction feasibility limit for Fast Ethernet service with a committed data rate of 100 Mbps only exceeds **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** linear feet inside the central business district of the **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** MSAs.[22] Most customer locations lie outside this limit. The **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** linear feet maximum construction feasibility limit is **[BEGIN HIGHLY CONFIDENTIAL] [END HIGHLY CONFIDENTIAL]** of the diameter of the median census block that the Commission describes in the *FNPRM* and **[BEGIN HIGHLY CONFIDENTIAL] [END**

[21] *Id.* ¶ 6.

[22] *Id.* at tbl.

HIGHLY CONFIDENTIAL] of the diameter of the 75th percentile census block that the Commission describes, indicating that the area of competitive influence of a lower-bandwidth Business Data Service is **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** the size of most census blocks.[23]

Second, the introduction of Ethernet-over-HFC has not altered the market for Business Data Services with capacity at or below 100 Mbps. The Commission states that "it may already be or soon will be the case that cable companies are able to supply BDS everywhere they have deployed DOCSIS 3.0."[24] But this conclusion is contrary to record evidence, which confirms that Ethernet-over-HFC is not a source of actual or sufficient potential Business Data Services competition to constrain incumbent LEC prices.[25]

As Chris McReynolds of Level 3 has explained, Ethernet-over-HFC services "are often subject to high levels of jitter and a relatively low maximum transmission unit [(MTU)]" and "are not as reliable as the cable companies' Ethernet-over-fiber services or the dedicated services offered by incumbent and competitive LECs."[26] In addition, cable companies "generally do not

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[23] *See id.*; *Order and FNPRM* ¶ 214.

[24] *Order and FNPRM* ¶ 221.

[25] For this reason, the Commission should conclude that, contrary to the claims of CenturyLink, et al., *see* CenturyLink et al.'s Motion to Strike, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 17, 2016), recently submitted data pertaining to the location of cable facilities does not affect the outcome of the analyses performed by Dr. Rysman, Dr. Baker, and others.

[26] Declaration of Chris McReynolds on Behalf of Level 3 Communications, LLC, ¶ 22, attached as an Appendix to Comments of Birch, BT Americas, EarthLink, and Level 3, WC Docket No. 05-25, RM-10593 (filed Jan. 22, 2016) ("McReynolds Decl."); *see also* Letter from Thomas Jones, Counsel for Level 3 and EarthLink, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, RM-10593, at 2-3 (filed Apr. 14, 2016) ("Level 3 and EarthLink Apr. 14 Ex Parte").

offer robust service level agreements"[27] for Ethernet-over-HFC. Thus, unless cable companies can provide Ethernet-over-HFC, customers with service level guarantees comparable to those provided to customers of fiber-based PBDS, Ethernet-over-HFC cannot be considered to be in the same market as Business Data Services. Moreover, with a maximum capacity of 10 Mbps (and sometimes below), Ethernet-over-HFC also cannot deliver speeds sufficient to serve many business customers' locations.[28]

But in the event that Ethernet-over-HFC becomes a robust competitor to Business Data Services provided by the incumbent LECs, this fact alone will not result in effective Business Data Services competition. As Sprint observes, "even if the capabilities of HFC networks managed to catch up to, and keep pace with, the requirements of each and every [Business Data Services] consumer, and even if cable providers managed to overbuild the footprint of each and every ILEC with HFC, there would still be a duopoly [in the vast majority] of locations with

[27] McReynolds Decl. ¶ 22; Level 3 and EarthLink Apr. 14 Ex Parte at 3 ("[C]able companies also do not in most circumstances offer customers purchasing Ethernet-over-HFC the same performance capabilities (including jitter as well as other performance characteristics) or, relatedly, prioritization capabilities (also known as classes of service) that are available to Ethernet-over-fiber customers. This means that customers using Ethernet-over-HFC cannot be sure that traffic associated with applications that are sensitive to delay and packet loss will be transmitted at acceptable performance levels or adequately prioritized.")

[28] Level 3 and EarthLink Apr. 14 Ex Parte at 4; *see also* Letter from Matthew A. Brill, Counsel for Comcast Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, at 3 (filed Mar. 25, 2016).

[Business Data Services] demand,"[29] which clearly could not constrain incumbent LEC market power.[30]

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[32] **[END HIGHLY CONFIDENTIAL]**

Third, the Commission has found that price cap incumbent LECs do not have headroom under the Commission's price caps. That is, the actual price indices ("APIs") of the six largest price cap incumbent LECs for DS1 and DS3 services – both Business Data Services below 50 Mbps – are more than 99 percent of their price cap indices ("PCIs").[33] This is notable because PBDS is a substitute for CBDS. Thus, evidence of high incumbent LEC prices for CBDS confirms the absence of competition from CBDS and PBDS at or below 50 Mbps.

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[29] Letter from Jennifer P. Bagg, Counsel for Sprint Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, RM-10593, at 2 (filed Mar. 24, 2016).

[30] *See* Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services, WC Docket No. 05-25, RM-10593, ¶ 6 (filed Jan. 28, 2016) ("Baker Decl.").

[31] Declaration of Jonathan B. Baker on Competition and Market Power in the Provision of Business Data Services, WC Docket Nos. 16-143, 15-247, & 05-25, RM-10593, ¶ 31 (filed June 28, 2016) ("Baker FNPRM Decl.").

[32] *Id.* ¶ 30.

[33] *Order and FNPRM* ¶ 241 & tbl. 6.

The record does not support the conclusion that all Business Data Services above 100 Mbps are competitive. The available evidence demonstrates that the level of competition for Business Data Services above the 100 Mbps capacity threshold is mixed, and there is strong evidence that the market is not competitive in many situations.

First, Mr. Merriman's declaration supports the conclusion that incumbent LECs have market power in the provision of many Business Data Services with capacities above 100 Mbps. He explains that sometimes Level 3 can deploy a new fiber connection to serve a customer that demands more than 100 Mbps of bandwidth, up to and including one Gbps of bandwidth, and sometimes it cannot.[34] That is because Level 3 can efficiently deploy loops to customers demanding Business Data Services in this range of capacities only as long as the customer is within the maximum distance to which Level 3 can deploy a connection for the relevant capacity.[35]

Mr. Merriman explains that "[w]hen a customer demands Business Data Service with a committed data rate of above 100 Mbps and less than or equal to 1,000 Mbps, whether Level 3 will find it economically justified to construct a fiber connection from a splice point to the customer's location depends on whether the customer's location is within the construction feasibility limit for the committed data rate requested by the customer."[36] He emphasizes that "there are many circumstances in which customers that demand Business Data Service in this range of capacity are within the construction feasibility limit and many circumstances in which

[34] Second Merriman Decl. ¶ 6.

[35] *Id.*

[36] *Id.*

such customers are not within the construction feasibility limit."[37] For example, if a customer were to request Gigabit Ethernet service with a committed data rate of 500 Mbps and located 1,000 linear feet from the nearest splice point in Level 3's network, the request would **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** linear feet construction feasibility limit for that service and committed rate in the central business district of **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** but would **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** linear feet construction feasibility limit in the central business district of **[BEGIN HIGHLY CONFIDENTIAL]** [38] **[END HIGHLY CONFIDENTIAL]**

Finally, Mr. Merriman's declaration supports the conclusion that the market for Business Data Services above one Gbps is competitive. According to Mr. Merriman, "Level 3 can usually deploy a new fiber connection to serve a customer demanding more than one Gbps of bandwidth . . . because the distance between a customer location and a splice point on Level 3's network is usually within the construction feasibility limits for bandwidths in excess of one Gbps."[39] For example, the construction feasibility limit for 10 Gigabit Ethernet service exceeds **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY**

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[37] *Id.*

[38] *Id.* at tbl.

[39] *Id.* ¶ 6.

CONFIDENTIAL] MSAs analyzed, both inside and outside the relevant central business district.[40]

Second, the regression results also support the conclusion that the level of competition for Business Data Services above 100 Mbps of capacity is mixed. The Commission appears to interpret Dr. Rysman's findings to support the inference that nearby fiber disciplines incumbent LEC prices for Business Data Services above 50 Mbps in every location.[41] But Dr. Rysman's analysis does not support this conclusion. In fact, Dr. Rysman saw little statistical relationship between prices and the presence of nearby competitors for Business Data Services above 50 Mbps. The Commission states that the fact that there is little statistical relationship for those services could mean that (1) competition broadly exists for these services, (2) to the extent any competition exists, it is *de minimis* and therefore cannot produce material competitive effects, or (3) there are too little data and/or too many uncontrolled for variables for a statistical relationship to emerge.[42] Given that any of these three explanations accounts for the absence of an observable inverse relationship between nearby fiber and incumbent LEC prices, it is inappropriate to assume that the explanation is that competition broadly exists for all services above 50 Mbps.

As Dr. Baker has explained, the bias that likely masks the magnitude of the inverse relationship between the presence of competitors and incumbent LEC prices in his regressions is

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[40] *Id.* at tbl.

[41] *See Order and FNPRM* ¶¶ 237, 244.

[42] *Id.* ¶ 244.

more likely to exist for higher capacity services.[43] Dr. Baker identified six statistical reasons – unobservable customer heterogeneity, unobservable impediments to competitive LEC expansion, errors in measuring the price of Business Data Services, multi-year incumbent LEC contracts, unobservable wholesale customer switching costs, and incumbent LEC wholesale pricing policies – that explain why the magnitude of the inverse relationship between the number of rivals and price is likely *greater* than his regressions indicate.[44] As a result of these factors, "each additional rival is likely associated with a greater reduction in ILEC retail prices than was measured by the regression equations."[45] These factors also "explain why the absence of a clear relationship in the CLEC retail price data and the wholesale price data should not be interpreted

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[43] Baker Decl. ¶ 75.

[44] *Id.* ¶¶ 68-94. In supplemental declarations, Dr. Baker explained that, contrary to the claims of the ILEC Economists, endogeneity of entry, missing data, and estimation of the primary specification for a subsample limited to locations in price cap regions do not bias the regression results away from an inverse relationship between the number of rivals and price. *See* Second Supplemental Reply Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services, WC Docket No. 05-25, RM-10593, ¶ 17 (filed Apr. 21, 2016) ("Baker Supplemental Reply Decl.") ("[T]he possibility of endogeneity bias is unlikely to be important practically when analyzing the relationship between the number of rivals and prices in the FCC's Special Access Data. Thus, this possibility does not call into question my conclusion that the regression results are biased against finding an inverse relationship."); *id.* ¶¶ 19-20 (explaining that missing price data did not bias results toward finding an inverse relationship between the number of rivals and prices); *id.* ¶¶ 21-24 (explaining that most omitted connections were not sources of competition in 2013, that even if omitted connections could have been sources of competition, that it would not necessarily have affected Dr. Baker's regression results, and that an empirical test of the regressions shows that the results are not biased, and in fact are robust, with respect to omitted connections); *id.* ¶ 27 ("Because prices can and do vary within price cap regions, the inverse relationship between the number of rivals and prices that appears when the primary specification is estimated on a price cap region sample is not a test of the direction of the bias in the regression results.").

[45] Baker Decl. ¶ 68.

as evidence against a negative relationship between the number of rivals and price."[46] Thus, it should be no surprise that Dr. Rysman did not find such an inverse relationship at higher capacities, and the absence of such a finding does not indicate that competition exists for all Business Data Services above 50 Mbps.

In his declaration filed today, Dr. Baker finds that Dr. Rysman's analysis is broadly consistent with his January 2016 analysis of the data from the mandatory data request.[47] Although Dr. Rysman analyzed retail and wholesale prices together and separated bandwidth categories, while Dr. Baker analyzed incumbent LEC retail prices separately and bandwidths together,[48] they both conclude "that greater rivalry tends to lower the price of business data services."[49] Dr. Baker finds that this result "is robust to the differences in the empirical approaches" that he and Dr. Rysman have utilized.[50]

Dr. Baker's specifications filed today are modeled on Dr. Rysman's regression analyses with certain modifications.[51] First, while Dr. Rysman's specifications account for the presence of in-building rivals and the number of nearby rivals, Dr. Baker's specifications instead require the presence of at least one in-building rival and at least one nearby rival, while also accounting

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[46] *Id.*

[47] Baker FNPRM Decl. ¶ 2.

[48] *Id.* ¶ 8.

[49] *Id.* ¶ 9.

[50] *Id.*

[51] *Id.* ¶ 11.

for the number of in-building and nearby rivals.[52] Second, Dr. Baker's specifications differ from Dr. Rysman's in that they include "variables to account for the competitive influence of the second and third nearby provider," thereby "allow[ing] for the possibility that each incremental nearby provider influences price differently."[53] Third, Dr. Baker identifies nearby providers as those with fiber-based facilities and, therefore, those that have the potential to provide high-bandwidth connections, while Dr. Rysman identifies nearby rivals as those that "have a facilities-based connection in the relevant Census block."[54] Fourth, Dr. Baker introduces fixed effects to control for provider and bandwidth by identifying the provider and bandwidth speeds for **[BEGIN HIGHLY CONFIDENTIAL]**

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[52] *Id.* ¶ 12.

[53] *Id.* ¶ 13.

[54] *Id.* ¶ 14. Dr. Baker explains that "[i]t is appropriate to focus on fiber-based providers, as distinguished from providers not using fiber-based facilities, when identifying nearby firms with the potential to provide high bandwidth services because fiber connections are typically employed when high transmission capacity is required." *Id*. Dr. Baker explains that his "approach to identifying in-block high-bandwidth rivals is likely overinclusive because it does not address the plausible possibility that different kinds of nearby providers . . . would pose different degrees of competitive constraint." *Id.* n.22. Dr. Baker also notes that "[i]t is not possible in the data to identify separately, among firms with fiber in the Census block but no connections, firms that offer splice points in the Census block and those purely passing through the Census block with no splice point." *Id.*

[55] *Id.* ¶ 15.

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[61] **[END HIGHLY CONFIDENTIAL]**

As with Dr. Baker's primary specification, bias in the data likely mute the extent of the inverse relationship between price and rivalry observed in the regressions performed for high-

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[56] *Id.* ¶ 16.

[57] *Id.* ¶ 17. Dr. Baker's results that analyze census tract fixed effects are consistent with his results that analyze county fixed effects. *Id.* ¶ 18.

[58] *Id.* ¶ 17.

[59] *Id.* ¶ 19.

[60] *Id.* ¶ 20. **[BEGIN HIGHLY CONFIDENTIAL]**

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[61] *Id.* ¶ 21. **[BEGIN HIGHLY CONFIDENTIAL]**

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bandwidth Business Data Services.[62] Dr. Baker explains that two of the factors that tend to bias the results away from an inverse relationship between the number of rivals and price, unobservable customer heterogeneity and the fact that retail prices "may tend to incorporate greater measurement error when the customer is purchasing managed services along with business data services," may become more significant at higher bandwidths.[63] **[BEGIN HIGHLY CONFIDENTIAL]**

[64] **[END HIGHLY CONFIDENTIAL]**

Multi-location customers likely have fewer competitive choices than other Business Data Service customers. As the Commission observes in the *FNPRM*, spread-out multi-location customers that may "require lower bandwidth, highly reliable, services in areas with lower business densities, may not face the same competitive choices as other customers."[65] Such customers frequently demand that their service provider serve all of their customer locations, and many competitive carriers are unable to do this with on-net facilities alone. Thus, multi-location customers that demand high-bandwidth Business Data Services at some locations and low-bandwidth Business Data Services at other locations are often unable to take advantage of competitive offers for high bandwidth services to the extent the providers of those services cannot also provide the low-bandwidth services those customers demand.

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[62] *Id.* ¶¶ 23-26.

[63] *Id.* ¶ 25.

[64] *Id.* ¶ 26.

[65] *Order and FNPRM* ¶ 201.

III. THE COMMISSION SHOULD ADOPT A TECHNOLOGY-NEUTRAL AND COMPETITOR-NEUTRAL REGIME FOR REGULATING BUSINESS DATA SERVICES.

For too long, Business Data Services have been subject to a "hodgepodge of wholesale access rights and pricing mechanisms" under which different rules have applied based on arbitrary and incoherent differences in technology and the service provider's identity.[66] This regime has harmed competition and business customers in numerous ways. Most importantly, it resulted in the elimination of *ex ante* regulation for incumbent LECs' PBDS even though, as discussed above, the incumbent LECs obviously have substantial and persisting market power in the provision of PBDS in most relevant markets.

As the Commission recognizes in the *FNPRM*, its past attempts to identify relevant Business Data Services markets that are subject to competition by using unreliable proxies such as competitors' collocations in an MSA and hopeful predictions of future entry have been unsuccessful.[67] Again, reliance on these mechanisms as a means of identifying Business Data Services markets that are or will be competitive has resulted in the elimination of *ex ante* rate regulation for incumbent LECs in many relevant markets in which the incumbent LECs retained market power. The incumbent LECs have leveraged that market power to maintain prices above costs and to engage in exclusionary conduct that has slowed competitive entry.

Accordingly, consistent with the Verizon-INCOMPAS proposal, it is critical that the existing regime be replaced by one that (1) applies the same regulatory framework to CBDS and PBDS; (2) applies *ex ante* rate regulation in a non-competitive Business Data Services market;

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[66] *See* FCC, Connecting America: The National Broadband Plan, at 47 (Mar. 17, 2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf.

[67] *See Order and FNPRM* ¶¶ 275-276.

and (3) applies *ex ante* regulation that ensures rates, terms, and conditions for CBDS and PBDS are just and reasonable. The following sections describe the appropriate means of achieving these objectives.[68]

A. The Commission Should Define Business Data Services in Accord With Customer Demand Characteristics.

In the *FNPRM*, the Commission proposes to define Business Data Services in a manner that resembles the definition of "dedicated services" in the 2015 Data Collection: a telecommunications service that "transports data between two or more designated points at a rate of at least 1.5 Mbps in both directions (upstream/downstream) with prescribed performance requirements that typically include bandwidth, reliability, latency, jitter, and/or packet loss. BDS does not include 'best effort' services, e.g., mass market BIAS such as DSL and cable modem broadband access."[69]

This definition is generally appropriate, but requires refinement because it can be read to include services that are offered pursuant to performance requirements that are insufficient to meet the needs of a large number (and likely a large percentage) of Business Data Services customers. For example, as explained above, Ethernet-over-HFC is currently offered with performance objectives that are insufficient to meet the needs of the Joint CLECs and their customers in many circumstances, and in any event frequently lack service level agreements ("SLAs") that guarantee even those insufficient objectives. To address this deficiency, the Commission should revise its definition of Business Data Services to state that, to qualify as Business Data Services, the prescribed performance guarantees must include minimum

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[68] *See* June 27 Verizon-INCOMPAS Letter, at 2-3.

[69] *See Order and FNPRM* ¶ 279.

performance guarantees (with penalties for non-performance), including those for jitter and latency, sufficient to support real-time applications such as video. The Commission should monitor technology and marketplace developments and revisit this definition as appropriate, including in connection with a triennial reassessment of the Business Data Service regulatory framework,[70] to ensure that product offerings are afforded the appropriate regulatory treatment and not excluded because they are not technically compliant with the Business Data Services definition we propose today.

B. Providers of Business Data Services Should be Classified as Common Carriers.

In the *FNPRM*, the Commission appropriately states that Business Data Services are common carrier services (or telecommunication services, the two terms are used synonymously here).[71] This means that providers of Business Data Services are subject to the baseline common carrier obligations set forth in Title II, such as the duties to deal in Sections 201 and 202, that have traditionally applied to non-dominant carriers. Although these baseline requirements are not burdensome, they provide important safeguards against harmful practices, and they should apply in both non-competitive markets and competitive Business Data Services markets. This is appropriate for at least two reasons.

First, Business Data Services customers rely on these services for some of their most important and sensitive operations. This is true of wireless carriers that use Business Data Services for backhaul, financial institutions and health care providers that use Business Data

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[70] *See infra* pp. 55-57 (recommending that no less frequently than every three years the Commission reassess the extent to which its framework for assessing competition in Business Data Services markets is functioning properly).

[71] *See Order and FNPRM* ¶ 257 n.672.

Services to transmit highly sensitive financial and health-related information, and Internet companies that use Business Data Services to connect to the public Internet and to the global economy. Given the crucial nature of these and other functions performed by Business Data Services, it is important that Business Data Services providers are subject to the baseline set of duties to deal set forth in Sections 201 and 202, as well as the other provisions of Title II.

Second, although the Commission should design its market competition test so as to eliminate *ex ante* rate regulation only in circumstances where the Commission can be reasonably confident that the relevant Business Data Services market is competitive, no test is perfect. It is almost certainly the case that the market competition test will cause some relevant markets to be classified as competitive even though all or some parts of those markets are not subject to competition. Where this is the case, a Business Data Services provider, likely the incumbent LEC, may have the incentive and ability to engage in inefficient conduct such as refusals to deal, the imposition of unreasonable or unreasonably discriminatory prices, or the imposition of harmful terms and conditions in customer contracts. Application of the baseline common carrier requirements give Business Data Services customers and the Commission a framework for addressing this conduct by, for example, requiring that a Business Data Services provider comply with behavioral requirements that are narrowly tailored to address the harm in question.

As the Commission has recognized, classification of all Business Data Services providers as common carriers means that the Commission must reverse the default grant of forbearance from application of Title II to Verizon's Business Data Services. As the Joint CLECs have explained at length in prior pleadings, there is no question that the Commission has the authority

to reverse the default grant of forbearance.[72] And, given the compelling reasons for treating Business Data Services providers as common carriers, there is a sound basis for the Commission to exercise that authority in this case. In fact, Verizon has stated that it would not oppose reversal of its default forbearance if the Commission were to adopt a Business Data Services regulatory regime that is consistent with Verizon's joint proposal with INCOMPAS.[73]

C. The Commission Should Classify Business Data Services Markets as Competitive Only Where There Is Sufficient Actual or Potential Competition to Ensure Just and Reasonable Rates, Terms, and Conditions.

The Commission should adopt a framework for identifying relevant Business Data Services markets in which there is competition that comports with the roadmap provided in the Verizon-INCOMPAS proposal. Under the framework, a relevant Business Data Services market should be classified as competitive only where there is sufficient competition such that the Commission can be confident that customers will be offered Business Data Services on reasonable rates, terms, and conditions. Because, as explained above, virtually no commercial buildings are subject to significant actual competition (i.e., 99 percent of commercial buildings with Business Data Services demand were served by one or two facilities-based competitors as of 2013, and a mere 2,148 buildings with Business Data Services demand, not even 0.2 percent nationwide, were served by four or more such competitors[74]), the market competition test must

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[72] *See* Petition of Ad Hoc Telecommunications Users Committee, BT Americas, Cbeyond, Computer & Communications Industry Association, EarthLink, Megapath, Sprint Nextel, and tw telecom to Reverse Forbearance from Dominant Carrier Regulation of Incumbent LECs' Non-TDM-Based Special Access Services, WC Docket No. 05-25, at 21-24 (filed Nov. 2, 2012).

[73] *See* Letter from Kathleen Grillo, Senior Vice Pres., Pub. Policy & Gov. Affairs, Verizon, and Chip Pickering, Chief Exec. Officer, INCOMPAS, to Marlene Dortch, Secretary, FCC, WC Docket No. 05-25 and RM-10593, at 2 (filed April 7, 2016).

[74] *See Order and FNPRM* ¶ 220 & tbl. 3.

focus primarily on the extent to which potential competition constrains the price of Business Data Services in relevant markets. In other words, the test should seek to identify circumstances in which enough competitive carriers can be expected to deploy connections to Business Data Services customer locations such that the behavior of the leading competitor (i.e., the incumbent LEC today) will be constrained. Under the test, the Commission should not consider the presence of competitors that rely on UNEs because, as the Joint CLECs have explained, such competitors have limited ability to constrain incumbent LECs' Business Data Services prices.[75]

In relevant markets in which there is no realistic prospect that reasonably efficient competitors could deploy connections to serve customers, the Commission should classify the relevant market as non-competitive. Conversely, in relevant markets in which multiple reasonably efficient competitors can generally deploy connections to serve customers, the Commission should classify the relevant market as competitive. In relevant markets in which reasonably efficient competitors can sometimes deploy connections to serve customers, the Commission should apply a test that assesses the prospects for connection deployment on a market-by-market basis.

As discussed above, the most reasonable means of defining relevant Business Data Services product markets is by the capacity of service demanded by the customer. Again, there is a reasonably strong correlation between the capacity of service demanded by a customer and a competitor's ability to deploy a connection from a splice point on the competitor's network to the customer's location. While the prospects for connection deployment differ by Business Data Services capacity, it is possible to treat multiple capacities as belonging to the same product

[75] *See* Joint CLEC Comments at 25-26.

market for purposes of the competition test to the extent that the prospects for connection deployment are reasonably similar among the grouped capacities. This approach will simplify the administration of the test.

As also discussed above, the relevant geographic market for Business Data Services is each commercial building. Nevertheless, when assessing the extent to which competitors can deploy connections to customer locations, it is possible to treat multiple commercial buildings as belonging to the same geographic market for purposes of the competition test to the extent that those buildings are a similar distance from splice points on competitors' networks, or a reasonable proxy for splice points.

Finally, the Commission must determine the number of competitors (i.e., competitors that can be expected to be able to deploy loops to customer locations) that must be present in a market in order to classify the market as competitive. Dr. Baker and the Commission have appropriately observed that there must be more than two competitors in a relevant market to ensure competitive outcomes.[76] But it is not clear how many more than two competitors must be present in order to classify the market as competitive. For example, in discussing the results of his regression analyses, Dr. Baker emphasizes that, while he observes reductions in incumbent LEC prices where competitors are present, he is unable to determine the number of competitors or the magnitude of a price reduction in response to competition that is evidence of effective competition.[77] In the absence of this information, the Commission will need to rely on basic

[76] *Order and FNPRM* ¶ 294; Baker Decl. ¶¶ 46-49.

[77] Baker Supplemental Reply Decl. ¶ 7.

principles of competition policy to identify the number of competitors that must be present to classify a market as competitive.

Those principles strongly support the conclusion that there must be at least four competitors in a relevant market before the market can be classified as competitive. For example, in reviewing wireless transactions, the Commission has concluded that a merger that would, if approved, cause the number of competitors in the relevant market to be reduced from four to three is harmful to consumer welfare.[78] The Commission staff reached this same conclusion in analyzing the proposed AT&T acquisition of T-Mobile.[79] Similarly, when the

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[78] *Applications of Nextel Communications, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 20 FCC Rcd. 13967, ¶ 119 (2005) (concluding that "competitive harm is unlikely in each CEA in which there will be four or more competitors present post-transaction with thoroughly built-out networks, adequate bandwidth, and the ability to offer competitive nationwide service plans"); *Applications of AT&T, Inc. and Centennial Communications Corp. for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements*, Memorandum Opinion and Order, 24 FCC Rcd. 13915, ¶¶ 76-77 (2009) (determining based on a market-by-market analysis that "the great majority of the 27 markets identified by the initial screen, no competitive concerns requiring remedy" because "in most of these markets, there would be four or more competitors present post-transaction with thoroughly built-out networks and the ability to offer competitive services," but that in seven markets in which the merger would cause the number of competitors to be fewer than four, there would not be sufficient competition to deter anticompetitive behavior by the merged entity); *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 19 FCC Rcd. 21522, ¶ 191 (2004) ("Our general conclusion, as discussed above, is that there is not a significant likelihood of unilateral effects or coordinated interaction as a result of this transaction, except in certain circumstances. Applying our analysis case by case confirmed that this is true for most markets, and in particular for those markets in which there will still be five or more genuine competitors in the market, post-transaction, each with a sufficiently built out network and sufficient bandwidth to discipline Cingular post-merger through the ability to attract customers away from Cingular should it attempt to increase price or reduce service.").

[79] *Applications of AT&T Inc. and Deutsche Telekom AG for Consent to Assign or Transfer Control of Licenses and Authorizations*, Order and Staff Analysis and Findings, 26 FCC Rcd. 16184, ¶ 42 (WTB 2011) (concluding that the merger, which would have reduced the number of national mobile wireless providers from three to four "would generate a substantial increase in

Commission reclassified AT&T as a non-dominant carrier in the long-distance services market in 1995, it relied in part on the fact that AT&T faced competition from three other nationwide providers as well as many other regional facilities-based providers and resellers.[80]

These conclusions are consistent with the Department of Justice/Federal Trade Commission Horizontal Merger Guidelines. In antitrust theory, "[t]he most important 'structural' factor in assessing the possible anticompetitive consequences of a merger is the number of 'significant' players in the market. An 'unconcentrated' market with ten or more significant players poses a relatively small threat to competition, while a 'concentrated' market with no more than five or six significant players generally poses a much more substantial threat."[81] Under the Merger Guidelines, market concentration is measured by applying the Herfindahl-Hirschman Index ("HHI"), which is the sum of the square of each market participant's market share. A relevant market is classified as highly concentrated if it has an HHI of 2,500 or above.[82] Thus, even a market in which four competitors hold equal market share (producing an HHI of precisely 2,500) would be classified as highly concentrated. In the

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concentration in many already concentrated retail mobile wireless markets to above the thresholds at which horizontal mergers raise competitive concerns").

[80] *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd. 3271, ¶¶ 67-70 (1995).

[81] IV Philip Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 930b, at 170 (3d ed. 2009); *see also* 2 Julian von Kalinowski et al., Antitrust Laws and Trade Regulation § 30.03[3][c], at 30-83 (2d ed. 2014) ("When concentration in a market is already great, even slight increases in concentration resulting from a merger between two firms with a high combined market share may be considered substantially anticompetitive.").

[82] Department of Justice and Federal Trade Commission, 2010 Horizontal Merger Guidelines, § 5.3 (Aug. 19, 2010) (HHI is calculated by summing the squares of the individual firms' market shares).

case of Business Data Services, the presence of four competitors in a market may result in a much higher concentration than 2,500 because the leading competitor (currently the incumbent LEC) may have a much higher market share than other competitors. Classifying relevant Business Data Services markets as competitive when there are four competitors present in the market is highly "conservative" in the sense that most such markets would still likely have HHI levels far above the level of highly concentrated markets.

A four-competitor threshold for competitive Business Data Services markets is also conservative because competitors with a network presence in the relevant area may not in fact be able to compete for a Business Data Services customer. For example, as discussed, many Business Data Services customers demand service at multiple locations, and such customers may not consider purchasing service from a Business Data Services provider that cannot serve all of the customer's locations.[83] A Business Data Services provider that is able to serve some, but not all, of such customers' locations will not be a competitor at all, and its presence in the relevant market will have little or no effect on price. In addition, there are many barriers to deploying connections that could prevent a nearby competitor from deploying a connection to a nearby customer. For example, as Level 3 has explained, it is sometimes unable to deploy a connection to a customer location because Level 3 cannot obtain access to the customer's building on reasonable rates, terms, and conditions.[84]

In light of these general principles, the market competition test should include the following components.

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[83] *See Order and FNPRM* ¶ 160.

[84] *See* First Merriman Decl. ¶ 16.

Business Data Services at or below 100 Mbps should be classified as non-competitive. As explained in Section II above, Business Data Services at or below 100 Mbps are almost never subject to significant competition. There is no basis for concluding that reasonably efficient competitors could deploy connections to customers that demand Business Data Services of 100 Mbps capacity or below. This means that these services are subject to competition at a given customer location only in circumstances where at least four competitors (e.g., the incumbent LEC and three non-incumbent LEC competitors) have deployed connections to the customer's location. Of course, this was the case in only 2,148 commercial buildings with Business Data Services demand in 2013—less than 0.2 percent of such commercial buildings—and that number is unlikely to have changed materially since then.

In light of this evidence, the Commission should classify Business Data Services of 100 Mbps or below as non-competitive in all locations. To be sure, there is a very small number of buildings to which four or more competitors have deployed connections or which might be close enough to a competitor's network that deployment of such a facility is feasible, and which may therefore be subject to effective competition. The Joint CLECs believe that a building-by-building approach is administratively feasible. Nevertheless, a national rule for low-bandwidth Business Data Services accommodates the Commission's expressed concern that imposing regulatory obligations that differ from building to building presents administrative challenges.[85] It is also important to note that even the very small number of buildings to which four or more competitors have deployed connections might not in fact be subject to effective competition for any number of reasons, including, that (1) as discussed, **[BEGIN HIGHLY CONFIDENTIAL]**

[85] *See Order and FNPRM* ¶¶ 204-215.

[END HIGHLY CONFIDENTIAL] and (2) to the extent that the customers demanding the service have multiple locations, Business Data Services providers with limited network reach might not be able to serve those customers.

Business Data Services above one Gbps should be classified as competitive. As explained, Level 3 can generally deploy connections to locations where the customer demands Business Data Services above one Gbps of capacity when the customer is a reasonable distance from the Level 3 network. It would be reasonable for the Commission to infer that any reasonably efficient competitor can also do this. To be sure, there are some locations to which competitive Business Data Service providers could not deploy connections even where the customer demands more than one Gbps of bandwidth. This might the case, for example, where the Business Data Services provider cannot obtain access to the customer's building on reasonable rates, terms, and conditions or if the customer is unusually far from a splice point on the Business Data Services provider's network. But, as with low-bandwidth services, it would be reasonable for the Commission to adopt a national rule for Business Data Services of greater than one Gbps of capacity. Under that rule, all such services would be classified as subject to competition in all geographic areas.

Business Data Services above 100 Mbps and at or below one Gbps should be subject to a market competition test. Unlike the categories of Business Data Services bandwidth discussed above, it would not be reasonable to adopt a national rule for Business Data Services of capacity above 100 Mbps and at or below one Gbps. Unlike Business Data Services of 100 Mbps or below or Business Data Services above one Gbps, a competitive provider's ability to economically deploy a loop to a customer's location varies widely on the basis of, among other

things, the capacity demanded, connection length, and the demographic characteristics of the geographic market in which the customer is located (e.g., inside or outside a central business district). It is therefore not possible to adopt a general rule as to the feasibility of deploying connections to customers that demand Business Data Services of capacities between these low and high-end bandwidths. Accordingly, the Commission should adopt a competition test for these mid-bandwidth services to be applied on a geographic market-by-geographic market basis.

This test should seek to identify circumstances in which four Business Data Services providers can serve a customer location. Ideally, the test would account for both Business Data Services providers that have already deployed connections to a customer location and Business Data Services providers that have splice points close enough to the customer location that they can deploy a connection to the location. Where the total number of such existing and potential competitors is four, the building should be classified as subject to competition. Unfortunately, the Commission cannot utilize the distance of a location from Business Data Services providers' splice points to assess the presence of potential competitors because the Commission does not have reliable information as to the location of splice points on Business Data Services provider networks.[86] It should consider collecting this information so that it can utilize it in a competition test in the future.

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[86] In the mandatory data request, the Commission collected information on the location of "nodes" on Business Data Services provider networks. The definition of "node" in the mandatory request encompasses splice points but also network points, such as "controlled environment vaults," "cable modem termination system," and "facility hubs," from which Business Data Services providers are unlikely to be able to deploy connections to customers. *See Special Access for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd. 16318, App. A at 3 (2012). In addition, the Commission appears to have collected information only as to those splice points that are used to interface with another network. *See id.* at 6 (Question

For now, the Commission will need to use a proxy for competitors with splice points near enough to deploy a connection to a customer location. The most appropriate proxy appears to be the presence of competitors that have deployed connections near to a particular customer location. The logic of using this as a proxy is that a Business Data Services provider that has deployed a connection to a location may well be able to deploy a connection to a second nearby location. Of course, this will not always be the case. For example, a Business Data Services provider may be able to economically deploy a connection from a splice point to one building in order to provide a 10 Gbps Business Data Services circuit but not to second nearby building in order to provide a 200 Mbps Business Data Services circuit given the lower revenue opportunity presented by such a circuit (or barriers to building entry or other logistical issues discussed above). Reliance on connections to nearby locations is therefore imprecise and could result in locations being classified as competitive in circumstances where they are not competitive.

To the extent possible, the Commission should seek to diminish the likelihood that this test would cause buildings to be classified as competitive when they are in fact non-competitive. For example, there are many Business Data Services providers with a small number of connections that do not deploy new connections to end user locations as part of their business. These providers' small networks and lack of economies of scale mean that their costs of deploying connections are likely to be higher than a reasonably efficient competitive carrier. Including these competitors in the market competition test would therefore artificially inflate the number of competitors in an area and likely cause the test to falsely identify competition where it

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II.A.5). Thus, the Commission appears not to have collected information on the location of all of the splice points used to connect to customer locations.

does not exist, to the detriment of businesses and consumers. Accordingly, the Commission should exclude from the market competition test any Business Data Services provider with 200 or fewer connections.

In addition, if the Commission were to classify Ethernet-over-HFC as Business Data Services, it must recognize that, as discussed above, HFC connections using DOCSIS can only be used to provide service at up to 10 Mbps of bandwidth. Such HFC connections cannot be used to provide any of the mid-band services subject to the market competition test as discussed here. Thus, HFC facilities to a customer location could not be counted as connections for purposes of the test.

While not perfect, the presence of connections to nearby customer locations is a better means of measuring competitors' ability to deploy connections than the available alternatives. Most importantly, it is a far better measure than the presence of fiber facilities near to a customer. The fact that a competitor has deployed fiber that runs near to a building does not mean that the competitor has a splice point near enough to deploy a connection to a customer. This is crucial because, as the Commission correctly observes in the *FNPRM*, "[t]he distance to a fiber splice point, as opposed to fiber in general, is an important determining factor in build/buy decisions."[87] Moreover, competitors often do not use fiber facilities to provide Business Data Services. Thus, the presence of fiber in the vicinity of a customer location provides no indication as to whether the carrier has any ability to, or interest in, using the fiber facility to serve the customer. In fact, the Joint CLECs' analysis of the fiber deployment data provided in response

[87] *Order and FNPRM* ¶ 211 n.553; *see also id.* ¶ 212 n.558 (observing that "Fiber splice points are critical" to the build/buy analysis).

to the mandatory data request showed that there are more than 540,000 census blocks with four or more competitors with fiber in which no customer purchased even a single Business Data Service circuit as of 2013, and more than one million census blocks with three or more such competitors in which not a single Business Data Service circuit was purchased in 2013. Fiber presence is therefore a poor proxy for competition in the provision of BDS.

In addition, business density is a poor proxy for the level of competition in a geographic area because it does not directly measure the presence of competitors. Standing alone, business density is at best a relatively poor estimate of the attractiveness of a given geographic area to Business Data Services providers – and there is no guarantee that the businesses in denser areas will be of the type or size that require Business Data Services. As such, business density is not even an effective *indirect* proxy for the presence of competitors. But the use of such a proxy is unnecessary where, as here, the Commission has access to the Business Data Services connections data itself.

It is conceivable that some type of business density data could be used as an additional component of a connections-based test to estimate the level of demand for Business Data Services in a relevant market. But the available business density data appears to be a poor tool for such a purpose. **[BEGIN HIGHLY CONFIDENTIAL]**

[END HIGHLY CONFIDENTIAL].

Finally, while the Joint CLECs believe that a building-by-building approach is administratively feasible, the Joint CLECs would, consistent with the Verizon-INCOMPAS proposal, support the use of census blocks as the geographic area for the market competition test.[88] As explained in Section II above, the costs of deploying connections are highly distance sensitive. The closer an existing customer location served by a connection is to second customer location, the better an indicator it is that the Business Data Services provider can serve the second location. It follows that the Commission should only count existing connections that are close to a customer location in order to assess competitors' ability to serve the customer location. Census blocks vary in size, but they are generally relatively small in downtown urban areas, which are the most likely places in which Business Data Services competition will develop. Census blocks are also smaller, and therefore more appropriate, than other standardized geographic units such as census tracts, counties, or zip codes.

[88] *See* June 27 Verizon-INCOMPAS Letter, at 2.

Moreover, it would not be difficult for either Business Data Services providers or customers to conduct business under a census block test. Business Data Services providers today frequently set prices and define the availability of services on a building-by-building basis. It is therefore unlikely that applying a market competition test on a census block basis would pose administrative problems for providers and customers.

Accordingly, the Commission should assess whether Business Data Services with capacity above 100 Mbps and at or below one Gbps are competitive by counting the number of competitors with at least one connection to a customer location in the same census block. That is, the Commission should classify Business Data Services in this mid-capacity range as competitive in any census block in which four or more Business Data Services providers have at least one connection. For purposes of this test, the incumbent LEC would be counted as a competitor in all locations. Thus, a census block would be classified as competitive if there are three non-incumbent LEC Business Data Services providers with a connection in the census block.

It is worth observing that this test would classify as competitive a large portion of the demand for services above 100 Mbps but less than or equal to one Gbps. **[BEGIN HIGHLY CONFIDENTIAL]**

[END HIGHLY CONFIDENTIAL]

Any challenge process should be limited in scope. In the *FNPRM*, the Commission suggests that it may make sense to permit Business Data Services providers to challenge the results of the competitive market test.[89] Given the potentially burdensome nature of a challenge process, the Commission should only permit parties to challenge the accuracy of the competitor counts under the test. The Commission should not establish an open-ended challenge process under which, for example, parties would have the right to show that census blocks found to be non-competitive under the test (e.g., have less than four competitors providing service in the census block) are, in fact, subject to competition. Such collateral attacks on the market competition test itself are likely to be difficult to conduct. They are also likely to be burdensome and costly for both private parties and the Commission. If, for example, a challenge process requires that all service providers in an area must submit and analyze information such as the types of Business Data Services offered, prices charged for those services, and network facilities in a census block (including the location of splice points and the distance of those splice points from customer locations), the process would likely be burdensome both with regard to the production and analysis of such information. It is hard to see how such burdens would be outweighed by the benefits associated with conducting a market-specific review.

The Commission should, however, permit parties to challenge the accuracy of the inputs into the test. For example, under this approach a Business Data Services provider would have the right to challenge the classification of a census block as competitive based on evidence that

[89] *See Order and FNPRM* ¶ 300.

there are in fact three, not four, competitors with connections in a census block. Challenges of this nature should be fairly easy to adjudicate because they turn on simple questions of fact. Moreover, such challenges will help to ensure that the test is properly administered.

The Commission should regularly rerun the market competition test using updated data. It is important that the Commission rerun the market competition test on a regular basis based on updated connections data. Thus, the Commission should require that Business Data Services providers supply the Commission with information as to the location of the connections they have deployed and the services provided over those connections on a regular (e.g., annual) basis. The Commission could do so by, for example, revising the Form 477 to require submission of this information. This will enable the Commission to ensure that the results of the competition test reflect current market conditions.

The Commission should reassess the regulatory framework for Business Data Services after three years. In addition, no less frequently than every three years the Commission should reassess the extent to which the elements of the framework for assessing competition in Business Data Services markets is functioning properly. This process should encompass reconsideration of each element of the framework.

First, the Commission should apply a "stress test" to assess the extent to which application of its framework has accurately identified competitive and non-competitive markets, both in applying the market competition test and in establishing national rules for low- and high-bandwidth Business Data Services.[90] In making this assessment, the Commission could compare

[90] As Public Knowledge has correctly observed, the Commission has frequently relied on what proved to be incorrect predictions that competition would develop in the future as a basis for eliminating protections against the abuse of market power in the provision of Business Data Services. *See* Letter from Phillip Berenboick, Counsel, Government Affairs, Public Knowledge,

the rates charged by the leading competitor in competitive markets to the regulated price charged for the same service in similarly-situated non-competitive markets. If the prices charged in the competitive areas are higher than the regulated prices, it is likely that the test has been incorrectly designed and must be reassessed. For example, if the price analysis demonstrates that the market competition test has inaccurately classified the market for 200 Mbps PBDS as competitive in certain areas, the Commission could increase the range of bandwidths classified as non-competitive in those geographic areas to include 200 Mbps PBDS.[91]

The Commission should also assess the extent to which broader changes in market conditions require reassessment of the bandwidth thresholds used to identify competitive markets, non-competitive markets, and markets subject to the competition test. For example, it is possible that wireless companies will someday be able to use advanced wireless technology to provide Business Data Services at low bandwidths. If this is the case, there would likely be a basis for classifying the Business Data Services markets served by such networks as competitive in every geographic area since there would likely be more than four competitors with nearly

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to The Honorable Tom Wheeler, WC Docket Nos. 16-143, 15-247, 05-25; RM-10593, at 2 (June 16, 2016) ("[T]he Commission's prior efforts to predict future competition and justify deregulation based on potential competition have been a failure."). This experience demonstrates the importance of establishing a formal process for reviewing the extent to which the regulatory framework adopted in this proceeding accurately identifies markets that are subject to competition and, where the framework does not do so, for changing it to align more closely with market conditions. *See* June 27 Verizon-INCOMPAS Letter, at 2 (proposing periodic review of the competition framework to ensure that it accurately identifies markets that are competitive and non-competitive).

[91] As mentioned above, the Commission should also consider collecting data on the location of splice points on Business Data Services providers' networks. If the connections-based market competition test proves to be unreliable, the Commission could consider adopting a test that measures the distance of Business Data Services customer locations from splice points.

ubiquitous networks (e.g., the four national wireless providers) serving the relevant product market.

Second, the Commission should assess the extent to which incumbent LECs are still the leading competitors in all relevant Business Data Services markets eligible for *ex ante* rate regulation. In making this assessment, the Commission should consider whether another class of competitors has ubiquitous (or nearly ubiquitous) networks used to provide the relevant Business Data Services (e.g., Business Data Services with capacity at or below 100 Mbps). If so, the Commission should assess the market share of such competitors as well as other relevant market factors to determine whether the class of competitors has emerged as a more powerful competitor than the incumbent LECs. If so, the Commission should classify this category of competitors as the leading competitors in the relevant product markets. As discussed below, those newly-classified leading competitors (rather than the incumbent LECs) would be subject to *ex ante* rate regulation in non-competitive markets.

D. The Commission Should Apply *Ex Ante* Rate Regulation Only to Leading Competitors in Non-Competitive Markets.

As the Commission observes in the *FNPRM*, *ex ante* rate regulation is the most effective means of ensuring that Business Data Service is provided on just and reasonable rates, terms, and conditions in non-competitive markets.[92] *Ex ante* rate regulation provides clear guidelines to both buyers and sellers in non-competitive markets as to the appropriate prices that a firm with market power can charge. These guidelines, if effectively designed and implemented as discussed below, largely obviate the need for Business Data Services customers to rely on the

[92] *See Order and FNPRM* ¶ 423.

extremely expensive, slow, and uncertain complaint process under Section 208 of the Communications Act. In this way, the transaction costs associated with purchasing Business Data Services from a firm with market power are reduced, and prices for Business Data Services are set closer to the level that would apply in a competitive market. The result should be a more efficient Business Data Services market than would be the case in the absence of *ex ante* rate regulation.

Ex ante rate regulation should only apply to leading competitors. The most efficient means of implementing *ex ante* rate regulation is to apply it only to the single leading competitor in a non-competitive market.[93] Under the legacy dominant carrier regulatory framework, the Commission treated incumbent LECs as dominant and subject to *ex ante* rate regulation absent an affirmative finding of non-dominance. In order to ensure that its regulatory regime is technology-neutral and service provider-neutral, the Commission should replace this legacy regime with one under which *ex ante* rate regulation applies to the leading competitor in a non-competitive market. In light of current market conditions, incumbent LECs are clearly the leading competitor in all relevant Business Data Services markets. As indicated above, this may not be the case in the future. If another class of competitors (or perhaps an individual competitor) emerges as a more powerful competitor than incumbent LECs in some or all Business Data Services markets, that other class of competitors would become the leading competitor. The leading competitor would be subject to *ex ante* rate regulation in Business Data Services markets classified as non-competitive under the regime described in the previous

[93] The only exception to this rule is that the Commission will need to closely monitor the rates that leading competitors charge multi-location customers in competitive markets, as discussed in Section III.F below.

Section. Moreover, it is important that the leading competitor be defined to include any of its affiliates that sell Business Data Services in the leading competitor's service territory.

As the Commission has long held, it is unnecessary and even potentially harmful to apply *ex ante* rate regulation to competitors without market power.[94] Business Data Services providers without market power have no ability to sustain prices above the level charged by the leading competitor in the market. That is, if the leading competitor is subject to *ex ante* rate regulation, other competitors in the relevant market would likely be forced to charge prices that are no higher than the regulated prices charged by the regulated competitor. If the non-leading competitors do not do so, they will likely lose market share and will not be able to sustain their presence in the market. Thus, applying *ex ante* rate regulation to the leading competitor in the relevant market should have the effect of ensuring that all firms that compete in the relevant market charge reasonable prices.

Moreover, it may well be affirmatively harmful to apply *ex ante* rate regulation to non-leading competitors. To begin with, any firm subject to rate regulation incurs compliance costs. The Commission should avoid imposing such costs on competitors where rate regulation is unnecessary.

In addition, applying *ex ante* rate regulation to non-leading competitors would make the task of designing *ex ante* rate regulation more complex and likely less effective. For example, as discussed below, it would be appropriate for the Commission to set the regulated price based on some measure of the leading competitor's costs (e.g., by using a cost model). But it would be

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[94] *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 FCC 2d 1, ¶¶ 2, 35 (1980) (describing basis for eliminating *ex ante* rate regulation for common carriers without market power).

unreasonable to require non-leading competitors to charge prices based on any measure of the leading competitor's costs because the leading competitors' ubiquitous network footprints, scale economies, and first-mover advantages cause them to have lower costs than other competitors in the market. This is the case with incumbent LECs, as the Commission correctly observes in the *FNPRM*.[95] Forcing non-dominant competitors to charge prices based in some way on the incumbent LEC's costs could therefore cause the non-dominant competitor to charge prices that are below its costs. This would of course harm competition by forcing the non-leading competitor to withdraw from the market.

This problem is especially likely to arise where (as is frequently the case) the non-leading competitor must deploy a new connection to serve a customer location. Prices set based on some measure of incumbent LEC costs would presumably account for the fact that incumbent LECs have already deployed connections to almost every customer location in the incumbent territory and that, if they must deploy new fiber connections, the incumbent LECs' costs of doing so are generally lower than other competitors' costs. A regulated price set based on some measure of incumbent LEC costs would therefore likely be far below non-leading Business Data Services providers' costs in circumstances where the other Business Data Services providers must deploy a connection to the customer location. Accordingly, non-leading Business Data Services providers should not be subject to *ex ante* rate regulation under any circumstances, but especially where the regulated prices are set based on some measure of the leading competitor's costs.

The Commission should monitor prices charged by competitors not subject to* ex ante *rate regulation. It is possible that competitors not subject to *ex ante* rate regulation will have the

[95] *See Order and FNPRM* ¶ 233.

incentive and ability to charge unreasonably high or discriminatory prices. This might be the case, for example, where a leading competitor maintains market power in a market classified as competitive under the market competition test. This might also be the case where a non-leading competitor can serve locations that the leading competitor cannot serve (e.g., because it cannot reach the locations with its network or because it cannot offer the service demanded by the customer at the locations). This second example is, while theoretically possible, unlikely to be a frequent occurrence given that incumbent LECs' networks serve virtually every business customer location in their respective territories and, again, their costs of deploying new fiber loops are likely equal to or lower than any other Business Data Service provider in the market. Thus, to the extent that the incumbent LEC (or another leading competitor) is subject to *ex ante* rate regulation in a relevant geographic area, it is likely that the incumbent LEC would offer Business Data Services to virtually every location in that area at regulated rates.

The Commission can prevent competitors not subject to *ex ante* rate regulation from exploiting opportunities to charge unreasonable Business Data Service prices without applying *ex ante* rate regulation to those firms. Specifically, the Commission should adopt its tentative conclusion that Business Data Service providers may not include non-disclosure provisions in service agreements that prevent either party from sharing the terms of the agreement with the FCC, as long as they do so on a confidential basis.[96] This would allow Business Data Services customers to report to the Commission unreasonable prices charged by competitors not subject to *ex ante* rate regulation. The Commission should also make it known that it will scrutinize closely any situation in which a competitor not subject to *ex ante* rate regulation charges prices

[96] *See id.* ¶¶ 313-320.

that are significantly above the regulated price for the same services applicable in the same area or similar areas. In this way, the Commission can monitor the conduct of competitors not subject to *ex ante* regulation without applying such regulation in inappropriate circumstances.

E. The Commission Should Adopt *Ex Ante* Price Regulation for all Business Data Services.

In the *FNPRM*, the Commission proposes to retain price cap regulation for CBDS, but it proposes to adopt a different *ex ante* regulatory regime, such as benchmark pricing or anchor pricing, for PBDS.[97] The Joint CLECs agree that price caps remain the appropriate regulatory framework for CBDS. And although the Joint CLECs are open to the possibility of supporting a benchmark approach for PBDS, it is not clear that it is possible to adopt a benchmark approach that would ensure that PBDS rates are just and reasonable and not unjustly or unreasonably discriminatory.

Price cap regulation is the most effective and efficient option for* ex ante *rate regulation. Price cap regulation appears to have numerous advantages over benchmark price regulation or anchor price regulation. *First*, the price cap regime is an existing, effective system of rate regulation. Indeed, the Commission acknowledges in the *FNPRM* that it is "not aware of any other presently available alternative to price cap regulation that more effectively balances the interests of ratepayers and carriers."[98] Reliance on price cap regulation therefore obviates the need to incur the costs associated with devising an entirely new regulatory regime for PBDS.

Second, price cap regulation will give regulated firms greater flexibility to set PBDS prices than the other forms of price regulation that the Commission is considering for PBDS.

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[97] *See id.* ¶¶ 420-426.

[98] *Id.* ¶ 354.

Firms subject to price cap regulation are free to set the prices for the services in a price cap basket at any level they desire as long as the weighted average of the prices (API) does not exceed the PCI for the basket. Moving PBDS into the Business Data Services price cap basket "would allow carriers flexibility to set prices for both packet-based services and TDM services based on the relative cost of and demand for these services, as would be the case in a competitive market."[99] In contrast, a benchmark approach would likely require that the regulated firm charge prices no higher than the regulated price for each service subject to *ex ante* regulation. The flexibility afforded by price caps benefits competition and the transition to more efficient packet-based Business Data Services because it gives regulated firms greater ability to respond to market conditions than is the case with other, more prescriptive forms of rate regulation.[100] For this reason, price cap regulation is a far less intrusive form of regulation than benchmark or anchor pricing.

Third, price caps limit the extent to which the Commission must undertake the difficult task of identifying a reasonable price for PBDS in non-competitive markets in the future. Under the rules currently applicable to incumbent LECs providing CBDS, the only time the Commission must determine a reasonable price level for services subject to price caps is when a

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[99] *Id.* ¶ 512.

[100] *See Policy & Rules Concerning Rates for Dominant Carriers*, Second Report and Order, 5 FCC Rcd. 6786, ¶ 35 (1990) ("*LEC Price Cap Order*") ("[F]lexibility in price-setting generates economic efficiencies that benefit ratepayers through lower rates. Since it is no longer required that every service cover its fully distributed cost of overheads, LECs also have the incentive to provide more services, to the benefit of ratepayers. Furthermore, with additional services, LECs can take advantage of economies of scope, also to the benefit of ratepayers.").

service is first introduced to the price cap regime.[101] After that, the Commission need only assess the extent to which the overall PCI should be changed by application of a productivity-based X factor, and in light of limited exogenous cost changes experienced by the regulated firm. As discussed below, the Commission should consider developing a cost model and then later revising the level of price caps in light of the prices produced by the cost model. But the key point is that revisiting the level of specific prices charged by the regulated carrier is not a necessary part of the price cap system.

In contrast, benchmark or anchor price regulation for PBDS outside of price caps *would* likely require a reassessment of the reasonableness of each prescribed price on a market-by-market basis in light of changes in market conditions over time. The most appropriate means of doing so would be to adopt a cost model for setting prices. The cost model would need to be updated periodically to account for such developments as lower equipment costs. This is certainly possible, but it is not clear that the benefits outweigh the costs of doing so.

Fourth, price caps give the Commission the flexibility to use pricing bands, which restrict the extent to which leading competitors may increase or decrease the average price each year for a defined service category.[102] This mechanism balances the benefits of providing competitors with the flexibility to set rates with the need to prevent disruptive price changes. In contrast, it is

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[101] *See, e.g.*, 47 C.F.R. § 61.49(g) (requiring an incumbent LEC introducing a new loop-based service to file a tariff accompanied by a forward-looking cost study, various estimates of the effect of the new tariff on the carrier's traffic and revenues, and supporting information and data).

[102] *See id.* § 61.47(e).

hard to see how the Commission would have access to such mechanisms under a benchmark or anchor pricing regime.

Fifth, it is far easier to establish pricing zones under price caps than under a benchmark or anchor pricing approach. Pricing zones allow the leading competitor to set prices to account for overall differences in regional costs. They therefore result in prices that are more closely aligned with costs than prices that are averaged across areas in which the average costs of providing service differ materially. Under price caps, the leading competitor would determine the size and location of pricing zones and the differences in prices in the different pricing zones in accord with guidelines set forth in the Commission's rules.[103] In contrast, in a benchmark or anchor pricing regime, the Commission would likely need to perform all of these functions itself. This is likely to be challenging and time-consuming.

Finally, adding PBDS to price caps reduces litigation risk and, by extension, regulatory uncertainty. The *CALLS Order*, the *Pricing Flexibility Order*, the *AT&T Initial Price Cap Order*, and the *LEC Price Cap Order* were all challenged on appeal, leading to years of uncertainty regarding the appropriate pricing regime for Business Data Services.[104] It is far more

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[103] *See id.* §§ 69.123, 61.47(f).

[104] *See Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Low-Volume Long-Distance Users, Federal-State Joint Board on Universal Service*, Sixth Report and Order, 15 FCC Rcd. 12962 (2000) ("*CALLS Order*") (among other things, reintroducing a 6.5% X Factor with non-productivity-based mechanism), *aff'd in part, rev'd in part, and remanded in part*, *Tex. Office of Pub. Util. Counsel v. FCC*, 265 F.3d 313 (5th Cir. 2001) (affirming *CALLS Order* in most respects, remanding the X Factor decision for further analysis), *cert. denied, Nat'l Ass'n of State Util. Consumer Advocates v. FCC*, 535 U.S. 986 (2002), *on remand*, 18 FCC Rcd. 14976 (2003); *Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Interexchange Carrier Purchases of Switched Access Services Offered by Competitive Local Exchange Carriers, Petition of US West Communications, Inc. for Forbearance from Regulation as a Dominant Carrier in the Phoenix, Arizona MSA*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd. 14221 (1999)

likely that a known and tested regulatory regime would survive challenge on appeal than would a new and novel regime.

Setting price levels under a benchmark or anchor pricing regime poses special challenges. Notwithstanding the relative benefits of price caps, the Joint CLECs would, consistent with the Verizon-INCOMPAS proposal, support a benchmark that ensures that Business Data Service rates in non-competitive areas are just, reasonable, and not unjustly or unreasonably discriminatory.[105] Achieving this objective is challenging.

In the *FNPRM* the Commission proposes three non-price cap methodologies for regulating PBDS prices: (1) reliance on regulated CBDS to discipline PBDS prices; (2) use of a regulated "anchor price" for a PBDS service as a means of constraining prices for other PBDS; and (3) benchmark pricing which would presumably consist of a rule defining the permissible prices for specified services. The first of these, reliance on regulated prices for CBDS to

("*Pricing Flexibility Order*") (granting incumbent LECs immediate pricing flexibility for some interstate access services and establishing procedures through which incumbent LECs may seek substantial additional relief from existing price cap regulation), *aff'd*, *WorldCom v. FCC*, 238 F.3d 449 (D.C. Cir. 2001) (upholding *Pricing Flexibility Order*); *Policy & Rules Concerning Rates for Dominant Carriers*, Report and Order and Second Further Notice of Proposed Rulemaking, 4 FCC Rcd. 2873 (1989) ("*AT&T Initial Price Cap Order*") (establishing a price cap index that serves as a price ceiling for each of three baskets of AT&T services), *modified on reconsideration*, 6 FCC Rcd. 665 (1991) ("*Reconsideration Order*") (excluding promotional offerings from price cap index calculations), *vacated by Am. Tel. & Tel. Co. v. FCC*, 974 F.2d 1351 (D.C. Cir. 1992) (holding *Reconsideration Order* arbitrary and capricious for lack of an adequate explanation supporting its policy of excluding promotional offerings and remanding for further consideration), *on remand*, 7 FCC Rcd. 7305 (1992); *LEC Price Cap Order* (requiring all Bell and GTE companies to shift to price cap regulation, and allowing but not requiring all other LECs to make the change), *on reconsideration*, 6 FCC Rcd. 2637 (1991), *aff'd by Nat'l Rural Telecom Ass'n v. FCC*, 988 F.2d 174 (D.C. Cir. 1993) (affirming the *LEC Price Cap Order* as FCC's determinations were neither arbitrary nor capricious).

[105] *See* June 27 Verizon-INCOMPAS Letter, at 2.

discipline PBDS, is not viable because, as discussed in Section III.E above, CBDS does not appear to constrain the price of PBDS. The second two, anchor prices and benchmarks, may be viable but they present serious implementation challenges.

At the outset, it is important to point out that a pure anchor price regime, under which a single regulated service price disciplines all other non-competitive prices, is not possible for PBDS. This approach only works effectively if the anchor service is a substitute for (i.e., is in the same product market as) the anchored services. As discussed above, the Commission will need to apply rate regulation to a range of different Business Data Service bandwidths from the lowest capacity services (e.g., two Mbps) up to one Gbps (or more, if the Commission does not adopt our proposal to declare all such services competitive). It would be impossible to select a single regulated service among all of these bandwidths that could discipline the price of all of the others because there is no one bandwidth that is a substitute for all other bandwidths. In addition, most PBDS providers offer services subject to service quality levels, memorialized in SLAs with different performance criteria. It is not at all clear that regulation of one service quality level would discipline prices at other service quality levels.

At the same time, it is unlikely that the Commission could assign a specific price for all non-competitive PBDS as part of a benchmark regime. This would require setting specific prices for each capacity, each service quality level, each term plan, and possibly each different relevant geographic area. The more pragmatic approach would be to regulate only a subset of services that, together, are deemed sufficient to constrain the prices of other non-competitive Business Data Services. In this way, the benchmark approach must function like multiple anchor prices. Indeed, it is apparent that the anchor and benchmark mechanisms would, at least in this context, be essentially the same.

Thus, to be workable, the anchor/benchmark proposal would require that the Commission identify an appropriate set of services that, if regulated, would constrain the leading competitor's prices for other non-competitive Business Data Services. This would be difficult to accomplish because the Commission lacks the customer demand information needed to determine precisely which services are substitutes for others. But even if this could be achieved, it might become quickly outdated. For example, Business Data Service providers could introduce new service features (e.g., more efficient dynamic capacity allocation) that are highly desirable to customers and regulated prices for older, less efficient services might not constrain the prices for the newer service. Thus, the Commission would need to update its list of regulated anchor/benchmark prices on a regular basis.

There is also a significant risk that an anchor/benchmark regime would be susceptible to various forms of regulatory evasion. Using the example of service quality again, the regulated firm would have the incentive to target improvements in service quality to services not subject to price regulation. Alternatively, the leading competitor would have the incentive to allow the quality of the services subject to regulation to degrade over time, while maintaining higher quality performance of the unregulated services. This is essentially what the incumbent LECs have done with unbundled network elements. It is a very difficult strategy for the Commission to defeat because it generally requires the application of service-quality regulation, which is difficult both to design properly and to enforce. Again, the problems states have encountered in regulating the service qualify of unbundled elements illustrates the challenges associated with this form of regulations.

In sum, the anchor/benchmark approach poses a set of complex implementation problems associated with selecting a subset of services to be subject to *ex ante* rate regulation. These

problems do not exist under price caps because price caps simply require that the regulated firm set the prices for all non-competitive services in the price cap basket such that the weighted average of those prices does not exceed the PCI.

F. The Commission Should Set *Ex Ante* Regulated Rates for Business Data Services at Levels that Minimize a Leading Competitor's Ability to Set Prices at Unreasonably High Levels in Non-Competitive Markets.

Regardless of what form of *ex ante* rate regulation applies in non-competitive markets, the Commission must establish appropriate rate levels for regulated services. Under price caps, the Commission will need to attribute reasonable prices for Business Data Services to be used to set the initial level of the PCI. Under non-price cap regulation, such as some form of benchmark pricing, the Commission will need to adopt a specific price for each service subject to regulation. The ideal approach to setting regulated rates for non-competitive Business Data Service markets is to seek to replicate the prices charged in competitive markets, which would equal the incremental costs of providing service. Because this is difficult to achieve, however, the Commission should take a pragmatic approach to setting regulated rates.

Rates for CBDS should be reduced by applying a modified X Factor. In the case of CBDS, the Commission should rely on existing price cap mechanisms to set prices. The Commission should first reduce the prices of CBDS in areas subject to Phase II pricing flexibility to the level of the prices for CBDS services subject to price caps. This will eliminate the rate differential that has developed in areas in which incumbent LECs were inappropriately relieved of price cap regulation based on unreliable proxies for competition used in the Commission's pricing flexibility regime. Once the prices charged in Phase II areas are reduced in this manner, they should be included in the price cap regime consistent with the discussion above regarding price cap regulation. The PCI for the Business Data Service price cap basket

should then be subject to an initial, one-time reduction designed to account for the absence of an appropriately set X Factor since the X Factor was set equal to inflation under the CALLS plan. The one-time initial reduction should be set equal to the extent to which incumbent LECs have experienced increases in productivity in excess of the economy as a whole due to the absence of an appropriate X Factor. For example, consistent with the Verizon-INCOMPAS proposal, the Commission could use 2003 as the starting point for the one-time adjustment calculation, since that is the year when the X Factor was set equal to inflation under the CALLS plan.[106] The Commission should then apply a prospective annual X Factor designed to reduce the PCI to the extent incumbent LECs experience increases in productivity in excess of the economy, minus inflation, and as modified by exogenous cost changes.

Rates for PBDS should be reduced by applying the results of regressions. The best way to set regulated rates for PBDS would be to replicate the prices charged in markets subject to effective regulation or to set prices based on the leading competitors' costs. Unfortunately, the Commission does not currently have access to reliable information as to the level of prices charged for PBDS in effectively competitive markets or leading competitors' costs of providing PBDS. Accordingly, perhaps the most practical means of setting regulated PBDS prices in the near term would be to estimate the prices charged by leading competitors in non-competitive markets and then reduce those prices by the percentage observed in the locations subject to competition in the regressions performed by Dr. Baker or Dr. Rysman.

The Commission should not use the prices incumbent LECs filed in response to the mandatory data request to determine incumbent LEC prices in non-competitive areas under this

[106] *See id.*

approach. Those prices are from 2013, and PBDS prices have declined since 2013 even in non-competitive areas. In order to establish the price that incumbent LECs currently charge in non-competitive markets, the Commission could instead collect from the incumbent LECs the prices they charge their five largest retail and five largest wholesale Business Data Service customers. The weighted average of the prices that incumbent LECs charge these customers in the areas classified as non-competitive could constitute the non-competitive price for purposes of the regulation. The Commission would then reduce those prices by the differential in prices subject to competition found in the regressions. For example, based on the results of Dr. Baker's primary specification, the presence four or more in-building providers, four or more nearby providers, and a provider that relies on a UNE lowers prices by 19.7 percent.[107] The Commission should therefore reduce incumbent LEC PBDS prices in non-competitive areas by at least 19.7 percent.[108]

It is important to emphasize that this methodology is unlikely to produce prices at or even close to the level charged in markets subject to effective competition. As Dr. Baker has observed the reductions observed in response to competition in his primary specification is likely artificially low due a range of factors that cannot be controlled for in the regressions.[109]

Accordingly, the methodology proposed herein should be an interim approach to be used while the Commission constructs a cost model for establishing regulated PBDS. Once the cost

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[107] See Baker Decl. ¶ 63.

[108] It is possible that a larger reduction in PBDS prices in non-competitive areas should be required because the regressions almost certainly understate the extent to which incumbent LEC prices change in the presence of effective competition. *See id*. ¶¶ 68-94 (discussing bias in the data that likely mute the inverse relationship between the number of competitors and price).

[109] *Id.* ¶¶ 68-94.

model has been completed, regulated PBDS prices should be changed to reflect the output of the model. In the case of price caps, this would be done by resetting the PCI to account for differences in prices yielded by the cost model and the PBDS prices charged by the incumbent LEC under price caps. In the case of a benchmark approach, the benchmark prices would be reset to equal the prices produced by the cost model.

The Commission should adopt rules designed to prevent price squeezes. As the Commission recognizes in the *FNPRM*, Business Data Service providers in non-competitive markets likely have the incentive and ability to "'strategically manipulate the price of their direct competitors' wholesale inputs to prevent competition in the downstream retail market.'"[110] A leading competitor is most likely to engage in this conduct by charging high prices for stand-alone Business Data Services (which are usually purchased by wholesale customers) and low prices for bundled service offerings (which are usually purchased by retail customers). The most effective way to prevent leading competitors from harming competition in this manner is to require that they charge cost-based prices for stand-alone Business Data Services offered in non-competitive markets. But the Commission lacks the information needed to adopt this approach, at least initially. Accordingly, it must adopt second-best protections to limit the extent to which leading competitors are able to act on their incentive to utilize price squeezes to prevent competition from developing.

First, leading competitors should be required to establish a standard schedule for tiered volume discounts for the sale of stand-alone Business Data Services in non-competitive areas.

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[110] *Order and FNPRM* ¶ 442 (quoting *Unbundled Access to Network Elements, Review of Section 251 Unbundling Obligations of Local Exchange Carriers*, Order on Remand, 20 FCC Rcd. 2533, ¶ 63 (2005)).

These volume discounts must pass through to customers the cost savings that leading competitors experience when they sell Business Data Services in large volumes. In order to assess the extent to which the incumbent LECs' discounts reflect their cost savings, the Commission should require that incumbent LECs file with the Commission copies of their customer contracts containing the ten largest volume commitments for Business Data Services (these are likely to be many of the same ten customers that would be used to establish PBDS prices for non-competitive markets). The Commission should establish a presumption that an incumbent LEC's standard schedule of volume discounts must provide customers in non-competitive markets with discounts that are at least as high as the highest discount offered under the ten agreements for each volume level encompassed by the agreements. The offers in the standard schedule should be expressed as discounts off of the regulated prices in non-competitive markets. This way, the actual price paid by a customer will decline as the regulated prices decline due to the application of an X Factor or similar mechanism for establishing annual reductions in regulated prices. Standard volume offers must of course comply with all of the regulations described in Section IV governing the terms and conditions included in volume and term plans. As also explained above, any individually negotiated contract with a customer must be filed as a contract tariff. Finally, the leading competitor should have the right to challenge the prices required under this regime based on a showing that they are below the carrier's costs of providing the services.

Second, as an additional safeguard, the Commission should prohibit a leading Business Data Service provider from charging any customer a higher price for stand-alone Business Data Services than for any bundled offer that includes Business Data Services. In order to monitor leading competitors' pricing practices, the Commission should require that leading competitors

file with the Commission the contracts governing the five lowest prices for service bundles that include Business Data Services in each state in which they operate. These filings should be made annually. The contracts need not be shared with other parties, but the Commission can use them to monitor the extent to which the leading competitors are manipulating the price of Business Data Services to harm downstream retail competition for bundled service offerings. Where necessary, the Commission can initiate an investigation to address unreasonably discriminatory conduct.

The Commission should adopt a regulatory backstop for multi-location services. As the Commission observes in the *FNPRM*, a Business Data Services "end user's competitive choices generally fall as the number of locations where it needs connectivity rises, as the number of those locations that are found in areas with less dense BDS demand rises, and as the end user's demand for higher-quality and lower-bandwidth rises."[111] This is equally true for carrier customers. In other words, the presence of competition in a subset of locations where multi-location customers demand service may not result in lower prices at these customers. This would undermine the premise of the competition test, which is that *ex ante* rate regulation should only apply in areas that are classified as non-competitive.

The Commission should therefore establish a regulatory backstop to prevent multi-location customers from being harmed by the absence of competition in areas classified as competitive under the market competition test. Specifically, the Commission should establish a presumption that it is unreasonable for a leading competitor to charge a multi-location customer a rate in a competitive area that is higher than the regulated rate for the same service in a non-

[111] *Id.* ¶ 160.

competitive area. As explained, the Commission should give leading competitors the ability to establish different pricing zones based on differences in the cost of providing service. To the extent that a leading company does establish such zones, the relevant comparison for purposes of the multi-location service backstop would be the regulated price in the same pricing zone as the price charged in the competitive area. The leading competitor should have the right to rebut the presumption that charging a price above the regulated price is unreasonable by showing that its costs of providing the service in the competitive area exceed the regulated rate. This might be the case, for example, if the leading competitor must deploy an unusually long connection in order to serve the customer location in the competitive area.

G. The Commission Should Require Leading Competitors to File Tariffs in Non-Competitive Areas.

In the *FNPRM*, the Commission acknowledges that tariffs "can help combat unjust and unreasonable rates, terms, and conditions,"[112] but the Commission nevertheless proposes to require public disclosure of generally available rates, terms, and conditions via a carrier's website, rather than through tariff filing.[113] Under this proposal, the Commission would forbear from the tariffing requirements of Section 203 of the Act[114] and from the related tariff enforcement provisions in Sections 204 and 205 of the Act.[115] In the absence of these requirements, the Commission would need to rely on some form of complaint proceeding under Section 208 of the Act to enforce regulated rates in non-competitive markets. While it may be

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[112] *Id.* ¶ 435.

[113] *Id.* ¶ 436.

[114] *See* 47 U.S.C. § 203.

[115] *See Order and FNPRM* ¶¶ 504-506; 47 U.S.C. §§ 204-205.

possible to do this, tariffs and tariff enforcement mechanisms are a more effective and efficient mechanism for detecting and deterring discrimination by a leading competitor. Accordingly, either a price cap or benchmark pricing regime would be more effective at preventing the abuse of market power in non-competitive areas if the Commission required the leading competitor in a non-competitive market to file tariffs.

Tariffs are more effective and efficient rate regulation enforcement mechanisms than complaint proceedings. Section 203 of the Act states that common carriers must file schedules of their charges along with the "classifications, practices, and regulations affecting such charges."[116] Courts and the Commission have repeatedly found that the Section 203 tariff filing requirement and related provisions of Title II play an essential role in restraining dominant carriers' ability to exercise market power. As the D.C. Circuit has explained,

> [t]he centerpiece of [T]itle II common carrier regulation is the supervision of filed tariffs. Pursuant to [T]itle II, every common carrier must file tariffs with the FCC for the communication services it provides. Any charge for a common carrier service that is "unjust," "unreasonable," or "unreasonabl[y] discriminat[ory]" is unlawful and shall be so declared by the Commission. Whenever a common carrier files a new or revised tariff, the Commission may suspend the charge for a period of five months, conduct an investigation into the lawfulness of the charge, and prescribe rates after holding appropriate hearings. The Commission may also suspend any existing charge and issue a cease and desist order prescribing the proper charge to be collected, provided the FCC has conducted a full hearing and concluded the existing charge to be unlawful.[117]

In this way, tariffs "serve as a kind of 'tripwire' enabling the Commission to monitor the activities of carriers subject to its jurisdiction and to thereby [ensure] that the charges, practices,

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[116] *See Order and FNPRM* ¶ 506; 47 U.S.C. § 203(a).

[117] *Sw. Bell Tel. Co. v. FCC*, 19 F.3d 1475, 1479-80 (D.C. Cir. 2001) (internal citations omitted).

classifications, and regulations of those carriers are just, reasonable, and nondiscriminatory within the meaning of Sections 201 and 202 of the Act."[118]

Moreover, the provisions in the Communications Act that govern the review of tariffs and the prescription of prices in tariffs establish an efficient means of monitoring the conduct of leading competitors.[119] Section 204 empowers the Commission to suspend and investigate "any new or revised charge, classification, regulation, or practice."[120] Private parties may also request that the Commission suspend and investigate a newly filed or revised tariff under Section 204.[121] Section 204 allocates to the tariff filer the burden of proving that the new or revised tariff provision at issue is lawful.[122] Section 205 also provides the Commission with the discretion to initiate an investigation of existing charges, classifications, regulations, and practices and also enables the Commission to prescribe rates and issue penalties.[123] In addition, private parties may request that the Commission conduct an investigation under Section 205.[124]

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[118] *Western Union Telegraph Company; New Telex Service Arrangements Via Mexico and Canada*, Memorandum Opinion & Order, 75 FCC 2d 461, ¶ 47 (1979), *vacated on other grounds by ITT World Commc'ns v. FCC*, 635 F.2d 32 (2d Cir. 1980).

[119] *See Order and FNPRM* ¶ 440 (stating that in enforcing its anchor or benchmark pricing methodology for packet-based Business Data Services, it would rely on the Section 208 process in which "interested parties . . . file complaints alleging that particular BDS providers' rates, terms, and conditions are unjust, unreasonable, or unjustly or unreasonably discriminatory"); *see also id*. ¶¶ 505-506 (proposing detariffing in both competitive and non-competitive areas seeking comment on whether forbearance from Sections 204 and 205 is appropriate).

[120] 47 U.S.C. § 204(a)(1).

[121] *Id.* § 204(a)(1).

[122] *Id.*

[123] *See id.* § 205(a).

[124] *See id.*

In a tariff review proceeding conducted under Section 204 or 205, the Commission initiates the proceeding by releasing a Designation Order in which it defines the tariff provisions subject to investigation, describes the nature of the possible legal violation, and describes the data and information that the tariffing party must file with the Commission in its Direct Case. Interested parties and the Commission then have the opportunity to review and analyze that data and information after the Direct Case is filed. The Commission relies on this analysis, along with input from the tariffing party, to reach its conclusions as to the lawfulness of the tariff under investigation. The entire process can be completed quite quickly. For example, the Commission completed the tariff investigation conducted in this proceeding in just over six months.

In contrast, if PBDS were not tariffed, it would be far more difficult for customers to challenge leading competitors' PBDS rates. Customers seeking to do so would likely need to rely on the Section 208 complaint process. The complainant in a Section 208 proceeding initiates the proceeding by filing a complaint that sets forth its legal claims and the basis for those claims. The complainant must seek access to relevant information through the discovery process. This process is generally far more expensive and slower than the information gathering process in a tariff investigation. In addition, unlike an investigation conducted under Section 204, a party challenging the lawfulness of a tariff under Section 208 bears the burden of proving that the tariff violates the Act or the Commission's rules or orders.[125] Nor does the Commission have the power to suspend the operation of a tariff in a complaint proceeding under Section 208.

Of course, the Commission could adopt a streamlined complaint process for challenging Business Data Services rates under Section 208. But prior attempts to establish accelerated

[125] *See Hi-Tech Furnace Sys., Inc. v. FCC*, 224 F.3d 781, 787 (D.C. Cir. 2000).

complaint processes have shown that it is difficult to do this effectively given the inherently costly and slow nature of the adversary process. For example, the Commission's accelerated docket complaint process usually requires that the parties engage in lengthy settlement discussions before the complainant files a complaint.[126] Moreover, the Enforcement Bureau may conclude that a complaint is unsuitable for the accelerated docket process if it raises multiple issues or if it would require complex discovery for resolution.[127] Once a party obtains authorization to file a complaint in the accelerated docket, the party must bear the expensive and time-consuming burden of collecting and filing every document in its possession, custody, or control that is likely to bear significantly on any claim in the complaint.[128] In the Joint CLECs' experience, these and other requirements have made the accelerated docket an unattractive and largely ineffective means of addressing conduct by dominant carriers. It is difficult to see how the Commission could design a more effective regime for PBDS.

Moreover, the differences between tariff investigations and adversarial complaint proceedings have important implications for enforcing *ex ante* rate regulation. Because the Section 208 complaint process is slower, more expensive, and less likely to result in a favorable outcome, customers are less likely to use that process to challenge the rates, terms, and conditions on which a carrier provides Business Data Services than would be the case if the tariff

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[126] *See* 47 C.F.R. § 1.730(b) ("In appropriate cases, the Commission staff shall schedule and supervise pre-filing settlement negotiations between the parties."); *id.* § 1.730(e)(1) (stating that the Enforcement Bureau may deny a request for inclusion of a complaint in the accelerated docket if the parties have not "exhausted the reasonable opportunities for settlement during the staff-supervised settlement negotiations").

[127] *See id*. § 1.730(e)(3).

[128] *See id*. § 1.729(i).

review process applies. A leading competitor in a non-competitive market is therefore less likely to be deterred from increasing prices above the rate set by regulation in the absence of tariffs because it will know that a customer is unlikely to file a complaint challenging the rates. This problem is especially acute in the case of small customers because small customers generally lack the resources needed to challenge a carrier's rates in an adjudication.

Ironically, if the Commission were to impose *ex ante* rate regulation on non-leading competitors, it is likely that a complaint process would have a greater deterrence effect on such competitors as compared to the effect on leading competitors. Smaller competitors are less likely to have the resources to participate in a complaint proceeding and are more likely to be concerned about the reputational harm associated with an adverse Commission decision. Thus, the complaint process would likely cause non-leading competitors to charge prices at or below a benchmark rate even if the leading competitor would feel free to charge rates above the benchmark rate. Moreover, to the extent non-leading competitors felt constrained to charge at or below a benchmark rate even when their costs to serve a particular location may be higher than the benchmark rate (because, for example, they must deploy loops of substantially greater distance than the leading competitor to serve that location), the non-leading competitor would face a substantial disincentive to deploy facilities to compete at that location at all.

Accordingly, regardless of whether the Commission chooses price caps or a benchmark regime, it should require that the competitors subject to the regulatory regime file tariffs. This requirement will enable to Commission to take advantage of the robust enforcement powers set forth in Sections 204 and 205, which are much more effective at ensuring compliance with rate regulation than a complaint proceeding.

Tariffs are an important part of the existing price cap regime. The tariff filing process also plays an important role in enforcing rate regulation under a price cap regime. The price cap regime, at least as implemented by the Commission in the past, essentially utilizes the threat of suspension and investigation under Section 204 as a means of giving the regulated carrier the incentive to charge prices that are within the relevant price cap.

Specifically, tariff filings that propose within-band, within-cap rates fall within a "no suspension zone" if they are accompanied by "supporting materials sufficient to establish compliance with the applicable bands, and to calculate the necessary adjustments" to the actual price index API and service band index ("SBI").[129] The no suspension zone reflects a presumption that the proposed tariff should become effective without suspension and investigation because it is "unlikely . . . that rates . . . constrained by the price cap formula . . . would be unreasonably high."[130] Accordingly, petitions to suspend and investigate tariffs that propose within-band, within-cap rates face a more stringent standard of review than petitions to suspend and investigate tariff filings that propose rates that are outside of the no suspension

[129] *See id.* § 61.49(b). The fact that a tariff filing proposes rates that fall within the no suspension zone does not constitute an assessment of "whether the tariff itself is lawful on the merits under the Communications Act." *LEC Price Cap Order* ¶ 295.

[130] *LEC Price Cap Order* ¶ 293.

zone.[131] In addition, tariff filings that propose rates outside of the no suspension zone must be accompanied by materials that demonstrate why the proposed rates are appropriate.[132]

Since the suspension and investigation provisions of Section 204 only apply to tariffs, the threat that the Commission would exercise its power under these provisions is only effective if the service provider must file a tariff. It is for this reason that tariff filings are a key component of the existing price cap regime. Of course, the Commission might be able to design a price cap regime that does not utilize the tariffs and that would therefore presumably not rely on the suspension and investigation process to enforce rate limits. But it is not at all clear that such a regime would be more effective or less burdensome for providers or the Commission than the existing price cap regime. Indeed, given that such a regime would likely need to rely on some

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[131] *See* 47 C.F.R. § l.773(a)(l)(iv) (establishing that tariff filings made pursuant to Section 61.49(b) of the Commission's rules are *prime facie* lawful and not subject to suspension unless a petition requesting suspension shows that: (1) "there is a high probability the tariff would be found unlawful after investigation"; (2) the suspension "would not substantially harm other interested parties"; (3) "irreparable injury will result if the tariff filing is not suspended"; and (4) "the suspension would not otherwise be contrary to the public interest"); *but see Bell Atlantic Telephone Cos.*, Order, 10 FCC Rcd. 10831, ¶ 3 (1995) (establishing that the Wireline Competition Bureau may suspend and investigate tariff filings when it finds, after initial review, that there are significant issues concerning the lawfulness of the tariff filing).

[132] *See* 47 C.F.R. § 61.49(d) (requiring a price cap tariff filing that proposes rates that will result in an API value that exceed the applicable PCI value to be accompanied by: (1) "[a]n explanation of the manner in which all costs have been allocated among baskets"; and (2) "[w]ithin the affected basket, a cost assignment slowing down to the lowest possible level of disaggregation, including a detailed explanation of the reasons for the prices of all rate elements to which costs are not assigned"); *id.* § 61.49(c) (requiring a "price cap tariff filing that proposes rates above the applicable band limits . . . [to] be accompanied by supporting materials establishing substantial cause for the proposed rates"); *id.* § 61.49(e) (requiring "a price cap tariff filing that proposes restructuring of existing rates [to] be accompanied by supporting materials sufficient to make the adjustments to each affected API and SBI").

form of complaint process for enforcing rate limits, it would likely be less well suited to the task than a tariff-based regime for the reasons described above.

Leading competitors should file contract tariffs. In the *FNPRM*, the Commission states that "forbearance from tariffing will allow for greater use of commercial negotiations, which will facilitate innovative integrated service offerings designed to meet changing market conditions and will increase customers' ability to obtain service arrangements that are specifically tailored to their individualized needs."[133] But while customers may benefit from the ability to enter into individually negotiated commercial agreements, the use of tariffs, under either a price cap or a benchmarking regime, does not preclude that ability. Today the incumbent LECs and their customers regularly enter into individually negotiated agreements for CBDS that are filed as contract tariffs. Leading competitors and their customers should be free to continue to enter into such agreements, and to enter into similar agreements for packet-based services, provided that those agreements also are filed as contract tariffs pursuant to Section 203 if they govern the provision of Business Data Services in non-competitive markets. It should be noted, though, that contract tariff filings should include every term of the contract, except the name of the customer. Requiring commercial agreements for Business Data Services to be filed as comprehensive contract tariff descriptions strikes the appropriate balance between fostering innovation and flexibility and ensuring that private parties and the Commission have the necessary tools to detect and deter anticompetitive or discriminatory conduct by leading competitors.

Accordingly, the Commission should rule that Section 203 mandates that *any* commercial agreement that affects, either directly or indirectly, the manner in which a leading competitor

[133] *Order and FNPRM* ¶ 434.

provides CBDS or PBDS in a non-competitive market must be filed as a contract tariff. Under this requirement, an incumbent LEC would be required to file as a contract tariff any commercial agreement that includes, for example, a credit against shortfall penalties incurred under a Business Data Services tariffed pricing plan in exchange for a commitment to purchase a certain volume of wireless services. If commercial agreements affecting the manner in which Business Data Service is provided are not filed, customers and the Commission will be unable to determine whether the leading competitor is discriminating unreasonably between customers in the sale of like services in violation of Section 202(a) of the Act.

Finally, the Commission should initiate enforcement proceedings against the incumbent LECs that have violated Section 203 by failing to file as contract tariffs the commercial agreements that affect their charges for DS1 and DS3 dedicated services. Not only did such conduct violate Section 203 and thus warrant enforcement action on that ground alone, as the record of the BDS Tariff Investigation makes clear, the incumbent LECs have used "tariff pricing plan penalty liability as leverage to induce competitive LECs to agree to large PBDS purchases."[134] In so doing, the incumbent LECs have abused their market power in the provision of CBDS to extend their dominance in the provision of PBDS in clear violation of Sections 201(b) and 202(a).

[134] *Id.* ¶ 456. The Commission notes that "such provisions appear in multiple commercial agreements submitted by the four large incumbent LECs in response to the Bureau's tariff investigation." *Id*.

IV. THE COMMISSION SHOULD ADOPT A COMPREHENSIVE REGIME TO ADDRESS THE HARMFUL EFFECTS OF CERTAIN TERMS AND CONDITIONS IN TARIFFS AND COMMERCIAL AGREEMENTS FOR BUSINESS DATA SERVICES.

In the *Order*, the Commission held that provisions in the tariffs subject to the investigation that impose "all-or-nothing" purchase obligations as well as provisions that impose shortfall or early termination penalties that exceed incumbent LECs' expectation damages are unjust and unreasonable in violation of Section 201(b) of the Act.[135] These are welcome first steps toward reining in the harmful lock-up effects of incumbent LEC volume and term Business Data Services plans, but they are insufficient to address this issue. The Commission should therefore build on the reforms adopted in the tariff investigation by adopting a comprehensive regime governing Business Data Services term and volume plans. The primary focus of this regime should be to limit the extent to which incumbent LECs can use their market power in non-competitive Business Data Services markets to harm competition and consumer welfare.

A. Requirements Applicable to Incumbent LEC Tariffs and Commercial Agreements in Non-Competitive Business Data Services Markets.

Except where otherwise indicated, the reforms described below should apply to incumbent LEC tariffs and commercial agreements[136] to the extent that they govern the sale of Business Data Services in non-competitive Business Data Services markets.[137]

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[135] *Id.* ¶¶ 110-111, 140, 158.

[136] As explained in Section III.G above, the Commission should require that incumbent LECs file as tariffs all agreements that affect the rates, terms, and conditions on which they offer Business Data Services in a relevant market. We refer to commercial agreements here to account for the possibility that the Commission declines to take this step in whole or in part.

[137] As explained in Section III.B above, competitors other than incumbent LECs might be classified as the leading or dominant competitor in one or more Business Data Services market in

All-or-nothing provisions. In the *Order and FNPRM*, the Commission determined that all-or-nothing provisions in the tariffs subject to investigation are unjust and unreasonable in violation of Section 201(b). The Commission reached this conclusion because all-or-nothing provisions by themselves, and in combination with other provisions such as exorbitant shortfall and early termination penalties, harm Business Data Services purchasers and competition by preventing purchasers from "controlling and reducing their purchase commitments" made under the tariff plans.[138]

There is every reason to believe that all-or-nothing provisions in other tariffs, including contract tariffs and commercial agreements governing incumbent LECs' sale of Business Data Services, have these same harmful effects. That is, there is nothing about the tariffs subject to the investigation that would cause all-or-nothing provisions to be more harmful when included in those tariffs than would be the case when such provisions are included in other tariffs or commercial agreements.

Nor is there any reason to think that all-or-nothing provisions are any less harmful when included in purchase arrangements governing the sale of PBDS in non-competitive markets than is the case when they are included in tariffs or commercial agreements governing the sale of CBDS in non-competitive markets. In fact, incumbent LECs could use a requirement that a customer purchase all of the PBDS it purchases from an incumbent LEC pursuant to a particular volume commitment plan as an effective means of locking up the PBDS market far into the

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the future. Where this is the case, the same regulations should apply to such competitors as those proposed here for incumbent LECs.

[138] *Order and FNPRM* ¶ 104.

future. Moreover, the incumbent LECs' purported justifications for including all-or-nothing provisions in tariffs or commercial agreements other than those subject to the tariff investigation cannot be any different from or more compelling than the inadequate justification proffered by the incumbent LECs in the tariff investigation.

The Commission should therefore find that all-or-nothing provisions in incumbent LEC arrangements for the sale of Business Data Services in non-competitive markets are unjust and unreasonable regardless of whether those provisions appear in standard tariffs, contract tariffs, or non-tariffed commercial agreements, and regardless of whether those agreements govern the purchase of CBDS or PBDS. Pursuant to this ruling, incumbent LECs should be prohibited from directly or indirectly preventing purchasers from determining the volume of Business Data Services included in a volume commitment to the extent applicable in a non-competitive market. In addition, incumbent LECs should be prohibited from limiting the number of volume commitments, whether of the same type or different types, that purchasers are able to enter into. In other words, if an incumbent LEC offers two separate volume commitment plans, a purchaser should be able to sign up for one or more of each type of commitment, or none, at its discretion. For example, if a customer has several different operating subsidiaries, each with its own access carrier name abbreviation ("ACNA") used to order Business Data Services from the incumbent LEC, an incumbent LEC must permit the customer to enter into separate purchase arrangements, including separate plans under the same tariff or commercial agreement, for each ACNA in the same incumbent LEC territory. Alternatively, if a customer has only one ACNA, the incumbent LEC should permit the customer to enter into separate purchase arrangements, including separate plans under the same tariff or under different tariffs or commercial agreements, under the single ACNA in the same incumbent LEC territory.

Finally, the Commission should require an incumbent LEC to permit customers to move Business Data Services circuits from one ACNA to another or between plans under the same ACNA without restriction within a non-competitive Business Data Services market. **[BEGIN HIGHLY CONFIDENTIAL]**

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The Commission should also prevent incumbent LECs from depriving customers of the right to move Business Data Services circuits between ACNAs or between different plans under the same ACNA by delaying the transfer of circuits between accounts. **[BEGIN HIGHLY CONFIDENTIAL]**

[142] **[END HIGHLY CONFIDENTIAL]** Accordingly, after a customer request to transfer a Business Data Services circuit to a different purchase plan account (i.e., from one ACNA to another or between plans under the same ACNA) has been pending for two weeks, the incumbent LEC should be required to bill the customer the rate applicable under the plan to which the customer seeks to transfer the circuit.

Shortfall and early termination penalties. The Commission found in the *Order and FNPRM* that shortfall and early termination penalties in the tariffed plans under investigation are

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unjust and unreasonable to the extent that they exceed incumbent LECs' expectation damages. Accordingly, the Commission directed the incumbent LECs to revise tariffed pricing plans that contain such provisions. At the same time, the Commission expressly held that it has *not* reached any decision as to the lawfulness of provisions that set shortfall and early termination penalties *below* expectation damages, and the Commission sought comment on whether and how it can adopt a more appropriate standard than expectation damages.[143] As explained below, the Commission should replace the expectation damages standard with a presumption that shortfall and early termination penalties should be no higher than 50 percent of expectation damages for Business Data Services sold by incumbent LECs in non-competitive areas.

The Commission's assessment of shortfall and early termination penalties turns largely on whether expectation damages, or some other measure of damages, would best ensure that incumbent LECs and their customers receive the benefit of the "agreement" or "bargain" under Business Data Services tariffs and commercial agreements.[144] But this standard does not, on its own terms, support retention of the expectation damages standard, and, in all events, it is an inappropriate standard for assessing penalties imposed by a firm with market power.

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[143] *See Order and FNPRM* ¶ 136 ("While we establish a threshold, above which we find shortfall penalty [provisions] to be unreasonable, we do not at this time make a determination as to shortfall penalty provisions in incumbent LEC pricing plans that assess a lesser amount."); *id.* ¶ 156 ("We do not, however, intend our decision to identify what we conclude is an unreasonable early termination fee to have any effect on early termination provisions in incumbent LEC pricing plans that assess a lesser amount.").

[144] *See, e.g.*, *id.* ¶ 132 (characterizing expectation damages as "damages as measured by the seller's revenue expectations under the agreement"); *id.* ¶ 148 ("[W]e scrutinize these [early termination] fees in light of both their reasonableness in compensating incumbent LECs for the benefit of their bargain and the potential harms unreasonable early termination penalties can have on the IP-transition.").

To begin with, application of the expectation damages standard likely causes incumbent LECs to receive compensation in excess of the "agreement" or "bargain" they entered into with their customers. Incumbent LECs have stated that they incur costs when they provide Business Data Services, and presumably they avoid most such costs when a customer does not purchase Business Data Services circuits.[145] Incumbent LECs have also stated that they incur costs when terminating circuits. It is likely that the costs of providing service that incumbent LECs avoid over time are much larger than the costs they incur when terminating Business Data Services. To the extent that this is the case (and incumbent LECs have made no attempt to refute prior competitive LEC claims that it is[146]), an incumbent LEC makes more profit when it imposes a shortfall or early termination penalty under which it is paid the full amount due under a volume commitment than when the customer satisfies its volume commitment. In addition, in non-competitive markets, the incumbent LEC will likely sell the Business Data Services circuits that the penalized customer declined to purchase to a different customer, thereby earning even higher profits. Thus, the expectation damages standard allows the incumbent LEC to recover far more than would be possible under reasonable interpretation of the terms of the "agreement" or "bargain" with the customer.

In any event, it is inappropriate for the Commission to assess the reasonableness of shortfall and early termination penalties based on whether they ensure that the incumbent LEC and its customer receive the benefit of the "agreement" or "bargain" in non-competitive markets.

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[145] *See* Brief of AT&T Inc. in Support of Its Direct Case, WC Docket No. 15-247, at 33 (filed Jan. 8, 2016) ("AT&T Brief").

[146] *See Order and FNPRM* ¶ 131.

There is no meaningful "agreement" or "bargain" in such markets. Rather, except to the extent limited by regulation, the incumbent LEC dictates the terms of the sale to customers that have few or no alternative suppliers – indeed, this is the reason that the prices and terms of such sales are regulated in the public interest under the Communications Act. An incumbent LEC incurs essentially no risk under these agreements because, as explained, the incumbent LEC will almost certainly sell the same circuits to another customer in non-competitive markets.

Moreover, the experience of competitive LECs is that shortfall and early termination fees set to equal expectation damages are prohibitively high and have forced competitive LECs to do everything possible to avoid incurring these penalties. For example, XO states that in order to avoid liability for shortfall penalties – even those that are based on expectation damages – it is "paying for service that it does not take, often because existing customers are migrating from DSn TDM services to Ethernet services and fewer new orders are coming in."[147] **[BEGIN HIGHLY CONFIDENTIAL]**

[148] **[END HIGHLY CONFIDENTIAL]**

It is also significant that competitive LECs either do not include shortfall or early termination penalties in their wholesale Business Data Services agreements or, if they do include

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[147] Comments of XO Communications, LLC on ILECs' Direct Cases, WC Docket No. 15-247, at 46 (filed Feb. 5, 2016) ("XO Opposition").

[148] **[BEGIN HIGHLY CONFIDENTIAL]**

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them, the penalties are far lower than expectation damages. For example, XO states that "other providers' plans generally do not have . . . shortfall penalties,"[149] and they allow XO **[BEGIN HIGHLY CONFIDENTIAL]**

[150] **[END HIGHLY CONFIDENTIAL]** In agreements with its wholesale customers, XO does not use "punitive shortfall penalties for failure to meet minimum commitments,"[151] and **[BEGIN HIGHLY CONFIDENTIAL]**

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[153] **[END HIGHLY CONFIDENTIAL]**

Accordingly, the Commission should establish a limit on shortfall and early termination penalties that is lower than expectation damages. Indeed, some incumbent LEC tariffs include shortfall and early termination penalties that are set at less than half of expectation damages. For example, the Verizon DS1 TVP sets shortfall penalties at approximately 33 percent of

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[149] XO Opposition at 52.

[150] *Id.* at 53.

[151] *Id.* at 55.

[152] *Id.*

[153] **[BEGIN HIGHLY CONFIDENTIAL]**

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expectation damages.[154] The PacBell and SWBT TPPs set early termination penalties at 40 percent of expectation damages.[155] Other incumbent LEC tariffs set shortfall and early termination penalties at 50 percent of expectation damages. For example, the AT&T ACP sets the shortfall penalty equal to the difference in the commitment level and the number of in-service circuits, multiplied by 50 percent of the ACP rate.[156] The Verizon DS1 TVP sets early termination penalties at 50 percent of the remaining recurring charges for the first year of a plan, plus decreasing percentages of remaining monthly recurring charges for subsequent years.[157] Similarly, the CenturyLink Tariff Special Access Term Discount Plan sets early termination penalties at 50 percent of expectation damages.[158] Given that the incumbent LECs have

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[154] *See* DS1 Term Volume Plan of the Verizon Telephone Companies Tariff F.C.C. No. 14 § 5.6.14(I) (setting the shortfall penalty, applied annually, at the lowest applicable monthly recurring rate, multiplied by the shortfall, multiplied by four months) ("Verizon DS1 TVP").

[155] *See, e.g.*, Pacific Bell TPP § 7.4.18(G)(2); Southwestern Bell TPP § 7.2.22(G)(2) (setting the early termination period for customers that have satisfied the minimum service period at the applicable monthly recurring rate, multiplied by the months remaining in the term, multiplied by 40 percent).

[156] *See* AT&T ACP § 2.4.8(B).

[157] *See* Verizon DS1 TVP § 5.6.14(O) (establishing the following early termination penalties: for a one-year plan, 50 percent of any remaining portion of the first year's recurring charges; for a two-year plan, the one-year plan penalty plus five percent of the total monthly recurring charges remaining for the second year; for a three-year plan, the one-year plan penalty plus 10 percent of the total monthly recurring charges remaining for the second and third years; and for a five-year plan, the one-year plan penalty plus 15 percent of the total monthly recurring charges remaining for the second through fifth years).

[158] *See* Special Access Term Discount Plan of the CenturyLink Operating Companies Tariff F.C.C. No. 9 § 7.4.11(G) (setting an early termination penalty of 50 percent of the monthly recurring charges for the remaining portion of the committed term).

voluntarily included these penalty amounts in their tariffs, they "presumably provide reasonable compensation to the incumbent LEC."[159]

Based on the level of shortfall and early termination penalties voluntarily offered by incumbent LECs, the Commission should adopt a presumption that an incumbent LEC may not set these penalties higher than 50 percent of expectation damages in non-competitive Business Data Services markets. In order to rebut this presumption, the incumbent LEC should be required to file a detailed cost study demonstrating why the net costs it incurs when customers fail to meet their volume commitments or terminate their plans early exceed 50 percent of expectation damages. The net cost calculation in this study should account for any cost savings that result from not providing service to a customer and any profits the incumbent LEC earns, on average, from other customers that purchase the volume of circuits that the customer paying the penalty has not purchased.

Moreover, there is no basis for limiting this rule to the tariffs subject to the tariff investigation. Excessive shortfall and early termination penalties are equally harmful when contained in other tariffs and commercial agreements governing the sale of Business Data Services in non-competitive markets. The Commission should therefore apply the standard set forth here to shortfall penalties and early termination penalties contained in *all* incumbent LEC arrangements for the sale of CBDS and PBDS in non-competitive markets, regardless of whether those arrangements take the form of tariffed pricing plans, contract tariffs, or non-tariffed commercial agreements.

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[159] *Order and FNPRM* ¶ 341.

Counting packet-based Business Data Services toward volume commitments. In the *Order and FNPRM*, the Commission expresses concern that incumbent LECs may use volume commitments that encompass both CBDS and PBDS (or, similarly, technology migration provisions) to effectuate harmful tying arrangements.[160] But the inclusion of both CBDS and PBDS in the same volume commitment does not, by itself, harm competition and consumer welfare. Rather, the combined effect of volume commitments for CBDS that are set at a very high percentage of a customer's historic purchase volumes, declining demand for CBDS, and unreasonably high shortfall and early termination penalties in incumbent LEC lock-up plans have given incumbent LECs the opportunity to coerce customers into large PBDS purchase commitments in exchange for some relief from high shortfall and early termination penalties. The Joint CLECs have been concerned that incumbent LECs would use these coerced PBDS volume commitments to lock up the PBDS market just as they have used CBDS volume commitments to lock up the market for CBDS.

Incumbent LECs would have been far less able to coerce customers into large volume commitments for PBDS if their lock-up tariff plans for CBDS had permitted customers to count PBDS purchases toward their volume commitments. Customers could have achieved their volume commitments using both CBDS and PBDS, thereby diminishing their exposure to high shortfall and early termination penalties under the lock-up plans. But, as the Joint CLECs have explained, the incumbent LECs' lock-up plans for CBDS either gave customers no right to count

[160] *See, e.g.*, *id.* ¶ 455.

PBDS toward their volume commitments, or they included technology migration provisions that were so limited that customers were rarely able to take advantage of them.[161]

Moreover, going forward, incumbent LECs will be even less likely to be able to use volume commitments that include both PBDS and CBDS in harmful ways if the Commission adopts the other protections described herein. Most importantly, if the Commission extends the prohibition on all-or-nothing provisions to all incumbent LEC tariffs and commercial agreements in non-competitive Business Data Services markets and adopts more robust limits on shortfall and early termination penalties, Business Data Services customers are less likely to find themselves in circumstances where they have no choice but to commit to large volumes of PBDS in order to avoid onerous shortfall and early termination penalties. It follows that the risks associated with requiring that customers be able to count their PBDS purchases toward their Business Data Services volume commitments are limited when accompanied by the reforms proposed herein.

At the same time, the benefits of such a requirement are likely to be significant. For example, allowing a customer to count PBDS toward its CBDS volume commitment would enable a wholesale customer to more easily and efficiently adjust to unanticipated fluctuations in the pace at which downstream customers replace CBDS with PBDS. Moreover, to the extent that a wholesale customer finds itself unable to meet a volume commitment for CBDS even after the reforms proposed here are adopted, counting PBDS toward such volume commitments would benefit the customer without harming the service provider in any way.

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[161] Opposition of Birch, BT Americas, EarthLink, INCOMPAS, Integra, and Level 3, WC Docket No. 15-247, at 22-23 (filed Feb. 5, 2016) ("Joint CLEC Opposition").

Nor is there a rational basis in the current market context for an incumbent LEC to insist that a customer meet its Business Data Services volume commitment only with purchases of CBDS. Such a restriction would only serve to lock customers into old, less efficient technology, thereby harming business customers and slowing the technology transition.

It follows that incumbent LECs should be required to permit customers to count their PBDS purchases toward any volume purchase commitment that includes CBDS purchases in non-competitive Business Data Services markets. That is, PBDS should count toward the volume commitment under the same circumstances that CBDS purchases count toward the volume commitment under a tariff or commercial agreement. The only qualification to this proposed rule is that the Commission must account for differences in the rate structure of CBDS and PBDS circuits. This can be accomplished by defining the volume commitment for CBDS as either a measure of total dollars spent or capacity purchased (i.e., Mbps purchased), then counting the dollar value or the capacity value of the PBDS purchases toward the commitment. Finally, the Commission should mandate that incumbent LECs permit customers to count PBDS toward any volume commitment for CBDS contained in any incumbent LEC tariff or commercial agreement that encompasses a non-competitive market in whole or in part.[162]

Tying arrangements. As the Commission acknowledges in the *Order and FNPRM*, a firm with market power in one relevant market can use tying arrangements to leverage that

[162] As explained above in Section III, the Commission should adopt a market competition test under which all Business Data Services at or below 100 Mbps is classified as non-competitive. Under this test, all DS1 and DS3 Business Data Services would be classified as non-competitive. Given that the regime described herein is designed to limit incumbent LECs' ability to exploit volume and term plans in non-competitive markets to harm competition, it makes sense to apply the requirement described here to all volume commitments for CBDS.

market power into a separate market.[163] As the Commission further observes, tying can take the form of conditioning either the sale or the price (i.e., the availability of a discounted price) in a non-competitive market on the sale of services in a competitive market.[164] Incumbent LECs are likely to have an especially strong incentive to engage in this conduct where it enables them to prevent competitive entry or to evade the effects of rate regulation. In the case of evading rate regulation, if rate regulation prevents an incumbent LEC from fully exploiting its market power in non-competitive Business Data Services markets, the incumbent LEC will have a strong incentive to tie the sale of other products to non-competitive Business Data Services so that the incumbent can reap the full value of its market power in the non-competitive market through the combined sale.

The Commission should therefore prohibit incumbent LECs from tying the sale of Business Data Services in non-competitive markets to the sale of other products. To begin with, the Commission should clarify that common carrier duties preclude any Business Data Services provider from conditioning the sale of Business Data Services in one location on the sale of BDS in another location or on the sale of non-Business Data Services. Furthermore, the Commission should prohibit incumbent LECs from tying the availability of discounts in harmful ways. For example, the Commission should clarify that an incumbent LEC may not condition the availability of a discount on Business Data Services prices in non-competitive markets on a customer's agreement to purchase Business Data Services in other markets. The Commission should also prohibit incumbent LECs from conditioning the availability of a discount on

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[163] *See Order and FNPRM* ¶ 448.

[164] *See id.*

Business Data Services prices in non-competitive markets on a customer's agreement to purchase non-Business Data Services, such as mobile wireless services or best efforts broadband.

These prohibitions should be subject to the important qualification that customers must have the right to choose how to account for the situation where a non-competitive area encompassed by a volume purchase plan for Business Data Services with the leading competitor is reclassified as competitive during the term of the plan. If the leading competitor were to prohibit a customer from counting Business Data Services purchased in the reclassified area toward the volume commitment in the plan, the customer might not be able to meet volume commitment and, if so, would be unreasonably exposed to shortfall penalties or higher prices due to the elimination of discounts. Accordingly, when an area encompassed by a leading competitor's Business Data Services volume plan (either in the form of a tariff or commercial agreement) is reclassified from non-competitive to competitive, the customer should be given the right to (1) require the volume commitment under the plan to be reduced by the volume of Business Data Services purchased by the customer in the reclassified area, or (2) continue to count the Business Data Services purchased by the customer during the life of the plan in the reclassified area toward the volume commitment in the plan.

Long-term commitments. As the Joint CLECs have explained, long-term arrangements have the effect of delaying, often by many years, customers' opportunities to purchase lower-cost and/or IP-based wholesale services.[165] The magnitude of this harm would likely be diminished if the Commission adopts the other reforms described here, because those reforms will, among other things, give customers the ability to control the size of their volume

[165] Joint CLEC Opposition at 10.

commitments and to count PBDS toward their CBDS volume commitments. Nevertheless, Business Data Services customers, especially wholesale customers, are still likely to have trouble predicting the volume of Business Data Services they will need in the future, and such predictions are more difficult the further into the future they must be made. Thus, long-term commitments inevitably expose customers to an increased risk of incurring shortfall and early termination penalties and likely delay the extent to which customers can adjust their purchases from incumbent LECs to meet their own needs and to account for the availability of emerging competitive alternatives. The result is likely to be less competition and higher costs for business customers.

In light of these harms, incumbent LECs should only be permitted to impose long-term commitments on customers in non-competitive areas where those commitments are fully justified. As the Joint CLECs have explained, the incumbent LECs have failed to provide any cost basis for the term commitments in their volume plans.[166] The incumbent LECs have offered only theoretical, unsubstantiated defenses of long term commitments. For example, they have argued that they experience efficiencies when a customer commits to buying a volume of Business Data Services over a long term,[167] but it is not clear how such cost savings would be material in areas where incumbent LECs have market power and where customers have little choice but to buy from the incumbent. Incumbent LECs have implied that long-term

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[166] *See id.* at 87-88.

[167] *See, e.g.*, AT&T Brief at 51-52 (stating that "term discounts are a legitimate means of pricing special access facilities so as to encourage the efficiencies associated with larger traffic volumes and the certainty associated with longer-term relationships") (internal citations and quotation marks omitted).

commitments allow incumbent LECs to recover the costs associated with performing circuit portability,[168] but this too makes no sense. It would seem that a commitment by a customer to purchase a specific volume of circuits is the logical means by which an incumbent LEC can recover the costs of circuit portability, not the term associated with those circuits.

Incumbent LECs have also argued that long-term commitments allow incumbent LECs to spread out the recovery of costs over a long period of time, thus enabling them to offer customers discounts.[169] But the available evidence (which, again, does not include cost data) does not support this claim. This claim is especially weak with regard to CBDS, because the "costs" the incumbent LECs incur to provide those services were long ago depreciated. And the "discounts" that the incumbent LECs claim to offer over long terms appear to be an illusion, since the incumbent LECs' CBDS revenues are set at or very near the maximum level permitted under price caps. Indeed, the incumbent LECs are required to provide DS1 and DS3 as UNEs on a month-to-month basis at prices well below the prices they charge for Business Data Services. Even with PBDS, it is not clear what costs the incumbent would need to recover over a long period of time, except to the extent that it must deploy a new fiber loop to provide the service. Where this is the case, the incumbent LEC can address the term on a circuit-specific basis if

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[168] *See, e.g.*, CenturyLink Narrative Responses, WC Docket No. 15-247, at 36 (filed Jan. 8, 2016) (stating that under a plan with circuit portability "[w]ithout a multi-year commitment, CenturyLink would incur costs to deploy and maintain services without a reasonable expectation of recovering those costs, potentially resulting in stranded facilities . . . [and] CenturyLink would have to charge higher recurring or non-recurring rates for these services").

[169] *See, e.g.*, Direct Case of Verizon, WC Docket No. 15-247, at 35 (filed Jan. 8, 2016) ("[L]onger term lengths are associated with larger discounts, as the increased term length provides greater certainty, reduces further the risk of stranded investment, and provides a longer period over which to spread any nonrecurring costs.").

necessary and appropriate. Moreover, as the Joint CLECs have explained, most competitive providers offer BDS for one-year terms.[170]

In light of these facts, the Commission should adopt the following restrictions on the length of terms applicable to volume commitments offered by incumbent LECs in any tariff or commercial agreement in non-competitive Business Data Services markets. First, the Commission should prohibit an incumbent LEC from setting the term associated with a circuit portability volume commitment for Business Data Services circuits (CBDS or PBDS) that are subject to circuit-specific term pricing (e.g., as is the case in the PacBell and SWBT TPPs) longer than one year in non-competitive Business Data Services markets. Second, the Commission should adopt a presumption that the term associated with other Business Data Services volume commitments (again, including those for CBDS and PBDS) should be no longer than one year in non-competitive Business Data Services markets. Incumbent LECs should be permitted to rebut this presumption by demonstrating that the costs associated with providing the services on a one-year term basis exceed the revenues for such services.

Automatic renewal and evergreen provisions. As the Commission correctly observes, provisions in incumbent LEC Business Data Services tariffs that require customers to automatically renew their commitments or to pay extremely high month-to-month prices upon expiration of a customer's plan have the effect of perpetuating the lock-up effect of volume commitments. In contrast, competitive LECs generally permit customers to purchase Business Data Services on a month-to-month basis after the expiration of term commitments without

[170] *See* Declaration of Gary Black, Jr. on Behalf of Level 3 Communications, LLC (attached as Appendix A to Opposition of Birch, BT Americas, EarthLink, INCOMPAS, Integra, and Level 3, WC Docket No. 15-247, ¶ 27 (filed Feb. 5, 2016) ("Black Tariff Investigation Decl.").

increasing the price to a month-to-month price, as the service provider would presumably have recovered any customer-specific sunk costs during the original term commitment.[171] That logic would seem to apply to incumbent LECs just as much as it would to competitive LECs.

Accordingly, the Commission should establish a presumption that an incumbent LEC must permit customers to purchase Business Data Services on a month-to-month basis after expiration of a term commitment on the same rates, terms, and conditions as applied under the term agreement. This presumption should apply to all tariffs and commercial agreements for all Business Data Services (CBDS and PBDS) sold by incumbent LECs in non-competitive markets. Incumbent LECs should be permitted to rebut this presumption by demonstrating that the costs associated with providing the services on a month-to-month basis as required here exceed the revenues for such services.

Fresh look and tariff revisions. It is important that the Commission ensure that the reforms adopted in the *Order and FNPRM* and that are proposed herein take effect as soon as possible so that business customers and consumers experience the benefits of increased competition and reduced barriers to the technology transition as soon as possible. The Commission should take the following steps to ensure that this is the case.

First, incumbent LECs should be required to modify their standard tariffs (i.e., tariffs other than contract tariffs) to comply with the new requirements. Those amendments, except for the prohibition on all-or-nothing provisions as explained below, should take effect for all existing and future customers upon approval of the tariff amendments. In addition, all future incumbent LEC contract tariffs and commercial agreements must comply with all of the new requirements

[171] *See id*.

to the extent that they govern incumbent LECs' sale of Business Data Services in non-competitive Business Data Services markets.

Second, the Commission should grant customers currently purchasing CBDS pursuant to volume and term plans under standard tariffs and pursuant to contract tariffs the right to either reduce their volume commitments without incurring shortfall penalties or to terminate their plans or contract tariffs without incurring early termination penalties at any time during a 180-day period following the effective date of the new rules. This "fresh look" will give such customers the opportunity to take advantage of the prohibition on all-or-nothing provisions while maintaining their existing purchase arrangements or to terminate their existing arrangements and enter into entirely new purchase arrangements with incumbent LECs. The Commission should also allow customers currently purchasing PBDS pursuant to commercial agreements the right to terminate those agreements at any time without incurring early termination penalties during a 180-day period following the effective date of the new rules. And the Commission should similarly allow customers purchasing any Business Data Services pursuant to commercial agreements that affect, directly or indirectly, the price paid for any Business Data Service (such as, for example, discounting a non-Business Data Service by an amount related to a shortfall or similar penalty in any Business Data Service purchase arrangement) the right to terminate those agreements at any time without incurring early termination penalties during a 180-day period following the effective date of the new rules.

As Level 3 has explained, by enabling customers to enter into new purchase arrangements with incumbent LECs so that they can increase the volume of Business Data Services they purchase from competitive wholesalers, a fresh look opportunity will remove

barriers to competition much more quickly than waiting for existing arrangements to expire.[172] The 180-day period proposed herein should provide customers with a reasonable amount of time in which to assess the costs and benefits of exercising their fresh look rights in a manner consistent with business needs.[173]

B. Guidelines Applicable to Non-Incumbent LECs and to Incumbent LECs in Competitive Business Data Services Markets.

The terms and conditions addressed in the previous section are most likely to harm competition and consumer welfare when included in tariffs and commercial agreements that govern incumbent LECs' sale of Business Data Services in non-competitive markets as defined under the market competition test proposed in these comments. As with *ex ante* price regulation, if incumbent LECs are subject to the requirements discussed above regarding the terms and conditions in tariffs and commercial agreements in non-competitive markets, it is likely that other competitors will be forced by the market to comply with those same requirements. If non-dominant providers do not offer comparable terms, they will likely lose market share. In fact, the available evidence indicates that competitive LECs have either not included the types of

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[172] *See* Letter from Thomas Jones, Counsel for Level 3, to Marlene Dortch, Secretary, FCC, WC Docket Nos. 05-25, 15-247, RM-10593, at 1-2 (filed Apr. 21, 2016).

[173] *See id*. As Level 3 explained, granting customers a fresh look is consistent with Commission precedent. For example, the Commission granted customers purchasing certain of AT&T's bundled service packages that included 800 service the right to terminate those packages within 90 days of implementation of 800 number portability without having to pay early termination penalties. *Id*. at 2 (citing *Competition in the Interstate Interexchange Marketplace*, Report and Order, 6 FCC Rcd. 5880, ¶ 151 (1991), *aff'd*, Memorandum Opinion and Order on Reconsideration, 7 FCC Rcd. 2677, ¶ 25 (1992)). Identifying potential alternative suppliers and transitioning to new agreements with multiple providers in the Business Data Services context is likely to be more time consuming than the transition envisioned in the 800 number portability context; for that reason, a longer fresh look period of at least 180 days is appropriate in this context.

harmful provisions discussed above in their Business Data Services sales agreements or, if they have done so, they generally do not enforce them the way incumbent LECS have.[174]

Nevertheless, as explained in Section III.C above, it is not certain that this will be true in all cases. The competition test is unlikely to identify all relevant non-competitive markets with perfect accuracy. Indeed, it is likely that there will be relevant markets classified as competitive in which the incumbent LEC retains market power. Moreover, within non-competitive markets, it is possible that firms other than incumbent LECs have or will develop the ability to exercise market power. Such firms may have the incentive and ability to use the kinds of provisions discussed above in their Business Data Services commercial agreements in ways that harm customers and competition notwithstanding the fact that incumbent LECs are subject to the regulations described above.

Accordingly, while it is unnecessary for the Commission to apply the rules proposed above to non-incumbent LECs or to incumbent LECs in competitive markets, the Commission should make clear that it will monitor the conduct of Business Data Services providers that are not subject to those rules. The Commission should remind such Business Data Services providers that their common carrier duties to provide services on just and reasonable and not unjust or unreasonably discriminatory terms govern the terms and conditions of their commercial

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[174] *See* Black Tariff Investigation Decl. ¶ 27 ("Competitive LECs generally offer dedicated services on one-year terms at affordable rates, without imposing shortfall penalties, overage penalties, or ratcheting provisions. . . . After the expiration of the initial term of a dedicated services contract with a competitive LEC wholesaler, Level 3 typically has the option to purchase dedicated services from a competitive LEC on a month-to-month basis at the rate that applied under the term commitment. . . . [I]n all cases where Level 3 might be subject to a penalty under a wholesale agreement with a competitive LEC . . . the competitive LEC is usually more willing to waive or reduce the penalty as part of a negotiated solution than is the case with incumbent LECs. . . .").

agreements. The Commission should further state that it may investigate reports by customers that sellers not subject to the regulations applicable to incumbent LECs have included in their Business Data Services commercial agreements terms and conditions including, but not limited to, those that dictate a customer's volume commitment, high shortfall and early termination penalties, unreasonably long term commitments, and provisions that automatically renew a volume or term commitment or that revert to much higher rates at the expiration of the agreement. Such investigations may include, for example, an assessment of the extent to which (1) the provider owns the only network facilities to a substantial number of relevant customer locations, (2) the provider is the only competitor offering the relevant Business Data Services to a substantial number of relevant customer locations, (3) the terms and conditions at issue have enabled a competitor to set quality-adjusted prices at supra-competitive levels (e.g., substantially above the regulated rates charged by incumbent LECs in non-competitive areas), and (4) the terms and conditions at issue have prevented customers from switching to alternative Business Data Services providers. If the Commission determines that the provider of Business Data Services is in fact using the terms and conditions in ways that harm competition and consumer welfare, it should consider, among other remedies, applying the behavioral requirements described herein to the investigated Business Data Services provider.

V. CONCLUSION.

For the foregoing reasons, the Commission should promptly reform the regulatory regime governing Business Data Services in order to prevent incumbent LECs from exercising their market power and to provide American businesses with greater access to competitive broadband infrastructure and services.

Respectfully submitted,

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June 28, 2016

APPENDIX

REDACTED – FOR PUBLIC INSPECTION

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

In the Matter of	)	
	)	
Business Data Services in an Internet Protocol Environment	)	WC Docket No. 16-143
	)	
Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans	)	WC Docket No. 15-247
	)	
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 Internet Special Access Services	)	RM-10593

DECLARATION OF JOHN MERRIMAN
ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC

1. My name is John Merriman. I am Vice President of Finance for North America for Level 3 Communications, LLC ("Level 3"). My responsibilities at Level 3 include managing the revenue and capital budget for North America. I have 16 years of experience in various finance roles at tw telecom and Level 3.

2. The purpose of this declaration is to estimate the maximum distance in linear feet that Level 3 finds it economically justified to construct fiber connections between a splice point

on Level 3's transport network and the location of a Business Data Service customer (I refer to these maximum distances as "construction feasibility limits").[1]

3. The attached table, prepared under my direction and oversight, provides the following information for each of the 10 MSAs identified in the first column:

a. The second column provides the average cost per linear foot of constructing Business Data Service connections between a splice point in Level 3's transport network and the location of a Business Data Service customer. The average cost per linear foot data is provided separately for areas within the relevant central business district ("CBD") and for areas outside the relevant CBD. Those average costs and the boundaries of the CBDs were calculated based on analysis performed by Level 3 engineers in the regular course of their duties. In addition to the per foot costs of deploying fiber to support Business Data Services, there are fixed costs for electronics, risers, fiber panels, etc., which may vary somewhat from one deployment project to the next, but are not distance-sensitive. For the purposes of this declaration, I have assumed such costs are approximately **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** for each deployment.

[1] For purposes of this declaration, I use the term Business Data Service as the FCC defined it in the Tariff Investigation Order and Further Notice of Proposed Rulemaking. *See Business Data Services in an Internet Protocol Environment, Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans, Special Access for Price Cap Local Exchange Carriers, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 4723, ¶ 12 (2016) (defining Business Data Service as a service providing "dedicated point-to-point transmission of data at certain guaranteed speeds and service levels using high-capacity connections")

b. The header rows of each column to the right of the average cost per linear foot data identify a specific Level 3 Business Data Service product and that product's capacity and MRC. Each MRC is the undiscounted list price for the product with the stated capacity and committed data rate, and no additional variable charges for data. For example, a customer may choose to purchase Gigabit Ethernet service, which can be configured to provide the capability to transmit up to one Gbps of data. However, the customer may typically use far less than the maximum capacity available. Such a customer would likely purchase service with a committed data rate appropriate for the customer's typical usage, paying additional usage charges only when the customer's usage exceeds the lower committed data rate.

c. Each subsequent row below a Business Data Service product's MRC shows, for the CBD and non-CBD areas of each MSA, the maximum linear feet of construction between a Level 3 splice point and the customer's premise that would be economically justified for that Business Data Service product and MRC. This calculation assumes that an investment in newly constructed facilities should be recouped **[BEGIN HIGHLY CONFIDENTIAL]**

[END HIGHLY CONFIDENTIAL]. In this sense the linear feet figures set forth in each column are the construction distance at which Level 3 could break even in **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** months. This calculation assumes that Level 3 has not sold

the customer additional services, the revenue for which could also be considered in evaluating a potential deployment decision.

4. Thus, on average, Level 3 generally would consider economically justified construction distances less than the construction feasibility limits shown in the table for these services. A proposed construction equal to or slightly greater than this distance would require further evaluation. Any proposed construction of a materially greater distance would not be considered economically justified. Note that the construction feasibility limits for T1 (1.5 Mbps) and Ethernet (10 Mbps) are negative numbers. This indicates that construction of new fiber connections to provide these products is not economically justified in these MSAs under normal circumstances.

5. I wish to emphasize that the construction feasibility limits shown in the table are to be measured from a splice point on Level 3's transport network, not merely from any point along the relevant fiber route. This reflects the reality that Level 3 must have readily available access to its installed fiber transport network to be able to construct a new connection to that network. Such access is only available at splice points, which can be accessed using nearby manholes and similar physical access portals. Splice points in Level 3's long haul fiber network are limited to minimize latency and packet loss.

6. Based on my experience, it is infrequently the case that Level 3 can deploy a new fiber connection to serve a customer demanding only 100 Mbps of bandwidth or below. This is because the distance between a customer location and a splice point on Level 3's network usually exceeds the construction feasibility limits for bandwidths of 100 Mbps and below. At the same time, my experience is that Level 3 can usually deploy a new fiber connection to serve a customer demanding more than one Gbps of bandwidth. This is because the distance between a

customer location and a splice point on Level 3's network is usually within the construction feasibility limits for bandwidths in excess of one Gbps. When a customer demands Business Data Service with a committed data rate of above 100 Mbps and less than or equal to 1,000 Mbps, whether Level 3 will find it economically justified to construct a fiber connection from a splice point to the customer's location depends on whether the customer's location is within the construction feasibility limit for the committed data rate requested by the customer. In my experience, there are many circumstances in which customers that demand Business Data Service in this range of capacity are within the construction feasibility limit and many circumstances in which such customers are not within the construction feasibility limit.

REDACTED – FOR PUBLIC INSPECTION

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

John Merriman

Dated: 6/27/16

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[END HIGHLY CONFIDENTIAL]