

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Unbundled Access to Network Elements)	WC Docket No. 04-313
)	
)	
Review of the Section 251 Unbundling)	WC Docket No. 01-338
Obligations of Incumbent Local Exchange)	
Carriers)	

AFFIDAVIT
OF
SUSAN M. BALDWIN

ON BEHALF OF THE
UTAH COMMITTEE OF CONSUMER SERVICES

SEPTEMBER 30, 2004

WITH REDACTED ATTACHMENTS

REDACTED – FOR PUBLIC INSPECTION

FCC CC Docket No. 01-338 and WC Docket No. 04-313
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I. INTRODUCTION

1. My name is Susan M. Baldwin. I am an independent consultant and my business address is 17 Arlington Street, Newburyport, Massachusetts, 01950. I provide consulting services to public sector agencies on telecommunications economics, regulation, and public policy. My statement of qualifications is included as Attachment SMB-A.

2. This affidavit is based, in part, on the detailed analysis that I conducted of impairment in Utah markets. On behalf of the Utah Committee of Consumer Services, I analyzed the claim by Qwest Communications Inc. (“Qwest”) of non-impairment in Utah markets, and addressed the implications of the proceeding for Utah consumers in draft testimony.¹ My testimony, although complete, was not filed as a result of the Appeals Court remand.²

3. I also prepared testimony in two other states, which analyzed the mass market switching impairment filings submitted by incumbent local exchange carriers (“ILECs”).

¹ *In the Matter of a Proceeding to Respond to the Federal Communications Commission Triennial Review Order Released August 21, 2003*, Utah Public Service Commission Docket No. 03-999-04.

² 359 F.3d 554 (D.C. Cir. 2004) (“USTA II”), pets. for cert. filed, Nos. 04-12, 04-15, 04-18 (June 30, 2004). See also *United States Telecom Ass'n v. FCC*, No. 00-1012, Order, (D.C. Cir. Apr. 13, 2004) (granting a stay of the court's mandate through June 15, 2004) (“USTA II Stay Order”). The *USTA II* mandate issued on June 16, 2004.

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I submitted testimony on February 2, 2004, on behalf of the New Jersey Division of the Ratepayer Advocate (“the Ratepayer Advocate”) in New Jersey Board of Public Utilities Docket No. TO03090705, which addressed impairment for mass market unbundled switching, high capacity loops and transport. I also provided technical assistance to the Ratepayer Advocate in the “hot cut” portion of the same proceeding. In Arkansas, on behalf of the Office of the Attorney General, I analyzed the filing submitted by SBC in Arkansas Public Service Commission Docket No. 03-171-U.³

4. As a result of preparing comprehensive testimony regarding the impairment filings submitted by Verizon New Jersey, SBC Arkansas, and Qwest, and analyzing the competitively sensitive data submitted by these ILECs and competitive local exchange carriers (“CLECs”) in three states, I acquired an in-depth familiarity with granular local telecommunications data, specific to various product, geographic, and customer class markets. Based on my first-hand knowledge of this detailed market-specific information, I applied the standards and rules set forth by the Federal Communications Commission

³ *In the Matter of the Implementation of the Impairment Review Mandated by the Federal Communications Commission in its Triennial UNE Review*, Arkansas Public Service Commission Docket No. 03-171-U. I analyzed SBC's filing of February 2004, in which SBC sought a finding of non-impairment for mass market unbundled voice grade switching in the Little Rock LATA in Arkansas. I was asked to file testimony analyzing whether SBC's filing satisfied the triggers set forth by the FCC in its *Triennial Review Order* and addressed the implications of the proceeding for consumers in Arkansas. My testimony, although complete, was not filed as a result of the ruling by the U.S. Court of Appeals for the District of Columbia in *USTA v. FCC* vacating the FCC's delegation of authority. *USTA II*.

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(“FCC” or “Commission”) in its *Triennial Review Order*⁴ in order to determine whether and where impairment exists.

Purposes of Affidavit

5. One of the purposes of this Affidavit is to “highlight[] factual information that would be relevant under the guidance of *USTA II*” and to provide, to the extent permitted by the proprietary agreements governing the state proceedings, the “underlying data, analysis and methodologies necessary to enable the Commission and commenters to evaluate the factual claims meaningfully, including a discussion of the basis upon which data were included or excluded.”⁵ In this Affidavit, I refer to and summarize data specific to local markets in Utah.

6. Other purposes of this Affidavit are to address how to: (1) define relevant product, geographic and customer class markets;⁶ (2) establish transition mechanisms

⁴ *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) (“Triennial Review Order”), corrected by Errata, 18 FCC Rcd 19020, 19021, paras. 12-13, 15, 17 (2003) (“Triennial Review Order Errata”), vacated and remanded in part, affirmed in part, *USTA II*, 359 F.3d 554.

⁵ *In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313, CC Docket No. 01-338, Order and Notice of Proposed Rulemaking, released August 20, 2004 (“NPRM”), ¶ 15.

⁶ *Id.*, ¶ 9.

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that “would help to prevent service disruptions during cut-overs from UNE facilities to a carrier’s own (or third-party) facilities, or for conversions to tariffed or other service arrangements”;⁷ and (3) apply the FCC’s unbundling framework “to make determinations on access to individual network elements.”⁸

7. This Affidavit summarizes how the FCC should apply its network unbundling framework to Utah markets, and more generally how the FCC should apply its framework to local markets. The recommendations in this Affidavit seek to improve the prospect of local competition for residential and small business mass market customers and to minimize the potential for service disruption when consumers migrate from one telecommunications supplier to a competing supplier.

The industry’s unique access to proprietary data should not prevent consumer advocates from making informed assessments of impairment in local markets.

8. Pursuant to the proprietary agreement in Utah’s impairment proceeding and the FCC’s confidentiality requirements, I am providing two versions of my Affidavit, which relies on proprietary data that I examined in the impairment proceeding of the Utah Public Service Commission (“PSC”). In the public version of my Affidavit, I have redacted information that has been designated as confidential or highly confidential in Utah PSC Docket No. 03-999-04. In the attachments to the confidential version of my

⁷ *Id.*, ¶ 10.

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Affidavit, I include proprietary information, which is intended to assist the FCC with its granular analysis of relevant markets in Utah.⁹ The redacted version identifies generally the categories of information that I analyzed, but excludes the proprietary data.

9. Should any of the industry participants, whether ILECs or CLECs, submit proprietary data in either their initial or reply comments in this proceeding, the Commission should afford other parties, particularly regulatory and consumer advocacy agencies (participants with the greatest potential for unbiased review of such data), ample opportunity to review these data and to propound discovery as necessary to obtain the data in the granular fashion necessary to assess impairment. In Utah, although Qwest submitted some market data with its filing, the Committee of Consumer Services and other parties to the proceeding nevertheless issued numerous data requests to Qwest and to CLECs. The data that local exchange carriers provided in response to these information requests were essential to my ability to analyze relevant markets.

⁸ *Id.*, ¶ 11.

⁹ On September 23, 2004, the Utah Committee of Consumer Services gave notice of its intent to use information that has been designated in the state's impairment proceeding as confidential or highly confidential in its responsive comments to the instant *NPRM. Notice of Intent to Refer to or to Include Confidential or Highly Confidential Information in Federal Communications Commission FCC-04-179, WC Docket No. 04-313 and CC Docket No. 01-01-338*, Utah Docket No. 03-999-04, submitted by the Utah Committee of Consumer Services, September 24, 2004.

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10. Based on my participation in three state proceedings in which state regulators were investigating ILECs' impairment claims, I believe that it is highly unlikely that any ILEC, in a submission to the FCC, will submit data that is sufficiently granular to permit a sufficiently informed assessment by the Commission of the merits of the filing. Analysis of ILECs' and CLECs' granular data is necessary in order to assess where self-provisioning CLECs are *actually* serving residential and small business consumers. For these reasons, discovery opportunities are essential to an impartial and adequately informed consideration of where and whether impairment exists in ILEC-dominated local markets.

11. Accordingly, as a threshold matter, the FCC should first assess whether it has sufficient access to granular data about local markets to make an informed determination regarding impairment. Then, the FCC should consider whether participants to the proceeding have had adequate opportunity to review such data, and to seek clarification and/or further disaggregation of such data from ILECs and CLECs. Without these two steps, the FCC cannot fulfill the directives of the 1996 Act¹⁰ or of *USTA II*. Based on my review of proprietary data, which I summarize and analyze in the attachments to the proprietary version of my Affidavit, I urge the Commission to find that impairment exists for mass market local switching in Utah. Residential and small

¹⁰ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("1996 Act"). The 1996 Act amended the Communications Act of 1934. Hereinafter, the Communications Act of 1934, as amended by the 1996 Act, will be referred to as "the 1996 Act," and all citations to the 1996 Act will be to the 1996 Act as it is codified in the United States Code.

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business consumers, who cannot themselves supply these allegedly proprietary data, should not be harmed by a process which lacks adequate information.

12. I understand that the Commission is eager to establish unbundling rules and to provide some regulatory certainty and stability.¹¹ Although I share this objective, the pursuit of this objective should not come at the expense of consumers. Any ILEC that seeks a finding of non-impairment should make a concerted and good-faith effort to submit a comprehensively documented filing in a timely manner, and to respond to discovery requests expeditiously and completely. Similarly, any CLECs that oppose any particular ILEC filing should be obligated to submit similarly granular data for the markets in question, and, in the absence of such CLEC cooperation, the Commission should afford such opposition the weight that the unsupported opposition merits.

¹¹ *NPRM*, ¶ 16.

II. BACKGROUND

13. The FCC seeks comment on how it might amend its interpretation of “impairment” as that term is used in section 251(d)(2)(B) of the 1996 Act, and also on how it should apply various factors when it determines whether an ILEC must provide particular unbundled network elements to competitors.¹² The Court, in its *USTA II* decision, determined, *inter alia*, that the FCC had unlawfully delegated certain authority to states in the determination of whether impairment exists in particular markets. It is my understanding that the FCC now seeks to “reclaim” that authority, and, in so doing, to issue final network unbundling rules that respond to the concerns expressed in *USTA II*. Furthermore, it is my understanding that the FCC must now, informed in part by states’ proceedings through the various submissions in the instant proceeding, review and evaluate ILECs’ specific claims of non-impairment in particular markets. Where the FCC lacks the relevant information to make such determinations, and/or if the FCC determines that the information in the instant proceeding is stale, then I would expect the FCC to issue data requests to the industry to obtain the necessary granular evidence necessary to make informed decisions.

The FCC’s resolution of this proceeding will affect consumers’ choices and the type of local competition that will occur.

At the broadest level, the outcome of this proceeding will affect whether and where

¹² *NPRM*.

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economically sustainable local competition can develop. The investigation raises significant economic, market structure, and public policy issues, the resolution of which directly affects consumers' choices and the extent to which local competition can occur.

14. Local competition is precarious. Despite the efforts of state and federal regulators to eliminate market barriers, successful entry to ILEC-dominated markets is not easy and requires CLECs to overcome (1) customer inertia, (2) economic and operational impediments, and (3) more than a century of Qwest's dominance in Utah's local markets. Based on the FCC's statistics, Qwest dominates 94 percent of the local market either directly through its own retail services or indirectly by leasing its wholesale facilities to its competitors (*i.e.*, the non-facilities-based competition that occurs through resale, unbundled network element – platform ("UNE-P"), and UNE-loop ("UNE-L"))¹³ Even if viewed solely on a retail basis (which would be misleading because it would mask CLECs' reliance on the incumbent carrier's facilities), Qwest dominates 80 percent of Utah's local markets.¹⁴

The changes in the local market since February 2004 have diminished the prospects for residential and small business competition.

15. Qwest submitted testimony to the Utah PSC in January 2004, and I reviewed

¹³ Federal Communications Commission, Wireline Competition Bureau, Industry Analysis Division, Local Telephone Competition: Status as of December 31, 2003, (June 2004), Tables 6 and 10.

¹⁴ *Id.*, at Table 6: "End-User Switched Access Lines Served by Reporting Local Exchange Carriers (As of December 31, 2003)."

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Qwest's filing and its responses to data requests in January and February of 2004. In the intervening eight months, the prospect of competitive choice among suppliers of basic local telecommunications services for mass market consumers has suffered serious setbacks. AT&T announced plans to stop marketing its residential telephone service.¹⁵ One article characterized the decision in this manner:

AT&T's move is a potential windfall for the Bells . . . which have been increasingly successful in selling packages of local and long distance. Mr. Dorman said AT&T's decision to withdraw was clinched by a recent regulatory setback that will make it more expensive for AT&T and others to rent the Bells' lines to sell similar packages. MCI Inc. and Sprint Corp. also have throttled back on advertising and marketing.¹⁶

Press reports indicate that both AT&T and MCI are for sale, given the right deal.¹⁷ Many of the smaller competitors are also scaling back marketing and expansion plans.¹⁸ Although ILECs may tout Voice over Internet Protocol ("VoIP") as gaining consumer appeal, as I discuss in Section IV, this technology does not yet represent an economic

¹⁵ Four months ago, AT&T announced its plan to pull out of seven states. "AT&T: No New Home Customers in 7 States," Reuters, June 23, 2004, http://news.yahoo.com/news?tmpl=story&u=/nm/20040623/bs_nm/telecoms_att_local_dc

¹⁶ "AT&T Posts 80% Drop in Net, Confirms Consumer Retreat," *The Wall Street Journal*, July 23, 2004, page A11.

¹⁷ "Bride or Bridesmaid? AT&T and MCI May Compete for Suitors," *The Wall Street Journal*, August 2, 2004, page C1.

¹⁸ "Without rules in place that support vibrant competition in the telecommunications marketplace, competitive carriers and consumers are now unfortunately faced with great uncertainty," said Donald Davis, Z-Tel's senior vice president-industry policy, in the June 21 letters. "The victims of this dramatic shift in federal policy and the resulting uncertainty will be consumers." "Z-Tel to Cease New Residential Business in Eight States," *TR Daily*, June 22, 2004.

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substitute for basic local exchange service.

16. The approximate eight-month passage of time between my preparation of testimony in Utah PSC Docket No. 03-999-04 and my preparation of this Affidavit potentially raises two concerns. However, as I explain below, neither of these concerns undermine or alter my conclusion that Qwest has failed to demonstrate that there are *any* areas in Utah within which the elimination of unbundled mass market switching would not impair CLECs.

17. The first concern is simply that, with each passing day, CLECs' may enter and exit markets, may gain or lose customers, and may shift their mode of entry. Conceivably, over an eight-month period, the competitive landscape could have changed materially. In order to assess generally the impact of the passage of time on the local market structure, I compared publicly available FCC-provided local competition data for June 2003 (the most recent FCC data available when I was preparing my testimony) and for December 2003 (the most recent FCC data available when I prepared this Affidavit). As Table 1 below shows, Utah CLECs decreased the use of their own lines to serve customers (mass market and enterprise), with a decline of approximately 8 percent. In sharp contrast, during the same time period, Utah CLECs' use of UNEs – UNE-P and UNE-L – to serve customers increased by approximately 26 percent, with an approximate 43 percent increase in their use of UNE-P and a 13 percent increase in their use of UNE-L. Clearly, the availability of UNEs, especially

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UNE-P, is essential to CLECs' efforts to establish themselves in the competitive marketplace, and to mass market consumers' opportunities for competitive choice.

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**Table 1
CONSUMER CHOICE DEPENDS ON UNES, INCLUDING UNE-P**

Utah	June 2003	December 2003	Percent Growth
CLEC-Owned	79,876	73,420	-8%
UNE Loops	42,860	48,463	13%
UNE Platform	34,285	48,963	43%
Total UNEs	77,145	97,426	26%
Resold Lines	76,680	71,012	-7%
Total CLEC-Served Lines	233,701	241,858	3%
ILEC Retail Lines	1,019,089	993,796	-2%
CLEC Share of Total End-User Switched Access Lines	19%	20%	
Total US	June 2003	December 2003	Percent Growth
CLEC-owned	6,275,655	6,935,358	11%
UNE Loops	4,205,000	4,260,000	1%
UNE Platform	13,026,000	15,161,000	16%
Total UNEs	17,231,000	19,421,000	13%
Resold	4,887,321	4,726,260	-3%
Total CLEC-Served Lines	28,393,976	31,082,618	9%
ILEC Retail Lines	155,922,118	151,837,752	-3%
CLEC Share of Total End-User Switched Access Lines	15%	17%	

Sources: *Local Telephone Competition: Status as of December 31, 2003*, Industry Analysis Division, Wireline Competition Bureau, June 2004, Tables 3, 4, 7, and 10. *Local Telephone Competition: Status as of June 30, 2003*, Industry Analysis Division, Wireline Competition Bureau, December 2003, Tables 3, 4, 7, and 10. http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/RBOC_Local_Telephone_Dec_2003.xls.
http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/RBOC_Local_Telephone_June_2003.xls.

Notes: Quantities of UNE Loops and UNE Platform lines are from FCC's RBOC Local Telephone reports of June 2003 and December 2003. The total UNEs (the sum of UNE Loops and UNE Platform) differ slightly from the total UNEs reported in the June 2003 and December 2003 Local Telephone Competition reports.

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18. The second concern regarding the passage of time since I prepared testimony in Utah is that, in the intervening months, the Court issued *USTA II*, and the FCC issued the instant *NPRM*. As discussed above, these major regulatory decisions are motivating CLECs' re-assessments of their business plans, which, in turn, will lead to changes in data about CLECs' presence in particular markets. The FCC's next release of local competition data (in December 2004 for data effective through June 30, 2004) may incorporate some of this effect. However, in my view, these regulatory events will only further dampen local competition, and, for this reason, do not alter my assessment that mass market switching impairment exists throughout Utah. If, however, the FCC considers it essential to review data that post-dates at least the *USTA II* decision, this data-gathering route would further justify the FCC holding evidentiary hearings to allow all parties comparable access to data.

19. Until recent data are made available, I cannot fully assess the impact of *USTA II* on CLECs' deployment decisions. ILECs are quick to assert that the availability of UNE-P (at prices they contend are too low) discourages CLECs from deploying their own switches. For example, in Utah's impairment proceeding, a Qwest witness stated that "[u]nnecessary unbundling requirements reduce the incentives of entrants and incumbents alike to invest and innovate." The witness further asserted:

If UNE-P resale is available in markets where it is not necessary for entry, carriers will have a strong incentive to avoid the risk of investing in their own networks to compete against each other. Incumbents will similarly be less inclined to invest and innovate if the benefits of their doing so will be

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reaped (cheaply) by their competitors.¹⁹

An alternative view, to which I ascribe, is that the availability of UNE-P, set at cost-based rates, provides accurate pricing signals, which in turn leads to economically efficient investment and avoids wasteful duplication of resources.²⁰ If, contrary to my belief, ILECs are correct, then one would expect, in the wake of the sobering Court decision, a surge of CLEC interest in deploying UNE loops. If, on the other hand, we observe a decline in UNE-P demand without an offsetting increase in UNE loops, the ILECs' assertion that UNE-P is a "crutch" will lose even more credibility. In this instance, consumers will be harmed because UNE-P – as both a stepping stone and alternative to facilities-based competition – will not be able to realize its potential as a catalyst in offering residential and small business customers a choice among suppliers. Instead of migrating from UNE-P to UNE-L (or to entirely facilities-based deployment), CLECs may exit the mass market entirely. Furthermore, unless and until ILECs provide empirical evidence demonstrating that CLECs use UNE loops to serve *residential* customers, *the loss of UNE-P disproportionately harms residential customers.*

¹⁹ Direct testimony of William Fitzsimmons on behalf of Qwest Corporation, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 15.

²⁰ A recent study shows that "states that have established relatively lower rates for unbundled loop access have enjoyed *more* consumer choice and have seen *more* deployment of broadband technology within their borders." "The Positive Effects of Unbundling on Broadband Deployment," Phoenix Center Policy Paper No. 19, George S. Ford and Lawrence J. Spiwak, Phoenix Center Policy Center, September 2004, at 12 (emphasis in original).

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Several economic and public policy principles should guide the FCC's establishment of network unbundling rules and its application of those rules to particular markets.

20. In its establishment of final network unbundling rules and in its application of those rules to granular evidence about specific local markets, the FCC should adhere to several important economic and public policy principles:

- *Further the goals of the 1996 Act:* Ultimately, the litmus test of whether the final rules are sound is whether they further the goals that Congress set forth in the Act.
- *Issue rules that further congressional goals and the FCC's objectives, as informed by the states:* Because the FCC is now issuing new rules, in those instances where it may disagree with the substantive arguments in the *USTA II* decision (as opposed to the unlawful delegation of authority to states), the FCC can set rules that incorporate the agency's administrative expertise, and that may not conform to the policy issues precisely as the Court frames them.
- *Stability/Minimize consumer disruption:* As the FCC stated in its *NPRM*,²¹ it is important to avoid unnecessary instability and consumer disruption. Absent compelling reasons to the contrary, the rules that the FCC adopts in this rulemaking should promote investor confidence in CLECs' operations and consumer confidence in the viability and longevity of competitive choice in the local telecommunications market.
- *Consistency with existing law and rules:* The FCC's final rules should be

²¹ *NPRM*, ¶¶ 1, 10, 20.

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compatible with other telecommunications laws and rules, e.g., Section 271 requirements; state purview over intrastate rates, etc.

- *Consistency with USTA II*: The recommendations, set forth in this Affidavit, are consistent with the directives set forth in *USTA II* and are intended to address the specific failings that the Court identified with the FCC's August 2003 *TRO*.
- *Further the goal of economically efficient local competition*: the FCC should establish UNE rules that encourage the economically efficient deployment of facilities by incumbent and new carriers. Although state or federal regulators should not "pre-select" any particular mode of entry (Congress did not favor any particular mode), assuming, *arguendo*, that the FCC nonetheless chooses to promote facilities-based competition,²² UNE-P is entirely compatible with such a goal.

²² *Id.*, ¶ 2

III. RELEVANT MARKETS

It is essential that the FCC correctly define the relevant markets before it applies its unbundling framework.

21. The FCC seeks comment on “how best to define relevant markets (e.g., product markets, geographic markets, customer classes) to develop rules that account for market variability and to conduct the service-specific inquiries to which *USTA II* refers.”²³ The *Triennial Review NPRM*, incorporated by the FCC into the instant *NPRM*, also seeks comment on how best to define markets.²⁴

22. In its *NPRM*, the FCC states that the *USTA II* decision requires that it “must account for specific characteristics of the market in which a particular requesting carrier operates” when undertaking its impairment analysis.²⁵ The D.C. Circuit Court of Appeals found in *USTA II* that “the FCC is obligated to establish unbundling criteria that are at least aimed at tracking relevant market characteristics and capturing significant variation.”²⁶ This follows the Court’s objection expressed in *USTA I* to the FCC’s issuance of “broad” unbundling rules that apply across all geographic markets and

²³ *Id.*, ¶ 9.

²⁴ *Id.*, ¶ 11, footnote 39; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98, 98-147, Notice of Proposed Rulemaking, 16 FCC Rcd 22781 (2001) (“Triennial Review NPRM”), ¶¶ 39, 43, 57-58.

²⁵ *NPRM*, ¶ 9, footnote 35.

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customer classes “without regard to the state of competitive impairment in any particular market.”²⁷

23. The proper definition of relevant markets is essential for the purpose of assessing whether impairment exists. Relevant markets include product markets (*i.e.*, mass market vs. enterprise market), geographic market (*i.e.*, the physical boundaries), and customer class (*i.e.*, residential vs. business). The FCC cannot undertake an analysis of impairment in the telecommunications market until and unless these markets have been properly defined. If the FCC were to define markets in such a broad manner that a finding of non-impairment was inevitable in most cases, customers would, in fact, *not* have substitutes for ILECs’ services in some sub-markets. This would have grave consequences for consumers. If, instead, the FCC properly defines markets, and then identifies markets where impairment does exist, then properly applied unbundling rules will enable nascent competition to take hold.

The delineation between the mass market and the enterprise market should correspond with 24 DSO channels.

24. The FCC addresses the characteristics of the mass market in various portions of the *Triennial Review Order*. Among other things, it states:

Based on the record before us, it is reasonable to distinguish these three classes of customers - mass market, small and medium enterprise, and large enterprise - for several reasons. These classes can differ

²⁶ *USTA II*, at 9.

²⁷ *Id.*, citing *USTA I*, 290 F.3d, at 422.

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significantly based on the services purchased, the costs of providing service, and the revenues generated. Because of these differences, for certain network elements the determination whether impairment exists may differ depending upon the customer class a competing carrier seeks to serve.²⁸

Mass market customers consist of residential customers and very small business customers. Mass market customers typically purchase ordinary switched voice service (Plain Old Telephone Service or POTS) and a few vertical features. Some customers also purchase additional lines and/or high speed data services. Although the cost of serving each customer is low relative to the other customer classes, the low levels of revenue that customers tend to generate create tight profit margins in serving them. The tight profit margins, and the price sensitivity of these customers, force service providers to keep per customer costs at a minimum. Profits in serving these customers are very sensitive to administrative, marketing, advertising, and customer care costs. These customers usually resist signing term contracts.²⁹

Small and medium enterprises are willing to pay higher prices for telecommunications services than the mass market. Indeed, they are often required to do so under business tariffs. Because their ability to do business may depend on their telecommunications networks, they are typically very sensitive to reliability and quality of service issues. These customers buy larger packages of services than do mass market customers, and are willing to sign term contracts. These packages may include POTS, data, call routing, and customized billing, among other services. Although serving these customers is more costly than mass market customers, the facts that enterprise customers generate higher revenues, and are more sensitive to the quality of service, generally allow for higher profit margins. The higher profit margins and greater emphasis on quality of service can provide a greater incentive to competing carriers to provision their own facilities, and the higher revenues make it easier to cover the fixed costs of installing such facilities.³⁰

²⁸ *TRO*, ¶ 124.

²⁹ *Id.*, ¶ 127, footnote omitted.

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25. The FCC could differentiate between the mass market and the enterprise market using three possible benchmarks. First, the FCC could rely on the definition that telecommunications carriers use in reporting local competition data to the FCC, which defines mass market as three or fewer lines to a location. Second, the FCC could use a price-based distinction, recognizing that at some “cross over” point, it is less costly for a consumer to order a DS1 line than to order multiple voice grade lines to a particular location. Finally, the FCC could simply determine that lines provisioned at a DS0 level are mass market lines, and lines provisioned at DS1 and above are enterprise market lines.

26. I recommend that for the purpose of differentiating between the mass market and the enterprise market the FCC adopt the last method in its network unbundling rules, *i.e.*, where CLECs are deploying DS0-level lines (whether they are deploying 1 or 23 to a customer), customers are considered to be mass market customers. Customers’ choice to purchase DS0 lines rather than DS1 lines reflects information about the price and their assessment of the appropriate cross over between the two products. However, as with mass market customers, I recommend that the FCC in its determination in the instant proceeding assess whether CLECs are serving the entire business market, or only a segment of the market. If, for example, CLECs are only serving customers with four or more lines, then they should not be considered to constitute direct competition to the ILECs’ services.

³⁰ *Id.*, ¶ 128.

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27. Although reliance on the “economic” cross over point for delineating between the mass and enterprise markets has theoretical appeal, such a determination depends on many variables (*e.g.* DSO and DS1 rates, DS1 multiplexing equipment costs, etc.), which, in turn, are subject to change. The four line carve-out previously set out by the FCC is one example. As the FCC noted in the *Triennial Review Order*, “[a]t some point, customers taking a sufficient number of multiple DS0 loops could be served in a manner similar to that described above for enterprise customers . . . this cross over point may be the point where it makes economic sense for a multi-line customer to be served via a DS1 loop.”³¹ The FCC opines that the “cross over” point may correspond with the four line carve-out in density zone 1 of the top 50 MSAs.³²

28. As described in Section IV below, Qwest took the position that it would not challenge “the FCC’s presumption of four DS0 lines at a single customer location as the ‘cross over point’ at which it is economically feasible to serve a customer via a DS1.” Qwest, therefore, recommended that the Utah PSC define mass market customers as those served by no more than three DS0 lines at a location.³³

29. The FCC extended the four line carve-out in the TRO “on an interim basis” pending regulatory decisions “to avoid service disruptions that may result from

³¹ *Id.*, ¶ 497.

³² *Id.*

³³ Direct testimony of Laura L. Scholl on behalf of Qwest Corporation, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 16, citing *TRO*, ¶ 497.

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expanding and then possibly reducing the eligibility for local circuit switching in this manner.”³⁴ The FCC’s intent was to retain the *status quo*. The FCC had delegated to the states the responsibility to determine whether the four line carve-out had been in effect in their respective states and to determine “the appropriate cut-off for multi-line DS0 customers.”³⁵ *USTA II* vacated the nationwide finding of impairment and the delegation of the analysis of impairment to the states.

30. The FCC has acknowledged that the four line carve-out should be re-examined in the context of the entire unbundling framework being contemplated at this time.³⁶ As such, the FCC still needs to make a market-specific determination with respect to the demarcation point between mass market and enterprise customers. I urge the Commission to refrain from adopting the four line carve-out on a permanent basis.³⁷ As the FCC recognized in the *TRO*, the four line carve-out has been implemented in just a few areas of the country.³⁸

31. The FCC, in its *Triennial Review NPRM*, expresses some concerns with the four line carve-out. Specifically, while the FCC selected the top fifty MSAs for inclusion because switch deployment appeared to be concentrated in these areas (*i.e.*, at least

³⁴ *TRO*, ¶ 525.

³⁵ *Id.*

³⁶ *Id.*; The *Triennial Review NPRM* seeks comment on whether a “substantially revised approach [to the four line carve-out] is called for.” *Triennial Review NPRM*, ¶ 56.

³⁷ See *TRO*, ¶ 497, footnote 1546.

³⁸ *Id.*, footnote 1545.

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three switches in most MSAs), the deployment of switches is not a good proxy for evaluating the level of mass market competition, *i.e.*, where customers are actually served throughout a relevant market.³⁹ In addition, a line-count approach appears to be difficult to implement for specific end-users, who may grow, or expand and contract on a seasonal basis.⁴⁰

32. I recommend that the FCC recognize mass market customers as those for which CLECs deploy DSO-level lines. The FCC should not maintain the four line carve-out rule, but rather should further define the geographic market for which impairment should be determined as described below.

The unbundling framework should be applied at the wire center level, which is the appropriate geographic market to use in assessing impairment.

33. The *Triennial Review NPRM* seeks comment on how to take geography into account in the FCC's unbundling analysis and what kinds of "geographic delineations would be useful" to such an analysis.⁴¹ The FCC notes that "a service- or location-specific analysis will be administratively more difficult, because it will involve more data and more review" and asks how it should "weigh the benefits of more refined unbundling rules against the administrative burden of conducting the more detailed analysis and

³⁹ *Triennial Review NPRM*, ¶ 57.

⁴⁰ *Id.*, ¶ 59.

⁴¹ *Id.*, ¶ 39.

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applying more complicated rules.”⁴²

34. In its *Triennial Review Order*, the FCC specifically deferred to states’ ability to determine the appropriate level of granularity for assessing whether CLECs would be impaired without access to ILECs’ switching elements. The FCC must once again make these determinations, given the Court’s decision in *USTA II*. However, the FCC should be guided by the Court’s findings in *USTA II*, and, as such, must adopt unbundling rules that take into account varying geographic markets and customer classes.⁴³ While it may be tempting to opt for administrative simplicity, the FCC has been barred from adopting broad unbundling rules for the sake of easing administrative burdens. It is imperative that the FCC define the geographic market before it can proceed with its own impairment analysis and application of an unbundling framework.

35. The manner in which the geographic market is defined is critical to the outcome of this proceeding. By way of illustration, were the FCC to define entire states as markets (an option that the FCC prohibited in the *TRO*), and one CLEC were to be self-provisioning in Salt Lake City, another CLEC in Logan, and a third in Brigham City, one might argue that the FCC-established self-provisioned trigger would be met for all consumers throughout the state. Clearly this approach (which no one is advocating) would be an economically indefensible outcome because consumers in Brigham City

⁴² *Id.*, ¶ 40.

⁴³ *USTA II*, at 9.

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cannot substitute services that a CLEC offers in Salt Lake City. At the other end of the spectrum, if the FCC were to establish a census block group (“CBG”) as the relevant market for examination, the presence of a CLEC in one CBG would have no bearing on the FCC’s findings in the neighboring CBG, and the analysis would be excessively narrow. Improperly defined geographic markets will mean that CLECs will not be able to serve the mass market using UNE-P, and, therefore, may not be able to serve the mass market at all.

36. The goal in this proceeding should be to designate markets that conform to:

- The actual development of competition;
- The structure of the local market;
- The pricing and regulatory history within the state; and
- Administrative feasibility.

37. While recognizing that the *USTA II* decision found that the FCC’s delegation to the states was unlawful, the framework outlined by the FCC in its *TRO* is still applicable to the analysis of impairment now before the FCC. Rule 51.319 states:

A state commission shall define the markets in which it will evaluate impairment by determining the relevant geographic market to include in each market. In defining markets, a state commission shall take into consideration the locations of mass market customers actually being served (if any) by competitors, the variation in factors affecting competitors’ ability to serve each group of customers, and competitors’ ability to target and serve specific

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markets profitably and efficiently using currently available technologies. A state commission shall not define the relevant geographic area as the entire state.⁴⁴

38. In the *TRO*, the FCC states, in pertinent part:

The triggers and analysis described below must be applied on a granular basis to each identifiable market. State commissions must first define the markets in which they will evaluate impairment by determining the relevant geographic area to include in each market. State commissions have discretion to determine the contours of each market, but they may not define the market as encompassing the entire state. Rather, state commissions must define each market on a granular level, *and in doing so they must take into consideration the locations of customers actually being served (if any) by competitors*, the variation in factors affecting competitors' ability to serve each group of customers, and competitors' ability to target and serve specific markets economically and efficiently using currently available technologies. While a more granular analysis is generally preferable, states should not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market. State commissions should consider how competitors' ability to use self-provisioned switches or switches provided by a third-party wholesaler to serve various groups of customers varies geographically and should attempt to distinguish among markets where different findings of impairment are likely. The state commission must use the same market definitions for all of its analysis.⁴⁵

The FCC should, in the case before it now, follow similar reasoning.

39. The overriding criterion in determining the geographic market should be whether

⁴⁴ §51.319(d)(2)(i).

⁴⁵ *TRO*, ¶ 495, footnotes omitted, emphasis added.

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customers are actually being served.⁴⁶ To that end, I recommend that the FCC adopt the wire center. The wire center is logical, corresponds with the economics of the supply and the demand for retail and wholesale services, is administratively feasible, and recognizes disparate customer densities. By contrast, Qwest's proposed geographic market definition in the Commission-mandated state proceeding, and that of other ILECs, is artificial and encompasses wire centers with differing structural attributes.

40. Much of the germane information about local market structure is based on the ILECs' wire centers. Among the various relevant factors that correspond with wire centers, in the case of the data I analyzed in Utah, are the following:

- *Qwest's prices charged to the end user* (i.e., the incumbent's retail price against which new entrants must compete, which, in turn, affects their potential revenues).
- *Local calling areas*: Local calling areas depend on the wire center that serves a customer. A single MSA encompasses wire centers with very different local calling areas. For example, within the Ogden-Clearfield MSA, customers' local calling areas in the Huntsville and Ogden Main wire centers differ significantly. The local calling area for customers in the Huntsville wire center market includes Ogden Main, Ogden North, Ogden South, and Ogden West. By contrast, the local calling area for customers in the Ogden Main wire center encompasses

⁴⁶ *Id.*, ¶ 495.

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Clearfield, East Layton, Huntsville, Kaysville, Morgan, Mountain Green, Ogden North, Ogden South, and Ogden West.⁴⁷ The size of the incumbent's local calling area affects a CLEC's potential revenues because most likely, to attract customers, CLECs need to match or to beat the ILEC's local service calling area.

- *Qwest's prices charged to CLECs for UNEs (i.e., the wholesale price new entrants must pay for essential elements, which, in turn, affects their potential costs).*
- *Size and topography:* The area served by wire centers varies in square mileage, presence of waterways, etc., and, therefore, wire centers possess significantly diverse cost characteristics.⁴⁸
- *Availability and cost of collocation space:* The FCC specifically identifies "variations in the capabilities of wire centers to provide adequate collocation space" as a relevant factor for defining geographic markets.⁴⁹ The ability to collocate in a wire center and the anticipated number of customers over which the collocation costs can be recovered directly affect the feasibility of serving markets.

41. Although the FCC explicitly identifies size as a relevant criterion for determining

⁴⁷ Qwest Corporation Exchange and Network Services Tariff, Utah, Section 5, pages 20 and 21, release 2.

⁴⁸ The FCC identifies the size of the wire center as a potential factor to use in defining geographic markets. *TRO*, ¶ 496.

⁴⁹ *Id.*

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relevant markets, Qwest did not provide information about the square mileage encompassed by its proposed markets in support of its filing.⁵⁰ This information would permit an assessment of line density, which, in turn, affects the cost of supplying basic local exchange telecommunications services.

42. Although economic theory relies, in part, on the presence of price discrimination to define markets,⁵¹ in the state filings I examined, the ILECs did not address the fact that their proposed geographic markets encompassed retail and wholesale prices, which vary based upon the wire center. The range of rates within the five MSAs presented by Qwest as geographic markets is further evidence of the excessively broad nature of Qwest's proposed geographic market. For example, the Ogden-Clearfield MSA includes locations classified as urban, suburban, and rural, and locations with a wide range of extended area service ("EAS") charges.⁵² Similarly, wholesale UNE loop rates within Qwest's market areas vary among three density zones. This hodgepodge of wholesale and retail rates (factors which critically affect the profitability of local entry) demonstrates that Qwest's proposed markets are not based on economic principles.

⁵⁰ Qwest response to CCS 1.2.12.

⁵¹ Horizontal Merger Guidelines, Department of Justice and the Federal Trade Commission, issued April 2, 1992, revised April 7, 1997 ("Horizontal Merger Guidelines"), § 1.12.

⁵² EAS increments apply on an exchange-specific basis. For example, the Ogden-Clearfield MSA includes Bountiful, for which the monthly residential EAS charge is \$2.10, and Mountain Green for which the comparable charge is \$4.00. Qwest Corporation Exchange and Network Services Tariff, Utah, Section 5, page 13, release 7, page 14, release 7.

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43. In their *Horizontal Merger Guidelines*, the U.S. Department of Justice (“DOJ”) and the Federal Trade Commission (“FTC”) define a market “as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a ‘small but significant and nontransitory’ increase in price, assuming the terms of sale of all other products are held constant.” The DOJ and FTC further state that a “relevant market is a group of products and a geographic area that is no bigger than necessary to satisfy this test.”⁵³

44. The purpose of this nationwide exercise is to create choice for *customers*, and, therefore, the focus should be on whether customers are *actually* being served. If markets are defined too broadly, they will encompass wire center areas where CLECs may not actually be serving customers in the proposed geographic market. Viewed from the customer’s perspective, the fact that a CLEC is serving customers in an adjacent wire center, responding, perhaps in part, to the prevailing (*i.e.*, ILEC) market price, does not translate into competitive choice for the customer in the home exchange, where the CLEC may not have yet raised the capital to install facilities, and/or the prevailing market price is less (thus diminishing revenue opportunities and dampening CLEC interest). If the FCC, contrary to my recommendation, adopts broader markets than the

⁵³ *Horizontal Merger Guidelines*, § 1.0.

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wire center, then the FCC should only consider those CLECs that serve the entire market, not just a portion of the area, as relevant competitors in the mass market.

45. An illustration from Utah makes this point. A customer who resides in Bountiful cannot substitute the local service offered by a CLEC in Roy. As I demonstrate in Section IV below, the evidence shows that CLECs compete on a wire center basis, and the mere fact that a CLEC serves a particular wire center does not imply that it serves all wire centers in the MSA. An excessively broad market masks important structural differences within the area.

46. The FCC does caution states in the *TRO* to “not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market.”⁵⁴ One solution may be to cluster contiguous wire centers that have similar market characteristics. However, although clustering of wire centers has a theoretical appeal, it would not be administratively practical for the FCC, particularly within the limited time frame contemplated for this proceeding, to cluster wire centers accurately.

47. As discussed in Section IV below, Qwest proposed the use of MSAs to define geographic markets for the purpose of the FCC’s impairment analysis. Indeed at least three RBOCs (Verizon, SBC and Qwest) all proposed the use of MSAs in their state

⁵⁴ *TRO*, ¶ 495.

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filings.⁵⁵ The proposal to utilize MSAs as the geographic market over which to apply the FCC's unbundling rules has been vague and unsupported by witnesses in the state proceedings. For instance, the Committee of Consumer Services propounded several discovery requests seeking the basis on which one of Qwest's witnesses concluded that CLECs will seek to serve customers *throughout* an MSA. The responses indicated that his conclusion was based on general economic theory and that Qwest's decision was a "qualitative judgment."⁵⁶

48. As discussed in Section IV below, my review of the granular data in Utah suggests that there is substantial disparity among wire centers within MSAs in terms of switch deployment and UNE loop activity. Several CLECs may enter one wire center, while choosing not to offer service in another wire center that is within the same MSA. This market behavior would indicate that the CLECs view certain wire centers as being ones that are economic to enter and *do* make distinctions *on a wire center-basis*. The observed behavior suggests that the ILECs' proposed geographic market boundaries

⁵⁵ See, e.g., *In the Matter of the Implementation of the Impairment Review Mandated by the Federal Communications Commission in its Triennial UNE Review*, Arkansas Public Service Commission Docket No. 03-171-U, Direct Testimony of Jon R. Loehman on behalf of SBC Arkansas Regarding Mass Market Switching, filed February 10, 2004. SBC supported the Arkansas PSC's decision to use LATAs, but proposed MSAs as an alternative geographic market. *Id.*, at 26. See also, *In the Matter of the Implementation of the Federal Communication Commission's Triennial Review Order*, New Jersey BPU Docket No. TO03090705, Direct Testimony of Harold E. West III and Carlo M. Peduto, II, filed December 3, 2003, at 11.

⁵⁶ Qwest Response to Committee of Consumer Services Request No. 01-015. See, also, Qwest Responses to Committee of Consumer Services Request Nos. 01-013, 01-014.

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are woefully unsupported and inadequate for the purpose of applying the FCC's unbundling analysis. In its *Triennial Review Order*, the FCC addresses such a circumstance, concluding that "if competitors with their own switches are only serving certain geographic areas, the state commission should consider establishing those areas to constitute separate markets."⁵⁷

49. Certainly the ILECs have failed to demonstrate that their proposed "mega-clusters" (*i.e.*, MSAs) correspond with the underlying scale and scope economies that CLECs may have. Where a theoretical concept cannot be supported by a detailed economic assessment, its practical implementation may well harm the development of competition, and therefore consumers. For example, simply because switching equipment *can* serve broad geographic areas, this does not mean the economies of scale and scope justify *actually* serving customers in the broader area. It is critical for the FCC to examine where customers are *actually* being served. CLECs may be able to recover the associated additional collocation and transport costs of serving a large geographic area over only a very small number of customers, thus not justifying the additional expense. The fact that network architecture can support broad deployment is only one relevant factor; more important is whether broadening its market is financially prudent for the CLEC.

50. The market definition that the FCC establishes in this proceeding has long-term

⁵⁷ *TRO*, ¶ 496, footnote 1537.

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implications for local competition in Utah and across the nation. It is important to define the market appropriately because the market boundary that the FCC determines in this proceeding will likely serve as the foundation for future ILEC requests for findings of non-impairment (or similar filings related to network unbundling rules). Therefore, even if, when viewed on an excessively broad area, such as a MSA, the ILECs do not provide evidence of non-impairment at this time, the FCC should not adopt their ill-supported use of the MSA as the relevant geographic market. Separate from the assessment of impairment, the FCC should determine the market boundaries that are best suited for the supply, demand, and consumer features of the local telecommunications mass market.⁵⁸ Drawing an excessively broad market presumes an efficiency and intent to serve by CLECs that may not exist.

CLECs are impaired in a given geographic market unless and until CLECs serve residential *and* business customers.

51. CLECs must serve both residential *and* business customers to be considered to be serving the entire mass market. The FCC ordered in the *TRO*, that, “[i]n circumstances where switch providers (or the resellers that rely on them) are identified as currently serving, or capable of serving, only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for purposes of its analysis.”⁵⁹ The reasoning behind that guidance is sound. The FCC

⁵⁸ Furthermore, in my view, the FCC could more easily *expand* than *contract* the geographic market at a future date, based on more detailed evidence.

⁵⁹ *TRO*, footnote 1552. The *TRO Errata* does not change the wording of this footnote,

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should continue to be guided by its analysis in the *TRO* regarding the distinctions in customer class within the mass market. The residential and small business markets differ for several reasons, which means that, for the purpose of analysis, the FCC should consider separately whether the relevant sub-markets are actually served by self-provisioning CLECs. It is essential to examine whether mass market customers are being served in both sub-markets, including the residential sub-market and the small business sub-market. The residential market is clearly a distinct customer class within the mass market. ILECs' ability to price discriminate, *i.e.*, to charge different rates for residential and business local exchange service, is evidence of separate markets.

52. The fact that a CLEC has deployed a switch that serves a sub-market, e.g., only small business customers, does not indicate that it will expand its offerings to serve residential customers. The focus should be whether CLECs are *actually* serving customers, not whether they have the potential to do so. If CLECs found it profitable to serve the residential market, they would be doing so. However, CLECs that are physically able to serve residential customers in a wire centers where they have already deployed a switch have chosen to serve only the business market. Clearly financial reasons motivate such a decision.

53. The FCC stated in the *TRO* that “[m]ass market customers are analog voice customers that purchase only a limited number of POTS [plain old telephone service]

although it does change the sentence to which this footnote refers, *i.e.*, the sixth

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lines, and can only be economically served via DS0 loops.”⁶⁰ CLECs must be serving the entire analog voice mass market. If a CLEC is serving only one class of customers, and not the other, then the CLEC should not count toward the application of the self-provisioning trigger. For this reason, in analyzing the data that CLECs provided in the Utah proceeding, I distinguish between instances where CLECs serve residential and business customers to enable the FCC to assess whether CLECs are serving the entire mass market.⁶¹

sentence.

⁶⁰ *TRO*, ¶ 497.

⁶¹ See Section IV of my Affidavit.

IV. GRANULAR DATA IN UTAH'S LOCAL MARKETS

Introduction

54. This section of my Affidavit (1) briefly summarizes Qwest's mass market filing; (2) describes the granular data submitted in Utah's impairment proceeding; and (3) summarizes the results of my data analysis. Information about Utah's local markets is essential to an assessment of whether impairment exists because, as the FCC has stated, "[b]ased on our experience from prior proceedings, we anticipate that we will find evidence of actual marketplace conditions to be more probative than other kinds of evidence, such as cost studies or hypothetical modeling."⁶² I analyze Qwest's "Track 2" filing in detail in Section V.

55. Residential and small business customers' access to competitive choice in Utah depends critically on the availability of UNE-P:

- The number of UNE-P lines increased by approximately 240 percent between December 2002 and November 2003.
- UNE-P is the fastest growing mode of local entry.
- As of November 2003, 43,376 lines were served through UNE-P.⁶³

⁶² *Triennial Review NPRM*, ¶ 17.

⁶³ Direct testimony of John F. Finnegan on behalf of AT&T Communications of the Mountain States, Inc., and TCG Utah (collectively "AT&T"), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 26-27, citing Qwest Performance Results, Utah, Checklist Format, December 2002 – November 2003, December 18,

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Qwest's confidential Attachments WRE-1C, WRE-2C, and WRE-3C include UNE-P line counts, UNE loop counts, and resale line counts by wire center. However, the data include lines that serve mass market *and* enterprise customers.⁶⁴

56. Confidential Attachments SMB-1aHC and 1bHC to this Affidavit show that residential and business consumers located in Qwest's proposed non-impairment area rely on CLECs' UNE-P based entry for competitive choice. I have prepared two versions of this Attachment, based on two different sources of data for UNE-P. SMB-1aHC relies on the data provided by CLECs in response to Data Request B.2 issued by the Utah Division of Public Utilities ("Division"). SMB-1bHC relies on Qwest-provided data about UNE-P. Both Attachments display the results on a wire center basis.

57. The evidence demonstrates that CLEC activity is scattered in Qwest's proposed markets. A significant number of wire centers within Qwest's proposed non-impairment markets are *in areas where CLECs are not serving customers with self-provisioned switches*, and, therefore, the elimination of UNE-P would jeopardize competitive choice for these customers. Confidential Attachment SMB-2HC to this Affidavit includes those wire centers in Qwest's proposed non-impairment area without *any* mass market UNE

2003. As of December 2003, CLECs leased 48,463 UNE-L from Qwest. See Table 2, *supra*.

⁶⁴ Direct testimony of William R. Easton on behalf of Qwest Corporation, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 3, 5, and 7. Mr. Easton does not include his delineation between mass market and enterprise customers in his testimony.

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loop deployment, and also shows the quantities of UNE-P that support residential and business local competition in these wire centers. Confidential Attachment SMB-3HC shows separately, by MSA, the quantities of wire centers with and without UNE loop activity. Qwest's Confidential Attachment LLS-6HC shows the deployment of UNE loops in Qwest's proposed non-impairment markets. These various data underscore the stakes of the instant proceeding for residential and small business consumers in Utah.

58. Information about CLECs' use of UNE-P and UNE-L is important to enable the Commission to consider the substantial implications of prematurely foreclosing CLECs' access to unbundling switching. Residential and small business consumers will bear the brunt of an erroneous finding of non-impairment. Without UNE-P, they will lose competitive choice.

59. The FCC stated that "...a switch can theoretically serve wide areas (provided that the costs of transporting traffic back to the switch are not cost prohibitive)."⁶⁵ However, the *absence* of any UNE loop activity in some wire centers within the same MSA boundaries as those wire centers *with* UNE loop activity underscores the importance of differentiating between *theory* and *practice*. The evidence also demonstrates the infirmities of Qwest's proposed geographic market. The disparity among the wire centers with respect to the level of CLECs' UNE loop activity that Confidential Attachment SMB-2HC shows is evidence that Qwest's proposed market boundary is too

⁶⁵ TRO, footnote 1536, elaborating on ¶ 495.

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broad. This disparity demonstrates that Qwest's proposed geographic market boundaries are woefully unsupported and inadequate for the purpose of applying the FCC's self-provisioning trigger.

Qwest seeks a finding of non-impairment for mass market switching in the vast majority of Utah.

60. Qwest proposes the use of Metropolitan Statistical Areas ("MSAs") to apply the FCC-established standards for assessing impairment. Qwest contends that the self-provisioning trigger is met in three MSAs (Salt Lake City, Ogden-Clearfield, and Provo-Orem) and that the potential deployment ("Track 2") requirements are met in the Logan MSA and the St. George MSA. As I discuss below, Qwest has not demonstrated that its proposed geographic market is appropriate.

61. As defined by the Office of Management and Budget ("OMB").

Metropolitan Statistical Areas have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. ... If the specified criteria are met, a Metropolitan Statistical Area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as Metropolitan Divisions.⁶⁶

62. The Ogden-Clearfield MSA includes Davis, Morgan, and Weber counties. The

⁶⁶ OMB Bulletin No. 03-04, Statistical and Science Policy Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, June 6, 2003 ("OMB Bulletin"), Attachment at 2.

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Salt Lake City MSA includes Salt Lake County, Summit, and Tooele counties. The Provo-Orem MSA includes Juab and Utah counties. The St. George MSA includes Washington County. The Logan MSA includes Franklin County, ID and Cache County. There are four micropolitan statistical areas in Utah: Brigham City (in Box Elder County), Cedar City (in Iron County), Price (in Carbon County), and Vernal (in Uintah County). A micropolitan statistical area has “at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.”⁶⁷

63. Confidential Attachment SMB-4C to this Affidavit identifies the wire centers within each of the five MSAs, and also the wire centers that are outside of the MSAs. Figure SMB-1 includes a map that shows county boundaries and the boundaries for the Salt Lake City-Ogden MSA, Provo-Orem MSA, and Ogden Clearfield MSA as of 1999. In 2000, the Ogden-Salt Lake City MSA was separated into two MSAs; some area was added to these two MSAs; and the Logan and St. George MSAs were created.⁶⁸

64. Qwest contends that defining the relevant market on a wire center basis would “ignore the manner in which CLECs are now providing switched voice grade services in Utah” and that it would be unreasonable “to assume that a CLEC would incur costs for switch deployment, customer acquisition, advertising and customer service to obtain

⁶⁷ *OMB Bulletin*, at 2.

⁶⁸ *OMB Bulletin*.

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mass market customers in only an individual wire center.”⁶⁹

65. However, as my analysis in this Affidavit demonstrates, Qwest has not shown that CLECs serve entire MSAs. The technical ability of a CLEC to serve an area broader than a wire center with a self-provisioned switch does not translate into CLECs actually serving (or finding it profitable to consider serving in the future) customers in broad geographic areas.

66. Although Qwest questions “whether a rational CLEC would self-supply switched services to customers in the Grantsville and Alta wire centers,”⁷⁰ Qwest nonetheless argues for the inclusion of these two wire centers in its proposed non-impairment market because customers in these wire centers may receive area-wide advertising. According to Qwest, CLEC managers might not want to risk the customers’ ill will by refusing to serve them; and there might be “high value” customers in these wire centers. Qwest also defends its inclusion of these types of wire centers because Qwest may not be serving these customers profitably either, and, therefore, Qwest should not have to “subsidize the abilities of CLECs to provide service to otherwise unprofitable customers.”⁷¹ These reasons are unpersuasive.

⁶⁹ Scholl Direct (Qwest) at 6.

⁷⁰ Fitzsimmons Direct (Qwest), at 53.

⁷¹ *Id.*, at 53-54.

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The granular data in Utah support the use of the wire center as the relevant geographic market for evaluating whether impairment exists.

67. Qwest's filing highlights examples of precisely why impairment should be assessed at a wire center level. The prospect for entry by self-provisioning CLECs in these (and other similar) markets is sufficiently unlikely that they should be examined separately. Qwest's ultimate rationale that, even if it is truly unprofitable to serve the area (i.e., if a wire center were to fail the "Track 1" and the "Track 2" analyses) Qwest *nonetheless should not be obligated to unbundled its local switching element* contradicts the letter and the spirit of the *Triennial Review Order*.

68. Furthermore, UNE-P prices are set to recover total element long run incremental cost ("TELRIC"), and therefore, CLECs, even if they were to enter low-profit markets on a UNE-P basis, *would not be subsidizing Qwest*. Qwest fails entirely to justify its proposed geographic market. Moreover, Qwest's proposal, if approved, would deny the opportunity of competitive choice to consumers in "low-profit" wire centers, and therefore, in my opinion, fails to fulfill the intent of the 1996 Act. The wire centers that appear in Confidential Attachment SMB-2HC are likely to share similar market structure attributes as those of Grantsville and Alta. The overriding criterion, in applying the self-provisioning trigger, should be whether customers are actually being served.⁷² Similarly, in applying the potential deployment analysis, the overriding criterion should be whether customers would actually be served.

⁷² TRO, ¶ 495.

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69. AT&T recommends that “a market definition encompassing various large geographic areas be taken into consideration” in an impairment analysis because, among other things, AT&T contends that “most efficient CLEC business plans anticipate serving customers distributed over a much wider geographic area than is served by a single wire center.”⁷³ AT&T further recommends that the Commission establish “impairment zones” for its analysis, and states that “[t]he pattern of customers being served by unbundled local switching – in particular the pattern of the most *recent* competitive activity – is perhaps the most useful indicator of the geographic area in which to conduct an impairment analysis.”⁷⁴

70. AT&T did not, however, propose specific geographic areas for Utah that comport with its recommended guidelines. AT&T recommended that the definition of the appropriate geographic market not be determined before the Utah PSC completed its data gathering and assessment.⁷⁵ AT&T presented the results of its business case model on a LATA-wide basis. The purpose of AT&T’s proposal in Utah’s impairment proceeding appeared to be to provide theoretical guidelines for the Utah PSC but not to recommend specific market boundaries. AT&T also contended that once the

⁷³ Direct testimony of William H. Lehr and Lee L. Selwyn on behalf of AT&T Communications of the Mountain States, Inc., and TCG Utah (Collectively “AT&T”), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 34.

⁷⁴ Finnegan Direct (AT&T), at 58 (emphasis in original). Mr. Finnegan also identifies other relevant factors on page 57 of his testimony.

⁷⁵ *Id.*, at 60.

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“impairment evaluation zone” has been determined, in order to qualify, providers and/or wholesalers should serve customers throughout the zone.⁷⁶

71. I agree that regardless of the geographic market that the FCC adopts, the FCC should assess whether customers *throughout* the area are being served. If a CLEC serves a high-revenue neighborhood or downtown business district and does not serve or seek to serve bordering areas within the geographic market, a finding of non-impairment should not be found for that market. Pockets of competitive activity do not constitute evidence of non-impairment for the entire area. As Confidential Attachment SMB-2HC to my Affidavit and Qwest Confidential Exhibit LLS-6HC show, competitive activity can vary significantly between adjacent wire centers, and, therefore, the presence of activity in one wire center will not necessarily translate into competitive activity in an adjacent wire center.

72. MCI recommended that the Utah PSC adopt the wire center as the foundation for analyzing impairment because, among other things, it “accomplishes the FCC’s goals of a granular analysis that maximizes accuracy of results, subject to the constraints of practicality.”⁷⁷ MCI explained further that “[t]he presence of economies of scale in the provision of telecommunications services leads providers to *enter many separate markets*; it does not suggest a more expansive geographic definition of markets.

⁷⁶ *Id.*, at 67-68.

⁷⁷ Direct testimony of Richard Cabe on behalf of WorldCom, Inc. (“MCI”), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 4.

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Whether for products or services, markets are always defined by reference to acceptable alternatives that are available to customers.”⁷⁸

73. The Utah Rural Telecom Association (“URTA”), which consists of small, rural telephone companies and member-owned cooperatives, expressed a concern that a geographic market definition that encompasses any of its members’ service territories could “inadvertently oblige them to unbundle local switching.”⁷⁹ For example, the Salt Lake City MSA includes Summit County and Tooele County, which are served in part by URTA’s members.⁸⁰ The URTA stated that “it is critical to recognize that any determination made” in the Utah impairment proceeding “not in any way revoke or otherwise limit the rural exemption of URTA members” and specifically recommended that the Utah PSC define boundaries so as to exclude URTA members’ service territory.⁸¹

74. I recommend that the FCC adopt the wire center as the basis of its analysis of non-impairment. The wire center is logical, corresponds with the economics of the supply and the demand for retail and wholesale services, is administratively feasible,

⁷⁸ *Id.*, at 46 (emphasis in original).

⁷⁹ Direct testimony of Dr. Curt Huttshell for the Utah Rural Telecom Association (“URTA”), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 3.

⁸⁰ *Id.*, at 5.

⁸¹ *Id.*, at 5-6.

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and recognizes disparate customer densities. By contrast, Qwest's proposed geographic market definition is artificial, encompasses wire centers with differing structural attributes, and ignores the fact that customers are not actually being served by self-provisioning CLECs (nor would they be likely to in a "potential deployment analysis") in Qwest's proposed broad geographic markets.

Collocation represents a barrier to entry in Utah.

75. According to Qwest, its performance with respect to collocation and CLEC-to-CLEC cross connects "is demonstrably outstanding, and there is no reason to expect either to present a problem if unbundled mass-market switching is no longer available."⁸² Qwest indicates that it has ample collocation space available and that the only one of its 62 central offices that has any constraint is scheduled for additional construction.⁸³ Qwest also indicates that it maintains a publicly available website that identifies wire centers with space constraints.⁸⁴ According to Qwest, it provisions collocation on time and at rates set by the Utah PSC, and, therefore, collocation does not represent a barrier in Utah's local markets.⁸⁵

⁸² Direct testimony of Robert J. Hubbard on behalf of Qwest Corporation, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 3.

⁸³ *Id.*, at 3 - 6.

⁸⁴ *Id.*, at 9.

⁸⁵ *Id.*, at 12 - 13.

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76. Based on the information provided by Qwest, the availability of *space* does not seem to present an operational barrier. However, I am not persuaded by Qwest's reasoning on collocation *costs*. The fact that the rates have been set by the PSC simply means that the PSC has established TELRIC-compliant rates, but reveals nothing about whether the cost is an entry barrier. Qwest, as the incumbent, serves a large pre-existing base of customers over which it can recover the large fixed costs of providing local service. By contrast, CLECs lack this embedded economy of scale and, therefore, must consider carefully where to invest capital. If a CLEC anticipates serving only a handful of customers in a given market, the collocation cost likely would be prohibitive, making entry uneconomic because the large costs could be recovered over only a small number of customers. Therefore, even if Qwest has demonstrated that collocation is not an operational barrier, it has not demonstrated that it is not an economic barrier.⁸⁶ Furthermore, as I discuss in Section V, CLECs' testimony suggest that operational barriers relating to collocation may persist.

77. Finally, since CLECs incur collocation costs on a wire center basis, this is yet further justification of using the wire center as the relevant geographic market for assessing the FCC's triggers.

78. Qwest's response to CCS-CCS01-016, which provides wire specific data, shows the disparate level of competitive activity among wire centers. The significant range of

⁸⁶ The FCC directs states to "consider the role of potential economic barriers associated

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Qwest domination among localities underscores the significant variation among wire centers and further substantiates the reasonableness of using the wire center as the geographic market.

79. Qwest failed to provide empirical support to demonstrate that its proposed geographic market corresponds with the economies of scale and scope associated with CLEC entry into local markets. I recommend that the FCC adopt the wire center as the relevant geographic market in this proceeding because the use of wire centers is administratively practical, corresponds with critical aspects of supply and demand in the local market, and is the place where competition is occurring. Although clustering has a theoretical appeal, it would not be administratively practical for the Commission, particularly within the limited time frame permitted for this proceeding, to cluster wire centers accurately. Certainly, Qwest has failed to demonstrate that its proposed “mega-clusters” (i.e., the five MSAs) correspond with the underlying scale and scope economies that CLECs may have. Where a theoretical concept cannot be supported by a detailed economic and empirical assessment of the relevant facts, its implementation will harm the development of competition, and ultimately consumers. Qwest has provided insufficient evidence to support the clustering that it advocates.

80. For example, one cannot argue that economies of scale and scope justify *actually* serving customers in the broader area simply because switching equipment is

with the use of competitive switching facilities.” *TRO*, ¶ 507.

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physically able to serve broad geographic areas. As the analysis in Sections IV and V of my testimony demonstrates, it is critical for the Commission to examine *where* customers are actually being served and *where* they are likely to be served by rational CLECs. CLECs may be able to recover the associated additional collocation and transport costs over only a very small number of customers, thus not justifying the additional expense of geographic expansion. The fact that network architecture can support broad deployment is only one relevant factor; equally important is whether it is financially prudent for a CLEC to broaden its market. The evidence does not show that CLECs compete for mass market customers in all contiguous wire centers. Qwest has not shown that the limited number of CLEC switches in Utah will serve the broad geographic markets that Qwest proposes.

81. As I discuss above, Qwest does not provide any evidence that its proposed geographic markets include areas with similar densities and potential revenues. Indeed, Qwest did not provide any information about square miles encompassed by its proposal, nor did it address the fact that the potential revenues vary among the diverse wire centers it proposed market encompasses. Furthermore, Qwest's network architecture, particularly its central offices, is a critical element of CLECs' network and business planning because the location of Qwest's central offices affects the costs and feasibility of CLECs' collocation and transport.

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Qwest fails to justify its proposed cross over between mass market and enterprise customers.

82. Qwest indicates that “it does not intend to challenge the FCC’s presumption of four DS0 lines at a single customer location as the ‘cross over point’ at which it is economically feasible to serve a customer via a DS1.” Qwest, therefore, recommends that the Commission define mass market customers as those served by no more than three DS0 lines at a location.⁸⁷

83. Based on its analysis, AT&T recommends a cross over point of twelve lines, asserting that “it made economic sense for a CLEC to serve a multi-line POTS customer using a DS1 based service rather than using UNE-P.”⁸⁸ Although this approach is based on theoretically appealing logic, the variables that affect the economic cross over point vary by wire center. As AT&T recognizes, the costs for a DS1 loop and for UNE-P vary by zone, and, therefore, to retain accuracy, the Commission would need to determine three separate cross over points, for each of the three density zones, or settle for a weighted average for the sake of simplicity.⁸⁹ Furthermore, if the DS1 and/or UNE-P rates change in the future, the Commission would need to recalculate the economic cross over point. Although AT&T’s proposal is theoretically appealing, it would be unwieldy to implement. Based on my review of the data in Utah and on the various

⁸⁷ Scholl Direct (Qwest), at 16, citing *TRO*, ¶ 497.

⁸⁸ Finnegan Direct (AT&T), at 73.

⁸⁹ *Id.*, at 82.

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proposals submitted by participants in the state's impairment proceeding, I recommend that the FCC unambiguously establish the cross over at 24 DS0 channels.

Other barriers exist that would prevent the seamless migration from UNE-P to UNE-L.

84. Participants in Utah PSC's impairment proceeding raised various credible concerns, not all of which I will address here. Among the significant issues that merit the Commission's scrutiny, and that relate to the product under investigation (unbundled switching), are the:

- *Impact of IDLC on consumers' ability to "seamlessly" migrate among competitive suppliers:* Qwest's increasing use of integrated digital loop carrier ("IDLC") equipment in its network architecture presents a problem for consumers seeking to migrate "seamlessly" from Qwest's IDLC-provisioned retail loop to a CLEC offering that relies on Qwest's unbundled IDLC UNE loop. According to MCI, Qwest's position is that the technological challenges of unbundling IDLC-provisioned loops cause UNE loop requests to "fall out" of provisioning processes such as batch hot cut processes and instead must "be provisioned via an extremely expensive and time-consuming manual process."⁹⁰ Until such time as Qwest resolves the technical challenge of unbundling IDLC loops, CLECs must

⁹⁰ Direct testimony of Timothy J. Gates on behalf of WorldCom, Inc. ("MCI"), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 16.

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endure “work arounds”⁹¹ which, in turn, diminishes the quality of consumers’ competitive choices.

- *Relationship of unbundled switching to CLECs’ DSL offerings:* CLECs require access to unbundled switching in order to offer a “line split” digital subscriber line (“DSL”) service.

85. The quality of UNE loop service appears to differ markedly between those loops that are provisioned over IDLC equipment, indicating that this is a distinct market, as MCI suggests.⁹² Therefore, at a minimum, CLECs should have continuing access to UNE-P for IDLC-provisioned loops until such time as Qwest has remedied the operational deficiencies of fulfilling UNE loop requests. However, defining this submarket, although preferable to ignoring the situation, is not a sufficient measure. Even if CLECs had continuing access to UNE-P for IDLC-served customers, this partial solution would still diminish the potential economies of scale of serving a market. CLECs would not be able to recover their cost of provisioning their own switch over this UNE-P supplied customer base and therefore the operational/technical barrier of Qwest’s IDLC deployment also represents an economic barrier to CLECs’ market entry.

86. Without unbundled switching, CLECs cannot provide a “line split” DSL.⁹³

⁹¹ *Id.*, at 15.

⁹² Cabe Direct (MCI), at 56.

⁹³ With line splitting, a voice CLEC and a data CLEC team together to use UNE-P to offer bundled voice and data service to an end user.

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According to Covad, if line sharing⁹⁴ is eliminated in three years, as the *TRO* requires, CLECs will not have an “economically viable” option to provide data services to residential customers. Covad also indicates that consumers want bundled offerings (i.e., voice *and* data services), and that without the ability of offer a bundled offering, “CLECs will be placed at a clear competitive disadvantage to the ILECs, and also face higher churn rates.”⁹⁵

87. According to Covad, “competitors cannot bundle voice and data easily via loop splitting because two (2) orders must be submitted rather than simply one (1) order as Qwest does.”⁹⁶ This operational drawback impedes CLECs’ ability to compete for customers’ local voice and data services.

88. The FCC found it “appropriate to ask the states to assess impairment in the mass market on a market-by-market basis.”⁹⁷ The FCC further stated that it expected:

...state commissions to follow a two-step process in determining whether to find “no impairment” in a particular market. In the first step, states will apply self-provisioning and wholesale triggers to a particular market to determine if the marketplace evidence of

⁹⁴ With line sharing, the ILEC provides voice service and a data CLEC provides DSL service to an end user.

⁹⁵ Direct testimony of Michael Zulevic on behalf of Covad Communications Company, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 5.

⁹⁶ *Id.*, at 12.

⁹⁷ *TRO*, ¶ 493.

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deployment of circuit switches serving the mass market requires a finding of no impairment. If the triggers are satisfied, the states need not undertake any further inquiry, because no impairment should exist in that market.⁹⁸

89. If the evidence does not satisfy the self-provisioning and wholesale triggers, then state commissions proceed to the second step, which entails the evaluation of operational and economic criteria to determine whether market conditions “are actually conducive to competitive entry, and whether carriers in that market actually are not impaired.”⁹⁹

90. In Utah, Qwest submitted “Track 1” filings for three MSAs and “Track 2” filings for two MSAs. I analyze Qwest’s Track 2 filing in Section V. As I understand the *TRO*, it requires the use of the *same* market definition for both sets of analyses. Therefore, in making determinations about market boundaries for the purposes of applying the first standard (*i.e.*, the self-provisioning trigger), it is important to be informed by the fact that the market would also need to be economically appropriate for the potential deployment analysis. That is, the market boundaries should be drawn to permit reasonable economic analyses of whether the analysis is based on *actual* deployment as well as based on *potential* deployment.

91. The key question for the FCC to consider, in its analysis of the self-provisioning

⁹⁸ *Id.*, ¶ 494, footnote omitted.

⁹⁹ *Id.*, ¶ 494.

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evidence, is whether the relevant CLECs are “operationally ready and willing to provide service to all customers in the designated market.”¹⁰⁰ In making that assessment, the readiness and willingness should be measured by whether CLECs actually serve customers. Furthermore, the FCC’s stated intent is that the competitive switch providers that are providing services only to a segment within the market should not be counted.¹⁰¹ If a CLEC has self-provisioned a switch within a Commission-designated market, but only seeks to attract business customers (for example, the CLEC simply offers services that compete on price with the business market segment), their offerings cannot be considered viable substitutes for the residential market. In this example, the CLEC is simply serving “a segment within the market,” and, therefore, the CLEC’s presence would not satisfy the self-provisioning trigger.

Qwest fails to demonstrate that the self-provisioning trigger is met in any of the three MSAs that it designates.

92. In support of its self-provisioning filing, Qwest includes a map that shows the physical location of CLECs’ switches.¹⁰² However, the information is of limited relevance to an assessment of mass market switching because the data is derived from the Local Exchange Routing Guide (“LERG”), which does not distinguish between

¹⁰⁰ *Id.*, ¶ 499, footnote omitted.

¹⁰¹ *Id.* Specifically, the FCC states that requiring the trigger-related competitive switch providers to be “capable of serving the entire market” “prevents counting switch providers that provide services that are desirable only to a particular segment of the market.” *Id.*

¹⁰² Confidential Attachment LLS-2C.

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switches that serve mass market and enterprise switched services.¹⁰³ Qwest indicates that it relied on the following sources of information in support of its self-provisioning filing:

- The LERG, which includes information about telecommunications carriers' switches.
- Wholesale services that Qwest provides, such as unbundled loops, number porting, and collocation.
- A confidential report from Intrado (Qwest's E911 service administrator) of all residential and business E911 records for all service providers serving customers in Qwest's territory, as of July 2003. According to Qwest, because the E911 records for CLEC services offered via resale of Qwest services or via UNE-P are included as Qwest records, any CLEC records in the E911 data base must be for lines served by CLEC-owned switches.¹⁰⁴ The business E911 records include businesses of all sizes.¹⁰⁵

93. The E911 data base includes customers served by cable telephony providers.¹⁰⁶ For this reason, contrary to Qwest's assertion that the E911 report "provides useful insights,"¹⁰⁷ the E911 data that Qwest relies on are not useful to the FCC in its

¹⁰³ Scholl Direct (Qwest), at 10.

¹⁰⁴ *Id.*, at 17-20.

¹⁰⁵ *Id.*, at 23.

¹⁰⁶ *Id.*, at 22, footnote 27.

¹⁰⁷ *Id.*, at 22.

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application of the FCC's self-provisioning trigger. The Commission should exclude those CLECs that offer local exchange service with cable telephony from its trigger analysis because cable telephony services are not comparable to voice grade local exchange service. As AT&T explains, providers should not count toward the trigger "unless they are shown to provide 'alternatives [that] are comparable in cost, quality, and maturity to incumbent LEC services.'"¹⁰⁸ AT&T explains further that cable telephony facilities deployment offers no evidence that CLECs have been able to deploy switches to access the incumbents' local loops.¹⁰⁹

94. Qwest asserts that its highly confidential Attachment LLS-4HC, "shows a widespread use of 'mass market' UNE loops by CLECs in the primary Utah MSAs."¹¹⁰ However, a close examination of these data demonstrates that CLECs' use of UNE-L is scattered.

Qwest's proposal fails to consider significant market structure disparities within its proposed non-impairment boundaries.

95. Qwest seeks a finding of non-impairment for the entire Provo-Orem, Salt Lake City and Ogden-Clearfield MSAs, which include eleven wire centers, seventeen wire

¹⁰⁸ Finnegan Direct (AT&T), at 133-134, citing *TRO*, ¶ 97 and footnote 97.

¹⁰⁹ *Id.*, at 134, citing *TRO*, ¶ 440.

¹¹⁰ Scholl Direct (Qwest), at 24.

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centers, and fourteen wire centers, respectively.¹¹¹ Confidential Attachment SMB-4 to this Affidavit lists the wire centers in Qwest’s proposed self-provisioning non-impairment market area. Highly Confidential Attachment SMB-2HC to this Attachment and Qwest Confidential Attachment LLS-6HC show that although CLECs may use self-provisioned switches to serve one wire center, such deployment does not necessarily translate into CLECs serving adjacent wire centers.

96. Qwest does not distinguish between situations where CLECs serve only residential or business customers from those where CLECs serve the entire market. As I explained in my discussion of the mass market definition, unless a CLEC serves both residential and business customers, the FCC should not count the CLEC toward the trigger.

97. Using Utah-specific data, I analyzed whether CLECs serve residential and business customers. The “universe” of CLECs that I examined included those CLECs which received the Division’s discovery, issued October 28, 2003. Attachment SMB-5 to this Affidavit identifies these CLECs and indicates the “response status” as being either (1) confidential response received; (2) no response received; or (3) not providing services in Utah.

98. Highly Confidential Attachment SMB-6HC to this Affidavit identifies the CLECs

¹¹¹ *Id.*, at i.

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that indicated that they have facilities; *i.e.*, they represent the potential universe of relevant carriers. In this Attachment, I include two columns, “Track 1” and “Track 2” to indicate which method of analysis might apply to each of the potentially relevant carriers.

99. In Highly Confidential Attachment SMB-7HC to this Affidavit, I quantify separately the residential and business UNE-L by CLEC (*i.e.*, a measure of customers *actually* being served), and separately by wire center, for that subset of CLECs that serve residential *and* business customers. To count potentially toward the Track 1 self-provisioning trigger, a CLEC must be serving residential and business customers with a Qwest-supplied loop (UNE-L) and a self-provisioned switch. This attachment includes only those CLECs that Confidential Attachment SMB-6HC shows as qualifying for the Track 1 trigger. Although Qwest fails to meet the FCC-established self-provisioning trigger in this proceeding, *regardless of the geographic boundaries chosen*, should the Commission adopt an overly broad geographic market, this definition could lead to uneconomic outcomes in any future investigations of Qwest filings. The geographic market should include areas with similar market structure characteristics and should serve as a reasonable foundation for filings that Qwest may make in future years. As the FCC observes:

The exact parameters of these geographic markets, however, cannot be defined nationally for switching because, as both incumbent LECs and competitive LECs agree, *there are extreme variations in population density, and thus wire*

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*center line densities, across the country.*¹¹²

I describe Attachments SMB-6HC and SMB-7HC in more detail below.

100. In Highly Confidential Attachment SMB-8HC to this Attachment, I identify the carriers that I determined might be in the universe of potentially qualifying “Track 2 carriers,” that is, those CLECs that, based on their present operations, show evidence, albeit minimal, that they might enter a particular local market in order to serve residential *and* business customers. My methodology was as follows: if a carrier presently serves residential and business customers somewhere, regardless of the mode (*i.e.*, whether by resale, UNE-P, and/or UNE-L), I considered it at least remotely possible that one day they might use their own switch and Qwest’s loops (*i.e.*, UNE-L) to serve the mass market within some local market. I then included these carriers in my analysis shown in Highly Confidential Attachment SMB-8C. Next, I identified those wire centers in which at least one of these carriers is offering service to either the residential and/or the business market using resale, UNE-P, and/or UNE-L. The quantities shown Attachment SMB-8HC correspond with the number of lines that the carriers are using to serve mass market customers, whether with resale, UNE-P, or UNE-L. My proxy for the universe of possible “Track 2” CLECs is too expansive because it may encompass, for example, CLECs that presently reach the mass market with resale and that are unlikely to self-provision a switch. Nonetheless, these data show that even using an extremely optimistic view of potential deployment, there is insufficient evidence of potential

¹¹² *TRO*, footnote 1536, elaborating on ¶ 495, emphasis added.

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deployment by CLECs to serve residential *and* business markets.¹¹³

101. Qwest's filing fails to demonstrate that it has considered the variations in key drivers of the cost of supplying the local telecommunications market. Moreover, the UNE loop deployment data suggests that Qwest's proposal masks important market structure differences among wire centers.

102. Qwest does not seek a finding of non-impairment based on wholesale providers' presence. Qwest indicates that based on its review of discovery responses "it does not appear that the provision of wholesale switching is significant in Utah."¹¹⁴

103. Qwest describes the services and rates of the offerings of AT&T, Eschelon, Integra, MCI, McLeod, SBC, XO, and Comcast.¹¹⁵ The litmus test is not whether carriers offer services but whether they are *actually* serving residential and business customers with self-provisioned switches.¹¹⁶ Therefore, I recommend that the FCC afford this information little weight in its application of its network unbundling framework.

¹¹³ The purpose of Attachment SMB-8HC is to apply the theory of the Track 2 analysis to empirical evidence about the carriers that are actually present in Utah in order to provide a "reality" check on the potential deployment theory. In Section V, below, I analyze the evidence that Qwest submitted in support of its specific Track 2 showing.

¹¹⁴ Scholl Direct (Qwest), at 30; See, also, Attachment LLS-7.

¹¹⁵ Scholl Direct (Qwest), at 30-36.

¹¹⁶ *TRO*, ¶ 495.

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Intermodal competition is irrelevant to an evaluation of non-impairment.

104. The FCC's rules state, in pertinent part:

To satisfy this trigger [the local switching self-provisioning trigger], a state commission must find that three or more competing providers not affiliated with each other or the incumbent LEC, *including intermodal providers of service comparable in quality to that of the incumbent LEC*, each are serving mass market customers in the particular market with the use of their own local circuit switches.¹¹⁷

105. The FCC also states that as “we evaluate evidence of intermodal deployment, we will consider to what extent services provided over these intermodal alternatives are comparable in cost, quality, and maturity to incumbent LEC services.”¹¹⁸ Qwest discusses wireless, Voice over Internet Protocol (“VoIP”), and cable telephony providers.¹¹⁹ Qwest has failed to provide evidence of intermodal providers offering service to the mass market that is of *comparable quality* to its voice grade POTS.

106. Cable telephony is not a comparable product and cannot be considered a substitute for voice grade local service, because, among other things, customers cannot purchase voice grade service apart from a cable package, and, therefore, the consumer's cost of obtaining local service from a telephony provider exceeds the consumer's cost of obtaining POTS. Similarly, wireless service is irrelevant to the

¹¹⁷ 47 C.F.R. § 51.319(d)(2)(iii)(A)(1) (emphasis added). Part (A)(2) applies to the application of the wholesale facilities trigger.

¹¹⁸ *TRO*, ¶ 97, footnote omitted.

¹¹⁹ Scholl Direct (Qwest), at 26-28, 36-61

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application of the self-provisioning trigger because it does not offer a comparable quality to Qwest's POTS.

107. Qwest contends that significant competition can be expected from VoIP.¹²⁰ VoIP-based services are even less of a substitute for voice grade service than is cable telephony-based service. Significant regulatory challenges cast ambiguity over the development and use of VoIP,¹²¹ and, therefore, I do not believe that the Commission should rely in any way upon its existence in assessing the level of impairment in Utah because these services are not comparable to ILEC services.¹²² Although VoIP represents a significant industry development, clearly numerous regulatory and technical issues mean that it cannot be considered a substitute in the voice circuit switching market at this time.

108. In summary, according to Qwest, four CLECs serve the Provo-Orem MSA, seven CLECs serve the Salt Lake City MSA, and five CLECs serve the Ogden-Clearfield

¹²⁰ Fitzsimmons Direct (Qwest) at 75-76.

¹²¹ See, e.g., *In the Matter of IP-Enabled Services*, FCC WC Docket No. 04-36, Notice of Proposed Rulemaking, Rel. March 10, 2004; *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, FCC WC Docket No. 02-361, Order, Rel. April 21, 2004; "Easing of Internet Regulations Challenges Surveillance Efforts," *New York Times*, January 22, 2004, at 1, which discusses, among other things, discussions and disagreements about VoIP among the Justice Department, the Federal Bureau of Investigation, the Drug Enforcement Administration, and the Federal Communications Commission.

¹²² *TRO*, ¶ 97.

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MSA.¹²³ Qwest contends that “the data clearly show that the Track 1 trigger has been met in these three MSAs.”¹²⁴ Based on my analysis of Qwest’s testimony, Qwest’s exhibits, and Qwest’s and CLECs’ responses to the Division’s data requests, I recommend that the FCC reject Qwest’s application and find impairment in the three MSAs. I summarize my analysis in my Attachments to this Affidavit, and discuss these Attachments in more detail below.

An analysis of the CLECs’ data responses provides further evidence that Qwest’s filing fails to meet the FCC’s self-provisioning trigger.

109. I conducted a detailed analysis of the data that the industry submitted in response to the Division’s data requests. I have included numerous Attachments detailing my analysis. These Attachments support my finding that, when economically appropriate markets are utilized, the FCC-established self-provisioning trigger is not met.

110. As mentioned above, Attachment SMB-5 lists the CLECs encompassed by the Division’s Initial discovery questions. For various reasons, which I discuss in more detail below, many of the CLECs are irrelevant to the self-provisioning trigger. Qwest relies specifically on switch self-provisioning by CLECs that offer service in certain parts of Utah in support of its proposed finding of non-impairment. However, a closer

¹²³ Scholl Direct (Qwest), at vii and 27.

¹²⁴ *Id.*, at 27.

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examination of these CLECs demonstrates that, for various reasons, not all of them should be relied upon by the Commission for the purpose of making a finding of non-impairment.

111. For example, SBC (one of the CLECs that received the Division's discovery) and Ameritech, when seeking regulatory approval for their merger applications, promised to enter local markets as "out-of-region" local competitors. By "out-of-region" I mean in an area where the company is not the incumbent local exchange carrier, but rather is a new entrant seeking to compete with the incumbent carrier. SBC and Ameritech filed an application for approval of their merger with the FCC on July 27, 1998, and promised, if the merger were approved, that SBC would enter 30 out-of-region markets throughout the country.¹²⁵

112. SBC, a multi-billion dollar company, has vast resources. Furthermore, it has a century of experience offering local telecommunications service, substantial experience as an incumbent carrier negotiating interconnection agreements with CLECs (which it brings to the negotiating table when it negotiates interconnection agreements as a CLEC with Qwest), has relevant technical expertise, and possesses substantial brand recognition. SBC has a unique and formidable ability to enter local markets in Utah.

¹²⁵ In re: Applications of Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, for Consent to Transfer Control, FCC CC Docket No. 98-141, Application, filed July 27, 1998, § II.A.1.

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113. The FCC transformed the carrier's *promise* into a *regulatory condition*.¹²⁶ The fact that SBC's entry into out-of-region local markets was among the *conditions* of the FCC's approval of the merger simply underscores the regulatory concern that, absent such an explicit requirement, SBC, despite its substantial size, resources, and expertise serving the local market, might have decided not to enter markets in Utah (and other out-of-region markets), once it had obtained the requisite regulatory approval to merge. Furthermore, this obligation requires SBC to enter local markets in 30 cities, *not in 30 MSAs*. Salt Lake City is one of the 50 potential markets identified in the FCC's order.

114. A close examination of SBC's entry into Utah's local markets illustrates the complexities of analyzing the local market. The size of a company may affect that firm's ability to raise capital and to allocate resources to local entry, but in no way alters whether management perceives entry into a new market to be profitable, and thus worthy of active pursuit. CLECs' ability *and* willingness to enter and serve a market are both critical factors in an assessment of non-impairment.¹²⁷

115. Skepticism about SBC's planned entry into out-of-region market was expressed at the time of its proposed merger with Ameritech: "SBC's fiduciary responsibilities lie

¹²⁶ In re: Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, for Consent to Transfer Control, FCC CC Docket No. 98-141, *Memorandum Opinion and Order*, released October 8, 1999 ("SBC/Ameritech Merger Order"), ¶¶ 398-399, Appendix E. The FCC's conditions require SBC to enter 30 of 50 potential out-of-region markets.

¹²⁷ The FCC directs states to assess whether "customers [are] actually being served."

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with its stockholders, not its customers, and if top management subsequently determines that out-of-region markets are not likely to become profitable within a reasonable period of time, SBC may well abort or scale back its National/Local strategy.”¹²⁸ Furthermore, one of SBC’s own managers recognized that local entry might not be profitable. As was observed at the time the application was pending regulatory approval, “Mr. Kahan specifically states that the business plan for the National/Local Strategy contemplates a ‘negative cash flow for nearly ten years.’”¹²⁹

116. The following was observed: “The Applicants’ claims with respect to the benefits for residential and small business market are particularly unpersuasive. In fact, the Applications are openly disparaging of the residential and small business market.”¹³⁰

117. If the local mass market is as open and attractive to competition as Qwest apparently wishes regulators to believe, one would expect the data to support such a finding. The FCC should examine Qwest’s Exhibit LLS-6HC to assess the level of SBC’s competitive entry in Utah’s local markets.

TRO, ¶ 495.

¹²⁸ In re Applications of Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, For Consent to Transfer Control, FCC CC Docket No. 98-141, Affidavit of Susan M. Baldwin and Helen E. Golding, on behalf of Indiana Utility Consumer Counselor, Michigan Attorney General, Missouri Public Counsel, Ohio Consumers’ Counsel, Texas Public Utility Counsel and Utility Reform Network, filed on October 13, 1998, at ¶ 41.

¹²⁹ *Id.*, at footnote 65, citing James S. Kahan (SBC), at ¶ 80.

¹³⁰ *Id.*, at ¶ 87.

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To meet the FCC-specified self-provisioning trigger, three or more CLECs must actually serve the entire market, including both residential and small business customers.

118. I also examined whether the CLECs that Qwest relies on in its filing are actually serving all mass market customers with self-provisioned switches. Highly Confidential Attachment SMB-7HC includes the CLECs that Qwest identifies in its direct testimony in purported support of its finding of non-impairment. If CLECs are not actually serving residential customers throughout a market, they should not be counted toward the self-provisioning trigger. The residential market is clearly a distinct customer class within the mass market. Qwest charges different rates for residential and business local exchange service. This ability to price discriminate is evidence of separate markets.¹³¹ Confidential Attachment SMB-7HC demonstrates that the self-provisioning trigger is not met, regardless of the geographic boundaries selected.

119. The FCC should clarify its rules to prevent an ill-advised interpretation that the self-provisioning trigger is met provided that at least three CLECs self-provision switches and serve *some part, but not necessarily all* of the mass market. Such a reading would be inconsistent with the goal of the 1996 Act which is to encourage local competition for all consumers, not simply a subset of consumers. Moreover, the FCC concluded that “the state commission may choose to consider defining that portion of

¹³¹ See, *Horizontal Merger Guidelines*, §1.12, for example.

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the market as a separate market for purposes of its analysis.”¹³²

120. Attachment SMB-7HC, in combination with the other attachments attached to my Affidavit, demonstrate that the self-provisioning trigger is not met. Because these CLECs do not serve all mass market customers, the FCC-established self-provisioning trigger is not met in any of these wire centers.

121. Although, as I demonstrated earlier, geographic markets that correspond with wire centers are more appropriate than the ones that Qwest proposes, *regardless* of whether the Commission adopts Qwest’s proposed market definitions or the definitions I propose, Qwest has failed to demonstrate that the self-provisioning trigger is met.

122. Furthermore, it is important to keep in mind that the ultimate goal of this proceeding is to ensure that customers have meaningful competitive options both now (before any finding of non-impairment is made) and after any such finding. If the Commission reaches a finding of non-impairment and then customers do *not* have substitutes for Qwest’s service (because the Commission drew the market boundary too broadly or placed undue weight on CLECs’ precarious presence), this will have grave

¹³² *TRO*, footnote 1552. The footnote elaborates on the revised sixth sentence, which refers to carriers “providing wholesale service.” *TRO Errata*, ¶ 21 (emphasis in original). However, elsewhere in the *TRO*, the FCC directs state commissions to use consistent market definitions: “[t]he state commission must use the same market definition for all of its analysis.” *TRO*, ¶ 495, footnote omitted. Therefore, the need to apply the trigger to submarkets applies to the wholesale and the self-provisioning CLECs.

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consequences for consumers. By contrast, if the Commission reaches a finding of impairment now, thus enabling nascent competition to take hold, and then at a later date reaches a finding of non-impairment, the harm in the interim to the industry is non-existent or negligible.

123. The application of the self-provisioning trigger is not a straightforward exercise. The successful resolution of this proceeding depends on the careful, judicious reasoning of the Commission. Certainly the use of “[o]bjective criteria can avoid the delays caused by protracted proceedings and can minimize administrative burdens,” and the FCC-specified thresholds were intended to provide “bright-line rules to guide the state commission,”¹³³ but the complexity of granular, unique markets within state boundaries ultimately requires a more in-depth and comprehensive assessment of local market structures in Utah than Qwest has undertaken in Utah.

¹³³ *TRO*, at ¶ 498.

V. APPLICATION OF THE UNBUNDLING FRAMEWORK

If the FCC relies on triggers to assess impairment, it is essential that it set forth more detailed criteria regarding their application to well-defined markets.

124. The FCC seeks comments on how to apply its unbundling framework “to make determinations on access to individual network elements.”¹³⁴ The FCC’s framework for the determination of access to unbundled network elements is made up of two “triggers” and a “potential deployment” analysis for evaluating whether impairment exists in a given market.¹³⁵ The Commission requires that only one of the three standards be met for a finding of non-impairment. The first is the “self-provisioning trigger”, which, to be satisfied, generally requires that three or more competing providers are serving mass market customers with their own local circuit switches.¹³⁶ The second standard (“the competitive wholesale facilities trigger”) requires that two or more CLECs offer wholesale local circuit switching service to customers using DS0 capacity loops and their own switches.¹³⁷ The two triggers examine *actual* deployment by CLECs, and have been termed “Track 1” of the impairment analysis by some parties in the Utah proceeding. The FCC’s rules also include an “analysis of potential deployment” which permits a finding of non-impairment if there is a determination that self-provisioning of

¹³⁴ *NPRM*, ¶ 11.

¹³⁵ *TRO*, ¶ 494.

¹³⁶ *Id.*, ¶ 501.

¹³⁷ *Id.*, ¶ 504.

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local switching is economic based on particular criteria.¹³⁸ This examination of potential deployment has been referred to as “Track 2.”

125. The use of triggers to determine whether impairment exists is appropriate *if and only if the FCC establishes appropriate criteria for their application and defines markets properly*. As stated in Section III above, if the FCC were to define markets so broadly that a finding of non-impairment was essentially a given, customers would, in fact, not have substitutes for ILECs’ services in some sub-markets. This would have grave consequences for competition, and thus, ultimately for consumers.

126. As I discuss in Sections III, and IV, above, among other things, it is essential that residential and business customers be served. Also, if, contrary to my recommendation, the FCC “counts” SBC (or any other ILECs that make negligible inroads into other ILECs’ “home” regions), in its application of the self-provisioning trigger, I recommend that the FCC increase the self-provisioning trigger in its network unbundling rules from three to four. Furthermore, I recommend that the Commission determine that, at present, there are not any intermodal providers of service “comparable in quality to that of the incumbent LEC.”

127. As I demonstrate in Section IV, Qwest fails to demonstrate that the self-provisioning trigger is met in any local market in Utah.

¹³⁸ *Id.*, ¶ 506.

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The FCC’s “potential deployment” analysis is administratively unworkable because it invites widely disparate views of the likelihood of CLECs’ entry into a particular market being “economic” and, furthermore, fails to shed light on whether mass market consumers *actually* have a choice among suppliers.

128. The FCC’s “potential deployment” analysis relies on regulators’ assessment of the evidence of actual deployment, operational barriers, and economic barriers.¹³⁹ I analyzed Qwest’s potential deployment filing in Utah, and subsequently examined Qwest’s and AT&T’s business case models.¹⁴⁰ As a result of examining these divergent views about the profitability of entering various local markets, I gained first-hand experience applying the FCC’s “potential deployment” analysis. Based on this analysis, which I discuss in detail below, I conclude that the Commission should eliminate this analysis from its final network unbundling rules.

129. Qwest and AT&T submitted competing models that are intended to analyze whether a competing carrier could economically serve the market without access to the incumbent’s switch. The models incorporate a wide range of assumptions regarding market penetration, customer churn rates, costs, revenues, geographic market

¹³⁹ § 51.319 (d)(2)(iii)(B)(1) through (d)(2)(iii)(B)(3).

¹⁴⁰ Direct testimony of Byron S. Watson on behalf of Qwest Corporation, January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, (Mr. Watson presented Qwest’s CLEC Profitability Model, or “CPRO”); Direct testimony of Michael R. Baranowski on behalf of AT&T Communications of the Mountain States, Inc. and TCG Utah (Collectively “AT&T”), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, (Mr. Baranowski presented AT&T’s Business Case Analysis Tool, or “BCAT”).

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definition, and the time horizon over which the business case should be conducted. I discuss these variables in detail below.

130. Interested parties previously submitted business case models aimed at evaluating the economics of entry in response to the *Triennial Review NPRM* and the FCC concludes, in the *Triennial Review Order*, that “technical shortcomings in each of these studies preclude us from relying on their results to evaluate impairment at the national level.”¹⁴¹ The FCC notes that “each study’s particular inputs and assumptions heavily influence its results, and there was significant disagreement in the record about the proper inputs and assumptions.”¹⁴² The Commission, nonetheless, ordered states to evaluate such evidence “on a market-specific basis.”¹⁴³

131. Although theoretically appealing, this method of assessing impairment ultimately would shed minimal light on the question of impairment yet would expend substantial administrative resources to implement. The Commission admits as much in its *Triennial Review Order* noting that “to the extent the impairment test for switching is not simple, however, it is because the facts surrounding impairment are not simple.”¹⁴⁴ Administratively, one could envision a situation where the Commission was obliged to analyze several competing business case models for *each and every separate market*

¹⁴¹ *TRO*, ¶ 472.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*, ¶ 521, footnote 1600.

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that the Commission has identified. Furthermore, even if the FCC determined that a CLEC *could* theoretically enter a market, this possibility alone is irrelevant to the mass market consumer who only benefits from the *actual* entry by a CLEC. For these reasons, the FCC should not include the potential market trigger as an option.

132. The Court, in *USTA II*, expressed its doubts about the Commission's analysis of potential deployment in the following manner:

The touchstone of the Commission's impairment analysis is whether the enumerated operational and entry barriers "make entry into a market uneconomic." Order ¶ 84. Uneconomic by whom? By *any* CLEC, no matter how inefficient? By an "average" or "representative" CLEC? By the most efficient existing CLEC? By a hypothetical CLEC that used "the most efficient telecommunications technology currently available," the standard that is built into TELRIC? Compare 47 CFR § 51.505(b)(1). We need not resolve the significance of this uncertainty, but we highlight it because we suspect that the issue of whether the standard is too open-ended is likely to arise again.¹⁴⁵

The FCC's *Triennial Review Order* directs state commissions to conduct further analysis to determine whether the market is suitable for "multiple, competitive supply."

133. The FCC concluded in its *Triennial Review Order* that the analysis of the self-provisioning trigger was not sufficient for a finding of impairment. In so doing, it required state commissions to examine the potential for CLECs to deploy their own switches to

¹⁴⁵ *USTA II*, at 25, emphasis in original. The Court noted that in light of its remand it need not review the FCC's impairment standard, as it "finds concrete meaning only in its application, and only in that context is it readily justiciable." However, the Court did offer a few "observations." *Id.*, at 24.

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serve the mass market. The FCC concluded that markets may exist in which three carriers have not yet deployed their own switches despite the fact that it may be economic to do so. The FCC expected state commissions to make a finding of “no impairment” if “the market in question is suitable for ‘multiple, competitive supply.’”¹⁴⁶ This additional level of analysis has been referred to as the “Track Two” or the “potential deployment” analysis.

134. Qwest’s filing in Utah’s *TRO* proceeding sought a finding of non-impairment based, in part, on the application of the Track Two impairment analysis. Qwest presented its case for non-impairment in five MSAs. Qwest witness, William Fitzsimmons asserted that “[t]hree of the MSAs -- Salt Lake City, Ogden-Clearfield, and Provo-Orem -- meet the Track One requirements. The other two MSAs -- Logan and St. George -- meet the Track Two requirements.”¹⁴⁷

135. The FCC directed states to examine three types of evidence in their analyses of potential deployment. States were to examine:

- Actual competitive deployment of local circuit switches;
- Operational barriers; and
- Economic barriers.¹⁴⁸

¹⁴⁶ *TRO*, ¶ 506.

¹⁴⁷ Fitzsimmons Direct (Qwest), at 67.

¹⁴⁸ *TRO*, ¶ 507.

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Contrary to the self-provisioning trigger, the FCC did not set forth specific benchmarks with respect to the evidence of self-deployment and suggested only that the states analyze these three factors “in concert.”¹⁴⁹

Qwest provided insufficient evidence of actual deployment of local circuit switches.

136. The FCC does conclude, in its *Triennial Review Order*, that the presence of three self-provisioners of switching or two wholesale providers of switching serving the voice enterprise market would provide evidence that the market can support multiple, competitive supply. However, the Commission also found that an analysis of such a presence would also have to determine “that these providers are operationally and economically capable of serving the *mass market*.”¹⁵⁰ The FCC stated:

The evidence in the record shows that the cost of providing mass market service is significantly reduced if the necessary facilities are already in place and used to provide other higher revenue services, and a more efficient cut over process is in place.¹⁵¹

137. Qwest provided very little evidence to back up its assertion that competitive carriers were indeed providing service utilizing their own switches. Qwest witnesses William Fitzsimmons and Laura L. Scholl briefly presented evidence related to self-provisioning of switching in the Logan and St. George MSAs:

- “One CLEC is self-supplying switching to mass market customers

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*, ¶ 508 (emphasis in original).

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in the largest of the four wire centers in the Logan MSA . . . ”¹⁵¹

- There are currently no CLECs with local switching capability in the St George [MSA]¹⁵²

Qwest did not provide *any* evidence of “actual competitive deployment” of local circuit switches in the St. George MSA and provided negligible evidence in the Logan MSA.

138. Despite the lack of evidence, Qwest asserted in Utah that the above evidence was dispositive of non-impairment. Mr. Fitzsimmons cited paragraph 510 of the *Triennial Review Order* in which the FCC finds that to the extent that one competitor is already serving the *mass* market with its own switch “this fact should be give particularly substantial weight.”¹⁵³ However, Mr. Fitzsimmons failed to take note of the FCC’s further guidance that: “[w]hether this competitor is using the incumbent’s loops or its own loops should bear on how much weight to assign this factor, at least until such time as incumbent loops are no longer required to be unbundled.”¹⁵⁴ As previously noted, the Commission concluded that all of the factors relating to potential deployment should be analyzed “in concert,” and no one particular piece of evidence is sufficient for a finding of non impairment.¹⁵⁵

¹⁵¹ *Id.*

¹⁵² Fitzsimmons Direct (Qwest), at 66.

¹⁵³ *Id.*, citing *TRO*, ¶ 510.

¹⁵⁴ *TRO*, ¶ 510, footnote 1572.

¹⁵⁵ *Id.*, ¶ 507.

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139. Qwest was unable to provide any evidence that there are any wholesale providers of switching in Utah. Qwest witness, Ms. Scholl stated in her testimony that, based on discovery responses, “it does not appear that the provision of wholesale switching is significant in Utah.”¹⁵⁶ In fact, she was unable to determine that any “wholesale local switching transactions” have occurred in Utah at all.¹⁵⁷

The Utah PSC record includes substantial evidence demonstrating that operational barriers continue to exist.

140. The Commission also concluded that an analysis of potential deployment should include an examination of operational barriers in the market. The FCC directed states to examine:

- LEC performance in provisioning loops;
- CLECs’ ability to obtain collocation space; and
- CLECs’ ability to obtain cross-connects in the incumbent’s wire center.¹⁵⁸

In its examination of the national market, the FCC found that these “operational” factors can raise barriers to entry.¹⁵⁹ The FCC directed state commissions to implement batch cut processes to reduce the current economic and operational barriers that exist.

¹⁵⁶ Scholl Direct (Qwest), at 30.

¹⁵⁷ *Id.*

¹⁵⁸ *TRO*, ¶¶ 507, 511.

¹⁵⁹ *Id.*, ¶ 511.

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However, the FCC noted that:

. . . even after such processes are implemented, competitive carriers may face barriers associated with loop provisioning – even problems arising from the newly improved hot cut processes – which may continue to impair a requesting carrier’s entry into the mass market. We therefore ask the state commissions to consider more granular evidence concerning the incumbent LEC’s ability to transfer loops in a timely and reliable manner. Specifically, we ask the states to determine whether incumbent LECS are providing nondiscriminatory access to unbundled loops.¹⁶⁰

141. The FCC also directed states to consider the “cost and physical constraints associated with collocation in a particular market.”¹⁶¹ Qwest addressed both collocation and CLEC-to-CLEC cross-connects in its filing in Utah’s proceeding.¹⁶² According to Robert J. Hubbard, Qwest “is currently meeting 100% of its installation commitments in Utah” and has “ample physical collocation space available.”¹⁶³ In January of this year, one central office – Santequin – had a space constraint and was scheduled for additional construction.¹⁶⁴ Among other things, Mr. Hubbard stated that Qwest completes feasibility studies in a timely manner and that Qwest’s collocation rates are TELRIC-compliant.¹⁶⁵

¹⁶⁰ *Id.*, ¶ 512.

¹⁶¹ *Id.*, ¶ 513.

¹⁶² Hubbard Direct (Qwest), at 3.

¹⁶³ *Id.*

¹⁶⁴ *Id.*, at 6.

¹⁶⁵ *Id.*, at 11.

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142. CLECs also submitted testimony in Utah's TRO proceeding that addressed collocation, in particular, and the potential deployment trigger, more generally. Their testimony suggests that collocation issues continue to pose significant operational barriers for CLECs in Utah and that an abrupt and premature discontinuation of unbundling requirements would jeopardize competitors' ability to enter and serve local markets. AT&T witness Robert V. Falcone noted that:

In general, the activities required to establish a collocation include: (1) obtaining the necessary space in the wire center, which is predicated upon the ILEC having sufficient collocation space in its central office;¹⁶⁶ (2) engineering the collocation; (3) arranging construction (for physical caged collocations); and (4) installing the required equipment in the collocated space.¹⁶⁷

MCI predicted that it would be unable to serve many of its customers if UNE-P was discontinued, because MCI does not collocate in every wire center and it would be uneconomic to do so.¹⁶⁸ While Qwest's filing goes to the issue of whether Qwest meets its installation commitments, the operational barrier posed by collocation is much more complex than Qwest simply meeting its deadlines. MCI witness Timothy J. Gates further testifies that:

collocation is time consuming and requires CLECs to perform numerous complex activities that are not required where unbundled local switching is available. Each step taken by the CLEC to reach

¹⁶⁶ See TRO, ¶ 477

¹⁶⁷ Direct testimony of Robert V. Falcone on behalf of AT&T Communications of the Mountain States, Inc., and TCG Utah (Collectively "AT&T"), January 13, 2004, Utah Public Service Commission Docket No. 03-999-04, at 18.

¹⁶⁸ Gates Direct (MCI), at 68-69.

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the end user through collocation adds time and cost to the process and introduces a probability of error and customer dissatisfaction that is not associated with the Qwest's provision of service to the same customer on a retail basis or through UNE-P.¹⁶⁹

143. The Commission also directed states to examine any evidence regarding additional operational barriers that make entry uneconomic. While the FCC specifically addresses the batch hot cut process, collocation space and costs, and cross connects, state commissions were not restricted from addressing other factors that may pose operational barriers to entry. For instance, as part of its analysis of loop provisioning, the FCC concludes that:

State commissions should also consider whether the incumbent's facilities, human resources, and processes are sufficient to handle adequately the demand for loops, collocation, cross connects, and other services required by competitors for facilities-based entry in the voice market.¹⁷⁰

Clearly, any analysis that the FCC now undertakes of "potential deployment" should also include these and other factors.

144. CLEC testimony in Utah's TRO proceeding provided many examples of other factors that may limit a CLEC's ability to compete without unbundled local switching. For example, MCI witness Gates testified:

The critical issue of this proceeding is not whether CLECs can "deploy" their own switches. Instead, the critical issue upon which this Commission should focus is whether a CLEC can "efficiently

¹⁶⁹ *Id.*, at 71-72.

¹⁷⁰ *TRO*, ¶ 512.

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use” its own switch to connect to the local loops of end users. The differences in the way end users’ loops are connected to carriers’ switches are among the most important factors that cause CLECs to face substantial operational and economic entry barriers when they seek to offer POTS to mass-market (residential and small business) customers using their own switches and ILEC-provided loops (i.e., UNE-L facilities-based entry). The barriers to which I refer relate primarily to the requirements that CLECs backhaul UNE-L traffic from the serving ILEC wire center to the CLEC switch.¹⁷¹

Qwest fails to show that potential competitors could economically serve the mass market without access to the incumbent’s switch.

145. The FCC’s guidance with respect to the examination of economic barriers is similarly open-ended. The FCC directed state commissions to examine whether a competing carrier can economically enter the mass market without access to the ILEC’s switch.¹⁷² In particular, the FCC expresses concern about “the significant cost disadvantages competitive carriers face in obtaining access to the loop and backhauling the circuit to their own switches.”¹⁷³ CLECs, in the *Triennial Review* proceeding, contended that these costs were exacerbated by the high churn rates typical of mass market customers in the first months of service.¹⁷⁴ More specifically, the FCC states the following with respect to states’ analysis of CLECs’ ability to enter and serve the market economically without access to the ILEC’s switch:

¹⁷¹ Gates Direct (MCI), at 32.

¹⁷² *TRO*, ¶ 517.

¹⁷³ *Id.*, ¶ 476.

¹⁷⁴ *Id.*, ¶ 479.

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We are requiring the states to conduct an analysis of whether entry is economic by comparing the potential revenues to the potential costs of providing a particular service. Mass market switching, in isolation, is not a service and thus cannot be easily evaluated. Instead, to evaluate the feasibility of self-deploying a switch, states should perform a business case analysis of providing local exchange service.¹⁷⁵

146. The FCC generally outlines its expectations of what such a study should include. The FCC establishes the following principles and assumptions for determining whether entry is economic:

- Use of the most efficient network architecture available to the entrant;¹⁷⁶
- Use of the most efficient business model for entry as opposed to a particular carrier's business model;¹⁷⁷
- Evaluation of how sunk costs and competitive risks affect the likelihood of entry;¹⁷⁸ and
- Consideration of *all* potential costs and potential revenues of providing service.¹⁷⁹

¹⁷⁵ *Id.*, ¶ 517, footnote 1581.

¹⁷⁶ *Id.*, ¶ 517.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*, footnote 1581 (emphasis added).

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147. The business case models presented in the Utah proceeding illustrate the pitfalls inherent in undertaking such a “potential deployment” or “business case analysis.” Although the Commission set out broad principles, and in some cases, very specific expectations as to the variables to be included in the business case models, such models can still produce widely varying results as to the prospects for economic entry into a particular market.¹⁸⁰

148. Qwest entitled the business case model that it presented in the Utah proceeding, the “CLEC Profitability Model (CPRO)”. AT&T witness Michael R. Baranowski presented the results of AT&T’s Business Case Analysis Tool (“BCAT”) in Utah’s impairment proceeding.¹⁸¹ The BCAT and CPRO models were presented in several states in the fourteen-state, Qwest-served region, and, therefore, my analysis of the evidence in Utah is likely applicable on a more general level.¹⁸² Qwest and AT&T varied some of the inputs as appropriate for various states, but generally used the same model and inputs in each state for which it presented their respective models.¹⁸³

¹⁸⁰ See, for example, *TRO*, ¶ 483 and footnote 1495, where the FCC recognizes that the models are “very sensitive to the inputs used and the assumptions employed.”

¹⁸¹ Baranowski Direct (AT&T), at 2.

¹⁸² As of February 10, 2004, Qwest had submitted the CPRO in the following states: Washington, Utah, Arizona, Minnesota, and Colorado. Qwest indicated that it may use the CPRO model “in filings in other state proceedings within its fourteen state region in connection with the TRO dockets.” Qwest Response to Committee of Consumer Services Request No. 02-009; AT&T responded to a similar data request indicating that it used the BCAT “in Qwest states for the purpose of the TRO proceedings.” AT&T Response to Committee of Consumer Services Request No. 1.6.

¹⁸³ See AT&T Response to Committee of Consumer Services Request No. 1.5; Qwest

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149. Qwest witness, Mr. Watson, presents results from the CPRO showing that there is a “positive business case” for CLECs serving mass market customers without access to the ILEC’s unbundled switching in all five Utah MSAs.¹⁸⁴ A positive business case is defined by Qwest as a positive net present value (“NPV”) determined by “estimating likely revenues a CLEC would generate over a period of years and subtracting the likely costs over the same period.”¹⁸⁵ Mr. Watson describes the CPRO in the following manner:

Rather than modeling a specific firm, my analysis follows the FCC’s directive that the “analysis must be based on the most efficient business model for entry rather than to any particular carrier’s business model.” To simulate an efficient CLEC and provide results with a high level of confidence, CPRO is populated with conservative and internally consistent assumptions to determine whether entry in particular markets presents attractive financial opportunities to entrants.¹⁸⁶

The NPV results of Qwest’s CPRO model for each MSA range from a high of \$6.6-million in the Salt Lake MSA to an NPV of just \$124,000 and \$63,000 for the Logan and St. George MSAs, respectively.¹⁸⁷

150. Mr. Watson’s testimony only presents NPV results on an MSA basis. However,

Response to Committee of Consumer Services Request No. 02-008.

¹⁸⁴ Watson Direct (Qwest), at iii.

¹⁸⁵ *Id.*, at ii.

¹⁸⁶ *Id.*, at 6-7, citing *TRO* at ¶ 517.

¹⁸⁷ *Id.*, at ii and 32.

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the CPRO model is capable of providing results on a wire center basis.¹⁸⁸ Mr. Watson states that the CPRO “demonstrates that CLECs in Utah can serve mass market customers economically in *significant portions* of the state . . .” but does not present specific details.¹⁸⁹

151. If, contrary to my recommendation, the Commission maintains the potential deployment trigger in its final network unbundling rules, it should examine the results of all of the carriers’ business case models disaggregated to a level that more closely approximates CLECs’ likely basis of decision-making, *i.e.* on a wire center basis and also separately for the business and residential markets. As illustrated by Qwest’s testimony in Utah, business case models present evidence that CLECs may enter “pockets” of large geographic areas and that, therefore, the Commission should be wary of defining the geographic market too broadly, which would limit many consumers’ choice.

152. AT&T’s BCAT assumes that a CLEC will serve mass market customers in every wire center in LATA 660 in Utah, and also purports to calculate the NPV for an efficient CLEC operating in Utah. Mr. Baranowski testified that “an efficient CLEC using UNE-L and its own switch could expect to earn significant negative returns, *i.e.*, would lose

¹⁸⁸ *Id.*, at 12.

¹⁸⁹ *Id.*, at iii, emphasis added.

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\$195.96 per mass market line served in Utah including long distance service.”¹⁹⁰

153. Table 2 compares the major assumptions in Qwest’s CPRO and AT&T’s BCAT.

¹⁹⁰ *Id.*, at 4.

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Table 2				
Comparison of Qwest's and AT&T's Business Case Models Presented in Utah PSC Docket No. 03-999-04				
	Qwest CPRO		AT&T BCAT	
Model Assumption or Attribute	Default Value	Source (Watson)	Default Value	Source (Baranowski)
CLEC minimum market share	5%	p. 10	5%	p. 6
Cost of capital	15%	fn. 17	16.64%	Exh. 2
Product market	DS0-level services	p. 5	DS0-level services	p. 6
Geographic market	MSA	pp. ii, 32	LATA	p. 5
Time horizon	25 yrs.	p. 16	10 yrs.	p. 5
Churn rate	3%	p. 35	4.6%	Denney/Starr, p. 26
<p>Notes: CPRO: CLEC Profitability Model BCAT: Business Case Analysis Tool</p> <p>Sources: Direct Testimony of Michael R. Baranowski on behalf of AT&T Communications of the Mountain States, Inc. and TCG Utah, January 13, 2004; Attachment 2 to Direct Testimony of Michael R. Baranowski: AT&T Business Case Analysis Tool (BCAT) Explanation and Documentation of Input Values, LATA 660, January 13, 2004; Direct Testimony of Douglas Denney and Arleen Starr on behalf of AT&T Communications of the Mountain States, Inc., and TCG Utah, DSO Cost Tool, Corrected Version, January 21, 2004; Direct Testimony of Byron S. Watson on behalf of Qwest Corporation, January 13, 2004; Qwest Attachment BSW-3C: CPRO Model Inputs, January 13, 2004.</p>				

154. MCI's position in Utah was that operational barriers (and therefore economic barriers) will be insurmountable, making business case models unnecessary. Nonetheless, MCI provided input regarding the evaluation of models. MCI witness

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Richard Cabe states the following:

As to the analysis of potential deployment – essentially an analysis of feasibility of entry – operational feasibility is a logical precursor to analysis of economic feasibility. If it is not technically and operationally feasible to provide mass market UNE-L service, then we must conclude that the provision of such service is economically infeasible, without any need to examine the costs or revenues that might be associated with a business plan that is not operationally feasible. If the plan is operationally feasible only with extraordinary expenditures undertaken to cure apparent operational infeasibility, such expenditures could be taken into account in the analysis of economic feasibility. I am not aware of any attempt to estimate any such extraordinary costs that may be required to bring UNE-L mass-market service to operational feasibility. In the absence of such estimates, potential deployment analysis must proceed under the assumption, which I believe to be counterfactual, that mass-market UNE-L service is now operationally feasible.¹⁹¹

155. The FCC already reviewed some business case models in its *Triennial Review* proceeding.¹⁹² The Commission concludes in its *Triennial Review Order* that the studies filed by interested parties were not sufficiently robust for use in evaluating impairment at the national level.¹⁹³ One of the specific criticisms of the models presented by parties in the *Triennial Review* proceeding was that the studies focused on estimating the cost disadvantages that CLECs faced relative to ILECs, but did not include potential revenues available to the CLECs.¹⁹⁴ In its *Triennial Review Order*, the FCC directs that:

¹⁹¹ Cabe Direct (MCI), at 75-76

¹⁹² *TRO*, ¶ 472.

¹⁹³ Watson Direct (Qwest), at 11 and *TRO*, at ¶ 472.

¹⁹⁴ *TRO*, ¶ 472.

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. . . the state commission must consider all revenues that will derive from service to the mass market, based on the most efficient business model for entry. These potential revenues include those associated with providing voice services, including (but not restricted to) the basic retail price charged to the customer, the sale of vertical features, universal service payments, access charges, subscriber line charges, and if any, toll revenues. The state must also consider the revenues a competitor is likely to obtain from using its facilities for providing data and long distance services and from serving business customers.¹⁹⁵

156. However, such direction still leaves plenty of room for disagreement among the parties as to what constitutes a full analysis of “potential revenues” as the Utah proceeding demonstrates.¹⁹⁶ Even if the carriers all agreed on what rates should be applied to determine potential revenues (which they do not) modeling differences would remain. For example, Qwest’s analysis of potential revenues did not adjust revenues over the course of the time period of the model. However, AT&T witness Mr. Baranowski states that AT&T’s BCAT adjusts rates over the time period based on recent trends in rates.¹⁹⁷

157. The FCC acknowledges this problem in the *Triennial Review Order* stating that “telecommunications prices are not static, and will change over time in response to

¹⁹⁵ *Id.*, at ¶ 519.

¹⁹⁶ Watson Direct (Qwest), at 20; Attachment BSW-3C, at 4.2; Baranowski Direct (AT&T), at 19-22.

¹⁹⁷ Baranowski Direct (AT&T), at 22.

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increased competition.”¹⁹⁸ While the FCC had directed states to consider prices that prevail at the time of the analysis,¹⁹⁹ if the Commission undertakes such an analysis it should certainly consider prices over time especially if the carriers submit business case models with a long time horizon.

158. Another potential problem with the attempt to model the “typical CLEC” is that such an analysis makes no distinction between the economic viability of serving business customers versus residential customers. To reach a finding of no impairment, the Commission needs to determine whether CLECs are serving (or would find it profitable to serve) residential *and* business customers. Any analysis that uses an average revenue approach for the mass market fails to properly analyze the residential and business submarkets. A combined cash flow might result in a small positive net present value, but an economically rational (and likely cash-strapped) CLEC likely would ignore residential customers if targeting only business customers would yield a higher NPV. The FCC acknowledges as much in its discussion of potential revenues. The FCC required state commissions to “ensure that a facilities-based competitor could economically serve all customers in the market before finding no impairment,” and concludes that “in determining whether impairment exists in a market including a particular group of customers, the typical revenue to be obtained from *all* customers in that group must be considered, to ensure that an entering competitor will be able to

¹⁹⁸ *TRO*, ¶ 157.

¹⁹⁹ *Id.*, footnote 1588.

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serve all customers.”²⁰⁰

159. In Utah, Qwest acknowledged that CLECs may not always have a positive business case in serving all customers in a wire center. However, Qwest’s position seems to be that competition in geographic pockets within MSAs or for high value customers within the mass market is sufficient to meet the goals of the 1996 Act. Mr. Fitzsimmons suggested that even if some wire centers do not have a positive business case, Qwest should not be obligated to provide unbundled switching. He states:

if CLECs do not have positive value business cases in these wire centers, even when they have a switch in place serving mass market customers in surrounding areas, it is likely that Qwest is not serving the customers in these wire centers profitably either. The goals of the Act are not properly served by unbundling requirements that cause ILECs to subsidize the abilities of CLECs to provide service to otherwise unprofitable customers.²⁰¹

160. The FCC notes that “it is quite possible that carriers can economically enter with their own facilities in low cost, high revenue locations, but not in high cost, low revenue locations . . . all of the studies mentioned – including the BOC studies – suggest that it would be uneconomic for a competing customer in smaller wire centers.”²⁰² The FCC concludes that the studies “strongly support the need for a more granular analysis of impairment.”²⁰³ The Commission’s observation that the economics vary on a wire

²⁰⁰ *Id.*, ¶ 519, footnote 1586.

²⁰¹ Fitzsimmons Direct (Qwest), at 54.

²⁰² *TRO*, ¶ 484.

²⁰³ *Id.*, ¶ 485.

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center level underscores the importance of defining the geographic market on a wire-center basis. If the Commission were to rely on business case models in its analysis of impairment, it would then need to define the relevant time horizon for analysis. Disagreements among carriers are almost certain to arise at the national level similar to those in Utah's impairment proceeding. Qwest proposed a twenty-five year time horizon with only minimal justification, stating that it "obviates the need for estimating a terminal value in the model."²⁰⁴ AT&T's BCAT model, on the other hand, is based on a ten-year planning horizon.²⁰⁵ Neither carrier adequately justified its proposed time horizon.

161. A plethora of other variable inputs in the business case models merit the Commission's scrutiny if it were to rely on such models to make a determination of impairment. For example, Qwest proposes unrealistically low churn rates in its CPRO. Churn is the percentage of customers that a carrier loses each month. Mr. Watson presents a churn rate of 3.0 percent and varies the rate by 10 percent (between 2.7 percent and 3.3 percent in his sensitivity analysis.²⁰⁶ A 10 percent variation in the churn rate resulted in a 9 percent variation in the expected NPV, assuming no other changes to the model. A change of this magnitude in the NPV would likely result in an unprofitable business case in some wire centers. However, Mr. Watson does not present his sensitivity analysis results on an MSA basis, but rather, in Table 11 of his

²⁰⁴ Watson Direct (Qwest), at 16.

²⁰⁵ Baranowski Direct (AT&T), at 5.

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testimony, on a Utah-wide basis only.²⁰⁷

162. Further diminishing the rigor of its analysis, Qwest assumes a business churn rate of 2 percent and a residential churn rate of 4 percent and creates an “average” 3 percent churn rate.²⁰⁸ Because switched access lines include vastly more residential lines than business lines, 3 percent is clearly not a weighted average. Furthermore, as I discuss throughout my affidavit, residential and business markets differ, and should be examined both separately and together.

163. AT&T, on the other hand, uses a churn rate of 4.6% in its BCAT model.²⁰⁹ In the *Triennial Review Order*, the FCC found that customer churn exacerbated the operational and economic barriers that exist in serving mass market customers:

The evidence in the record demonstrates that there is a significant amount of churn, or movement, among mass market customers. Mass market customers move freely from carrier to carrier when they desire, and have come to expect the ability to change local service providers in a seamless and rapid manner. We find that this movement, or churn, happens most frequently in the first few months after the customer switches to a new carrier and is often driven by “winback” activities . . . Z-Tel estimates that at least four percent of its lines turn over each month. Because of this churn, Z-

²⁰⁶ Watson Direct (Qwest), at 39, Table 10.

²⁰⁷ *Id.*, at 40, Table 11.

²⁰⁸ *Id.*, Attachment BSW-3C, at 4.3.3.

²⁰⁹ Direct testimony of Douglas Denney and Arleen Starr on behalf of AT&T Communications of the Mountain States, Inc., and TCG Utah (Collectively “AT&T”), January 21, 2004 (Corrected Version), Utah Public Service Commission Docket No. 03-999-04, at 26.

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Tel asserts that carriers in a competitive market cannot expect to keep any particular customer for more than 18-24 months.²¹⁰

164. Despite protests to the contrary, Qwest relied on churn numbers that may not match the expected results of carriers serving mass market customers. Mr. Watson claims that the market share and churn values used in CPRO are consistent with the default price value (i.e. the revenues based on MCI's Neighborhood plan).²¹¹ Yet, his testimony also emphasizes the fact that the FCC has directed states to avoid modeling a particular CLEC.²¹²

165. Carrier models presented in response to this *NRPM* or future FCC proceedings may also differ in their assumptions with respect to projected CLEC market share. Qwest's CPRO model uses a 5 percent market share, which Qwest asserts is conservative "as shown by the fact that AT&T and MCI have achieved higher market share levels in other states in less time."²¹³ Similarly, AT&T models a 5 percent market share *in each wire center*.²¹⁴ However, although Qwest and AT&T seem to agree on

²¹⁰ *TRO*, at ¶ 471.

²¹¹ Watson Direct (Qwest), at 34-35.

²¹² *Id.*, at 6. See also the discussion of comparable CLECs in the "Data Sources" section of Attachment BSW-3C, where it is stated: "The modelers chose these criteria to mirror the modeled provider – a CLEC with 500,000 access lines, providing local and long distance services to the mass market. The modelers based their assumptions on only the most relevant CLECs for each input. Following the criteria outlined above, we came up with nine comparable CLECs."

²¹³ Watson Direct (Qwest), at 35.

²¹⁴ Denney/Starr (AT&T), at 26.

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this important model assumption, neither adequately support it. Furthermore, it is unrealistic to assume that CLECs enter *all* wire centers at the same time, as the evidence in the Utah proceeding demonstrates. Instead, the evidence shows that there are “pockets” of competitive activity. The FCC notes that “it is quite possible that carriers can economically enter with their own facilities in low cost, high revenue locations, but not in high cost, low-revenue locations.”²¹⁵ Despite FCC admonishments regarding the use of average, national data,²¹⁶ the business case models submitted in Utah PSC Docket No. 03-999-04 do just that. Also, as I discuss in Section I of this Affidavit, AT&T and other CLECs are withdrawing from the residential market, which further undermines the credibility of an assumed market share of 5 percent.

166. Relying on data regarding UNE-P entry as an indicator of potential market share if UNE-P were no longer an option is a heroic assumption. It implies that the CLEC would be willing and able to deploy a switch to serve all customers within an MSA and furthermore that the CLEC’s customer would be willing to be “migrated” from UNE-P to UNE-L. In fact, MCI’s position in the Utah proceeding was that that it may not serve as many wire centers as it does now if it has to do so by migrating customers from UNE-P to UNE-L.²¹⁷

²¹⁵ *TRO*, ¶ 484.

²¹⁶ See, e.g., *TRO*, ¶¶ 483-485.

²¹⁷ *Gates Direct (MCI)*, at 68-69..

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167. Furthermore, Qwest relied on FCC data that show “[a]s a group, CLECs have gained over five percent of all access lines in just the span of two years” to support the use of a 5 percent market share.²¹⁸ In fact, such data proves that a 5 percent market share for any one CLEC individually is an overly optimistic assumption, and, again, fails to make a distinction among residential and business consumers. Qwest relied upon the market share success of two large, established carriers providing both local and long distance telecommunications services. In noting that MCI “has a strong record of winning market shares with its Neighborhood pricing plan,”²¹⁹ Mr. Watson cited MCI’s President of MCI Mass Markets as stating that the Neighborhood product has “become the most successful local service product in the history of consumer local communications.”²²⁰ The Commission should be wary about basing its analysis of the prospects for competitors entering the mass market on the market share of established players who are just now achieving success *with access to unbundled switching to serve mass market customers*.

168. My analysis of the evidence submitted in the Utah PSC’s proceeding indicates that the Commission should not adopt either Qwest’s CPRO or AT&T’s BCAT if it intends to maintain a potential deployment analysis as part of its larger determination of impairment for unbundling purposes. The rigor of such business case models must be improved if the Commission intends to rely on their use for making an impairment

²¹⁸ Watson Direct (Qwest), Attachment BSW-3C, at “Model and Input Consistency.”

²¹⁹ *Id.*, at 34.

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determination. Among other things, I recommend that the FCC examine potential profitability be on a wire center basis, for the reasons described in Section III of my Affidavit. In its examination of business case models presented in the *Triennial Review Order*, the Commission analyzes the economics of entry on a wire center basis. Noting that model results vary significantly with respect to location and type of customer, the FCC finds that entry is “likely to be economic in locations served by larger wire centers with greater line density.”²²¹ Indeed, the FCC further notes that “all of the studies mentioned – *including the BOC studies* – suggest that it would be uneconomic for a competing carrier to serve customers in smaller wire centers.”²²²

169. My analysis of Qwest’s CPRO model in the Utah proceeding leads me to conclude that the Commission should not rely on Qwest’s business case model to assess whether CLECs are impaired because, among other things:

- The 25-year planning horizon is unreasonably long for computing a discounted cash flow, particularly for a new entrant that may confront capital constraints.
- Qwest predicts an unrealistically high market share for CLECs.
- The CPRO fails to recognize that if effective local competition actually occurs, rates will decline, thereby diminishing potential revenues.

²²⁰ *Id.*, footnote 44.

²²¹ *TRO*, at ¶ 484, footnote 1499.

²²² *Id.*, at ¶ 484, emphasis added.

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- Qwest fails to justify its proposed low churn rates, and, furthermore, Qwest inappropriately averages residential and business churn.
- Qwest fails to conduct a wire center analysis of potential profitability, although the appropriate geographic market is the wire center.
- Qwest fails to examine the residential and business markets separately, and, as a result, does not model the likelihood that excluding residential customers from the NPV analysis would likely *increase* the CLEC's profitability.

In summary, Qwest's CPRO fails to provide a realistic model of a CLEC's financial decision-making regarding potential entry in a relevant local market.

170. Qwest's filing does not provide adequate evidence to justify the Utah Public Service Commission (and now the FCC) finding no impairment based on the evidence of potential deployment as outlined by the FCC in its *Triennial Review Order*. Qwest's showing relied largely on its business case model. In its analysis of impairment, the FCC states that while business case analyses and cost studies are:

useful tools for analysis, we may give this evidence less weight than actual market place evidence for several reasons. First . . . actual marketplace evidence shows whether new entrants, as a practical matter, have surmounted barriers to entry in the relevant market. Second, these studies are generally based on estimates of costs and revenues that can be difficult to verify, and thus are more easily manipulated by the advocates in this proceeding. Third, there may be issues and factors that affect a competitor's ability to enter that are difficult to foresee (such as unexpected costs, delays, revenue streams, or new niche products). Thus, there will be uncertainty concerning the existence of such factors when

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examining these studies, while examination of actual marketplace evidence will reveal whether such factors exist and are significant.²²³

171. CLECS participating in the Utah proceeding identified significant operational and technical barriers to entry demonstrating that even those carriers that do currently serve mass market customers will likely not be able to do so without access to UNE-P. Furthermore, Qwest failed to provide sufficient evidence of *actual* competitive deployment of local circuit switches. In fact, Qwest acknowledged that there are no providers self-provisioning switching in the St. George MSA and no evidence of a wholesale provider of switching in any MSA in Utah. Clearly, Qwest failed to show why the Utah PSC (and now the FCC) should determine that requesting carriers are not impaired without access to mass market local circuit switching despite the fact that the Logan and St. George MSAs fail to satisfy the Track 1 trigger analysis.

172. As detailed above, it is not evident that the Commission's impairment standard will pass muster with the Court, particularly with respect to the Commission's analysis of "economic entry."²²⁴ The Commission is not equipped to deal with the immense administrative burden with respect to the analysis of competing models given the acknowledged requirement for such models to be sufficiently granular. As such, the Commission should eliminate the analysis of potential deployment from its unbundling

²²³ *Id.*, at ¶ 99.

²²⁴ Again, the Court found in *USTA II* that the analysis of potential deployment is simply too open-ended." *USTA II*, at 25.

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framework.

173. If the FCC does not eliminate the use of the potential deployment analysis, the FCC should afford this factor less weight than evidence of actual deployment provided with respect to the self-provisioning trigger. As I demonstrate above, business case modeling is an extremely subjective exercise with widely divergent results, depending on a myriad of assumptions. Furthermore, the ultimate goal of this proceeding is to protect the *consumer*, and, as such, the analysis of where CLECs may potentially provide services is of little value. The FCC should instead focus its attention on identifying those markets where CLECs are providing services to mass market consumers, both residential and business.

The FCC should eliminate the potential deployment analysis from its final network unbundling rules.

174. Although I recommend that the FCC eliminate Section § 51.319 (d)(2)(iii)(B)(1) through (d)(2)(iii)(B)(3) from its rules, it should not eliminate Section § 51.319 (d)(2)(iii)(B)(4), which requires the establishment of a “cut-off” between mass market and enterprise customers. The FCC intended that states would make this determination “as part of the economic and operational analysis” required to apply the potential deployment analysis.¹⁸⁷ However, if the Commission adopts my recommendation, it will eliminate the potential deployment analysis. As I understand the *USTA II* directives, it is

¹⁸⁷ *TRO*, ¶ 497.

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now the FCC, and not the state, that must define mass market. I recommend that it do so unambiguously by defining up to 24 DS0 lines as mass market, for the reasons I discuss in more detail in Section III, above.

175. If, contrary to my recommendation, the FCC does not eliminate the potential deployment analysis from its final rules, I recommend that, in evaluating the three criteria relating to potential deployment, it afford the greatest weight to the criterion regarding evidence of actual deployment. Among the three criteria that the FCC identifies in its unbundling rules for making a "Track 2" analysis, the actual deployment of switches provides the strongest evidence of CLECs' assessment of the potential profitability of market entry (although, until the CLEC uses the switch to serve residential and business customers throughout the relevant geographic market, the evidence is still significantly weaker than information about quantities and locations of customers actually being served).

176. In its analysis of economic barriers, the Commission likely will be assessing competing business case models. The Commission should require ILECs and CLECs, in their design of such models, to compare the projected profitability of (1) serving residential and business customers with (2) serving only business consumers. In those instances where including the residential market in a cash flow analysis diminishes the projected net revenues, one can reasonably assume that rational CLECs will not serve residential customers. If the inclusion of residential customers reduces projected profits in a given market, the FCC should determine that the "Track 2" trigger is not met.

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Furthermore, if the FCC decides to retain the potential deployment trigger in its final rules, it should expand the rules to include an explicit directive that ILECs separately demonstrate the profitability of serving (1) residential and business customers and (2) serving only business customers. Furthermore, ILECs' applications should disaggregate the financial analyses to a wire center level. These distinct analyses will assist the FCC in assessing the plausibility of CLECs serving the *entire* mass market.

VI. TRANSITION MECHANISMS

Background

177. In its *Order and Notice of Proposed Rulemaking*, the FCC established a two-phase plan to occur over a twelve-month period, which commenced with the publication of its rules in the *Federal Register* on September 13, 2004. In the interest of having “an orderly transition mechanism,” the FCC required continued availability over a six-month period of those elements that were provided under interconnection agreements as of June 15, 2004, and, during the subsequent six-month period, established a plan that is intended to mitigate disruption should the FCC reach a finding of non-impairment for any elements.²²⁵ The FCC seeks comment on whether there are circumstances “in which particular final rules would necessitate additional transition mechanisms apart from or beyond this second six-month phase.”²²⁶

178. During the “interim” period, *i.e.*, the first six months after the mid-September publication of the *NPRM* in the *Federal Register*, ILECs must provide unbundled access to switching, enterprise market loops, and dedicated transport according to the rates, terms and conditions that applied under interconnection agreements as of June 15, 2004. The FCC permits changes in these rates, terms and conditions if they are, or have been, superseded by voluntarily negotiated agreements, an intervening Commission order affecting specific UNE obligations, or a state public utility commission

²²⁵ *NPRM*, ¶ 10.

²²⁶ *Id.*

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(“PUC”) order “raising the rates for network elements.”²²⁷

179. Because state PUCs have authority to set rates for UNEs, which the *NPRM* would seem to undermine, the FCC should clarify and/or correct its language to refer to PUC orders that *change* the rates for network elements, rather than identifying only those state PUC orders *raising* rates.²²⁸

180. The FCC also defines a “transition” period, which is the six-month period beginning the earlier of either mid-March 2005 (six months after the publication of the *NPRM* in the *Federal Register*) or the effective date of the FCC’s final unbundling rules. During this transition period, the FCC stated that in any areas of non-impairment for mass market switching, ILECs may charge a UNE-P rate equal to the *higher* of (1) the rate which the CLEC paid on June 15, 2004 *plus* one dollar or (2) the rate that a state PUC establishes between June 16, 2004 and mid-March 2005 *plus* one dollar. For areas of non-impairment for enterprise market loops and/or dedicated transport, ILECs may choose the *higher* of (1) *115 percent* of the rate which the CLEC paid on June 15, 2004 or (2) *115 percent* of the rate that a state PUC establishes between June 16, 2004 and mid-March 2005. These transitional rates would apply only to the embedded

²²⁷ *Id.*, ¶ 29.

²²⁸ CLECs have petitioned the FCC to clarify that rate decreases are permitted. *In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of the Incumbent Local Exchange Carriers*, CC Docket Nos. 04-313, 01-338, Petition for Emergency Clarification and/or Errata, submitted by the Association for Local Telecommunications Services, et al, August 27, 2004.

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customer base and not to CLECs' new customers. Also, carriers are "free to negotiate alternative arrangements."²²⁹

181. The FCC stated that "[s]ubject to the comments requested in response to the above *NPRM*, we intend to incorporate the second phase of the plan into our final rules."²³⁰ The FCC should eliminate this second phase from its final rules. The FCC's transitional rate rules contradict and undermine states' UNE ratemaking authority. Furthermore, it is hard to imagine ILECs willingly negotiating "alternative arrangements" that include rates *less* than those that regulators permit. As a practical matter, because impairment exists for unbundled mass market switching throughout Utah, not only because of costly and excessively manual hot cut processes, but because, as I demonstrate in Sections IV and V, Qwest's Utah filing satisfies neither the Track 1 nor the Track 2 requirements, the FCC's "transitional" rate increases would not apply to UNE-P in Utah. Nonetheless, the FCC-specified transitional rate increases represent poor public policy. Furthermore, if, contrary to my granular analysis and my recommendation, the FCC identifies particular markets in Utah where mass market switching impairment does not exist, then the transitional rate increases would harm consumers.

²²⁹ *NPRM*, ¶ 29.

²³⁰ *Id.*

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The FCC should re-affirm the transition plans that it set forth in the *TRO* and in the *TRO* rules.

182. The FCC should analyze the “transition” more broadly than simply determining the manner in which the rates, terms, and conditions will apply to UNEs during the next twelve months. As the FCC recognized in the *TRO*, the quality and cost of hot cut processes affect the likelihood of disruption for consumers and the industry.²³¹ Until ILECs offer seamless hot cuts at cost-based rates, CLECs are impaired because they cannot transition from UNE-P to UNE-L without jeopardizing consumers’ service quality and without confronting an insurmountable economic barrier.

183. *USTA II* does not diminish the significance of hot cuts to UNE-P. According to *USTA II*, hot cut costs contribute to but do not prove non-impairment. The Court stated:

Though certain sections of the Order suggest that impairment due to hot cut costs might be sufficiently widespread to support a general national impairment finding even in the absence of more “nuanced” determinations to be made by the state commissions, Order ¶¶ 459, 470, 473, the Commission at other points concludes that a national finding, without the possibility of market-specific exceptions authorized by state commissions, would be inconsistent with *USTA I*. See Order ¶¶ 186–88, 196, 425, 485, 493. At the very least, these latter passages demonstrate that the Commission’s own conclusions do not clearly support a non-provisional national impairment finding for mass market switches, and thus require us to vacate and remand.²³²

The Court also stated that:

²³¹ *TRO*, ¶¶ 470, 472.

²³² *USTA II*, at 21.

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. . . the Commission implicitly conceded that hot cut difficulties could not support an undifferentiated nationwide impairment finding. Order ¶¶ 425, 485, 493. Moreover, we made clear in *USTA I* that the Commission cannot proceed by very broad national categories where there is evidence that markets vary decisively (by reference to its impairment criteria), at least not without exploring the possibility of more nuanced alternatives and reasonably rejecting them. 290 F.3d at 425–26.²³³

184. As I understand the Court’s reasoning, it faults the FCC for relying on hot cut costs and “difficulties” in its determination of impairment on a *national* level, but does not dispute the relevance of hot cut costs and processes to the determination of impairment, provided the analysis is conducted in a sufficiently “nuanced” manner. Accordingly, it is not only valid under the *USTA II* ruling, but also imperative from a public policy and economic perspective, for the FCC to consider the status of hot cut processes and rates in its assessment of whether impairment exists in particular markets. I also address the hot cut rules included in Sections 51.319(d)(ii) (“Batch cut process”) and 51.319(d)(iv) (“DS0 capacity end-user transition”) set forth in the *TRO*.

The major purposes of establishing rules for the transition are to encourage consumer and investor confidence in CLEC and ILEC operations, and to minimize consumer disruption when consumers migrate from one supplier to another supplier.

185. A smooth transition from UNE-P to UNE-L is essential in order to encourage consumer and investor confidence in CLEC and ILEC operations. Seamless hot cut processes are also critically important to prevent consumer disruption. Consumers

²³³ *Id.*, at 21.

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must maintain access to service and “eliminating unbundled access to incumbent LEC switching on a flash cut basis could substantially disrupt the business plans of some competitors.”²³⁴ A transition plan is required to allow sufficient time for competitors to change business and operational plans in light of changes to the regulatory regime and the need to change interconnection agreements. CLECs will have to develop new UNE-L provisioning systems, which may include the need to hire new employees, undergo training, revise billing systems, etc. CLECs must also have time between any regulatory decision and the time it is able to serve customers using alternative facilities, otherwise CLECs would need to halt advertising and customer acquisition, thus harming consumers.

186. The FCC, in its unbundling rules, adopted a transition period for mass market loops and mass market switching. Specifically, the FCC adopted a three-year transition period for new line sharing arrangements²³⁵ and an implementation plan for moving the embedded base of DS1 enterprise customers and mass market customers to competitive LECs’ switches.²³⁶ The *TRO* requires that carriers adopt an implementation plan with the ILEC within two months of a state finding of non-impairment and carriers may not request access to unbundled local circuit switching five months after such a finding. Migration orders are to be submitted according to the following schedule (1) thirteen months after a non-impairment finding: CLEC must submit orders to migrate

²³⁴ *TRO*, ¶ 529.

²³⁵ *Id.*, ¶ 265.

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one-third of their customers; (2) twenty months after a non-impairment finding: CLEC must submit orders to migrate half of its remaining unbundled local circuit switching end users; and (3) twenty-seven months after a non-impairment finding: all remaining orders must be submitted to the ILEC.²³⁷

187. *These provisions are critical and should be retained in the final rules in order to prevent consumer disruption.* In response to USTA II's directive that the FCC, not state commissions, must determine whether impairment exists, the FCC need only make minor wording changes to the section of its rules governing "DS0 capacity end-user transition." For example, in Section 51.319(d)(iv), the FCC can simply change the current language, "[i]f a state commission finds that no impairment exists in a market..." to "[i]f the FCC finds that no impairment exists..."²³⁸

188. My analysis of granular data, whether assessed within the markets that I recommend, or even within the ill-supported markets that Qwest recommends, reveals that Qwest has failed to demonstrate non-impairment. Furthermore, the irrevocable harm of prematurely discontinuing UNE-P, which is a critical stepping stone in the evolution of local competition, outweighs the purported harm of continuing Qwest's obligation to lease mass market switching to its competitors.

²³⁶ *Id.*, ¶ 532.

²³⁷ *Id.*, ¶ 532, § 51.319(d)(iv)(A).

²³⁸ Similar wording changes apply in the referenced section of the FCC's rules (i.e., § 51.319(d)(iv)).

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189. In the future, CLECs' competitive presence and use of their own switches to serve residential and small business customers may justify a finding of non-impairment in a particular geographic market. Should this occur, the FCC should ensure that an adequate transition process is in place before releasing Qwest from its unbundling requirements for mass market switching. In its *Triennial Review Order*, the FCC appropriately directs states to establish a transition plan to migrate the embedded customer base. The FCC specifically determined that the "most critical aspect of any industry-wide transition plan is to avoid significant disruption to the existing customer base served via unbundled loop circuit switching so that consumers will continue to have access to their telecommunications service."²³⁹ The FCC's findings in the *TRO* regarding the need for a smooth transition are entirely consistent with *USTA II* and are essential to protect consumers. As the FCC determined, "state commissions are well suited to monitoring the operational aspects of this migration . . . State commissions have strong incentives both to encourage competition (as a means of providing citizens of their states with a choice of service providers) as well as to foster new investment (as a means of promoting economic growth in their states)."²⁴⁰

190. If the FCC should contemplate a finding of non-impairment, which I do not recommend for Utah, then it should open an investigation into the industry's transition

²³⁹ *TRO*, ¶ 529.

²⁴⁰ *Id.*, ¶ 531

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plan so that the FCC can ensure that states are managing “the transition in a way that promotes investment as well as continued choice for consumers.”²⁴¹ A smooth migration is essential to ensure that consumers have uninterrupted access to basic telecommunications service, and to the public switched telephone network.

191. A well-functioning hot cut process is essential to ensure that consumers can migrate among suppliers without service disruption. Mass market customers have an expectation that when they switch to a new service provider, the installation will be timely and transparent. As the FCC opined in the *TRO*: “competition is meant to benefit consumers, and not create obstacles for them.”²⁴² Furthermore, if hot cut rates are set too high, then competitors will find it prohibitively expensive to migrate customers from Qwest’s switches to their own switches, thereby leaving Utah consumers with fewer options.

192. An inefficient and inadequate hot cut process, with prices based on inflated costs, represents a significant barrier to local telecommunications competition in the mass market. Residential and small business customers, who lack the telecommunications redundancies that large businesses typically possess, have little patience or understanding for service delays and interruptions. Furthermore, the mass market offers minimal profit margins, which means that over-priced hot cuts will prevent

²⁴¹ *Id.*

²⁴² *TRO*, ¶ 467.

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local competition from evolving. The likelihood that the mass market will benefit from the service quality and service choices that local competition can bring depends critically on the establishment of a trouble-free, reasonably priced system that enables consumers to migrate easily among carriers, and one that does not require a household or small business to *disconnect* its Internet access.

193. The ILECs, however, lacks an economic incentive to foster the development of such a process because the consequences of the *status quo* favor the ILEC: high hot cut prices discourage CLECs from serving the market, and disgruntled mass market customers who experience service delays and disruptions will likely stay with or return to the incumbent carrier. The lack of an economic incentive on the part of the ILEC combined with CLECs' lack of negotiating strength means that regulatory intervention is essential to ensure that the market place functions efficiently. Continuing regulatory involvement by the Utah PSC and by the FCC is essential to ensure that Qwest's hot cut processes work properly, efficiently, and sufficiently, and that Qwest offers hot cuts to its competitors at a fair price.

VII. CONCLUSIONS AND RECOMMENDATIONS

194. The economic, policy, and legal challenges that this proceeding presents are complex, and the FCC's resolution of them has far-reaching consequences for residential and small business consumers' competitive options in Utah's local telecommunications markets, and for the price protection, innovation, diversity, quality, and redundancy that such competition yields. The FCC has expressed its intention to finalize its network unbundling rules expeditiously. I urge the FCC to proceed not only with speed, but also with deliberation, and, as it applies its framework to relevant markets, to keep in mind consumers' unique interests. The unbundling rules that the FCC set forth in the *TRO* require limited but nonetheless important refinement not only to respond to the concerns expressed by the Court in *USTA II*, but also to eliminate unnecessary ambiguities and to define relevant markets better. By adopting the recommendations that I describe in this Affidavit, the FCC can establish network unbundling rules that are economically sound, administratively feasible, and consumer-friendly.

195. I urge the FCC not to prematurely eliminate the foundation of the competitive options that exist today. Instead, the FCC should apply its modified network unbundling framework judiciously to relevant product, geographic, and customer markets based on an analysis of granular data. Based on my detailed review of ILECs' and CLECs' data in Qwest-served, SBC-served, and Verizon-served regions, and my application of the FCC-established network unbundling rules, I identified specific ways in which the FCC

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can improve its rules toward the end of promoting sustainable local competition. Furthermore, based on my examination of Qwest's filing and industry-provided data, I conclude that there are not any areas of non-impairment in Utah for unbundled mass market local switching, *i.e.*, CLECs would be impaired without access to unbundled mass market local switching.

196. Among my specific recommendations and findings are the following:

- Mass market customers depend critically upon the availability of UNE-P to obtain competitive choice among local telecommunications services.
- CLECs would be impaired without continuing access to unbundled voice grade circuit switching to serve residential and small business consumers.
- If Qwest's filing were approved, mass market customers would be denied the benefits of local competition (affordable prices, expanded and innovative service offerings, and reasonable service quality).
- Qwest has failed to demonstrate that the availability of cost-based UNE-P stifles innovation or efficient investment by ILECs and CLECs.
- Qwest failed to demonstrate that there are any markets in which CLECs would not be impaired without access to mass market unbundled local switching.
- The FCC should eliminate the potential deployment analysis from its final network unbundling rules.
- The FCC should define the wire center as the relevant geographic market.

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- The FCC should unambiguously delineate between mass and enterprise markets by using 24 DS0 channels as the cutover point.
- In applying its network unbundling framework, the FCC should assess whether residential *and* business consumers are being served.
- The FCC's "second-phase" UNE rate increases are inconsistent with states' ratemaking authority and would unfairly penalize mass market consumers.
- No finding of non-impairment is appropriate until a well-functioning, reasonably priced hot cut process is in place.
- Before granting any ILEC request for a finding of non-impairment, the FCC should afford adequate opportunity for discovery and analysis of data that are sufficiently granular to enable an assessment of whether the relevant market is actually being served by self-provisioning CLECs.

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DECLARATION

The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Susan M. Baldwin

Newburyport, Massachusetts, September 30, 2004

SWORN TO AND SUBSCRIBED
before me on this, the _____ day of
_____, 2004

NOTARY PUBLIC

My Commission expires
