COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Rebuttal Panel Testimony
(Hot Cut Process and Scalability)

[PUBLIC VERSION]

Members of the Panel:

Julie A. Canny
Maryellen T. Langstine
Thomas Maguire
James L. McLaughlin
Bruce F. Meacham
William E. Taylor
John L. White

On Behalf Of
Verizon Massachusetts

February 25, 2004

TABLE OF CONTENTS

I. INTRODUCTION

A. The Witness Panel

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. This testimony is submitted by Verizon Massachusetts ("Verizon") in response to the February 6 testimony of AT&T/Broadview, Conversent, Covad, and MCI in the above-captioned case concerning hot cuts.[1/]

Q. WHO IS SPONSORING THIS TESTIMONY?

A. This testimony is sponsored by the following witnesses, who, with the exception of Julie Canny and John White, sponsored Verizon's initial testimony filed on November 14, 2003 concerning the development of a batch hot cut process: Julie Canny, Maryellen T. Langstine, Thomas Maguire, James L. McLaughlin, Bruce F. Meacham, William E. Taylor, John L. White. The Panel members have the same general areas of primary responsibility as were described in their initial testimony, with Mr. White assuming responsibility for the technical and engineering issues that Mr. Nawrocki previously sponsored. *See* Initial Panel Testimony of Verizon Massachusetts on Hot Cut Processes and Scalability, at 4 (Nov. 14, 2003) ("Verizon Initial Panel Testimony"). In addition, Ms. Canny has been added to the panel to address metrics-related issues raised by the CLECs. Finally, Mr. Goldrick and Ms. Gray have been removed from the Panel, with Dr. Taylor adopting Mr. Goldrick's testimony and assuming responsibility for statistical issues and the panel adopting the testimony Ms. Grey.

[1/] We cite the CLEC testimony by the sponsoring party, witness last name, and page number. (*E.g.*, "MCI Jenkins 23.")

Q. MS. CANNY, PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND RELEVANT WORK EXPERIENCE.

A. I am Verizon's Executive Director – Metrics Policy and Planning in Wholesale Markets. I received a Bachelor of Science degree in Mathematical Economics and Management from Simmons College in 1977 and a Master of Business Administration degree, with a concentration in Finance, from Babson College in 1980. I am is currently responsible for developing the performance measurements and performance assurance plans for wholesale products and services provided to CLECs and resellers by Verizon and its local operating company affiliates in other states. I have been a participant in the New York Carrier Working Group ("NYCWG") since its inception in 1997.

I have 23 years of experience in the telecommunications industry. I assumed my present position in July 2000 after the merger of Bell Atlantic and GTE. I had similar responsibilities for NYNEX between 1995 and the 1997 (when NYNEX merged with Bell Atlantic), and for Bell Atlantic between 1997 and 2000. From 1989 to 1995, I was Director of Quality for NYNEX, supporting all staff departments. In that function, I was involved with the implementation of quality processes and, in particular, the development of performance measurements for business purposes. From 1985 to 1989, I held positions of increasing responsibility in Installation, Maintenance, and Construction Engineering in Boston and New Hampshire. From 1980 to 1985, I held various positions in Planning and Budgeting. Before joining New England Telephone and Telegraph Company in 1980, I was Senior Statistician at Liberty Mutual Insurance

Company, where I was responsible for the integrity of Workers Compensation experience filings with various regulatory bodies.

Q. MR. WHITE, PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND RELEVANT WORK EXPERIENCE.

A. My name is John L. White. I am currently the President of 8 Degree Research & Consulting Inc. My business address is North Salem, New York 10560. I was employed by Verizon, or by its affiliates and predecessor companies, from 1966 until November 2003. During my first 12 years at Verizon, I was involved in every aspect of Outside Plant telephone engineering. From 1979 to 1994, I held managerial positions in Construction, Installation and Maintenance, and Engineering, in both line and staff capacities. As the NYNEX Director of Engineering Strategy, NYNEX Director of Engineering Support, and NYNEX Managing Director of Outside Plant Engineering, I personally supervised service and cost studies and testified on outside plant issues before various state commissions. At Bell Atlantic, I worked in the Technology organization as the Executive Director, Transport Technology Planning. In June of 1999, I joined the Wholesale Services organization reporting to the Network Services Department, and was responsible for, among other things, CLEC technical support with a significant focus on DSL, Line Sharing and Line Splitting. From March to November in 2003, I served as an Executive Director of Fiber To the Premise. In November 2003, I left Verizon and became a private consultant.

I studied engineering at the University of Buffalo and received a Bachelor's degree in Business Administration in 1977, and a Masters in Business

Administration in 1984 from Pace University. I pursued post-graduate work from 1993 to 1998 in Finance and Economics as part of a DPS Program at Pace University.

B. Overview of Testimony

Q. PLEASE DESCRIBE THE SCOPE OF THIS TESTIMONY.

A. This testimony addresses the arguments raised by AT&T/Broadview ("AT&T"), MCI, Covad, and Conversant in their direct testimony concerning Verizon's hot cut processes However, this testimony does not attempt to address every assertion and claim set forth in the CLEC testimony, and the failure to address a particular contention here should not be interpreted as agreement with or acquiescence in that contention. In general, this testimony only addresses factual matters. Verizon reserves its right to address policy and legal matters in the post-hearing briefs.

Q. PLEASE SUMMARIZE THE CONCLUSIONS THAT VERIZON REACHES IN THIS TESTIMONY.

A. The CLEC testimony is based on an unrealistic and idealized vision of the hot cut process. The CLECs make unsupported assumptions about the capabilities of currently available systems, fail to understand the processes that are actually being utilized by Verizon, and fail to appreciate the fact that many aspects of the hot cut process that they describe as "inefficiencies" are actually process safeguards that have been specifically requested by the CLECs. The unrealistic and unsupported nature of the CLEC assumptions is important not only because those assumptions form the basis of their criticisms of Verizon's hot cut

processes, but also because the same assumptions lie at the heart of the AT&T, MCI, and Conversent cost studies. Indeed, they are the principal reason for the unrealistically low hot cut costs generated by those studies.

Q. EVEN IF THE CLECS' CRITICISMS OF VERIZON'S HOT CUT PROCESSES ARE UNFOUNDED, ARE THOSE PROCESSES INCAPABLE OF FURTHER IMPROVEMENT?

A. No. All systems are capable of improvement, and Verizon always seeks to identify, evaluate, and, if warranted, implement potential refinements to its hot cut processes. Verizon's ongoing attempts to improve its processes are aided by input from the CLECs that utilize those processes — input that Verizon actively solicits.

Past efforts to improve Verizon's hot cut processes have resulted in such innovations as the implementation of WPTS, the creation of the large job/project process, and the development of the new batch hot cut process. As a result of these innovations, Verizon has moved far ahead of other ILECs (a fact that the CLECs themselves have acknowledged in proceedings in other states, as described further below). Verizon intends to continue its process improvement efforts. Indeed, as set forth below, we are considering, and in certain cases have already decided to adopt, changes to the batch hot cut process that were suggested by CLECs in technical workshops and in their interrogatories.

Moreover, as discussed in our initial testimony, future improvements that are anticipated but which have not yet been achieved are reflected in Verizon's cost studies.

Q. DOES THE FACT THAT VERIZON'S PROCESSES MAY BE IMPROVED IN THE FUTURE MEAN THAT THEY ARE INADEQUATE OR INEFFICIENT NOW?

A. Not at all. It may be that these technologies will be feasible and cost-effective at some point in the future, and if so, Verizon would certainly consider adopting them ? just as, for example, it has already adopted automated frames for use in small (5,000 lines or fewer) central offices. However, the fact that a possibility for future improvement exists does not mean that the current processes are inadequate. The adequacy of a hot cut process must be analyzed not by comparing the process to some as-yet-unrealized ideal, but by considering whether that process does what it is intended to do, efficiently meets the reasonable needs of CLECs and end users, and will support the level of hot cuts that can be expected in a post-UNE-P world. Verizon's initial testimony showed that those criteria have been satisfied.

Q. WHAT ARE THE RULES GOVERNING APPROVAL AND IMPLEMENTATION OF A BATCH CUT PROCESS?

A. FCC Rule 319(d)(2)(ii) governs the approval and implementation of a batch cut process.

First, this rule defines a "batch cut process" as "a process by which the incumbent LEC simultaneously migrates two or more loops from one carrier's local circuit switch to another carrier's local circuit switch, giving rise to operational and economic efficiencies not available when migrating loops from

one carrier's local circuit switch to another carrier's local circuit switch on a line-by-line basis." 47 C.F.R. § 51.319(d)(2)(ii).

Second, FCC Rule 319(d)(2)(ii)(A)(1) requires a state commission reviewing a batch process to "determine the appropriate volume of loops that should be included in the 'batch.'"

Third, FCC Rule 319(d)(2)(ii)(A)(2) further requires a state commission to "adopt specific processes to be employed when performing a batch cut, taking into account the incumbent LEC's particular network design and cut over practices."

Fourth, under FCC Rule 319(d)(2)(ii)(A)(3), a state commission must "evaluate whether the incumbent LEC is capable of migrating multiple lines served using unbundled local circuit switching to switches operated by a carrier other than the incumbent LEC for any requesting telecommunications carrier in a timely manner, and may require that incumbent LECs comply with an average completion interval metric for provision of high volumes of loops."

Finally, FCC Rule 319(d)(2)(ii)(A)(4) requires the adoption of batch hot cut rates in accordance with the FCC's UNE pricing rules.

Q. DO YOU AGREE WITH CLEC CLAIMS THAT VERIZON HAS NOT SATISFIED THIS STANDARD?

A. No. Specifically, as demonstrated in this panel's Initial Testimony, Verizon's batch cut proposal satisfies the requirements of FCC Rules 319(d)(2)(ii):

- Verizon's batch cut process can simultaneously migrate multiple loops from the Verizon switch to a CLEC switch. *See* Verizon Initial Panel Testimony at Part II.
- The batch cut process can migrate an "appropriate volume" of loops. Verizon proposes to perform the cuts when a "critical mass" of orders is reached. *See* Verizon Initial Panel Testimony at 31-32. The "critical mass" standard does not require any prior specification of an absolute minimum or maximum number of lines, which will vary from office to office, based on the volume of cuts and the optimum level of frame staffing.
- The batch cut process takes into account Verizon's particular network architecture and cut-over practices. *See* Verizon Initial Panel Testimony at Part II.
- The batch cut process will perform cut-overs in a timely manner. Verizon has indicated that batch hot cut orders will be cut over when a critical mass of orders had accumulated in the relevant central office, but that the cut-over date will in no event be less than 6 business days, or more than 26 business days, from the date that the batch hot cut LSR is submitted.[2/]

[2/] In our initial Testimony, we stated that this period would be 10 to 35 days. *See* initial Panel Testimony at 32. Since that time, Verizon has revised this policy, and the new period is now 6 to 26 days.

?? Verizon has proposed TELRIC-compliant rates for its proposed batch process. *See* Verizon Initial Panel Testimony at Part III.

II. HOT CUT PROCESSES

A. General Considerations Relating to the Evaluation of Verizon's Hot Cut Processes

Q. WHAT IS THE BASIS OF THE CLECS' PURPORTED CONCERNS WITH VERIZON'S HOT CUT PROCESSES?

A. The specific bases for various criticisms are discussed in detail in this testimony. However, many of the criticisms are based in large part on the purported professional judgment of the CLEC witnesses. For example, in adjusting Verizon's times and the typical occurrence factors in Verizon's cost study, the AT&T panel repeatedly states that "based on our knowledge and experience," Verizon's work times and assumptions with regard to the need for manual handling are not correct. It is important to consider, in evaluating those criticisms and proposed adjustments to Verizon's study, the degrees of relevant knowledge and experience possessed by the Verizon and CLEC witnesses.

Q. WHAT IS THE BASIS FOR VERIZON'S PROFESSIONAL JUDGMENTS CONCERNING ITS HOT CUT PROCESSES?

A. The Verizon witnesses who are principally responsible for matters related to hot cut processes are Mr. Maguire, Mr. White, and Mr. McLaughlin.

Mr. Maguire is a Verizon Senior Vice President with primary responsibility for the ordering, provisioning, and maintenance of the wholesale services that Verizon provides to CLECs. He has been directly responsible for all aspects of

the hot cut process since 1999. In this capacity Mr. Maguire co-authored the original basic hot cut methods and procedures, and led the industry collaborative that helped to fine-tune the hot cut processes. He guided his organization's development (working closely with a CLEC partner) of the large job/project hot cut process and spearheaded the development of, and subsequent enhancements to, WPTS. Mr. Maguire also developed the concept for the batch hot cut process. In addition, Mr. Maguire directed his organization's efforts to earn nationwide ISO certification.

Mr. White has over 30 years of experience in the engineering of switching, transmission and loop equipment. His previous job experience includes the selection, evaluation, testing, and standards development for central office and outside plant equipment, including the technologies being addressed in this proceeding. Mr. White has extensive experience with network and field operations.

Mr. McLaughlin's experience in central office frame operations goes back over 14 years. In 1999, he co-developed the hot cut processes that were adopted in New York and subsequently in the entire Bell Atlantic footprint, including both the step-by-step hot cut methods and procedures themselves, and related matters such as certification, training, tracking, and reporting.

Together, these three witnesses provide the Verizon Panel with a core of direct, first-hand expertise on matters concerning hot cuts and related technology issues that in all likelihood is unsurpassed anywhere in the nation. Their

judgments as to what is feasible, efficient, and practical are grounded in that substantial body of experience.

Moreover, insofar as Verizon's cost studies are concerned, the Panel's expertise is supplemented by numerous Verizon professionals who actually perform or manage activities involved in the hot cut processes, and whose views on matters related to work times were collected through a rigorous survey methodology and statistically validated.

Q. DO THE CLEC WITNESSES HAVE COMPARABLE RELEVANT EXPERIENCE?

A. No. Whatever their general experience in telecommunications matters, and their experience as hot cut customers and as observers of hot cut activity, none of the CLEC witnesses have actually had experience in developing, implementing, or managing hot cut processes. Although experience as a customer or observer is obviously not entirely irrelevant to this proceeding, day-to-day experience in the development, implementation, and management of end-to-end hot cut processes provides the best perspective for assessing current processes and evaluating proposals for further process improvements.

Q. WHAT IS THE LEVEL OF RELEVANT EXPERIENCE AMONG THE AT&T WITNESSES?

A. To the extent that the AT&T witnesses have any operational "experience" related to hot cuts, it is generally limited to observing them.

In a response to an interrogatory in New York, AT&T admitted that the "[AT&T] Panel members have not performed or supervised the performance of

hot cuts on behalf of an ILEC."[3/] That interrogatory response does state that "Mr. Walsh . . . has performed cross connects on the main distribution frames in ILEC central offices."[4/] However, a "cross-connect" is only one of the numerous activities involved in a hot cut, and some experience in performing cross-connects hardly qualifies a witness to evaluate the entire end-to-end hot cut process, which involves numerous, closely interrelated steps. (In fact, Verizon's cost study for the large job hot cut process indicates that only approximately 20% of the costs associated with the hot cut are for the pre-wiring activities, which activities include, among other things, the cross-connect work.) Additionally, the depth of this supposed cross-connect expertise vanishes on close inspection. According to AT&T's responses in New York, Mr. Walsh "has not placed cross-wires on a live production MDF," but rather "has performed cross-connections on MDFs in ILEC COs in connection with training activities." Moreover, these "training activities" took place between 11 and 25 years ago.[5/] The remaining member of the AT&T/Broadview Panel, Mr. Hou, "manag[es] the hot cut process for AT&T" and "manage[s] Broadview's hot cut processes with Verizon" (AT&T Panel at 4). However, this refers to Mr. Hou's work with Verizon on behalf of AT&T as a *user* of the hot cut process. While such experience is not without

---

3/ New York Interrogatory VZ-ATT-2 (attached as Exhibit 1).

4/ *Id.*

5/ *See* New York VZ-ATT-50 and VZ-ATT-59(i) (Attached as Exhibits 2 and 3). Mr. Walsh's description of his background does not mention any work with hot cuts. (*See* AT&T Panel at 2-3.)

value, as noted above it cannot replace actual experience in developing, implementing, and managing hot cut processes.

None of the other AT&T witnesses provides the operational experience that the Panel itself lacks. Mr. Salvatore, of course, is offered as a policy witness, not as an operational witness. And although Mr. Falcone's statement of background and experience (AT&T Falcone at 1-2) indicates a number of assignments of an operational nature, none had anything to do with any aspect of current hot cut processes.[6/]

Q. WHAT ABOUT MR. JENKINS?

A. Here again, Mr. Jenkins, the only MCI witness to testify about hot cut processes, appears to have no experience whatsoever in developing, implementing, or managing hot cut processes.

For example, in response to an interrogatory in New York, MCI stated that Mr. Jenkins had performed or supervised "thousands of transfers of working lines to another assignment locations [sic.]."[7/] But this experience must have pre-dated 1996 (when Mr. Jenkins left NYNEX, *see* MCI Jenkins Rebuttal Testimony Attachment 1), and thus in all likelihood did not involve high volumes of hot cut

---

[6/] Mr. Falcone states that his first assignment, when he began working for AT&T *in 1970*, was as a "frameman" in a large central office; his responsibility in that post was "to install and remove cross connections on various central office frames." (AT&T Falcone at 1.) Here again, cross-connects are but one part of the end-to-end hot cut process, and like virtually everything else, frame technology and the associated OSS have evolved considerably since 1970, more than a quarter of a century before the competitive environment created by the 1996 Act.

[7/] New York VZ-MCI-2 (Attached as Exhibit 4).

activity between carriers. It must be kept in mind that other types of "transfers of working lines," such as shifting lines *en masse* in connection with switch or frame replacements by a single carrier, are quite different, in key operational respects, from hot cuts between two different carriers.

Q. DO CONVERSENT'S WITNESSES HAVE ANY EXPERIENCE IN PERFORMING HOT CUTS?

A. No. Mr. Ankum is a consultant who is apparently offered as a policy witness. Mr. Morrison does have experience working in the field and on main distributing frames, but that experience appears to have ended in 1980, long before the 1996 and multi-carrier environments.

Q. WHAT ABOUT THE TESTIMONY OFFERED BY THE OTHER CLECS?

A. Covad's testimony is limited to issues relating to line sharing and line splitting and the relation of those services to the hot cut process, and thus throws little light on the effectiveness or efficiency of Verizon's current hot cut processes or on the practicality of proposed alternative processes. Covad offers no specific criticisms of the way in which conventional hot cuts are performed by Verizon.

Q. PLEASE COMMENT ON THE CLECS' USE OF THE TERM "BULK" HOT CUT PROCESS IN THEIR TESTIMONY.

A. As discussed in Verizon's initial testimony, the term "bulk" hot cut process is sometimes used informally to refer to Verizon's large job process; however, we have chosen not to use the term in our testimony. We believe that this serves the interests of clarity, because a "bulk" process could be interpreted to refer to *any* process that can handle a large volume of orders, and as Verizon explained

in its initial testimony, *any* of the three hot cut processes can be used to handle large volumes. Scalability cannot be assessed solely in terms of the large job process. Rather, the issue is whether Verizon offers hot cut options that collectively are sufficient to handle the anticipated demand. (Indeed, Verizon's scalability analysis is specifically based on the basic hot cut process, not the large job or batch hot cut processes.) This distinction should be kept in mind in evaluating the CLEC testimony, which frequently uses the term "bulk" hot cuts as if it were synonymous with both the large job process and the handling of large volumes of orders. (*See, e.g.*, AT&T Panel at 25; Conversant Panel at 78.)

Q. WHAT POSITION DO THE CLECS TAKE ON THE PROCESS IMPROVEMENTS THAT IT PROPOSES?

A. In many respects, AT&T's attitude towards its own criticisms is strangely divided. For example, while it insists that the changes it proposes are necessary, it is careful to state that even as modified by those proposals, Verizon's hot cut processes would be inadequate because they are "not . . . forward-looking process[es] based on the best available technology and the practices of a truly efficient LEC." (*See, e.g.,* ATT Panel at 39.) By "forward-looking processes," AT&T seems to be referring to electronic loop provisioning and/or automated frames. Yet AT&T's testimony does not even specifically propose, identify, or endorse such provisioning alternatives. And MCI's assessment of these technologies, as discussed below and in Verizon's initial testimony, is severely flawed.

In short, by holding out the impossible standard of utilizing an as-yet-nonexistent technology, or of achieving "total" automation, the CLECs seek to undermine Verizon's processes without proposing any achievable processes in their place. What this indicates, quite clearly, is that what these CLECs are seeking is *not* the implementation of a better hot cut process. Rather, they are seeking to ensure that whatever changes Verizon does or does not make, it will get a "failing" grade in this proceeding, that they will continue to have access to UNE-P, and they will have a pretext for denying compensation for the costs of its current hot cut processes.

Of course, the Department must take a different view of the situation. Its goal should be the establishment of an adequate batch hot cut process or set of processes (or the recognition that adequate processes are already in place). That goal is very different from the CLEC goal of the indefinite perpetuation of UNE-P.

Although Verizon firmly believes that its processes *are* adequate, if the Department should conclude that they are *in*adequate in any respect, then it would be incumbent upon state commissions to identify improvements that they believe are necessary and that are reasonably achievable. The regulations promulgated pursuant to the *TRO* require state commissions to do more than merely evaluate the current processes. Instead, state commissions are specifically directed to "either establish an incumbent LEC batch cut process . . . or issue detailed findings explaining why such a batch process is unnecessary."

State commissions do *not* have the alternative of adopting the course of action implicitly proposed by AT&T and MCI, and simply rejecting Verizon's processes.

Q. PLEASE DESCRIBE THE ORGANIZATION OF THIS SECTION OF THE TESTIMONY.

A. The following discussion is broken down on the basis of the issues raised by the CLECs. Each subsection discusses one particular operational issue, and comments on the CLECs' criticisms of Verizon's current processes and their proposals for modifying those processes.

B. The CLECs' Flowthrough Assumptions Are Unsupported and Incorrect

Q. WHAT IS FLOWTHROUGH?

A. In the sense that Verizon uses the term in this testimony, "flowthrough" relates solely to the performance of ordering systems. Verizon defines flowthrough as the process by which a CLEC's Local Service Request ("LSR"), submitted through the Electronic Data Interface ("EDI") or Local Service Interface ("LSI") with Verizon, is routed to the Verizon gateway systems and then to the Verizon Service Order Processor ("SOP"), where it is confirmed automatically, without the assistance of a representative in the National Market Center ("NMC"). The LSR must pass a series of edits applied in the interfaces, gateway systems, and SOP before it can be confirmed. Thus, an LSR is considered to flow through when it goes through this process without manual intervention.

Q. WHAT IS "FALLOUT"?

A. The term “fallout” is sometimes used to describe orders that do *not* flow through, and that thus require some degree of manual processing in the NMC. We do not use the term in this testimony, however, since (a) if it is used simply to refer to an order that does not flow through, it does not add anything to the flow through concept; and (b) if it refers to something other than orders that do not flow through, then its use may be confusing or misleading, as the CLEC testimony demonstrates.

Q. IS THE ABOVE DESCRIPTION CONSISTENT WITH THE WAY IN WHICH THE CLECS UTILIZE THE TERMS “FLOWTHROUGH” AND “FALLOUT” IN THEIR TESTIMONY?

A. Not entirely. Although AT&T, MCI, and Conversent do use these terms to refer to the performance of ordering systems, as described above, they also use them to refer to other types manual processing. MCI and Conversent both define “fallout” to include both the failure of an order to flow through the ordering systems, as well as all other situations in the provisioning stage that may cause orders to be diverted from automated provisioning steps. (MCI Jenkins at 20; Conversent Panel at 61.)

Q. WHY IS IT UNDESIRABLE TO USE THE TERMS SUCH AS “FALLOUT” AND “FLOWTHROUGH” IN THIS BROAD SENSE?

A. Ordering flowthrough is closely tied to the capabilities of Verizon’s ordering OSS. Although hot cut orders may “fall out” from automated provisioning steps at various stages in the hot cut processes, such events do not occur with the same frequencies, or as a result of the same causes, as failures to flow through

ordering systems. Thus, for the sake of analytical clarity, such events should be considered and analyzed separately, as Verizon does in its cost studies.

Q. DOES THIS MEAN, AS MCI ARGUES AT PAGE 21 OF MR. JENKINS' TESTIMONY, THAT VERIZON HAS "CHOSEN TO OVERLOOK THE THROUGHPUT POTENTIAL OF THE PROCESS THAT IS BEING IMPACTED BY ORDERS 'DROPPING OUT', WHICH REQUIRE MANUAL INTERVENTION."

A. Absolutely not. Verizon's cost studies consider various scenarios in which hot cut orders "drop out" from or are intentionally excluded from automated processing, and account for them explicitly, through the use of occurrence factors. Thus, Verizon's studies do not ignore such situations.

Moreover, it is *not* true, as MCI alleges, that Verizon's recognition of these "drop out" scenarios is tantamount to a "conscious[] deci[sion] not to look for ways to improve the efficiency of the overall process." (MCI Jenkins at 21.) The Verizon managers who are responsible for the Company's hot cut processes are concerned on a continuing basis with improving those processes and eliminating potential roadblocks and inefficiencies. Of course, the development of WPTS is a key example of this concern and oversight. Exclusions from automated processing thus should not be regarded as imprudent or unnecessary, and they cannot simply be ignored in accounting for Verizon's hot cut costs. MCI's and AT&T's blithe assumption that whenever such situations exist, they can simply be investigated and eliminated (*see, e.g.,* AT&T Panel, Att. D at section C.3), is unsupported by any facts or analysis.

Q. ARE THE AT&T AND MCI ASSUMPTIONS CONCERNING ACHIEVABLE LEVELS OF "FLOWTHROUGH," "FALLOUT," "DROP OUT," AND RELATED PHENOMENA VALID?

A. Absolutely not. The CLEC statements do not conform to Verizon's actual experience and are not based on anything other than unsubstantiated assertions that Verizon's systems and processes should be better than they are.

Q. DOES EVERY LSR SUBMITTED BY THE CLECS FLOW THROUGH WITHOUT REQUIRING MANUAL PROCESSING IN THE NMC?

A. No. There are exceptions to the types of ordering scenarios and products that are required to flow through. These exceptions have been reviewed and approved by the Department and are set forth in Appendix H to the C2C Guidelines.[8/] The Department's recognition that some categories of orders are not expected or intended to flow through is reflected in its approval of two separate flowthrough metrics, one of which (OR-5-03, described as "% Flow through Achieved") is based solely on the flowthrough performance of orders that are eligible for flowthrough.

Q. WHAT FLOWTHROUGH LEVELS DOES VERIZON EXPERIENCE FOR HOT CUT ORDERS?

A. A new analysis of metrics data for recent months, as set forth in Exhibit 5 indicates that the *total* flowthrough rate for hot cut orders (*i.e.*, flowthrough as a percentage of total orders, as measured by metric OR-5-01), averages about

---

[8/] These are available at http://www.dps.state.ny.us/ny_c2c_guidelines_11_2002.pdf.

65% from April through December 2003, although the percentage varies from month to month.

Q. IS THIS THE FLOWTHROUGH RATE THAT VERIZON ASSUMED IN ITS COST STUDY?

A. No. Verizon conducted the special study showing its actual hot cut flowthrough rate of 65% in response to Interrogatory ATT 170(b). The cost study, by contrast, reflects a 77% flowthrough rate by employing a 23% typical occurrence factor for the NMC activity titled "Create Order Manually, If Necessary." The special study thus demonstrates that Verizon's *actual* flowthrough rate is substantially lower than the 77% flowthrough rate Verizon employed in its cost study. Nevertheless, Verizon expects that the 77% flowthrough rate reflected in the study represents the efficiencies that Verizon may be able to achieve in the forward-looking environment, and thus has declined to revise its cost study to reflect its actual flowthrough rate (which would have had the effect of raising costs). Verizon's proposed costs thus reflect ordering efficiencies that Verizon has not yet achieved, but rather hopes to achieve in a forward-looking environment.

Q. AT&T CLAIMS THAT THE NON-FLOWTHROUGH RATE FOR THEIR ORDERS IS LESS THAN ONE PERCENT. DO YOU AGREE?

A. No. AT&T provides no data to support its contention. Verizon, by contrast, performed a special study of AT&T and Boadview orders in Massachusetts to determine the percentage of AT&T and Broadview orders that fall out. That

study, attached as Exhibit 6, shows that in reality, 74% of these orders flow through (and thus 26%, far more than 1%) require manual handling.

Q. SHOULD HOT CUT RATES BE BASED ON THE PURPORTED (AND UNVERIFIED) EXPERIENCE OF A SINGLE CLEC, OR SHOULD THEY BE BASED ON MEASURED DATA CONCERNING ACTUAL FLOWTHROUGH LEVELS FOR HOT CUTS IN GENERAL?

A. Clearly, the later provides a more reliable and more relevant source of flowthrough data for use in cost studies.

Q. WERE ANY OTHER FACTORS UTILIZED BY THE CLECS TO REFLECT "FALLOUT" OR "DROP OUT" OF ORDERS FROM AUTOMATED PROCESSING AT A LATER STAGE OF THE HOT CUT PROCESS?

A. Yes. At page 68 of its Panel testimony, AT&T states that "[i]n other instances, when AT&T and Broadview did not have direct experience with a specific function or sufficient information to estimate the rate of frequency, the Study assumes a 2% system fallout rate." And in Attachment B to its Panel testimony, at page 3, AT&T states that fallout "in no instances should be greater than 2% . . . ." MCI and Conversent also employs a 2% fallout assumption in its cost studies.

Q. WHAT IS THE BASIS OF THE CLECS' 2% FIGURE?

A. In support of the figure, AT&T cites the Department's Order in D.T.E. 01-20, page 449. Conversent cites the same order, as well as the orders of other commissions.

Q. DID AT&T APPLY THE 2% "FALLOUT" LEVEL TO THE APC AND THE RCMAC IN ITS HOT CUT COST STUDY IN THIS PROCEEDING?

A. No. Despite its reliance on the Department's Order in D.T.E. 01-20, the AT&T cost study assumes that manual processing in the APC and the RCMAC is required 0.1% of the time, not 2%. However, the study does apply the 2% figure — without any apparent basis — to other provisioning steps that may require manual handling, such as CLEC No Dial Tone situations.

Q. SHOULD THE 2% FIGURE BE APPLIED TO NMC (ORDERING) ACTIVITIES?

A. No. For the reasons explained above, Verizon has performed a special study that demonstrates its ordering flowthrough experience with regard to hot cuts alone. The 2% figure ordered by the Department was based on an older version of Verizon's cost model that modeled typical occurrence factors for *all* UNE orders, and was not specific to hot cuts. Verizon's actual experience with ordering flowthrough, adjusted to be forward-looking, should form the basis for typical occurrence factors in the NMC.

C. Automated Frames and Electronic Loop Provisioning Do Not Provide Feasible and Practicable Means of Migrating End-User Customers Between Switch-Based Local Service Providers

Q. WHAT IS AT&T'S POSITION CONCERNING THE USE OF AUTOMATED FRAMES AND ELECTRONIC LOOP PROVISIONING?

A. AT&T appears to take inconsistent positions on this issue. At page 23 of its Panel testimony, it states in part that "some of these manual steps [in the hot cut process], such as the physical work on the frame, are the result of limitations that cannot be eliminated using today's technology . . . ." And also on that page, it

admits that "today's frame technology requires the performance of physical work on the frame in order to accomplish a hot cut."

On the other hand, at page 28, AT&T claims that "[o]ther technology platforms would permit seamless and error-free customer migrations at a fraction of the cost of the error-prone manual processes that will remain even after adoption of the process improvements we propose." However, AT&T does not put forward a description or a proposal related to such alternative "technology platforms," and does not appear to claim that such technology is available currently.

To the extent that AT&T has in mind some form of electronic loop provisioning, it should be noted that AT&T's electronic loop provisioning proposal was rejected by the FCC in the *TRO*, *TRO* ¶ 491, as described in Verizon's initial testimony, and that AT&T has totally failed to pursue the issue by identifying any way in which electronic loop provisioning could be implemented using currently available vendor equipment.

Q. WHAT ARE MCI AND CONVERSENT'S POSITIONS?

A. MCI and Conversent address these issues in somewhat greater detail than AT&T. Mr. Jenkins states, at page 38 of his testimony, that Verizon should make use of Automated Distribution Frames ("ADF") for all-copper loops. Conversent also faults Verizon for not "account[ing] for the efficiencies of Automatic Distribution Frames." (Conversent Panel at 85.)

Q. ARE THESE PROPOSALS VALID?

A. No. As discussed in detail in Verizon's initial testimony, these technologies, although potentially promising in the long run, are not yet at the stage at which they provide a feasible and practicable alternative to manual re-wiring on a distribution frame as a means of migrating mass-market customers between carriers. Below, we amplify our original discussion of this issue by responding to some specific points raised in the initial testimony of AT&T, MCI, and Conversent.

1. Automated Frames

Q. WHAT IS THE CLECS' POSITION ON AUTOMATED FRAMES?

A. MCI discusses automated frames at pages 35-42 of Mr. Jenkins' Responsive Testimony. Its basic position, as set forth on page 37, is that "micro relay and robotic technology has evolved to the point where they are now being utilized for systems that have the ability to automate the manual wiring function in small offices serving less than 10,000 lines." MCI has thus apparently retreated from its original claim that such technology can be utilized in all of Verizon's offices.

Conversent states, on page 86 of its Panel testimony, that "[n]ew technologies making automated distributing frames (ADF) practical have emerged and are being deployed that dramatically reduce the cost and size of electromechanical cross-connects, supporting thousands of any-to-any connections in a single 23-inch wide shelf."

Q. DO YOU AGREE THAT THE TECHNOLOGY REFERRED TO BY MCI CAN IN FACT BE UTILIZED TO "AUTOMATE THE MANUAL WIRING FUNCTION IN

SMALL OFFICES SERVING LESS THAN 10,000 LINES"? (MCI JENKINS RESPONSIVE TESTIMONY AT 37; *SEE ALSO* CONVERSENT PANEL AT 86.)

A. No. As Verizon has described in its initial testimony, robotic devices have been installed in a number of smaller Massachusetts remote offices serving a few thousand lines, none of which have collocation. If these offices had CLECs collocated, the devices would be unworkable even for 5,000 lines, because it may be necessary to terminate each CLEC's entire collocation cable count on each ADF to insure access to all customers that appear on the frame. In an office with multiple CLECs, the number of ADFs and corresponding tie pairs would grow geometrically. Indeed, if there were five CLECs collocated in an office, such robotic devices would unusable even up to 1,500 lines.

Q. IS THIS TECHNOLOGY SCALABLE TO OFFICES GREATER THAN 5,000 LINES?

A. For any true any-to-any connectivity, every pair terminated on the existing main frame must be terminated on the ADF, including every working, spare, cut through, and defective pair. Similarly, in order for the process to work effectively, each and every CLEC collocated in an office would need to build new facilities and terminations for each and every cable pair it had in the office. Putting aside the massive capital outlay that would be required to deploy such devices, the necessary cabling would require a significant up-front cost not only for Verizon but for CLECs, many of whom would benefit only minimally, if at all, from this complete rearrangement of frame cross-connection capability.

Q. BUT MCI APPEARS TO RECOMMEND THE USE OF AUTOMATED FRAMES ONLY IN SOME OFFICES SERVING LESS THAN 10,000 LINES. IS MCI'S POSITION WORKABLE?

A. No. As Verizon pointed out in its initial testimony, any automated cross-connect device would initially have to be pre-wired, which would be a costly process, and particularly inefficient if the automated systems were ultimately utilized on only a small number of lines. Apparently recognizing this fact, MCI states at page 38 of Mr. Jenkins' responsive testimony that "[w]hile it is true that these systems still require the pre-wiring manual work associated with establishing connectivity from the MDF through the automated system, Verizon has overlooked an option that can be beneficial to the hot cut process. Specifically, if a small ADF system were placed into a large central office, designed to manage the CLEC tie cable facilities, it would be possible to prewire hot cut connections manually in advance of the hot cut date, and remotely cut over the lines on the cut-over date without requiring another frame technician dispatch. This approach would free the technician to do additional pre-wiring for other hot cuts while reducing the overall cycle time of the process by providing the capability to handle thousands of hot cuts remotely without respect to the lines per day/per central office/per manager area throttle that Verizon uses to pace demand."

As far as we can understand this proposal, MCI is suggesting that particular subscriber pairs in a larger central office could be pre-wired to small ADFs when the subscriber first migrates to a different carrier.

Q. WHAT, IF ANYTHING, IS WRONG WITH THAT PROPOSAL?

A. Pre-wiring a connection for a specific hot cut or group of hot cuts does not save any of the work, time, or cost associated with a hot cut; it simply permits greater scheduling flexibility by permitting the final step, the actual cut-over, to occur without manual intervention.

Such an alternative could, conceivably, have some value in particular time-critical cut-over applications, but it has no application as a general solution for the mass market. Even under the most effective deployment of currently available ADFs, the total amount of manual wiring work is actually greater because of the necessity for pre-wiring both the end-user's loop and the end-user's Verizon switch port - a minimum of two cross-connections and possibly more as compared to one in a the current process - to the ADF prior to the hot cut. Moreover, MCI's proposal would force Verizon to incur the additional capital costs associated with the automated system (costs that would, of course, ultimately have to be recovered from the CLEC). Whatever additional scheduling flexibility, if any, results from this proposal could be better achieved through Verizon's batch hot cut proposal, and without the extensive capital investment in ADF devices and the additional expenses involved in operating them.

Q. MCI ALSO SUGGESTS, AT PAGES 38-39 OF MR. JENKINS' RESPONSIVE TESTIMONY, THAT A KEY BENEFIT OF ITS PROPOSAL IS THAT ONCE A PARTICULAR SUBSCRIBER PAIR IS WIRED TO THE MINI-ADF, SUBSEQUENT MIGRATIONS COULD BE ACCOMPLISHED WITHOUT ANY FURTHER WIRING ACTIVITY. IS THIS CORRECT?

A. No. All existing CLEC collocation pairs would need to be re-cabled to the ADF device, or they would be stranded at the existing MDF, requiring an even greater pre-wiring effort to get them to the ADF prior to a hot cut. Indeed, in order to facilitate the use of this device on a hot cut basis, every facility-based CLEC with collocation in the central office, as well as at least a portion of Verizon's own office equipment, would need to be connected to the ADF. Additionally, tie cables from the existing MDF – to connect the end-user's loop to the ADF prior to the hot cut - would need to be terminated on the ADF. In terms of the scalability of such devices, the same growth constraints would still exist (a few thousand pairs) as described in Verizon's initial testimony. If, in fact, it became practical to grow the first ADF to additional devices, engineering of the inter-device connections would become an ever-increasing concern, given the requirement to connect any CLEC collocation pair to any subscriber pair terminated on the device(s). Based on the assumption by MCI that "this customer base will have a higher probability of switching again" (MCI Jenkins Responsive Testimony at 39), it can be reasonably concluded that CLECs will need to establish sufficient collocation facilities at the ADF to administer such churn. Therefore, particularly in a large central office, there will be increasing pressure to expand ADFs, leading to a higher cost per termination and less efficient use of these devices. If any ADF were installed without a plan to reserve resources to expand to a second device, significant re-wiring of subscriber and collocation-side pairs would need to take place in order to facilitate the addition of multiple ADF devices.

Q. IF NEW TECHNOLOGY SOLUTIONS EXISTED THAT WOULD FACILITATE THE AUTOMATION OF THE HOT CUT PROCESS, WOULD VERIZON BE AWARE OF SUCH SOLUTIONS?

A. Yes. Verizon continually monitors the industry and the vendor community for new products and solutions that increase efficiency and reduce network costs.

Q. HAS VERIZON CONDUCTED AN INVESTIGATION OF ADF PRODUCTS OR OTHER SOLUTIONS THAT COULD POTENTIALLY FACILITATE THE AUTOMATION OF THE HOT CUT PROCESS?

A. Yes. In 2002 Verizon formally conducted a product selection of ADF products and solicited responses from the vendor community. Based on this evaluation, Verizon selected the NHC ControlPoint? product to meet the requirements for a small/unstaffed remote office application for ADF technology.

Q. DID VENDORS REPLY WITH PRODUCTS OTHER THAN ADF TECHNOLOGY TO MEET THE REQUEST FOR PROPOSAL REQUIREMENTS?

A. Yes. Verizon did receive responses from two non-ADF vendors who proposed a different technology in the RFP. Both Alcatel and AFC proposed their existing Next Generation Digital Loop Carrier ("NGDLC") products, the Litespan 2000 and the Access Max respectively. A team of Verizon subject matter experts reviewed all of the vendor proposals. As part of this review, it was determined that the Alcatel and AFC proposals, which basically assumed a NGDLC device (or devices) in the central office to perform cross-connects, were both cost prohibitive and insufficiently scalable to meet the needs of an automated cross-connect capability for remote offices. In addition, NGDLC products typically

require different cards for specific classes of service, thereby limiting their ability to perform "any port" to "any port" connections. Based on all of these factors, the Alcatel and AFC products were not recommended for this application.

2. Electronic Loop Provisioning

Q. WHAT IS MCI'S PROPOSAL WITH RESPECT TO ELECTRONIC LOOP PROVISIONING ("ELP")?

A. MCI's proposal is discussed at pages 25-35 of Mr. Jenkins' Responsive Testimony. Apparently, MCI is seeking only to require Verizon to implement ELP on "fiber-fed loops served by GR303 compliant IDLC systems." (In contrast, as discussed below, MCI's cost studies assume ubiquitous implementation of ELP, purportedly on the basis of TELRIC principles.)

Q. DO YOU AGREE WITH MCI'S PROPOSAL?

A. No. Electronic Loop Provisioning as proposed by MCI is not feasible or practicable — even for GR-303-compliant systems — for reasons discussed in our initial testimony. (Initial Panel Testimony at 18-20.)

Q. AT PAGES 27-30 OF HIS TESTIMONY, MR. JENKINS DISCUSSES A NUMBER OF OPTIONS FOR MIGRATING CUSTOMERS SERVED BY IDLC-EQUIPPED LOOPS. PLEASE COMMENT ON THESE OPTIONS.

A. The first two options are essentially the ones that Verizon utilizes today. They involve removing the customer's distribution pair from the IDLC system and connecting it to a copper feeder pair or to a UDLC system. Option 3, which involves utilizing the UDLC capabilities of NGDLC electronics, is also utilized today where NGDLC technology is deployed, but it still requires a dispatch to the

Serving Area Interface to move the customer's distribution pair from an IDLC connection to a UDLC connection on the NGDLC electronics. Thus, MCI's Options 1 through 3 do not offer any improvement over current processes for dealing with IDLC loops.

Further, MCI states that its Option 6 is "a very inefficient solution that requires manual work activities to perform and is a technological step backwards as a serving arrangement."

Thus, the essence of MCI's ELP proposal in this proceeding lies in what it identifies as Options 4 and 5. Option 4 entails utilizing "a separate GR-303 Interface Group for the CLEC customers." Under Option 5, Verizon would "[s]hare a GR-303 Interface Group and use the side door port of the switch to transport CLEC traffic out of the ILEC switch."

Q. ARE THESE OPTIONS FEASIBLE AND PRACTICABLE FOR USE IN VERIZON'S NETWORK?

A. No. MCI incorrectly concludes that Option 4 and Option 5 could be used effectively for UNE-P to UNE-L and UNE-L to UNE-L migrations. But as Verizon explained in its initial testimony, the use of multiple GR-303 interface groups from a single NGDLC system is not currently feasible nor has such an option been implemented by any carrier or vendor for the purpose of unbundling IDLC loops.

Similarly, as part of its discussion of Option 5, MCI claims that a shared GR-303 interface could be used in conjunction with a LDS side door capability to rearrange CLEC DS0s to a CLEC DS1. While Mr. Jenkins routinely refers to the use of a LDS side door port in this Option, MCI fails to recognize the complexity

and the resource impacts of administering side door capability in a switching environment. Side door port (sometimes referred to as hairpinning) is a capability that is not currently deployed in Verizon's network. From a hardware perspective, hairpinning requires the use of two DS0 channels on the same switch interface unit in order to effectively route a DS0 channel "in" and "out" of the switch line unit. In addition, a DS1 outbound port, (containing the DS0 channels) must be established on the switch line unit and an additional hardware element, such as a D4 channel bank or a 1/0 digital cross connect system, must be utilized to terminate the DS1 in order to provide DS0 channel connections to the CLEC. Most importantly, there are no OSS capabilities to support hairpinning as an unbundling tool. At a minimum, hairpinning would require OSS developments in Verizon's ordering, provisioning, and maintenance systems, including enhancements for LFACS, SWITCH and TIRKS. For these reasons, hairpinning is not utilized by Verizon for its retail or wholesale services, and Verizon can find no evidence that hairpinning has been adopted by the industry.

Q. IS MCI CORRECT THAT TELCORDIA PROVIDES VIABLE OPTIONS FOR THE UNBUNDLING OF IDLC LOOPS? (MCI JENKINS AT 28-29.)

A. No. MCI cites an October 2000 Telcordia document to support its position. Telcordia's work program documentation for 2001 noted that "*new requirements* are needed to support alternative distribution technologies . . . as well as new

services and applications (*e.g., . . . local loop unbundling*)."[9/] Throughout 2003, Telcordia continued to maintain that technological barriers make unbundling using GR-303 infeasible. In its updated web site devoted to GR-303, Telcordia continues to refer to GR-303 "implementation issues," acknowledging that the industry has yet to "resolve implementation issues related to GR-303 NG-IDLC systems."[10/] The lack of reported progress in the industry over the last few years highlights the fact that no technological progress has been made by the manufacturers or others in the industry on unbundling using IDLC technology with the GR-303 interface, so that UDLC remains the only viable fiber loop technology for provisioning stand-alone loops.

Q. MCI CLAIMS THAT ITS PROPOSAL IS DIFFERENT FROM AT&T'S ELP PROPOSAL REJECTED BY THE FCC. (MCI JENKINS AT 34-35.) DO YOU AGREE?

Although MCI's electronic loop provisioning proposal differs in some respects from AT&T's ELP proposal rejected by the FCC, MCI's version of ELP leads to the same conclusion – it requires the existence of a network that does not exist in Massachusetts or anywhere else. Notwithstanding the small percentage of IDLC in Verizon's network, MCI assumes the existence of a GR-303-based NGDLC network in order to implement its ELP proposal. Beyond this

9/ GR-303 Integrated Access Platforms – 2001 Work Program Information," Telcordia Technologies, at 1, available at http://www.telcordia.com/resources/genericreq/gr303/proram.html (last visited Jan. 12, 2003) (emphasis added).

10/ http://www.telcordia.com/resources/genericreq/gr303/ (last visited Jan. 12, 2003).

capability, MCI assumes deployment of other options in order to make ELP feasible. Thus, MCI's ELP proposal shares many of the same characteristics that led the FCC to conclude that the feasibility of AT&T's ELP has not been established, thereby rejecting AT&T's ELP proposal. *See TRO* ¶ 491.

Q. MCI STATES THAT BELLSOUTH HAS ADOPTED ONE OF THE TWO "NON DISPATCH OPTIONS" LISTED IN THE TELCORDIA DOCUMENT AS A VIABLE ALTERNATIVE. (MCI JENKINS AT 67.) WHAT IS YOUR RESPONSE?

A. BellSouth identified eight alternative options for provisioning IDLC loops to CLECs via hot cuts in its Florida testimony. One of those options – Option 5 in Mr. Ainsworth's testimony (p. 27) – states that, when IDLC terminates at a switch peripheral that is capable of serving "'side-door/hairpin capabilities,' BellSouth will utilize this switch functionality."

First, it should be noted that this option is the fifth of eight options that BellSouth lists in order of increasing complexity and cost. The first options that BellSouth uses to provision hot cut orders on IDLC loops (its Alternatives 1-4) are the same sort of substitution of copper or UDLC for IDLC facilities that Verizon employs. Thus, while BellSouth may consider this "hairpinning" alternative to be "feasible," it does not, as MCI proposes, employ it every time a hot cut is requested on an IDLC loop. In fact, the document suggests that BellSouth would use this option only when the majority of the alternatives had been exhausted. Even if Verizon were to employ BellSouth's alternatives, Verizon would not need to resort to such an expensive and inefficient alternative, however. This is

because less than 1% of the terminals in Massachusetts are served only by IDLC and thus, in less than a fraction of 1%, a copper or UDLC alternative would be available.[11/]

Second, BellSouth's testimony indicates only that the company will employ this alternative when the necessary switch functionality is available. It is unclear from the testimony when BellSouth expects such functionality to be available.

Finally, regardless of BellSouth's engineering judgments, as explained above, Verizon does not utilize such hairpinning because it significantly reduces switch line unit capacity, the need for associated OSS enhancements and the cost prohibitive nature of this approach.

III. RESPONSE TO CLEC CRITICISMS OF VERIZON'S HOT CUT PROCESSES

A. AT&T CRITICISMS OF LARGE JOB PROCESS

Q. AT&T SPENDS A CONSIDERABLE AMOUNT OF TIME CRITICIZING VERIZON'S PROJECT HOT CUT PROCESS. (*SEE, E.G.* AT&T PANEL AT 7-45.) WHAT IS YOUR REACTION TO THESE CRITICISMS?

A. We are frankly at a loss to understand why AT&T spends so much time criticizing the project process and suggesting improvements for it when Verizon has introduced a new process that addresses many of AT&T's criticisms and implements many of AT&T's proposed improvements. As we explain further below, all of AT&T's criticisms are either addressed by Verizon's proposed batch process or not valid.

11/ In the highly unlikely event Verizon did encounter such a situation, it would build more copper or UDLC facilities to provision the CLEC's order.

Q. HAS VERIZON ALREADY ADDRESSED AT&T'S CRITICISMS OF THE PROJECT PROCESS AND IMPLEMENTED MANY OF THE IMPROVEMENTS AT&T PROPOSES?

A. Yes. First, AT&T notes the "various capacity limitations and restrictions" involved in the hot cut process (AT&T Panel at 28) and proposes modifying or eliminating those constraints (*id.* at 29). In particular, AT&T complains about the limitation for the project process of one central office per manager's area, and two central offices per geographic area on any given night, as well as the project process's minimum and maximum line limitations. (AT&T Panel at 21-23.) Verizon's proposed batch hot cut process, however, does not contain these restrictions. Indeed, the hallmark of the batch process is that CLECs can batch lines across COs, and that "batches" can be as small as one line. Likewise, Verizon's batch process handles batches that span multiple collocation arrangements. (*See* AT&T Panel at 22-23.) Even for CLECs that use the project process however, Verizon has indicated a willingness to review and revise the policy, or to waive it on a case-by-case basis if it proves to be unnecessarily restrictive. (Initial Panel Testimony at 29-30.)

Second, AT&T expresses concern regarding the "manual processes, unnecessary steps, and multiple handoffs that are involved in the project hot cut process" (AT&T Panel at 23) and argues that the process should involve fewer manual steps and incorporate greater automation (*id.* at 30). But Verizon's proposed batch process eliminates many manual steps and is premised on greater automation. For example, while the project process once employed a

"project spreadsheet," the spreadsheet is not part of the batch process, and Verizon has agreed to eliminate the use of the spreadsheet even for the project process, something that even AT&T acknowledges. (AT&T Panel at 11.) AT&T also argues that the step of contacting the CLEC prior to the final cut should be eliminated (AT&T Panel at 41), but under Verizon's proposed batch process, that communication takes place through WPTS, eliminating the need for a phone call. The batch process eliminates the MLT test that AT&T claims is not necessary. (AT&T Panel at 24; *see also* Conversent Panel at 94.)[12/]

Verizon's proposed batch process eliminates still more manual processes, such as the Due Date minus 2 (DD-2) testing and multiple phone calls between Verizon and the CLEC. As explained further below, Verizon is also willing to work with the CLECs on further mechanization of the batch process, such as by making further use of WPTS. (*See* AT&T Panel at 36-40, 42.)

1. WPTS

Q. WHAT IS THE CLECS' APPARENT ATTITUDE TOWARDS WPTS?

A. The CLECs appear to support it. Indeed, AT&T states, at page 45 of its Panel testimony, that the Panel recommends "enhanced usage of WPTS," a recommendation that we take as a compliment to the system. AT&T goes on to state that "WPTS can serve both as an interface for communications between

12/ Verizon would be willing to eliminate both the phone calls and the MLT test from the project process as well, should the CLECs desire it. Verizon asks, however, that the Department assure that Verizon's obligations in this respect are clearly stated, and that no cost of phone calls or of a testing process that Verizon is *required* to perform be disallowed on the grounds that such additional testing is not "efficient" under TELRIC standards.

Verizon and CLECs and as a mechanism for relaying orders and information from one Verizon work center to another." (AT&T Panel at 33.) No CLEC suggests that WPTS is wasteful, inefficient, or "gold plated"; if anything, their recommendations are, in essence, "give us more of the same." (*See, e.g.,* AT&T Panel at 30, recommending "improved usage of WPTS from the beginning to the end of the bulk hot cut process"). Conversent states that it has "no immediate problems with the manner in which Verizon is provisioning Conversent's hot cuts," including its use of WPTS. (Conversent Panel at 76.)

This impression that the CLECs support WPTS is confirmed by statements CLECs have made before other state commissions. For example, in a recent filing with the Colorado Public Utilities Commission, MCI recommended that "Qwest should develop an electronically bonded and on-line system for communicating with CLECs similar to the Verizon [WPTS]."[13/] In a California hot cut workshop, an MCI representative identified WPTS as "a very robust system from my perspective," admitted that "one of the recommendations we made to SBC in the Ohio collaborative was that they look at WPTS," and stated that "we're moving our folks onto WPTS because we do believe that it will – that the less you have to send email or faxes or phone calls, the better that we can

13/ "MCI's Response to Qwest's Proposal for Region-Wide Batch Loop Conversion Process" (Colorado PUC Docket No. 03I-485T) (November 18, 2003), at 10 (footnote omitted). In the footnote, MCI added a boilerplate disclaimer indicating that its reference to WPTS "does not mean that MCI considers that system in its presently identified status to be ideal or acceptable to MCI."

manage this process, particularly in seeing the status of that cut rather than waiting for jeopardy notifications."[14/]

In a Florida workshop, when MCI's witness was asked what MCI would like to see in a batch hot cut process, the witness stated: "MCI would certainly like to see Bell South take look at WPTS system and see how they could implement something similar." "We are clearly concerned in Bell South process with the fact that we can't see time, what window the cut take place and fact that we get fax or e-mail and maybe developing online system like WPTS would help."[15/]

Despite these endorsements of WPTS in proceedings involving other RBOCs, AT&T continues to criticize the system, identifying a number of respects in which WPTS is supposedly deficient, and in which it should be improved.

Q. PLEASE EXPLAIN THE "PUSH" CAPABILITY FOR WPTS THAT AT&T PROPOSES.

A. As we explained in the Initial Panel Testimony, WPTS allows CLECs to view the status of their orders in real-time. It automatically retrieves information on hot cut orders from Verizon's OSS, and at appropriate points, automatically forwards work for review and verification to the CLEC and to Verizon's RCCC. (Initial Panel Testimony at 21-22.) On WPTS, CLECs can view and download status

---

[14/] California Public Utility Commission Rulemaking 95-04-03 and Investigation 95-04-044, Collaborative Workshop on Batch Hot Cut Processes (November 17, 2003), Tr. 2411-12.

[15/] TRO Hot Cut Workshop (November 28, 2003) (quotations transcribed from audio tape).

information and can send messages to and review messages from Verizon, eliminating the need for most telephone calls. (*Id.*) WPTS thus goes a long way in improving and automating communication with the CLECs so that CLECs can timely perform whatever tasks are necessary for them to ensure a successful hot cut.

Nevertheless, some CLECs, including AT&T and Conversent, have expressed interest in equipping WPTS with an "electronic push" that would move the information currently housed on WPTS directly into the CLECs' systems. In general, a CLEC obtains information from WPTS by submitting a query to the system. (AT&T Panel at 30; Conversent Panel at 78.) In order to obtain updated information, the CLEC has to either (a) submit a new query, or (b) "refresh" the display. Either option involves pushing at least one key on a keyboard. CLECs would prefer to have the information electronically "pushed" to their systems.

Q. IS PUSHING A BUTTON TO REFRESH A DISPLAY AN INORDINATE BURDEN FOR CLECS?

A. We do not believe so. Certainly we can understand the additional convenience that the CLECs desire, but we do not believe that that level of convenience is an absolute necessity for what the FCC describes as a "seamless" hot cut process, or warrants disapproval or mandated modification of the existing process. Like many proposals for improving an existing process, this is an issue that should be handled through available industry forums — in this case, Change Management. "Push" is not a vital pre-requisite for an effective hot cut process, or a "stop the presses" necessity that must be implemented immediately.

Q. IS IMPLEMENTATION OF A "PUSH" OPTION NECESSARY TO PROVIDE CLECS WITH ELECTRONIC ACCESS TO DATA FROM WPTS?

A. No. Verizon has already implemented, in response to CLEC requests, the ability to download data from WPTS into an electronic file in Excel format. This data can then be input into CLEC systems. Thus, it is *not* the case that absent a push capability, CLECs would be required to manually transcribe data from a WPTS screen, and then manually key that data into their systems.

Q. WOULD THE IMPLEMENTATION OF A "PUSH" OPTION REDUCE VERIZON'S HOT CUT COSTS, AND THEREFORE ITS RATES?

A. No. This is strictly an issue of the level of "functionality" provided to the CLECs, not an issue of the efficiency of Verizon's hot cut provisioning processes. If anything, development of a push capability would cost something — and perhaps a lot — and therefore would increase Verizon's overall costs and, obviously, the rates chargeable to CLECs.

Q. THE "PUSH" ISSUE RELATES TO THE MANNER IN WHICH DATA IS OBTAINED FROM WPTS. DO THE CLECS HAVE ANY CONCERNS ABOUT THE MANNER IN WHICH DATA IS ENTERED INTO WPTS?

A. Yes. AT&T vaguely complains about "the manual updates necessary to WPTS" (AT&T Panel at 14), and argues that ". . . Verizon's OSS should automatically populate into WPTS the information for each line cut in a project after service orders have been created." (AT&T Panel at 39.) At page 54, AT&T states that "SOP and WPTS should communicate with each other. Data from SOP concerning project item information should be automatically imported into WPTS

so that interested parties, including the CLEC, can stay on top of project details and respond appropriately to developing problems." Likewise, Conversent states, at page 77 of its Panel testimony, that WPTS should be "part of the front end of the LSR process."

Q. ARE THESE VALID CRITICISMS?

A. No. WPTS has always been able to download service order information automatically once the orders appear in Verizon's provisioning systems. WPTS both interfaces *directly* with SOP and draws on systems that in turn derive their information from SOP. Thus, WPTS is fully and automatically updated with all relevant information that is available from SOP. Exhibit 7 illustrates the manner in which WPTS interacts directly and indirectly with Verizon's OSS.

Q. IN GENERAL, UNDER WHAT CIRCUMSTANCES WOULD DATA NEED TO BE ENTERED INTO WPTS MANUALLY, AND WHY?

A. When an order's status changes as a result of work that is performed manually rather than by an automated system, WPTS in turn will have to be updated manually. For example, once a frame technician completes the wiring work necessary to cut over a line, the completion notification will have to be entered manually into WPTS. Similarly, the results of a frame technician's check for CLEC dial tone (which takes place on DD-2 in both basic and large job hot cuts) would have to be entered manually into WPTS. However, where Verizon's OSS "know" of a relevant change in the status of a hot cut order, that information is used to update WPTS automatically.

Q. AT&T AND CONVERSENT ALSO CLAIM THAT CLECS AS WELL AS VERIZON SHOULD BE ABLE TO INPUT UPDATED INFORMATION INTO WPTS. (AT&T PANEL AT 39; CONVERSENT PANEL AT 78.) IS THAT A VALID CRITICISM?

A. No. CLECs *can* enter certain information, such as a Go/No-Go indication on the due date, directly into WPTS. WPTS is an interactive system in that all parties involved in hot cuts (RCCC, Central Office, and the CLEC) have the ability to enter information and communicate with each other using the system. However, it should be noted that WPTS was designed to be a provisioning system, not an ordering system. Therefore, any changes to the order itself must be effected through the submission of a supplemental LSR, rather than simply through the entry of revised order information into WPTS.

Q. AT PAGE 42 OF ITS PANEL TESTIMONY, AT&T ARGUES THAT "VERIZON'S FRAME TECHNICIANS SHOULD BE GIVEN ACCESS TO WPTS SO THAT THEY CAN UPDATE THE SYSTEM WITH PROJECT COMPLETIONS ON A REAL TIME BASIS, THEREBY ELIMINATING REDUNDANT CALLS TO THE RCCC FOR WPTS UPDATES." DO YOU AGREE?

A. We agree as to the value of such a process, which is why we have already implemented it. The majority of frame technicians in Massachusetts can now access WPTS, and enter information into it, through terminals in their work areas. In addition, Verizon is trialing the possibility of providing frame technicians with handheld devices through which they would be able to access WPTS. It should

also be noted that Verizon's cost study, through the use of Forward Looking Adjustment Factors ("FLAFs"), incorporates the assumption that frame technicians are already equipped with such devices.

2. The Use of Negotiated Intervals in the Large Job Process

Q. WHAT PROBLEMS DOES AT&T DISCERN IN THE MANNER IN WHICH A LARGE JOB PROJECT IS INITIATED?

A. As explained in Verizon's initial testimony, a large job project is initiated when a CLEC contacts Verizon to discuss the parameters of the project, a PON is assigned by Verizon, and a due date for the project is negotiated. AT&T finds this process unnecessary and inefficient. At page 35 of its Panel testimony, AT&T states that "[i]nstead of the current practice of placing a phone call to [the NMC], a CLEC should input directly into WPTS the scope of the project it wants Verizon to perform."

Q. PLEASE COMMENT ON AT&T'S PROPOSAL THAT "A CLEC SHOULD INPUT DIRECTLY INTO WPTS THE SCOPE OF THE PROJECT IT WANTS VERIZON TO PERFORM." (AT&T PANEL AT 35.)

A. In essence, this is what the CLEC does do when it submits the LSRs for the project, bearing the project PON. The information in those LSRs will be used to automatically populate WPTS. The purpose of the initial discussion between the CLEC and Verizon is not to collect data for populating WPTS, but to assign an appropriate interval in light of the anticipated dimensions of the project and the resources available in the central office in which the project will be carried out.

Q. WHY IS THE DUE DATE NEGOTIATED?

A. As indicated in Verizon's initial testimony, the negotiation process enables Verizon to schedule projects in a way that makes the most efficient use of its workforce. The factors that bear on project scheduling are complex enough that no simple algorithm can be used to set a due date automatically. As experience accumulates and demand increases, we would be willing to evaluate, through the Change Management process, the costs and benefits of establishing a system similar to the SMARTS clock for scheduling large job orders.

3. Treatment of IDLC Loops in Project Process

Q. AT&T FAULTS VERIZON'S PROJECT HOT CUT PROCESS FOR FAILING TO INCLUDE CUSTOMER LINES THAT ARE NOT SERVED ON COPPER. (AT&T PANEL AT 18-19) HOW DO YOU RESPOND?

A. We discuss in detail in the initial Panel Testimony the reasons that IDLC loops are not eligible for inclusion in the project or batch process. *See* initial Panel Testimony § II.B.2. But it also bears noting here that AT&T's description of Verizon's handling of non-copper served loops in the project process is factually incorrect. First, AT&T complains that Verizon's loop make-up database does not always accurately represent the facilities that Verizon is using to provide service to a customer. (AT&T Panel at 19.) But AT&T raised the same issue in the New York hot cut proceedings, only to later admit that there are inaccuracies in Verizon's database only .5% of the time.[16/]

[16/] New York VZ-ATT-42 (attached as Exhibit 8).

Second, AT&T claims that when one line in an order is on IDLC, the entire order must be removed from the project and cut at a later date. (AT&T Panel at 19-20.) But, during the New York workshops, Verizon proposed to discontinue its policy of requiring CLECs to submit supplemental LSRs for any IDLC lines from a large job. As Verizon explained in its initial Panel Testimony, Verizon now will automatically remove IDLC-equipped lines from project jobs, and will convert them to basic hot cut orders without requiring the CLEC to submit a supplemental LSR. Where feasible, Verizon would make the cut of the IDLC loops by the negotiated due date for the large job process. (initial Panel Testimony at 28.) Thus, AT&T's criticisms of the limitations on non-copper loops in the project process are unfounded.

4. Parity in UNE-L to UNE-L Migrations

Q. WHAT IS YOUR RESPONSE TO AT&T'S ARGUMENT THAT CLECS ARE NOT "IN PARITY" WITH VERIZON IN CLEC-TO-CLEC MIGRATIONS? (AT&T PANEL AT 43-44.)

A. AT&T's criticism of this aspect of the project process is premised on the incorrect assumption that Verizon always has circuit identification information for all loop facilities, while CLECs do not. In order to perform a hot cut, Verizon must identify the loop facility that is to be cut over from one switch provider to another. When the loop being cut over is a Verizon retail loop, the customer (or, more precisely, his or her telephone number) is linked with the facility in Verizon's databases, so Verizon is able to locate the circuit identification information. But when the loop is initially a UNE-L that is being utilized by a facilities-based CLEC, Verizon has

no record of the CLEC's end-user customer. This is because Verizon does *not* record or store any subsequent changes to the circuit information that may be made by the CLEC. There is no Verizon database that cross-references migrated telephone numbers with circuit identification numbers. Rather, Verizon only has a record of the particular loop facility and of the fact that that facility is being used by a particular CLEC. Verizon has no way of associating the customer identification information on the LSR (such as the end-user's telephone number) with the particular loop facility that must be cut over. Accordingly, existing business rules require the CLEC ordering the hot cut (i.e., the CLEC that has "won" the customer) to provide circuit identification (or "TXNU") information on the LSR.

In general, the "winning" CLEC does not have this information, and must therefore obtain this information from the "losing" CLEC. Unfortunately, not infrequently, losing CLECs fail to comply with this requirement, thus preventing the completion of the hot cut. Although this may be a concern, it is not one that can be resolved by any improvement in Verizon's hot cut processes or that reflects a lack of parity in favor of Verizon. For the reasons explained above, Verizon faces *precisely* the same problem when it wins a customer from a CLEC, and as a result must frequently provision such winbacks by installing new lines, rather than by utilizing a "reverse hot cut" process. AT&T's claims of discrimination are therefore unfounded.

B. CLEC CRITICISMS OF THE BATCH HOT CUT PROCESS

1. General

Q. AT&T LEVELS MANY CRITICISMS AGAINST VERIZON'S PROPOSED BATCH PROCESS, AND ULTIMATELY CONCLUDES THAT THE BATCH PROCESS "PROVIDES NO ADVANTAGES OVER ITS PROJECT PROCESS." (AT&T PANEL AT 45.) WHAT IS YOUR RESPONSE?

A. First, it should be noted that no other CLEC has made this claim. Indeed, MCI praises Verizon's proposal to notify NPAC, a key element of the batch proposal. Second, as we explain in further detail below, none of AT&T's purported concerns with the batch process holds water. Verizon's batch process offers a sensible alternative for CLECs that desire lower cost hot cuts. To the extent certain aspects of Verizon's hot cut proposal do not mesh with AT&T's particular business needs, that is no reason to reject the batch process. As Verizon has explained, it offers CLECs a menu of choices to fit their particular needs; to the extent AT&T requires handling not included in the batch process, it is free to use the basic or project processes.

2. Lack of CLEC Control

a) Ability to Make Changes

Q. AT&T ARGUES THAT VERIZON'S PROPOSAL TO EMPLOY THE UNE-P-LIKE SERVICE LIMITS THE ABILITY OF CLECS TO MAKE CHANGES TO THEIR CUSTOMERS' ACCOUNTS. (AT&T PANEL AT 47.) WHAT IS YOUR RESPONSE?

A. First, we note that AT&T claims that Verizon's proposal limits their ability to make changes for up to 35 days. (AT&T Panel at 47.) But, as AT&T is aware through its participation in other batch hot cut proceedings, Verizon has agreed to modify

the 10-35 day holding period to 6-26 business days. It is true that CLECs will not be able to make changes during the 6-26 days while the batch order is pending against the line, but this same situation exists today for all pending Verizon wholesale and retail service orders, to prevent provisioning issues that may arise if two orders overlap.

This does not mean, however, that CLECs will not be able to make changes to their account. Indeed, the CLECs will have multiple opportunities to make changes. First, CLECs can make changes to the existing account by submitting a "as specified" order for the UNE-P-like service. This ensures the CLECs ability to induce customers to switch providers by offering them new features and services. After the UNE-P-like order is complete and before the CLEC has issued the batch LSR, CLECs will have another opportunity to change the account by issuing a change order against the "UNE-P- like" line. Finally, after the CLEC has issued the batch LSR, the CLEC can make any necessary changes by canceling the first batch LSR and issuing a new LSR. Indeed, it is possible that no delay would result from the cancellation of one LSR and submission of another; if the central office does not reach "critical mass" before the new LSR is submitted, the line would still be cut on the same day that it was originally scheduled to be cut. In any event, given the short period of time between the initial order and the batch cut, the need for CLECs to make changes should be rare.

Q. AT&T ARGUES THAT THE INABILITY TO MAKE CHANGES DURING THE HOLDING PERIOD IS TROUBLESOME BECAUSE VERIZON COULD

ENGAGE IN "WINBACK" MARKETING ACTIVITIES. (AT&T PANEL AT 49.) WHAT IS YOUR REACTION?

A. AT&T's professed concern demonstrates its lack of understanding of the reason for the limitation on the ability to make changes. As Verizon explained above, the rule that no changes can be made to an account that has an LSR pending against it applies to *all* carriers, including Verizon. Thus, Verizon will not be any more able than any other carrier to submit an order against an account that has a pending batch cut order pending against it.

b) Timing of Batch Cut

Q. AT&T EXPRESSES CONCERN THAT THE BATCH PROCESS "ELIMINATES THE ABILITY OF A CLEC TO CONTROL" THE TIMING OF THE CUT. (AT&T PANEL AT 49.) IS THIS TRUE?

A. No. As described in Verizon's Initial Panel Testimony, Verizon will notify CLECs of the cut-over date for a request six days prior to performance of the actual cut. CLECs will then be required to give Verizon a sign-off (*i.e.*, a "go/no-go" indication) through WPTS three days prior to the scheduled cut-over date. (*See* Verizon's initial Panel Testimony at 32-33.) The sign-off will verify that there is dial tone on the CLEC facility that will be used to serve the customer. Moreover, one of the benefits of the batch process is that the work is not limited to one or two shifts, but rather can be done late at night. The concerns AT&T expresses with regard to the out-of-service period for under the batch cut are therefore not warranted. If AT&T for some reason needs to schedule the exact time that a

particular hot cut should be performed, it can simply request that the hot cut be performed through one of Verizon's other non-batch hot cut processes, the basic or the large job process.

Q. AT&T ALSO COMPLAINS THAT THE LACK OF CLEC CONTROL OVER THE SEQUENCE IN WHICH THE LINES OF A MULTI-LINE ORDER ARE CUT UNDER THE BATCH PROCESS IS A PROBLEM. (AT&T PANEL AT 57.) IS THIS A VALID CONCERN?

A. No. AT&T fails to explain this concern in any detail and it is unclear why AT&T would need or want to control the *sequence* of cut-overs within a batch hot cut order. Indeed, the *only* example AT&T offers where the ability to control the sequence would matter is the migration of a business customer with a "hunting" feature. (AT&T Panel at 57.) But the batch process is intended to provide efficiencies for mass market customers who are likely to have only a few lines, not the type of large business customers that are likely to have "hunting" features. In any event, because the batch process would be performed late at night, it is unlikely to disrupt service even if the customer did have a hunting feature. Again, if AT&T has some special business need to control the sequence in which lines of a multi-line order are cut, it may simply request the basic or large job hot cut processes. As discussed in Verizon's initial Panel Testimony, both the basic and large job hot cut processes are scalable and capable of handling a large volume of customer hot cut orders.

c) Notification of NPAC

Q. AT&T EXPRESSES CONCERN THAT VERIZON WILL NOT CONTACT THE NUMBER PORTABILITY ADMINISTRATION CENTER IN A TIMELY MANNER. (AT&T PANEL AT 51.) IS THIS A VALID CONCERN?

A. No. AT&T has no basis for its professed concern with regard to Verizon's proposal to submit NPAC changes on CLECs' behalf. Verizon has significant experience in handling NPAC transactions and, therefore, this aspect of Verizon's proposal poses no risk to end-user customers. Moreover, as part of the batch hot cut process, CLECs will be notified in advance of the cut that the cut will take place on a specific day. This is to ensure that CLECs have taken appropriate steps to make the cut successful, including creating the port message for NPAC and making sure their dial tone translations are set. In addition, on the day of the cut, WPTS will be updated as each work event is completed. The CLEC will be able to view the status of each order in real time. No matter *who* submits NPAC changes, the CLECs will still be able to monitor the process.

Notably, concern about Verizon's activation of the port on behalf of the CLEC is unique to AT&T; MCI, by contrast, has specifically praised this feature of the Batch process and asked Verizon to explore importing it into the basic process. In its Responsive Testimony, MCI states that it "support[s]" this "proposed process change, by which Verizon would submit the final number port notification to NPAC, reducing the coordination that needs to take place between Verizon and the CLEC on the due date." (MCI Jenkins at 54.) MCI goes on to

state that it "would like Verizon to explore handling the NPAC transaction in a similar fashion for all hot cuts, not just batch hot cuts." (MCI Jenkins at 54.)

Q. AT&T COMPLAINS THAT AS PART OF VERIZON'S BATCH HOT CUT PROPOSAL IT WILL BE UNABLE "TO MONITOR THE QUALITY OF THE CUT DURING THE CRITICAL PERIOD BETWEEN THE CUT-OVER OF THE LOOP AND THE ACTIVATION OF THE NUMBER PORT AT NPAC." (AT&T PANEL AT 51.) WHAT IS YOUR RESPONSE?

A. Verizon's batch process will provide CLECs with the same information through WPTS that they receive today as part of the basic and large job processes. Thus, the CLECs will still be able to monitor the hot cut between the cut-over of the loop and the activation of the number at NPAC. Armed with this information, CLECs will remain able to test for connectivity after the line is cut and before the number port is activated at NPAC. (*See* AT&T Panel at 52.)

3. IDLC Loops

Q. THE CLECS CLAIM THAT THE BATCH HOT CUT PROCESS OR A MASS-MARKET HOT CUT PROCESS MUST INCLUDE LOOPS PROVISIONED ON IDLC. (*SEE, E.G.*, AT&T AT 78.) WHAT IS YOUR REACTION?

A. Verizon's initial Panel Testimony demonstrates that IDLC loops cannot be handled through the large job or the proposed batch hot cut processes because there is no technically feasible, practicable means of obtaining access to individual voice-grade loops at the central office when such loops are provisioned over an IDLC system. (*See* Verizon initial Panel Testimony at § II.B.2.) This does not mean that there is no "bulk" method for migrating such loops. As

explained in our initial Panel Testimony, each of Verizon's three hot cut processes (basic, large job, and batch) is capable of handling large volumes of lines *(i.e*., "bulk" orders). *See* Verizon initial Panel Testimony, at Part II.

Q. WHAT IS YOUR RESPONSE TO MCI'S PROPOSAL WITH RESPECT TO ELECTRONIC LOOP PROVISIONING ("ELP") OF IDLC LOOPS?

A. Our response is discussed in detail above. *See* Section II-B-2.

4. CLEC-to-CLEC Migrations

Q. MCI AND AT&T FAULT THE BATCH HOT CUT PROCESS FOR NOT HANDLING CLEC-TO-CLEC MIGRATIONS. (MCI JENKINS RESPONSIVE TESTIMONY AT 51; AT&T AT PANEL 60.) IS THIS CORRECT?

A. No. The batch hot cut process does not prohibit including CLEC-to-CLEC migrations as such in the batch process. CLEC UNE-P to CLEC UNE-L migrations, for example, are eligible for batch treatment. However, the batch process cannot be used for CLEC UNE-L to CLEC UNE-L migrations.

Q. WHY IS THAT?

A. A key part of the batch hot cut process is Verizon's submission of the final port notification to NPAC. In order for Verizon to be able to do this in the context of a migration to UNE-L from UNE-P, resale, or Verizon retail, Verizon must submit a trigger order to NPAC, and the UNE-L provider (*i.e.*, the new local service provider) must create the initial port notification with NPAC. Further, the dates on the trigger order and on initial port notification must be changed when notice of the new due date is given on DD-6. Finally, Verizon must send NPAC the final port notification.

In the case of a CLEC UNE-L to CLEC UNE-L migration, the trigger order would have to be created by the old local service provider. However, the old local service provider has no incentive to cooperate with the batch hot cut process. Thus, it is possible that the trigger order would never be created. Moreover, in a CLEC UNE-L to CLEC UNE-L migration, Verizon would not be able to determine whether the trigger order had in fact been submitted and the port was ready to be activated. This situation is rife with possibilities for putting customers out of service. Moreover, Verizon is not willing to become involved in disputes between the old and new CLECs concerning the submission of information and authorizations to NPAC. Accordingly, Verizon has proposed to exclude such migrations from the batch process. CLEC UNE-L to CLEC UNE-L migrations can, however, be handled through both the basic hot cut process and the large job hot cut process.

5. Issues Related to Hot Cuts On Split and Shared Loops

Q. COVAD INSISTS THAT VERIZON MUST DEVELOP, TEST, AND IMPLEMENT "A PROCESS TO PERFORM HOT CUTS TO MIGRATE EFFICIENTLY AND ECONOMICALLY A UNE-P LINE SPLITTING ARRANGEMENT." (COVAD AT 4.) WHAT IS THE RELATIONSHIP BETWEEN THE BATCH HOT CUT REQUIREMENTS OF THE *TRO* AND LINE SPLITTING OR LINE SHARING?

A. The *TRO* discusses hot cuts in general, and batch hot cuts in particular, as a means to migrate "mass market" customers served by Verizon-provided loops from one local circuit switch to another. (*See* 47 C.F.R. §§ 51.319(d)(ii), 51.319(d)(ii)(A).) Thus, the batch hot cut requirements of the *TRO* do not apply

to line sharing or line splitting arrangements because these arrangements do *not* involve the mass migration of local circuit-switched customer lines from one carrier to another, but rather involve non-switched data service. DSL service, whether provided on a line-split or line-shared loop, does *not* rely on circuit switching. Not surprisingly, then, although the *TRO* discusses the issue of hot cuts at length, there is absolutely no mention of any need for a batch process specific to customers receiving data service via line splitting or line sharing arrangements. Indeed, the *TRO* explicitly separates hot cut issues and line splitting issues. While Rule 319(d)(ii) addresses requirements relating to batch hot cut processes, line sharing requirements are separately set forth in Rule 319(a)(1).

Not only did the FCC *not* require line splitting issues to be addressed in the context of a batch hot cut inquiry, but it specifically "encourage[d] incumbent LECs and competitors to use existing state commission collaboratives and change management processes to address OSS modifications that are necessary to support line splitting."

Thus, the Department should resist the implicit invitation in Covad's testimony to turn this case into a broad-ranging inquiry into provisioning and other issues related to line sharing and line splitting.

Q. HOW MANY LINE SHARING AND LINE SPLITTING ARRANGEMENTS ARE CURRENTLY IN PLACE IN MASSACHUSETTS?

A. The number of such lines is relatively small. *See* Exhibit 9, which provides in-service quantities for December 2003 (the last month for which both line sharing and line splitting statistics were available).

Q. SHOULD VERIZON BE REQUIRED TO DEVELOP OSS AND OTHER PROCESSES THAT WOULD SUPPORT VOICE MIGRATIONS ON LINE SHARING OR LINE SPLITTING ARRANGEMENTS WITHOUT DISCONNECTING THE DATA SERVICE?

A. If the volumes of split and shared arrangements remain at or near their present levels, there would be little need for any modification of the Verizon OSS. If, on the other hand, the CLECs believe that volumes will increase, and if as a result they want to propose changes to Verizon's OSS, then they can do so pursuant to the well-established Change Management process, as the FCC specifically contemplated in the *TRO*. Indeed, permitting CLECs to raise the line splitting issue in this proceeding would only encourage an end-run around the agreed-to and approved Change Management process. That business-to-business avenue for resolving issues between ILECs and CLECs will fail if CLECs do not utilize it before resorting to litigation before the Department.

Indeed, the Change Management process is already underway. Covad has already submitted a Change Management proposal that would implement OSS to support various voice migration scenarios involving shared or split loops, and that proposal is currently under consideration in Change Management.

Q. HOW WILL VERIZON HANDLE THIS PROPOSAL?

A. Verizon will work with the CLECs to fully define the proposed migration scenarios, to understand the priorities, explore the feasibility of the OSS changes necessary to accommodate this request, and report on the progress of these efforts at the monthly Change Management meetings.

C. Testing and Metrics

1. Volume Testing

Q. AT&T ASSERTS THAT BATCH CUT "OPERATIONAL PROCESSES, METHODS AND PROCEDURES" HAVE NOT BEEN "DEFINED, DOCUMENTED, TESTED OR OPERATIONALIZED." (AT&T AT 54.) IN ADDITION, AT&T COMPLAINS THAT "THERE HAS BEEN NO EXPERIENCE OF 'LIVE PRODUCTION' OPERATIONS" FOR THE PROPOSED BATCH PROCESS "IN A REAL WORLD ENVIRONMENT." (AT&T AT 55.) ARE THESE VALID CRITICISMS?

A. No. The proposed batch process incorporates many aspects of Verizon's existing hot cut processes, such as the project hot cut process. Verizon has performed thousands of hot cuts using its existing ISO-certified processes. Therefore, it is inaccurate to suggest that "[n]o operational processes, methods and procedures, or system messages" for Verizon's proposed batch hot cut process "have been defined, documented or tested."

Q. AT PAGES 73-74 OF HIS TESTIMONY, AT&T WITNESS FALCONE INDICATES THAT THE COMMISSION SHOULD NOT RELY ON A PROMISE OF FUTURE PERFORMANCE BY VERIZON AND

THAT VERIZON SHOULD BE REQUIRED TO TEST ITS PROCESS BEFORE THE BATCH PROCESS IS DEPLOYED. DO YOU AGREE?

A. Clearly, one issue that is being examined in this case is whether Verizon can handle the volume of hot cut orders that would be expected in a post-UNE-P environment. Verizon has addressed that question through the scalability analysis included in its initial testimony. We do not agree, however, that the Department must or should address the scalability issue through "volume testing" of the new batch hot cut process or, for that matter, of the existing basic and large job processes.

Q. WHY NOT?

A. The *TRO* clearly does not contemplate volume testing of Verizon's batch hot cut processes. By July 2004, the Department is *required* by the FCC's rules either to either approve a batch hot cut process, or to show why the current hot cut process is sufficient. In other words, the Department does not have the option of delaying its approval of the process indefinitely while volume testing takes place. *See* 47 C.F.R. § 51.319(d)(2)(ii).

Moreover, Verizon's proposed batch hot cut process is not yet in place on a commercial basis (nor is it required to be). Additional OSS support for the process is now being developed. This fact necessarily limits the time that can be devoted to large volume testing of the process before the end of the nine-month deadline.

Q. DOES THIS MEAN THAT THE DEPARTMENT AND THE PARTIES WILL BE STUCK WITH ANY LIMITATIONS OR FLAWS IN THE BATCH HOT CUT

PROCESS THAT ARE DISCOVERED AFTER A PERIOD OF ACTUAL COMMERCIAL USE?

A. Not at all. Verizon is confident that the careful development of the process, the experience that will be gained during the trial period, and the intensive scrutiny that is being given to the process in this proceeding, make it unlikely that any important aspect of the process will escape the Department's attention. Furthermore, as Verizon and the CLECs gain real production experience, Verizon will work with the CLECs to ensure that the process works well and will make modifications that may be needed.

It should be emphasized that most of the "piece parts" of the batch hot cut process already exist and are already being utilized in other contexts in commercial volumes. For example, WPTS currently has the ability to identify and count hot cut orders on a central-office-by-central-office basis. This is essentially the accumulation or "batching" process described in our initial testimony. WPTS is also a proven communication tool, utilized by many CLECs across the nation. In addition, Verizon already activates ports for itself on winback orders, and, therefore, it has significant experience managing the port activations offered as part of the batch hot cut process. Finally, Verizon central office forces currently manage projects for a number of CLECs across the country; thus, Verizon is also experienced with the management of "batch" migrations themselves.

Q. ARE THERE ANY OTHER CONSIDERATIONS THAT BEAR ON THE FEASIBILITY AND DESIRABILITY OF VOLUME TESTING OF VERIZON'S PROPOSED BATCH HOT CUT PROCESS?

A. Yes. Hot cut volume testing would be costly, difficult to manage logistically, and ultimately of minimal practical benefit either to Verizon, the CLECs, or the Department.

Q. WHY WOULD HOT CUT VOLUME TESTS BE COSTLY?

A. Among other things, in order to perform hot cut volume tests, Verizon undoubtedly would be forced to create hundreds of test accounts and arrange for the use of collocation space at the central offices so that connectivity can be established at the Verizon MDF and switch. Hot cut volume testing, therefore, would be costly for both Verizon and the CLECs.

Q. WHY WOULD HOT CUT VOLUME TESTING BE LOGISTICALLY DIFFICULT?

A. Hot cut volume testing would require a high level of CLEC cooperation, and it would be very difficult to coordinate this assistance with Verizon's resources. Moreover, Verizon would have to hire and train large numbers of people to perform and manage the hot cut testing, who would be needed only for the duration of the testing period. These sorts of logistical problems make volume testing impractical.

Q. PLEASE EXPLAIN YOUR STATEMENT THAT THE RESULTS OF HOT CUT VOLUME TESTING WOULD BE OF MINIMAL PRACTICAL BENEFIT.

A. A hot cut volume test would be of minimal practical benefit because of the extreme artificiality of the testing environment. A test would be most reliable and effective when the testing environment is as close to "real life" as possible and the test participants do not know that the test is being conducted. But it would be virtually impossible to create a blind hot cut volume test.

In short, given Verizon's past experience with volume hot cuts, and the managerial and staffing issues associated with organizing a hot cut volume test, as well as the very short timetable that would be imposed for such a test, the reliability of a hot cut volume test at this point in time would be questionable. The substantial costs and logistical difficulties to be shouldered by Verizon and the CLECs would certainly outweigh any utility of a hot cut volume test.

Q. HAS HOT CUT VOLUME TESTING BEEN REQUIRED IN THE PAST UNDER SIMILAR CIRCUMSTANCES?

A. No. In the Section 271 proceedings in the East, state commissions retained KPMG to conduct OSS testing. These states included New York, Massachusetts, New Jersey, Rhode Island, Pennsylvania, and Virginia. No hot cut volume testing was performed in any of these states. Moreover, in its publicly filed reports, KPMG concluded that for certain processes, including those that involved "provisioning of large volumes of test transactions that would exceed the manual capacity of [Verizon's state] work center . . . it was not practical to simulate certain order types, troubles, and processes in a test situation."[17/] Hot cuts were among the transactions KPMG and the state commissions declined to volume test.

17/ State of New York Dept. of Public Service, Bell Atlantic OSS Evaluation Project, KPMG's Final Report at II-7 (Aug. 6, 1999), available at http://www.dps.state.ny.us/tel271.htm; *see also, e.g.,* Virginia State Corporation Commission, Verizon Virginia, Inc. OSS Evaluation Project, KPMG's Final Report at II-16 (April 15, 2002), available at http://www.state.va.us/scc/division/puc/osskpmg_final.htm.

Q. WILL VERIZON CONDUCT A TRIAL OF ITS PROPOSED BATCH HOT CUT PROCESS?

A. Yes. Through this trial Verizon will be able to confirm that it is capable of activating the line ports on behalf of the CLECs — the one step of the batch hot cut process that will be relatively new — and that the process otherwise performs as expected.

2. Metrics

Q. AT&T ALLEGES THAT THE FAILURE OF THE BATCH PROCESS TO INCLUDE METRICS IS A PROBLEM. (AT&T PANEL AT 25-26, 60.) IS THAT CORRECT?

A. No. Only one party— AT&T— has argued that this proceeding must address metric issues. Contrary to AT&T's allegations, nothing in the *TRO* requires that performance metrics be addressed in this proceeding. In an order otherwise full of very explicit and mandatory directives to the states, this omission is quite telling. With respect to the adoption of metrics for batch hot cut processes, the TRO merely says that:

> Specifically, state commissions may require that incumbents comply with an average completion interval metric, including any further disaggregation of existing loop performance metrics (i.e., quality or maintenance and repair metrics) for provisioning of high volumes of loops.

TRO ¶ 489 (emphasis supplied).

This permissive language clearly shows that the FCC does *not* require the Commission to develop new metrics for the optional Batch hot cut process or for

other types of hot cuts.[18/] Moreover, even if new metrics *were* required, this language clearly acknowledges and contemplates use of existing performance metrics dockets, much as the *TRO* similarly contemplates the use of existing change management procedures for the development of hot cut processes for scenarios other than migration of voice services.[19/]

Q. WHERE SHOULD METRICS ISSUES BE ADDRESSED?

A. Given the extremely tight time deadlines already set by the *TRO*, it is apparent that if any new metrics were needed, the existing Carrier Working Group ("CWG") process in the NY C2C proceeding (Case 97-C-0139) should address these issues. The current C2C Guidelines, which are used in Massachusetts, are the result of a collaborative process that is in its seventh year. The CWG process, and not this proceeding, is best suited to develop and refine metrics related to the various hot cut processes. Participants in that process, as well as the Staff members who review the metrics, are very familiar with the key areas of measurement. Also, in many cases parties' representatives in the CWG are *not* the same as those in this proceeding, so their expertise could be lost if metrics

18/ As AT&T knows, but fails to acknowledge in its testimony, the current Carrier-to-Carrier ("C2C") Guidelines include a number of Hot Cut metrics. In addition, the current Performance Assurance Plan has a number of provisions that provide for bill credits to CLECs for unsatisfactory performance on Hot Cut metrics. Under the current Plan a substantial amount has been allocated to the Hot Cut metrics and special provisions.

19/ *See*, *e.g.*, *TRO* ¶ 252 (encouraging state commissions to use existing collaborative and change management processes to address OSS modifications relating to line splitting).

issues were addressed here. Finally, this discussion of Batch Hot Cut Metrics is already on the agenda for the Carrier Working Group in New York.

Q. MUST ANY SUCH METRICS BE APPROVED BEFORE THE BATCH HOT CUT PROCESS IS APPROVED?

A. No. The Department should *not* delay in approving any new or modified Batch hot cut process pending the development of such metrics. To do so would deny wholesale customers the benefits of that process. It would also thwart the clear directive of the *TRO* that the Commission "approve and implement" a batch hot cut process within nine months or issue detailed findings why one is unnecessary in a particular market.[20/] Metrics must be designed around the process, not the other way around.

Furthermore, AT&T's concern about the timing of any new hot cut metrics is misplaced.[21/] Under the time table outlined in the *TRO*, there appears to be more than adequate time to address the metric issues, to the extent necessary, before mass market local switching is no longer available to CLECs. Pursuant to the *TRO*, the states must address the mass market local switching impairment issues by early July 2003. If there is a finding of no impairment and UNE-P is eliminated in the requested market areas, pursuant to the *TRO* ILECs must continue to offer UNE-P until November 2004.[22/] Thus, contrary to AT&T's

---

20/ *See, e.g.*, *TRO* ¶ 423.

21/ *See* AT&T Panel at 26.

22/ *See TRO* ¶ 532 ("[F]ive months after a finding of no impairment, competitive LECs may no longer request access to unbundled local circuit switching.").

contention, UNE-P will *not* be eliminated as soon as the batch process is approved. More than adequate time exists to develop or refine any Hot Cut related-metrics.

Verizon believes that the first step to creating metrics is to establish a documented process upon which measures can be based. We note that AT&T has expressed agreement with this approach in at a collaborative workshop in California. There, Mr. Hoffman, speaking on behalf of AT&T, stated: "Of course, you can't put the cart before the horse because you really need to have a clearly defined process before you can look at what the metrics are going to be."[23/] As AT&T has recognized, workable and effective metrics cannot be established until the batch hot cut process is actually being utilized. Evaluating hypothetical scenarios is simply not an efficient way to proceed.

Q. IS VERIZON PREPARED TO HAVE METRICS IN PLACE ONCE THE BATCH HOT CUT PROCESS IS APPROVED?

A. Yes. Verizon already is developing metrics based on its proposed batch process. These metrics will be presented to the New York CWG within the near future at one of the regularly scheduled monthly meetings.[24/] If the process is refined by the New York Commission, the metrics can be modified, if necessary,

---

23/ Order Instituting Rulemaking and Investigation on the [California] Commission's Own Motion into Competition for Local Exchange Service, R.95-04-043, I.95-04-044; Transcript, Batch Hot Cut Workshop dated November 17, 2003 (AT&T, Hoffman), p.2457 (excerpt attached as Exhibit 10).

24/ See **http://www.dps.state.ny.us/97c0139_CWG.htm**

to reflect those refinements.[25/] Once the new hot cut metrics are adopted in New York they will become effective in Massachusetts.[26/]

IV. HOT CUT COSTS

A. The CLECs' Hot Cut Cost Studies Do Not Accurately Reflect the Forward-Looking Costs of Providing Hot Cuts.

1. The AT&T Cost Study

Q. HAS AT&T SUBMITTED A STUDY OF HOT CUT COSTS?

A. Yes. The AT&T study is described at pages 64-70 of the AT&T Panel testimony, and in Attachment B to that testimony. Based on its study, AT&T concludes that "the total forward-looking cost for Verizon to perform a hot cut using the Recommended Project Hot Cut Process is $4.65 for the first line and $4.43 for each additional line thereafter" (AT&T Panel at 65.).

Q. DOES AT&T RECOMMEND DIFFERENT RATES FOR DIFFERENT HOT CUT PROCESSES?

A. No. Its study apparently focuses on the large job process.

Q. WHY ARE THE COSTS SET FORTH IN AT&T'S COST STUDY SO MUCH LOWER THAN THE COSTS SET FORTH IN VERIZON'S COST STUDY?

25/ The New York Batch Hot Cut Hearing concluded on January 14, 2004. The matter has been fully brief and submitted to the presiding Administrative Law Judge. A commission decision is expect in the next few months, ahead of the July 2004 deadline.

26/ The Department has held that "VZ-MA's reporting of carrier-to-carrier measurements in Massachusetts shall change immediately, with no delay, to incorporate new or changed measurements in New York." *See* DTE 99-271 "Order", dated November 21, 2000 at 14. The Department also directed Verizon MA to make PAP filings within ten calendar days of any NYPSC action affecting the New York PAP.

A. A number of flaws in AT&T's study are discussed below. As a general matter, however, the study is based on unrealistic flowthrough and "fallout" assumptions, as already discussed, and ignores or attributes unrealistically low work times to various tasks involved in the hot cut process. "The [AT&T] study modeled the costs of the Recommended Project Hot Cut Process proposed by AT&T and Broadview." (AT&T Panel at 66.) In short, the studies are worthless because they rely on the invalid process assumptions and positions that were discussed in the preceding section of this testimony.

Q. WHAT WORK TIMES WERE USED IN THE AT&T STUDY?

A. AT&T states at page 69 of its Panel testimony that "[f]or those instances in which AT&T and Broadview determined that Verizon personnel were needed to perform a certain task in the service order creation and work assignment phases of the Recommended Project Hot Cut Process, the labor times were derived from corresponding work activities in Verizon's final compliance filing submitted in D.T.E. 01-20." Thus, although AT&T's work times for certain functions mirrored work times previously utilized by Verizon, AT&T nevertheless eliminated (and thus, in effect, attributed a zero time to) tasks that it regarded as not needed.

Q. WHAT "SERVICE ORDER CREATION AND WORK ASSIGNMENT TASKS" WERE ELIMINATED FROM AT&T'S STUDY ON THE GROUNDS THAT THEY WERE NOT NEEDED?

A. With respect to service order creation, AT&T simply included its estimate of the time required for the NMC to identify the cause of any fallout and to manually establish an order. However, it apparently does not recognize the need to

include time for the NMC to question the CLEC about the order or to enlist the assistance of other organizations such as the APC. It also does not acknowledge any NMC work that may be required in support of a throwback.

With respect to work assignment, AT&T simply included a minimal amount of time for non-flowthrough order resolution at the APC and RCMAC. It also conveniently ignores all of the provisioning steps associated with coordination through the RCCC.

Q. SHOULD A COST STUDY REFLECT THE COSTS OF THESE TASKS?

A. Absolutely. The omitted steps are necessary now and in the foreseeable future. Without any justification whatsoever, AT&T simply assumes away 100% of the RCCC's work in coordinating the hot cut, as well as the required steps that will be involved in resolving problems and in manual service order generation in the NMC.

Q. WHAT WORK TIMES WERE USED FOR OTHER TASKS?

A. AT&T states that "[t]he pre-wiring and wiring CO frame technician work time was determined, for the most part, based on AT&T and Broadview current experience with such functions." (*See* AT&T Panel at 69; *see also* AT&T Panel, Att. B, at 4: "For the most part, the labor times shown in the Study were provided by AT&T and Broadview personnel with current experience working bulk hot cut projects.")

Q. PLEASE COMMENT ON THE RELATIVE MERITS OF DETERMINING WORK TIMES "BASED ON AT&T['S] AND BROADVIEW['S] CURRENT EXPERIENCE" AND DETERMINING SUCH WORK TIMES BASED ON THE SURVEY METHODOLOGY UTILIZED BY VERIZON.

A. As noted above, the AT&T witnesses have no experience in developing, implementing, performing, or managing hot cut processes. Moreover, the Panel apparently did not rely on anyone else's expertise. In response to an interrogatory in New York, when asked whether "any in-house subject matter experts other than those on the Panel provided input as to AT&T's/Broadview's model"; AT&T's response was a simple "no."[27/]

Thus, at bottom, to the extent that AT&T is utilizing work times that differ from Verizon's, it is relying solely on the Panel members' opinions, based on their observation of hot cuts. However, those opinions are unavoidably subjective: AT&T does not offer actual records of the situations that it observed, nor does it provide measured work times; nor does it utilize the rigorous survey approach that underlies Verizon's cost studies. We have no way of knowing whether — as is clearly the case with AT&T/Broadview's 1% estimate of ordering "fallout" (discussed above) — the estimate is based on an invalid inference from the witnesses' observations.

Q. DOES THE AT&T STUDY UTILIZE THE SAME LABOR RATES AS WERE UTILIZED BY VERIZON IN ITS STUDY?

A. No. Rather, AT&T employed hypothetical labor rates developed by its witness, Mr. Flappan, resulting in massive reductions in Verizon's costs. AT&T's use of these hypothetical labor rates is discussed further below.

[27/] New York VZ-ATT-51 (attached as Exhibit 10).

Q. HOW DOES AT&T PROPOSE THAT VERIZON RECOVER THE COSTS THAT IT IDENTIFIES?

A. Although non-recurring charges are proposed by AT&T for much of the costs it acknowledges, it recommends the use of *recurring* charges to recover "[c]ertain administrative overhead functions performed by the RCCC in allocating work assignments when the Verizon OSS fails to automatically do so and when monitoring hot cut project status reports." (AT&T Panel at 69.)

Q. IS IT APPROPRIATE TO RECOVER SUCH COSTS THROUGH RECURRING RATES?

A. No; to require Verizon to do so would violate cost-causation principles. The CLEC request for a hot cut is what causes the RCCC to perform the work, and the requesting CLEC should therefore bear the burden of paying for such work. Attempting instead to recover non-recurring costs through recurring rates would force the incumbents to become bankers for the CLECs and to take on the added risk that the non-recurring costs would never be recouped. Recovering a direct cost from the direct cost causer is preferable to spreading the cost to other users.

2. MCI Cost Study

Q. DID MCI SUBMIT A COST STUDY?

A. Yes. Its study recommends a $6.44 "coordinated" hot cut rate and a $5.58 "mass market" hot cut rate.

Q. DID MCI PROPOSE SEPARATE RATES FOR VERIZON'S HOT CUT PROCESS?

A. No. MCI provided a study of its own proposed "coordinated" hot cut process that MCI claims should replace Verizon's "basic" and "project" processes. MCI also modeled its proposed "mass market" hot cut cost model that is ostensibly designed to incorporate forward-looking improvements to Verizon's new "batch" process.

Q. WHAT ACCOUNTS FOR THE LOW COSTS GENERATED BY MCI'S COST STUDY?

A. As with AT&T's study, the key problem with MCI's study is that it is based on unrealistic process assumptions, including fallout rates, which essentially are those assumptions discussed in Part II of this testimony. MCI based its cost study on the revisions it made to Verizon's process flow chart. (*See* MCI Jenkins Attachment ESJ-3 at 3.) The process flow chart upon which MCI bases its costs eliminate numerous steps that were deemed by MCI to be inefficient or unnecessary were simply eliminated from consideration.

Q. WHAT IS THE CENTRAL PROVISIONING ASSUMPTION OF MCI'S COST STUDY?

A. MCI states at page 5 of Mr. Jenkins' testimony that "the cost model presented by MCI is based on 100% IDLC and GR303 compliant technology." It should be noted that MCI did not assume the use of automated frames for existing copper loops, as would be consistent with its process recommendations, but instead based its costs on ubiquitous deployment of GR-303 technology and on ubiquitous use of ELP. This assumption is reflected, for example, in the fact that

the study incorporates *no time whatsoever* for wiring activities. (*See* Response to New York Interrogatory VZ-MCI-4 (Attached as Exhibit 12).)

Q. HOW DID MCI DEVELOP WORK TIMES FOR THE WORK STEPS THAT DID REMAIN IN ITS STUDY?

A. MCI states that, "[a]s a general rule, MCI utilized the times presented by Verizon in its compliance model as a baseline for the activity steps that appear in both models." (MCI Jenkins Attachment ESJ-3 at 3-4.)

Q. DOES MCI PROVIDE ANY DOCUMENTED SUPPORT FOR ITS PROCESS ASSUMPTIONS AND ESTIMATED WORK TIMES?

A. No. MCI's reductions are all arbitrary and depend heavily on speculative future enhancements. They are not based on any evidence or competent expert opinion.

Q. HAS THE DEPARTMENT RECOGNIZED THAT THE UBIQUITOUS DEPLOYMENT OF GR-303 TECHNOLOGY IS NOT A PROPER METHOD FOR DETERMINING HOT CUT RATES?

A. Yes. As we have already discussed, even utilizing the "most efficient technology currently available," there is no feasible and practicable way of migrating IDLC-equipped loops between switches in a multi-carrier environment. The only currently available, feasible, and practical option for UNE-L migration of IDLC loops is to move the customer on to copper or UDLC facilities before the migration to the CLEC. The Department recognized this basic fact is its order in D.T.E 01-20, which approved a hot cut rate based on manual, physical cross-connection work at the frame. The Department evidently did not regard that

assumption as inconsistent with a recurring cost model based on ubiquitous deployment of Digital Loop Carrier technology.

Q. MCI ALSO RELIES ON THE *VIRGINIA ARBITRATION ORDER* ISSUED BY THE FCC'S WIRELINE COMPETITION BUREAU. (MCI JENKINS AT 5.) DOES THAT ORDER SUPPORT MCI'S POSITION HERE?

A. No.

Q. WHAT CONCLUSION WAS REACHED BY THE WCB IN THE *VIRGINIA ARBITRATION ORDER*?

A. The WCB accepted a hot cut cost model that had been submitted by AT&T, which was essentially based on a Frame Due Time-type process (a process which, incidentally, AT&T is not proposing here).

Q. WAS THE AT&T MODEL BASED ON ELECTRONIC LOOP PROVISIONING?

A. No. It assumed that hot cuts would be accomplished through pre-wiring and wiring work on a main distributing frame. The cost reductions posited by AT&T flowed, as noted above, in large part from the reduced level of coordination that was assumed.

Q. HAS THE FCC RECOGNIZED THAT NON-RECURRING CHARGES BASED ON WORK REQUIRED ON COPPER LOOPS MAY BE APPROPRIATE EVEN WHERE IDLC IS IDENTIFIED AS THE FORWARD-LOOKING LOOP TECHNOLOGY FOR OTHER PURPOSES?

A. Yes. For example, the FCC has specifically authorized recovery of loop conditioning charges (such as charges for load coil removal), even though load coils would generally not be utilized, and conditioning charges would therefore

not be incurred, on IDLC-equipped loops.[28/] In the *UNE Remand Order*, the FCC went further: it not only upheld the recoverability of conditioning charges but also ruled that load coil removal costs would be recoverable even where load coil placement would *not* be called for under current standards applicable to copper loops.[29/]

3. Conversent's Study

Q. DID CONVERSENT SUBMIT A COST STUDY?

A. Yes. Conversent "revised" Verizon's cost study to produce a $4.95 cost for basic hot cuts.

Q. DID CONVERSENT PROPOSE SEPARATE RATES FOR EACH HOT CUT PROCESS?

A. No. Conversent based its cost study only on the basic process.

Q. WHAT ACCOUNTS FOR THE LOW COSTS GENERATED BY CONVERSENT'S COST STUDY?

A. As with AT&T's and MCI's study, Conversent's study is based on unrealistic process assumptions, including the same end-to-end 2% fallout rate assumed by MCI, wild assumptions about the capabilities of WPTS and Verizon's OSS that virtually eliminate the role of the RCCC and the need to analyze orders at the

---

[28/] The FCC specifically authorized the recovery of conditioning charges in its *Advanced Services Order*. *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Memorandum Opinion and Order, and Notice of Proposed Rulemaking (rel. August 7, 1998), ¶ 53 n.98. *See also* ¶ 382 of the FCC's 1996 *Local Competition Order*. The principle was also reaffirmed in the *UNE Remand Order*.

[29/] *UNE Remand Order* ¶¶ 192-93 (footnotes omitted).

frame, and minimal central office wiring and no travel time (based in part on an assumption of 100% automatic distribution frames at all remote central offices).

Q. DOES CONVERSENT PROVIDE ANY DOCUMENTED SUPPORT FOR ITS PROCESS ASSUMPTIONS AND ESTIMATED WORK TIMES?

A. No. Conversent's reductions are all arbitrary and depend heavily on speculative future enhancements that, as discussed above, have no place in the provisioning of hot cuts, even in a forward-looking TELRIC environment. They are not based on any evidence or competent expert opinion. And, as discussed above, Conversent's witnesses appear to have no experience with hot cuts.

B. Verizon's Cost Study is Sound, Reflects Real-World Experience, and Produces Accurate Costs.

1. Verizon's Survey Methodology

Q. AT&T AND CONVERSANT ALLEGE THAT VERIZON'S SURVEY METHODOLOGY IS FLAWED AND PRODUCED BIASED WORK TIMES. (AT&T MERCURIO AT 5-6; CONVERSENT PANEL AT 45-48.) WHAT IS YOUR RESPONSE?

A. The CLECs' criticisms is based on the erroneous assumption that the surveyed workers would want to "help" Verizon by providing a high work time. There is no basis for this claim. First, it is unlikely that the surveyed individuals were even aware that the surveys were being used in a proceeding that would set costs for UNEs, or would understand that higher reported times could result in higher costs for Verizon.

Moreover, the instructions clearly and explicitly indicated the importance of accurate and unbiased responses. The following is from the instructions that Verizon's Service Costs organization sent to the directors of the employees being surveyed:

> I am requesting your support as the Finance-Service Costs organization collects data over the next two weeks necessary to support Verizon's financial endeavors. This enterprise is based predominantly on the labor costs that the Company incurs to provision and install products and services. Achieving proper study results depends on the presentation of well-documented costs that are accurate and credible. Overestimation and underestimation are equally problematic and lead to less than desirable outcomes. As a result, independent, unbiased data and responses are essential.
>
> Inputs from Verizon's various operating and financial systems, as well as from the Service Technicians who are involved in doing the associated work functions, are critical to the true and complete identification of our costs. The identification of work times and costs to perform these functions will help insure that Verizon recovers the proper costs incurred to order, provision, wire or otherwise install service — no more and no less. While the Service Costs organization is responsible for developing the costs related to these work functions, we must rely on the expertise of the Service Technicians in your organization who are actually involved in the provisioning and installation of products and services. As such, we need to work with members of your respective organizations to identify activities performed in your functional groups, to obtain the actual work times to perform those activities and to verify the final results. We will gather this information in the form of written surveys requesting the recording of start and stop times per Service Order for various activities associated with provisioning. The survey forms and instructions will be sent separately. While these surveys may be perceived as a burden to the individuals who must complete them, it is imperative that they be given priority and that the information provided be accurate, unbiased and independently developed. We recognize that this may cause a strain on your workload and

> are willing to work with your organizations to gather the data in the least disruptive way. The Service Costs team will be responsible for actually gathering, compiling, and analyzing all the data before including it in the cost study. It must be emphasized that this data collection effort is strictly to be used for estimating the costs identified by our non-recurring studies. In no way will this data be used for staffing, compensation, or any other managerial purposes.

Any concern with regard to bias in this proceeding should be directed at the CLEC "experts" who claim that, although they have never designed, implemented, or managed a hot cut process, they know exactly what it must cost.

Q. DR. MERCURIO SUGGESTS THAT THE "HAWTHORNE EFFECT" RESULTS IN BIASED WORK TIMES. (AT&T MERCURIO AT 5.) HOW DO YOU RESPOND?

A. This theory holds that the mere act of observing workers in a study is likely to affect their performance (specifically, by increasing their productivity) and thus distort the results of the study. But the Hawthorne effect does not undermine Verizon's methodology. *Any* survey approach is based to some extent on observation and tracking of worker performance. This is as true of the "time and motion" approaches supported by some of the CLECs as it is of Verizon's survey approach. Moreover, this Effect would predict an *increase* in efficiency of the workers as a result of the attention being focused on them and would therefore, if anything, drive NRCs down.

Q. AT&T AND CONVERSENT ARGUE THAT VERIZON'S SURVEYS WERE UNCLEAR AS TO WHEN A TASK BEGINS AND ENDS. (AT&T MERCURIO AT 8-9; CONVERSENT PANEL AT 51-52.) DO YOU AGREE?

A. No. It is not surprising that these descriptions may appear ambiguous to the CLECs' experts, who are unfamiliar with Verizon's hot cut processes. These descriptions nevertheless have a clear, definite, and specific meaning to the Verizon workers who actually carry out the process. The task descriptions were developed in consultation with managers who actually supervise hot-cut related tasks, and were designed to describe the tasks in a manner that would be understood by the supervisors' subordinates.

Q. DR. MERCURIO AND CONVERSENT CLAIM THAT VERIZON SHOULD HAVE DONE TIME AND MOTION STUDIES TO DETERMINE WORK TIMES. (AT&T MERCURIO AT 7; CONVERSENT PANEL AT 52-53.) DO YOU AGREE?

A. No. in most instances, Verizon's provisioning activities tend to be complex, performed by different technicians and in various places. Work groups are located not only in Massachusetts, but also throughout the Verizon-East region. As a result of these limitations inherent in a time and motion study, such a study is not an appropriate measure of work times relating to the complex telecommunications industry. Time and motion studies therefore are often costly, administratively burdensome, and disruptive to the workforce.

Q. DR. MERCURIO ASSERTS VERIZON'S PROCEDURE OF TRIMMING THE HIGHEST AND LOWEST 10% OF THE SAMPLE OBSERVATIONS FOR EACH WORK TIME IS COMPLETELY INVALID FROM A STATISTICAL PERSPECTIVE AS IT TENDS TO ARTIFICIALLY REDUCE THE VARIABILITY OF THE SURVEY ESTIMATES. (AT&T MERCURIO AT 11.) DO YOU AGREE?

A. While it is certainly the case that the variability of the trimmed data is less than the variability of the raw data, the important question is what potential bias may have been introduced by trimming the data. By examining the untrimmed data, Dr. Mercurio infers that the variances are so high that it reflects doubt on the reasonableness of the survey and thus the cost study itself. We rebut this point below. But the point that Dr. Mercurio misses is that by trimming the data, the majority of the means of the work activities decreased. Given that the higher the average mean of the activities, the higher the average cost, by trimming the data the average cost estimates are lower than they would have been if the data were not trimmed. Specifically, out of 39 work activities used as inputs into the cost study, 26 had lower means as a result of trimming the data. For purposes of estimating costs, trimming the data as Verizon has done provides greater confidence that any "outlier responses" do not affect the results of the cost study.

Q. DR. MERCURIO ASSERTS THAT HE HAS PERFORMED T-TESTS ON EACH OF THE WORK TIME ESTIMATES FROM VERIZON'S SURVEY AND FINDS THAT THE RESULTS ALONE ARE STRONG ENOUGH TO RENDER VERIZON'S SURVEY UNRELIABLE FOR THE PURPOSE FOR WHICH IT IS INTENDED. (AT&T MERCURIO AT 12.) DO YOU AGREE?

A. No. The t-test performed by Dr. Mercurio is not relevant to the task at hand. That is, we are not estimating a regression equation in which the t-test of the hypothesis that a coefficient is zero tests the hypothesis that some independent variable has an effect on the variable of interest. We are estimating the mean cost of an activity, not whether a coefficient is zero.

Second, to the extent there is high variability in the work times for the different activities, these work times are used as *inputs* to the cost study. What is relevant from the point of view of the application at hand is the variability surrounding the final cost study estimates. It matters less if the components of the time required for a hot cut are estimated precisely or not; what matters is the accuracy (the statistical variability) of the estimate of the cost of the activity. Verizon's cost estimates are quite precise, as described in the Initial Panel Testimony.

Q. WOULD YOU PLEASE ELABORATE ON THIS LAST POINT?

A. While Dr. Mercurio is critical of statistical significance of some of the inputs that go into the estimation of hot cut costs, the more relevant issue is the statistical significance of the output, i.e., the mean cost of a hot cut. It is important to examine the output because while it may be the case that some inputs into the cost estimate may have high variances, the impact that the input has on the cost estimate may be rather small. For an individual work activity, costs are developed in the following manner:

Average Work Activity Cost = (Average Work Time) * (Typical Occurrence Factor (TOF)) * (Forward-Looking Adjustment Factor (FlAF)) * (Wage) * (Common Overhead (COH)) * (Gross Revenue Factor (GRF))

The UNE cost is developed by summing the costs over all the work activities involved in providing the UNE. For the purposes of calculating confidence intervals, Verizon treats everything but the work TIME as a constant. This means that:

Variance Of Work Activity Cost = (Variance Of Average Work Time) * (Constant Factors)^2

Verizon assumes that reported work times are uncorrelated, both across UNE orders and across work activities within orders. This implies that the variance of the sum of the costs of the individual work activities equals the sum of the variances of their costs. We calculate this sum and take the square root to obtain the standard error. Then:

PRECISION = 1.96 * (Standard Error Of UNE COST/UNE Cost)

What this means is that even though an input may have a high variance, it may have a relatively small occurrence factor or forward-looking adjustment factor so as to have a relatively small impact on the cost study. Alternatively, an input with a low variance may have a relatively large occurrence factor or forward-looking adjustment so as to have a greater impact on the cost study. For this reason, it is important to examine, as Verizon properly did, the precision of the hot cut cost estimate and not necessarily dwell on the inputs. The precision estimates provided by Verizon indicate that the final hot cut costs are much more precise than what Dr. Mercurio would have the Department believe.

Q. DR. MERCURIO REFERENCES A PREVIOUS DEPARTMENT DECISION WHERE THE DEPARTMENT ADJUSTED VERIZON'S COST ESTIMATES BY TAKING THE LOWER 95% CONFIDENCE BOUND AROUND THE MEAN AND THEN FURTHER REDUCING THIS FIGURE BY AN ADDITIONAL 20%. DR. MERCURIO ASSERTS THAT WHEN HE PERFORMED THE SAME ANALYSIS TO VERIZON'S CURRENT DATA, THE RESULT WERE INSTANCES WERE

HE OBTAINED A NEGATIVE WORK TIME. (AT&T MERCURIO AT 13.) BASED ON THIS HE RECOMMENDS THAT VERIZON'S SURVEY RESULTS "BE THROWN OUT." HOW DO YOU RESPOND?

A. Whatever the reasons for the Department to make the adjustments alleged by Dr. Mercurio do not pertain in this case because the survey that Verizon relied on in this case is a *new* survey, different than the one used by Verizon previously. Second, Verizon's statistical precision demonstrates, contrary to Dr. Mercurio's suggestion, that the final cost study estimates are quite precise and the Department can have confidence in the statistical validity of the survey.

2. Work Activities and Times

Q. DO YOU AGREE WITH AT&T'S CLAIM THAT CERTAIN OF THE WORK TIME FIGURES WERE ANOMALOUS, IN THAT THEY REFLECT SIGNIFICANTLY DIFFERENT WORK TIMES FOR IDENTICAL TASKS AMONG THE THREE HOT CUT PROCESSES (*E.G.*, BASIC, LARGE JOB, BATCH).

A. No. The "anomalies" to which AT&T points reflect actual differences in the data, and it is the data that should be regarded as the primary evidence of current work times, rather than the CLECs' presuppositions about how work times vary among the three processes. In any event, these supposed "anomalies" do not draw Verizon's results into question.

First, AT&T claims that there is a discrepancy between the pre-wiring costs for basic, large job, and batch hot cuts. (AT&T Panel at 98.) In fact, when both initial and additional lines are taken into account (using initial-to-additional line ratios from Attachment A to the responsive testimony of the AT&T Panel),

the pre-wiring cost for basic and large job hot cuts differ by only a small amount (less than six percent). The pre-wiring time for the batch hot cut is less because of the application of FLAFs that assume additional wiring efficiencies resulting from bulk processing of frame work in the most efficient order.

Second, AT&T expresses concerns about the variations in the work times for the final wiring ("lift and lay") task among the three hot cut processes. (AT&T Panel at 98-99.) Those differences, however, merely reflect the economies of scale that the CLECs elsewhere insist should be exhibited by the batch and large job processes.

Finally, AT&T challenges the fact that the task of pulling disconnected wires on DD+1 has a higher work time for the large job and batch processes than for the basic process. (AT&T Panel at 99.) The most likely explanation for this is that when disconnected wires are being pulled, the tie-pair connections would be pulled as well. To the extent that the large job orders were more typically performed in the larger offices with more tie-pair frames, there would have been additional work associated with the DD+1 wire-pulling task.

3. IDLC Surcharge

Q. THE CLECS CLAIM THAT THEY SHOULD NOT HAVE TO PAY THE COSTS OF MOVING THEIR FACILITIES OFF OF IDLC AND ON TO COPPER TO PROVISION THEIR HOT CUT ORDERS. DO YOU AGREE?

A. No. As discussed in our initial testimony, Verizon must move loops provisioned on IDLC to copper facilities. CLECs, as the cost-causer, should pay for the work they cause. The CLECs' attack on the IDLC Surcharge essentially is based on

the same mistaken premise, discredited above, that in a ubiquitous GR-303 environment, IDLC loops (or, more precisely, those IDLC loops that utilize NGDLC and GR-303 technologies) could be migrated automatically from one switch provider to another. As we explain above, GR-303 technology is deployed only on a very small minority of loops in Massachusetts, and Verizon does not expect that fact to change by the end of the three-year planning period encompassed by Verizon's TELRIC cost study.

4. Labor Rates

Q. AT&T CLAIMS THAT VERIZON SHOULD HAVE EMPLOYED HYPOTHETICAL LABOR RATES IN ITS COST STUDY, RATHER THAN ITS ACTUAL LABOR RATES. (AT&T FLAPPAN AT 10.) WHAT IS YOUR RESPONSE?

A. Verizon's proposed rates appropriately rely on the actual wages paid to its employees in accordance with its labor contracts, and actual data in its records concerning associated labor costs such as benefits. This approach is consistent with TELRIC because these are the actual forward-looking labor costs Verizon must inevitably bear to perform hot cuts, assuming that it continues to operate efficiently. By contrast, AT&T's proposed rates are constructed by consulting generic Bureau of Labor Statistics ("BLS") statistics regarding companies. Verizon has every incentive to reduce labor costs to efficient levels, and engaged in protracted negotiations with its work force to do just that last year. Verizon's actual labor costs are clearly the best evidence of Verizon's efficient forward-looking labor costs.

Q. IS AT&T CORRECT THAT MR. FLAPPAN ASSERTS THAT VERIZON'S PROPOSED RATES DO NOT PROPERLY ACCOUNT FOR EXPECTED PRODUCTIVITY GAINS? (AT&T FLAPPAN AT 62-63.)

A. No. Mr. Flappan misunderstands Verizon's studies. Verizon does account for expected productivity gains through its forward-looking adjustment factors. This forward-looking adjustment factor appropriately captures expected increases in productivity in the final hot cut rate. If Verizon were to adjust *both* the time to perform a task *and* the labor rate itself, it would double-count the effects of increased productivity.

V. SCALABILITY

A. Operational Issues

Q. AT&T RAISES A VARIETY OF OPERATIONAL CONCERNS THAT IT CLAIMS ARE RELEVANT TO VERIZON'S BATCH HOT CUT PROPOSAL. WHAT IS YOUR REACTION TO THOSE CLAIMS?

A. Contrary to AT&T's claims, evidence concerning alleged operational and economic impairment issues are irrelevant to this proceeding. To the extent they are addressed to developing a batch hot cut process, they are clearly misplaced. But they are also not relevant to the impairment case to the extent that that case is based solely on the satisfaction of trigger tests.

In the *TRO*, the FCC slotted operational and economic impairment issues for review, if necessary, only in any "potential deployment" proceeding that might be conducted within the context of a mass market circuit switching case. The FCC stated, however, that in the mass market switching proceeding operational

and economic impairment issues would only be addressed in a second phase if its trigger tests could not be satisfied.[30/] In Massachusetts, Verizon is seeking the elimination of unbundled mass market switching in specific markets solely on the basis of the FCC's trigger standards. The FCC has expressly provided that satisfaction of the objective, "bright-line" self-provisioning trigger *mandates* a finding of no impairment. The purpose of the FCC's triggers is to "give substantial weight to actual commercial deployment of particular network elements by competing carriers."[31/] These triggers do not allow for the consideration of the kinds of operational and economic impairment "barriers" that AT&T raises. Instead, the satisfaction of a particular trigger renders moot the consideration of factors related to operational and economic "barriers." As Verizon has made clear, it will not rely on evidence of "potential deployment." Accordingly, the issues concerning alleged operational or economic are entirely irrelevant to the questions that will be in this case.

30/ *TRO* ¶ 494 ("We expect state commission 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 deployment of circuit switches serving the mass market requires a finding of no impairment. If the triggers are satisfied, the state need not undertake any further inquiry, because no impairment should exist in that market. If the triggers are not satisfied, the state commission shall proceed to the second step of the analysis, in which it must evaluate certain operational and economic criteria . . . .").

31/ *TRO* ¶ 498.

Q. HAVE ANY STATE COMMISSIONS RECOGNIZED THAT OPERATIONAL IMPAIRMENT ISSUES ARE NOT RELEVANT WHEN "POTENTIAL DEPLOYMENT" IS NOT AT ISSUE?

A. Yes. The Florida Public Service Commission recently recognized that state commissions may only consider "potential deployment" issues if the triggers are not met and stressed the mandatory nature of triggers. The Commission concluded: "As the FCC has made clear, AT&T and MCI are indeed incorrect. If the 'automatic triggers' are met, 'a state must find 'no impairment.'"[32/] Accordingly, the Florida Commission found that evidence of alleged economic or operational impairment is not relevant to the self-provisioning "trigger." *Id.* at 5.

Q. EVEN IF OPERATIONAL AND ECONOMIC ISSUES WERE RELEVANT TO THIS PROCEEDING, HAS AT&T DEMONSTRATED ANY AREAS OF CONCERN TO VERIZON'S ABILITY TO MIGRATE LARGE VOLUMES FROM UNE-P TO UNE-L?

A. No. By introducing evidence on various operational and economic issues, AT&T is attempting to sidestep the limitations on trigger cases by turning *this* proceeding into a potential-deployment/economic-impairment review, contrary to the FCC's clear mandate. But, as we detail below, even if collocation, tandem trunking, and other operational issues were relevant to this proceeding (which they are not), AT&T has failed to demonstrate that these issues in any way

---

[32/] Order Granting Verizon Florida Inc.'s Motion to Clarify the Scope of the Proceeding, *In re: Implementation of Requirements Arising from Federal Communications Commission's Triennial UNE Review: Local Circuit Switching for Mass Market Customers*, Docket No. 030851-TP (Rel. Feb. 20, 2004).

undermine Verizon's scalability analysis, including the validity of the Force Load Model. For the most part, these alleged issues are matters that either should be worked out during the 27-month transition period that the FCC has established for the conversion of UNE-Ps to UNE-Ls, or else should be addressed by the CLECs now as part of their forward looking planning processes.

1. Collocation

Q. AT&T AND MCI CLAIM THAT CLECS WILL NOT BE ABLE TO OBTAIN COLLOCATION FACILITIES FROM VERIZON MA SUITABLE TO SUPPORT THE MIGRATION OF THEIR UNE-P CUSTOMERS. (ATT FALCONE AT 15-17; JENKINS AT 63.) IS THIS A LEGITIMATE CONCERN?

A. No. As an initial matter, as we state above, such an issue is beyond the scope of this proceeding, which is not concerned with competitive issues generally, but with the fairly narrow questions of hot cut processes, costs, and scalability. Not every action that a CLEC needs to take before or after a hot cut — such as hiring staff, establishing collocation arrangements, buying a switch, or signing up customers — is, merely by virtue of the fact that it precedes or follows a hot cut, itself a hot cut issue. Such an approach would expand this proceeding well beyond its intended scope.

Putting this issue aside, Verizon provides CLECs with a vast array of collocation options. For example, CLECs can request physical collocation, cageless collocation, SCOPE[33/] collocation arrangements, and virtual collocation.

33/ "SCOPE" stands for Secured Collocation Open Physical Environment.

CLECs can also share collocation space. With a modicum of planning, the CLECs should be able to utilize these various options to satisfy their collocation needs for the provision of UNE-Ls on a mass market basis. Furthermore, Verizon has more than enough collocation space in Verizon's Massachusetts central offices, and it will have the ability to provision that space to CLECs on a timely basis when CLECs' needs arise. AT&T and MCI suggest that because they presently have few or no collocation facilities in many Verizon MA central offices, it will be impossible for them to obtain the collocation facilities needed to serve their embedded UNE-P customer base in the event of a migration. But this fact is hardly probative of the collocation facilities that CLECs could request — and that Verizon MA could provide — during a conversion process. First, Verizon MA is only making a claim of non-impairment as to MSAs that include 181 of its 271 central offices in Massachusetts; the other 90 would not be affected by a UNE-P migration. For those central offices in areas where the triggers are met, Verizon MA has ample spare capacity for collocation. There are currently over 1,000 unused collocation arrangements in Verizon's Massachusetts central offices where Verizon claims the triggers are met — far more than the 660 arrangements that are currently being used by CLECs in those same offices. In large part, this excess capacity exists because CLECs initially ordered far more collocation space than they reasonably could have ever used and then subsequently returned that space to Verizon MA. Verizon still has over 100,000 square feet of available collocation space in these same central

offices.[34/] This space would more than accommodate any surge in CLEC demand that a migration from UNE-P might cause. For example, of the 181 central offices in density Zones 1, 2 and 3 in the MSA's in which Verizon is seeking a finding of no impairment 121 currently have in-service arrangements with a capacity for 1,025,615 Voice Grade loops, only 106,868 of which are in service. In short, there is simply no basis for AT&T's claim that "an extraordinary build out" of collocation facilities would be required. (Falcone at 19.)

Q. AT&T AND MCI FURTHER ARGUE THAT, EVEN IF VERIZON MA HAS ENOUGH COLLOCATION SPACE TO SUPPORT CLECS' MIGRATION FROM UNE-P, VERIZON MA WILL NOT BE ABLE TO PROVISION THAT SPACE ON A TIMELY BASIS. (ATT FALCONE AT 17-23; MCI JENKINS AT 50) IS THIS TRUE?

A. No. AT&T and MCI are incorrect in claiming that Verizon MA would not be able to "manage and keep up with the collocation demand" generated by the hot cut process. (ATT Falcone at 17.) AT&T and MCI conveniently ignore the fact that Verizon MA has already faced periods in which demand for collocation grew rapidly, and handled the increased demand effectively. In fact, Verizon MA established in excess of 1000 arrangements in the 13 month period between June of 1999 and June of 2000. Just as importantly, Verizon MA reasonably assumes that any CLEC that currently serves UNE-P based customers in market areas in which the mass-market local switch unbundling obligation is eliminated,

---

[34/] *See* http://www22.verizon.com/wholesale/attachments/space-exhaust/WebUpdateMA.pdf.

and that wishes to continue serving those customers using UNE-L, will work in good faith with Verizon MA to develop an appropriate transition plan and will place timely orders for the services and facilities it requires. While AT&T selectively quotes a discovery response provided by Verizon in New York to suggest that Verizon has no concrete plans for processing increased CLEC requests for collocation, the portion of the response that AT&T omitted notes that "Verizon . . . has in place well-established procedures for the construction of the necessary collocation spaces and other facilities necessary to migrate their current UNE-P customers to UNE-L," and that "Verizon has repeatedly demonstrated that it can satisfy its collocation obligations, and it has no doubt that it will continue to do so after the Commission determines that the TRO requirements have been satisfied."[35/]

Q. AT&T ALSO ASKS THE DEPARTMENT TO CONSIDER "THE REALITIES OF THE TIME IT WILL TAKE FOR THE CLECS TO RAISE THE CAPITAL THEY WILL NEED" TO ESTABLISH THE COLLOCATION ARRANGEMENTS NEEDED TO SERVE THEIR EMBEDDED UNE-P CUSTOMER BASES. (ATT FALCONE AT 22-23). DO YOU AGREE THAT THIS SHOULD BE AN ISSUE IN THIS PROCEEDING?

A. No. Like collocation space availability, the issue of access to capital markets falls well beyond the purview of this case. The FCC has recognized that once a finding of no impairment has been reached for UNE switching, and once UNE-P

35/ New York ATT-VZ-42S2 (attached as Exhibit 13).

is therefore no longer available in certain markets, the CLECs will face a host of related issues, in addition to the collocation issues that AT&T has raised. These issues, however, do not constitute an "impairment." Rather, they are issues that any facilities-based provider must manage, and the FCC clearly stated that these are the types of issues that must be addressed during the transition planning period.[36/] For example, the FCC has stated that under any transition plan, one-third of the UNE-Ps in the relevant market area must be transitioned to UNE-Ls within thirteen months. The time frame of thirteen months is three times Verizon's standard interval of approximately four months for the provisioning of new collocation space and is more than eight times the standard interval required for many augments. *Finally*, AT&T is simply wrong in implying that Verizon has the primary burden to develop plans to accommodate the need for greater collocation space. Contrary to AT&T's arguments, "[t]he Act does not require the incumbent LECs to do all the work."[37/] If anything, the primary responsibility resides with the CLECs, which have an obligation to inform Verizon about their forecasts for collocation and other unbundled network elements. Without this information, it is unfair and impractical to expect Verizon to appropriately size its network and workforce. This fact has been recognized for some time, and

---

[36/] *See TRO* ¶ 529 ("For example, competitive CLECs may need to develop new UNE-L provisioning systems, including hiring, training, and equipping loop provisioning and switch technicians; purchase and collocate new equipment, create additional customer service and trouble maintenance groups; revise wholesale billing systems; and develop capabilities for E911 and local number portability.").

[37/] *See Iowa Util. Bd.*, 219 F.3d 744, 759 (8th Cir. 2000) (citation and quotation omitted).

pursuant to the C2C Guidelines, twice a year (in August and February) Verizon requests the CLECs to provide forecasts of their projected demand for products.

2. Tandem Trunking

Q. AT&T ALSO SPECULATES THAT THE TANDEM NETWORK WILL NOT BE ABLE TO ACCOMMODATE THE SURGE IN TRAFFIC THAT IT ANTICIPATES AS A RESULT OF THE PENDING SHIFT FROM UNE-PS TO UNE-LS. (AT&T FALCONE AT 22-24.) WHAT IS YOUR RESPONSE?

A. Mr. Falcone provides no evidence to support this speculation, except for his recollection of that blockage problems arose after the AT&T Divestiture, approximately 20 years ago. (AT&T Falcone at 27-28.) These concerns are meritless. Most, if not all, of Verizon's responses to AT&T's concerns about alleged collocation problems apply with equal force to AT&T's alleged concerns about tandem facilities in a UNE-L environment.

Furthermore, to the extent that AT&T or any other CLEC can identify anticipated problems with respect to the tandem network, these issues can be addressed in the transition plan. Current evidence, however, indicates that any such problems are highly unlikely. First, the tandem transport network in Massachusetts currently has capacity to absorb sudden surges in traffic. Second, as AT&T knows, the tandem transport network has been engineered to a blocking standard of 0.5%. The tandem groups are monitored regularly, and a number of metrics are included in the C2C Guidelines and PAP to prevent backsliding in this area. These trunking metrics indicate that Verizon has provided the CLECs with good service. Third, any analogy to the 1984 post-

Divestiture network is inapposite. Among other things, the current network is much more sophisticated than the 1984 network. Switch modernization and software advances have provided options that did not exist in 1984 to re-route traffic and quickly alleviate any sustained blockages. Verizon has also gained a tremendous experience with the management of numerous CLEC networks since the passage of the 1996 Act. Among other things, Verizon has been able to handle surges in traffic associated with the rapid growth of the wireless network. Finally, as the evidence in the transport portion of this case demonstrates, the CLECs are perfectly capable of building their own transport networks, and Verizon expects that the Department will find that the CLECs are not impaired on numerous transport routes in the State.

3. Other Operational Concerns

Q. THE CLECS HAVE SUGGESTED THAT VERIZON'S BATCH HOT CUT PROCESS IS NOT SCALABLE BECAUSE IT REQUIRES MANUAL WORK. (ATT PANEL AT 6; MCI JENKINS AT 56). ARE THEY CORRECT?

A. No. Verizon's Force-Load Model ("FLM") accounted for the fact that performing hot cuts requires manual work in determining that Verizon's proposed process is, in fact, scalable. The work times used in the scalability analysis were based on estimates of actual hot cut work times, which reflect all necessary manual processing steps.

Q. SOME CLECS HAVE SUGGESTED THAT SPACE LIMITATIONS AT THE FRAME WILL PREVENT VERIZON FROM BEING ABLE TO HANDLE INCREASED HOT CUT DEMAND SIMPLY BY INCREASING ITS WORK

FORCE. (MCI JENKINS AT 59.) DO YOU AGREE THAT PHYSICAL SPACE LIMITATIONS WILL HAMPER VERIZON'S EFFORTS TO SCALE UP ITS WORK FORCE TO THE NECESSARY EXTENT?

A. No. As explained in Verizon's initial testimony, the increased force levels estimated by the scalability model will simply bring the level of frame activity closer to staffing levels in earlier years, and crowding was not a problem then. Even if in rare cases two frame technicians might be assigned work in the same frame location at the same time, frame managers are experienced in making informal, pragmatic work scheduling adjustments to deal with such conflicts. Such measures ? which work well today and worked well in the days when frame staffing levels were as high as those predicted by the Force Load Model — will be sufficient to resolve any space availability issues.

Q. THE CLECS ALSO EXPRESS CONCERN OVER THE POTENTIAL VARIABILITY AND UNPREDICTABILITY OF FUTURE HOT CUT DEMAND. (*SEE, E.G.*, MCI JENKINS AT 58.) WILL SUCH ISSUES POSE A PROBLEM FOR VERIZON?

A. No. Verizon's scalability analysis is based on CO-by-CO estimates of the hot cut demands expected in each month or in each relevant embedded-base conversion period, and the implementation of efficient arrangements for staffing those offices to meet that demand. Peak loading situations (*i.e.*, sporadic increases in volumes to levels above the estimates) will be handled as they are handled today, through the use of overtime and, where feasible, by shifting of workers between functions and work locations. Since staffing will be based on

anticipated load over each month, there is no reason to believe that any long-term backlog of demand will develop. It should be emphasized that Verizon's analysis is not based on averaging between time periods with significantly different demands, such as periods during and after the conversion of the embedded base. Therefore, we have no reason to expect any greater variability of demand within each period that we analyzed than we typically experience today. Finally, the greater scheduling flexibility that is possible with the batch hot cut process, and the ability to use that process to accumulate orders over a 6 to 26-business day period, should help to smooth out demand variations. Verizon frame managers are experienced in making informal, pragmatic work scheduling adjustments to deal with varying demand in the case of emergencies and special projects.

Q. MR. FALCONE CITES A LONG LIST OF PROBLEMS HE IS SURE WILL OCCUR FOLLOWING THE ELIMINATION OF UNE-P. WHAT IS THE BASIS FOR THESE ASSERTIONS?

A. Mr. Falcone bases his assertion on his 8 months of experience "installing and disconnecting cross connections on central office frames." (ATT Falcone at 50.) During this time, Mr. Falcone notes, he "inadvertently shorted out terminals, broke wires and disconnected the wrong jumpers," and he has "no reason to believe that today's technician is any more proficient than [he] was." (ATT Falcone at 50.) But Mr. Falcone provides no basis for believing that "today's technicians" is as incompetent as Mr. Falcone claims he was when he performed central office work decades ago. Moreover, although Mr. Falcone's statement of

background and experience indicates a number of assignments of an operational nature, none had anything to do with any aspect of current hot cut processes. Mr. Falcone states that his first assignment, when he began working for AT&T *in 1970*, was as a "frameman" in a large central office. His responsibility in that post was "to install and remove cross connections on various central office frames." (ATT Falcone at 3.) Like virtually everything else, frame technology and the associated OSS have evolved considerably since 1970. Of course, Mr. Falcone's activities had nothing to do with the provisioning of UNEs. In sum, Mr. Falcone provides no support for his assertions aside from his own assumptions based on his experiences working on frames over 30 years ago.

Q. ON PAGE 29 OF HIS TESTIMONY, MR. FALCONE ALLEGES THAT VERIZON'S SCALABILITY ANALYSIS "DIDN'T CONSIDER WHETHER VERIZON HAS THE SPARE CAPACITY TO ACCOMMODATE THE UNE-P LINES THAT ARE CURRENTLY ON IDLC FACILITIES" AND THAT "VERIZON HAS NO CLUE WHAT ITS CAPABILITIES ARE TO SUPPORT THE MIGRATION OFF IDLC FACILITIES THAT WOULD BE REQUIRED BASED ON A FINDING OF NON-IMPAIRMENT." (ATT FALCONE AT 29, 33.)

A. Verizon has ample capacity to accommodate lines that would need to be migrated from IDLC facilities after the elimination of unbundling switching. Verizon has made clear that 99% of Verizon's access lines are served from terminals that are also fed by copper or UDLC. The remaining access lines are in terminals that are fed, at least in part, by copper or UDLC. In addition, in the event that no spare copper or UDLC facilities are available, Verizon may conduct

a “line swap” or “pair swap” to free up copper or UDLC to provide for the hot cut of a customer’s line. Verizon routinely completes these sorts of pair swaps where necessary without lengthy outages in service to customers.

Q. MR. FALCONE ASSERTS THAT THE PRESENCE OF ADDITIONAL TECHNICIANS AT THE VERIZON FRAME WILL RESULT IN ERRORS THAT WILL COMPROMISE SERVICE FOR CUSTOMERS ON THE RECEIVING END OF A HOT CUT AND FOR CUSTOMERS WHO ARE NOT EVEN INVOLVED IN THE HOT CUT. (ATT FALCONE AT 50.)

A. Mr. Falcone’s doomsday scenario is untenable. The increase in staff levels necessary to handle the increase in hot cut volumes after the elimination of UNE-P would merely bring the level of frame activity closer to staffing levels prevailing in earlier years, during which crowding was not a problem. (Verizon Initial Panel Testimony at 76). Even if in rare cases two frame technicians might be assigned work in precisely the same frame location at precisely the same time, frame managers are experienced in making informal, pragmatic work scheduling adjustments to deal with such conflicts. Such measures, which work well today and worked well in the days when frame staffing levels were as high as those predicted by the FLM — will be sufficient to resolve any space availability issues. Indeed, the work-space issue is made even less significant by the additional flexibility created by the batch hot cut process. That process, by significantly reducing Verizon/CLEC coordination requirements, will enable Verizon to spread cut-over work over an entire 24-hour period, rather than limiting it to one or two

work shifts. Indeed, even in cases where the batch process is not utilized, pre-wiring activities can be done outside of normal work hours.

4. Accuracy of the Force Load Model

Q. MR. FALCONE CONTENDS THAT "VERIZON'S FORCE LOAD MODEL OVERSTATED THE AMOUNT OF PRODUCTIVE TIME IT WILL GET FROM ITS STAFF UNDER CURRENT LEGACY LABOR ARRANGEMENTS AND WORK CULTURE." (ATT FALCONE AT 61.) DO YOU AGREE?

A. No. Mr. Falcone claims that the FLM assumes that employees work productively during all of their non-break work hours, and thus do not engage during working hours in, for example, "coffee breaks, health breaks and the general social discussions that occur on the job daily." (ATT Falcone at 64.) Mr. Falcone prefers to assume that only 6 to 6.5 hours of productive work can be squeezed out of a 7.5 hour net shift. However, a reasonable level of this type of activity is a normal workplace phenomenon appropriately factored in measuring work times for various tasks; and such work times are thus appropriately measured against the *actual* length of the shift, not a reduced length as Mr. Falcone proposes.

Q. MR. FALCONE CLAIMS THAT THE AMOUNT OF TIME NEEDED TO ACCOMPLISH CERTAIN TASKS IN VERIZON'S FORCE MODEL IS OUT-OF-SYNC WITH THE TIME SHOWN IN ITS COST MODEL FOR THE SAME TASKS AND SEEMS TO BE UNDERSTATED. (ATT FALCONE AT 61.)

A. The work times in Verizon's FLM and Cost Model are not precisely equal because FLM work times were derived for the most part from the WFA-DI database and certain other sources, while the cost study estimates were based

on the methodologies described in Verizon's Initial Panel Testimony at 48. Tasks are broken down differently in WFA-DI than they are for cost study purposes, and as a result WFA-DI data cannot be used directly in cost studies. Nevertheless, at the aggregate level, the two sets of work time estimates agree closely.

Q. MR. FALCONE STATES THAT AT&T HAS CONCERNS OVER "VERIZON'S ABILITY TO ATTRACT AND HIRE THE NUMBER OF HIGH CALIBER PEOPLE IT WILL NEED." (ATT FALCONE AT 78.) HOW WOULD YOU RESPOND?

A. Verizon does not expect to encounter any substantial problem in meeting the incremental force requirements predicted by the FLM. A sufficient number of potential employees are clearly available. Because of force reductions in the telecommunications industry over the last several years, there is a large pool of experienced workers available to fill incremental staffing needs. Indeed, because the qualifications for these positions are relatively modest, as described above, Verizon would not be limited to hiring experienced telecommunications workers. Generally, there are no educational requirements for new hires to associate positions, although a high school or equivalent diploma is preferred. Applicants are required to pass a battery of tests that measure situational judgment and basic cognitive skills. Thus, a large portion of the available labor force would be eligible for the work in question. An analysis of current unemployment statistics for Massachusetts, presented in Verizon's initial testimony, shows that qualified job seekers are available in numbers far exceeding those that would be required by Verizon. As the analysis demonstrates, all indications from the labor markets

suggest that sufficient workers are available to manage the expected additional work load from incremental hot cuts.

Q. YOU'VE SHOWN THAT VERIZON CAN HIRE THE NECESSARY WORKERS, BUT WILL VERIZON HAVE THE TIME AND RESOURCES TO TRAIN THEM TO PERFORM HOT CUTS?

A. Yes. A trained workforce could be put in place relatively quickly. First, experienced telecommunications workers who have re-entered the job market would require less training. Second, the amount of training to get new technicians up and running is certainly manageable. In accordance with Verizon's standard training requirements, new central office technicians would be required to attend approximately 20 hours of training, which could be provided within a single week. Service representatives would require approximately 112 hours of training, delivered over the course of three weeks. Since the projected demand will not materialize all at once, Verizon will have time to hire and train the necessary staff on a rolling basis. Nor should office space and facilities (computers, etc.) present a problem. Verizon's force levels have been significantly reduced in the recent past, which will make it easier to provide office space, computers, and other needed office tools for new employees. Also, existing office space has been consolidated, freeing up additional space. Making new office space and facilities available, to the extent necessary, should not impose any insurmountable obstacles. Verizon has frequently had to provide space and facilities for additional staff on a rapid basis (*e.g.*, in connection with the establishment of new work centers).

B. Hot Cut Volumes

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS IN THIS SECTION OF THE TESTIMONY.

A. Mr. Falcone argues that NERA's forecast of incremental hot cuts understates the future volume of such hot cuts because, in his view, (i) migrations to non-UNE-L alternatives will be minimal, (ii) conversion of the embedded base of UNE-P lines will never stop, (iii) the conversion of the embedded base of UNE-P lines will be back-loaded rather than uniform for a number of reasons, (iv) NERA's analysis ignores Verizon's time requirements for collocation, shifting traffic to its tandem network, and providing alternatives to IDLC circuits, (v) NERA's forecast relies on a single data point regarding the proportion of CLEC lines provisioned on their own facilities, and (vi) NERA's analysis of the relationship between migrations and hot cuts ignores certain work activities. Mr. Falcone is mistaken.

Future migrations will involve fewer migrations to wireline carriers because traffic is shifting to cable and wireless carriers. In addition, even among wireline carriers, future alternatives to UNE-P include resale and combined ILEC loop and switching services (at market-based rates).

Twenty-seven months after a Department non-impairment decision, there will be no further conversion of the embedded base, because every UNE-P line will have been converted (to UNE-L or something else) under the mandatory schedule in the *TRO*. Of course, future customer migrations that would not have generated a hot cut in a UNE-P world will require hot cuts in a UNE-L world. And NERA's forecast explicitly takes those additional hot cuts into account.

While there are reasons to expect the conversion of the embedded base to be either slower or faster than its pro-rata rate, the result doesn't matter much. According to the FCC's rule, the embedded base conversion must take place in three specific installments. If Mr. Falcone is right and CLECs would prefer to delay conversion, then they would negotiate for a disproportionate number of conversions at the end of the 13th, 20th, and 27th months. But according to the FCC's rule, one-third of the conversions must take place in each of the three periods. In addition, Mr. Falcone ignores the fact that the migration schedule must be agreed upon by both the ILEC and CLEC and approved by the Commission. Thus, the outcome of the process cannot be one which concentrates conversion in an inefficiently short period of time.

Mr. Falcone's hypothesized time requirements for additional collocation and for shifting Verizon's network traffic were taken into account when the FCC set its 27 month schedule, and this proceeding is not the forum in which to re-litigate that aspect of the *TRO*. NERA's forecast of incremental hot cuts assumes that the 27 month schedule in FCC Rule 319(d)(2)(iv) will be met; if that schedule is not met—and for any of Mr. Falcone's reasons the schedule is delayed and the conversion is protracted—then the peak monthly volume of hot cuts will be smaller than the peak forecasted, based on a mandatory 27 month conversion of the embedded base.

The current proportion of CLEC lines provided over their own facilities is not used in any way in the forecast of incremental hot cuts. It is used *only* in the analysis of the relationship between migrations and hot cuts. Moreover, using

the more recent proportions from the December 2003 FCC Local Competition Report, as Mr. Falcone suggests, results in no important change in the results: out of 1,000 hypothetical migrations in the UNE-L environment, the number of additional hot cuts rises from 115 to 163 using the more recent FCC data.

While the activities identified by Mr. Falcone, by and large, represent work that must be done by the ILEC, they are not hot cuts and they will not increase as a result of the elimination of UNE-P. Thus, they do not belong in an estimate of the additional work force necessary to accommodate the changes brought about by the finding of non-impairment.

Finally, Mr. Falcone overlooks an important reason why NERA's forecast is conservative, namely the fact that Verizon is not requesting (and the Department may not make) a finding of non-impairment throughout its service territory in Massachusetts. In fact, the proportion of UNE-P lines falling into the geographic areas in which Verizon MA asserts CLECs are not impaired amounts to [**BEGIN VERIZON PROPRIETARY] [END VERIZON PROPRIETARY]** of its Massachusetts UNE-P lines. Thus, from this fact alone, Verizon's forecast will be approximately [**BEGIN VERIZON PROPRIETARY] [END VERIZON PROPRIETARY]** too high, all else equal.

Q. MR. FALCONE TAKES ISSUE WITH THE ASSERTION THAT SOME CLECS MAY, UPON THE ELIMINATION OF UNE-P, MIGRATE TO NON-UNE-L ALTERNATIVES SUCH AS RESALE OR (PARTICULARLY IN THE CASE OF CABLE COMPANIES) MAY CHOOSE TO PROVIDE THEIR OWN SWITCHING AND LOOP FACILITIES AND HOT CUTS WOULD NOT BE REQUIRED FOR

MIGRATIONS FROM VERIZON TO ANY OF THESE ALTERNATIVES. (AT&T FALCONE AT 7.) HOW DO YOU RESPOND?

A. There are additional options available to the CLECs and it seems improbable, as assumed conservatively in NERA's analysis, that every UNE-P line will be converted to a UNE-L line. Non-telephony wireline alternatives, such as cable telephony and wireless exist and are growing. It would be incorrect to assume that these alternatives will have no impact on future migrations and on the demand for hot cuts. Moreover, while resale levels are currently low in comparison with UNE-P, the elimination of switching would make resale a more attractive option. Recall that in a world where CLECs have UNE-P available, resale is less attractive. Why select resale when one can have a similar product at a lower price? One would expect, however, that as UNE-P is eliminated, CLECs would likely take a closer look at utilizing resale and this would reduce the demand for hot cuts. Finally, as mentioned in Dr. Taylor's Direct Testimony, it is entirely possible that Verizon and CLECs may agree to some type of switch-loop combinations (at market-based prices), further reducing the demand for hot cuts.

For all these reasons, NERA's assumption that all UNE-P lines would be converted to UNE-L is a conservative assumption in the sense that, in reality, it is likely that some UNE-P lines would not be converted to UNE-L, thereby reducing the demand for incremental hot cuts.

Q. MR. FALCONE CLAIMS THAT EVEN WHERE CLECS SUPPLY THEIR OWN LOOPS, VERIZON WILL STILL HAVE TO DO FIELD WORK, FRAME WORK

AND SWITCH WORK TO CARRY OUT A CUSTOMER MIGRATION. (AT&T FALCONE AT 8.) DO YOU AGREE?

A. Yes. Many of the tasks outlined by Mr. Falcone will have to take place. However, this work is not incremental to the Department's non-impairment finding, in the sense that these activities take place today when customers migrate, and nothing in the Department's decision will change the nature or volume of the work involved. For purposes of our data analysis, we assume that all UNE-P lines today and in the future will be via UNE-L, even though this is conservative. Therefore, this conservative assumption means that for data analysis purposes, Mr. Falcone's field work would not be impacted by the elimination of UNE-P. In addition, these activities are not hot cuts. They do not have to be coordinated between competing carriers, and many of the activities can be performed during otherwise slack periods: the time spent in the activity does not represent time during which a customer is without service.

Q. MR. FALCONE CRITICIZES THE EXPECTATION OF INCREASED INTERMODAL COMPETITION (AND FEWER HOT CUTS ASSOCIATED WITH A CUSTOMER MIGRATION), SUGGESTING THAT CUSTOMER DECISIONS TO SWITCH TO CABLE OR WIRELESS TELEPHONY WOULD BE DUE TO "POOR QUALITY HOT CUTS." (AT&T FALCONE AT 9-10.) WHAT IS YOUR RESPONSE?

A. Mr. Falcone is correct that poor wireline service quality would increase customers' migration to intermodal alternatives (currently cable and wireless). But he is incorrect that it is the quality of hot cuts that is responsible for the

growth of cable and wireless telephony. After all, cable telephony and wireless alternatives to wireline service are rapidly growing today, without any effect on customer service from Mr. Falcone's alleged botched hot-cuts. There is no reason that NERA's forecast should ignore this well-known phenomenon.

In addition, Mr. Falcone claims (at footnote 10) that Verizon may wish to "driv[e] customers from wireline service" as a strategy "since it hurts Verizon less than its competitors, given Verizon's wireless operations." Even assuming Mr. Falcone's premise were correct, it would certainly be an unprofitable strategy to drive wireline customers (Verizon's as well as UNE-L CLECs') to intermodal alternatives, when Verizon is only a part-owner of one of many competing wireless alternatives[38/] and does not provide ordinary cable service.

Q. MR. FALCONE CLAIMS THAT THE EMBEDDED BASE CONVERSION "WILL INDEED GIVE RISE TO A CONTINUING INCREMENT OF HOT CUT DEMAND SIMPLY BASED ON CUSTOMER CHURN ON THOSE LINES ONCE THEY ARE CONVERTED." (AT&T FALCONE AT 12.) IS THIS CLAIM CORRECT?

A. No. As clearly explained in Dr. Taylor's Direct Testimony (at 34), incremental hot cuts are made up of the sum of (i) the conversion of the embedded base and (ii) ordinary migration of customers between carriers (or of carriers between wholesale services). Regarding hot cuts incremental to the Department's impairment finding, hot cuts stemming from conversion will end—without doubt or question—after the 27th month following the Department's decision. There will be

38/ Verizon Wireless is jointly owned by Vodaphone and Verizon Communications Inc.

no more, and the bulge in the flow of monthly hot cuts will subside. For the second component of hot cuts, the ordinary migration of customers among carriers will continue, unaffected by the Department's decision. However, some of the migrations that did not involve hot cuts in a UNE-P world will result in hot cuts when UNE-P is no longer available. The additional monthly flow of hot cuts from these migrations is the second component of NERA's hot cut forecast.

Q. AT PAGE 13 OF HIS TESTIMONY, MR. FALCONE SUGGESTS THAT "CLECS WILL STILL REQUIRE THE AVAILABILITY OF UNE-P AS A TOOL FOR THE EXPEDITIOUS ACQUISITION OF CUSTOMERS," AND THEREFORE, THE EMBEDDED BASE OF UNE-P WILL CONTINUE TO GROW. DOES VERIZON'S FORECAST GROW THE EMBEDDED BASE DURING THE FIRST 5 MONTHS AFTER A DECISION OF NON-IMPAIRMENT?

A. Yes. In order to be conservative, NERA's forecast does build in normal growth of the embedded base during the 5 month period when new customers can still be added to the stock of UNE-P customers, despite our view (at 8, cited by Mr. Falcone at 12) that CLECs will not necessarily find it attractive to add UNE-P customers and convert them shortly to UNE-L

Mr. Falcone is attempting to re-litigate the *TRO*. Under the FCC's rules, five months after a Department decision finding non-impairment in some geographic market, CLECs will be unable to purchase new UNE-P services. If Mr. Falcone's view of CLEC needs is correct, they may find resale or the purchase of combined loops and switches at market prices to be convenient, but in any event, no additional UNE-P service will be sold.

Q. WHY DOES MR. FALCONE ARGUE THAT IT IS UNREASONABLE TO ASSUME A PRO-RATA CONVERSION OF THE EMBEDDED BASE? (*SEE* AT&T FALCONE AT 15.)

A. Mr. Falcone offers three basic reasons. First, Mr. Falcone believes that Verizon's analysis ignores any issues that may arise because of collocation "constraint." That is, he argues that collocation space will not be readily available and this means that it is inappropriate to assume a pro-rate conversion of the embedded base. Second, Mr. Falcone (at 25) argues that there will be an increase in tandem traffic with the elimination of UNE-P that may cause "network congestion and the resulting call blocking." His implication is that it will take a while for Verizon to be able to "fix" this problem, thus rendering the pro-rata conversion inapplicable. Finally, Mr. Falcone believes that Verizon will have difficulty converting IDLC lines.

Q. HOW DO YOU RESPOND TO MR. FALCONE'S CONCERNS?

A. In addition to the operational issues addressed above, it is important to reiterate that while there are reasons to expect the conversion of the embedded base to be either slower or faster than its pro-rata rate, the result doesn't matter much. According to the FCC's rule, the embedded base conversion must take place in three specific installments. If Mr. Falcone is right and CLECs would prefer to delay conversion, then they would negotiate for a disproportionate number of conversions at the end of the 13th, 20th and 27th months. But according to the FCC's rule, one-third of the conversions must take place in each of the three periods. In addition, Mr. Falcone ignores the fact that the migration schedule

must be agreed upon by both the ILEC and CLEC and approved by the Commission. Thus, the outcome of the process cannot be one which concentrates conversion in an inefficiently short period of time.

Q. DOES MR. FALCONE MISUNDERSTAND VERIZON'S METHODOLOGY REGARDING FORECASTING INCREMENTAL HOT CUTS?

A. Yes, his apparent understanding of our methodology appears to be incorrect. Mr. Falcone (at 36) asserts incorrectly that our "entire analysis is based on the proportion of CLEC lines as they existed in December 2002." He then sums up his critique by stating (at 40), "…Dr. Taylor missed entirely the competitive landscape that has evolved in the state and as a result he based his forecasts on a world that no longer exist." But our forecasts of incremental hot cuts are not based in any way on the proportion of CLEC lines that are provisioned using the CLECs own facilities, as Mr. Falcone asserts. Rather, our forecast is based on actual Verizon information regarding actual UNE-P migrations and winback. The proportion of CLEC lines provided over their own facilities is used only to demonstrate that not every change in a customer's serving arrangement results in a hot cut. That is, it was used to reach the conclusion that approximately 12 percent of customer migrations would fall into the category incremental hot cuts. It also shows that CLECs that contend that long distance PIC changes are good proxies for the volume of hot cuts required are incorrect because unlike a long distance migrations, that requires a PIC change in almost every migration, a hot cut is not required for every local exchange migration.

Of course, at the time Verizon filed direct testimony, November 12, 2003, the December 2003 FCC Local Competition had not yet been released. Nevertheless, using the more recent FCC data in no way changes the general conclusion that the probability of a customer migration resulting in an incremental hot cut is quite low. Using the more recent proportions from the December 2003 FCC Local Competition Report, as Mr. Falcone suggests, results in no important change in the results: out of 1,000 hypothetical migrations in the UNE-L environment, the probability of a migration resulting in an incremental hot cut rises from approximately 12 percent to 16 percent.

Q. MR. FALCONE ASSERTS THAT DR. TAYLOR'S TABLE 2 "SERIOUSLY MISREPRESENTS" THE MIGRATION ACTIVITIES THAT WILL REQUIRE SOME FORM OF PHYSICAL WORK ON THE PART OF VERIZON'S TECHNICIAN. (AT&T FALCONE AT 41.) HOW DO YOU RESPOND?

A. While the activities identified by Mr. Falcone, by and large, represent work that must be done by the ILEC, they are not hot cuts and they are not incremental to the Department's decision regarding impairment. Thus, they do not belong in an estimate of the additional work force necessary to accommodate the changes brought about by the finding of non-impairment.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.