assume a far greater level of mechanization than is either possible or efficient, and they specifically fail to account for special or complex services for which manual handling is more cost-efficient. Verizon VA has designed numerous mechanized tools to make the MLAC/CPC processes less labor-intensive, but much of the assignment and design of special services still must be performed manually. Indeed, this will continue to be the case for the foreseeable future.

The panel describes Mr. Walsh's days at NYNEX, when one goal was "to reduce corporate overhead, and deliver the assigned orders as efficiently as possible, by enhancing the OSS, correcting mismatched databases," and so forth.[42/] This is still a central goal at Verizon. In fact, Verizon has taken bold steps in this direction since Mr. Walsh's departure by organizing the business in a more modern and enlightened style, appointing two Directors whose organizations focus on operation of the MLAC — including the integrity of its primary database (LFACS) — for Verizon East in its entirety. Despite this intense organizational focus, attaining flowthrough for assignment at rates above the 96% reflected in Verizon VA's model is not an attainable goal, at least given currently available technologies. AT&T/WorldCom have been unable to point to any other carrier or existing system that even begins to suggest otherwise.

[42/] *Id.* at 49.

Q. Please explain why the MLAC, and the specific tasks included in Verizon VA's non-recurring cost model, continue to be necessary in a forward-looking network. [AT&T/WorldCom NRC Rebuttal Panel at 48, 51-52.]

A. One of the key flaws in the AT&T/WorldCom testimony is that they take pains to identify and quantify efforts of various work teams, but then assume them away by hypothesizing the use of technology and products that do not exist. AT&T/WorldCom's wishful assumptions notwithstanding, these teams will be an integral part of provisioning UNE services for the foreseeable future.

The MLAC has been in existence in a mechanized mode for approximately 20 years. Since 1995 it has been under centralized management with flowthrough as a primary objective. By carefully coordinating MLAC with Service Order systems and by driving OSS vendors to numerous improvements through iterative development of functionality, Verizon VA has nearly achieved an optimal flow-through capability of 96% orders being assigned electronically (*i.e.*, only a 4% incidence of manual intervention). Further improvement would not be feasible in the foreseeable future. The fact remains that in a forward-looking environment, Verizon VA expects MLAC employees to handle 4% of all orders manually.

Q. How does Verizon VA respond to AT&T/WorldCom's criticism of the MLAC task? [AT&T/WorldCom NRC Rebuttal Panel at 49-50.]

A. AT&T/WorldCom first contend that the MLAC task is ambiguous with respect to the cause of fallout. But Verizon VA has been quite explicit on this score: fallout sometimes

results from CLEC error, such as a duplicate assignment of CLEC port equipment. In other cases, fallout results from the absence of sufficient assignable loop facility spares to satisfy a CLEC request. Manual intervention by the MLAC may result from the need to rearrange the utilization of Verizon VA loop facilities to permit successful assignment of the CLEC order. Often, this occurs without the CLEC even knowing that Verizon VA took extraordinary measures to ensure completion of its order. Finally, as described elsewhere in this testimony, some orders, by virtue of their complexity, are not designed to flow through the system.

AT&T/WorldCom next contend that application of MLAC fallout within the NRCM is exactly the same for every UNE. However, the incidence of CLEC error and other phenomena giving rise to MLAC activity is similar across all UNE products. Indeed, to the extent that there is variation among MLAC fallout rates, CLECs are advantaged by Verizon VA's assumption of a 4% fallout rate, because if anything, the actual rate for any given individual UNE product is likely *higher* than that.

Finally, AT&T/WorldCom argue that absent evidence that manual intervention is due to CLEC-caused errors, there is no basis for recovering for MLAC "fallout" in non-recurring charges. As described in more detail below, however, non-recurring charges are appropriate in all cases where — as here — the associated cost is the direct result of efforts to provision a specific CLEC order. AT&T/WorldCom's attempt to state an extraordinarily narrow view of "causation" that frees them of their legitimate financial burdens must be rejected.

Q. Why has Verizon VA "included interaction with the MLAC group in the Field Installation's work activity (Task #6), although there is no matching activity indicated for the MLAC"? [AT&T/WorldCom NRC Rebuttal Panel at 29.]

A. AT&T/WorldCom are correct: Verizon VA has neglected to include this MLAC activity in the identification of its costs. Verizon VA should, in fact, have added the costs associated with this activity to the appropriate NRCs.

Q. AT&T/WorldCom suggest that the work of the RCMAC is unnecessary. Please respond. [AT&T/WorldCom NRC Rebuttal Panel at 48, 52-53.]

A. The RCMAC has already achieved significant mechanization eliminating the need for manual work on the provisioning of UNEs. For example, Unconditional 10-Digit Triggers necessary for successful local number portability are set in translations by Verizon VA OSSs in a completely automated mode. Similarly, Verizon VA's OSSs remove retail end-user translations from the Verizon VA switch after Hotcut/LNP migrations in a completely automated fashion. An examination of the RCMAC Forward-Looking Adjustment Factors in the Verizon VA NRCM shows that Verizon VA expects to achieve an even higher level of mechanization on a forward-looking basis.

Nonetheless, the RCMAC organization will continue to be a key component of the UNE provisioning process in the future. Some degree of manual switch translation work will still be needed to perform Hotcuts and Local Number Portability migrations, especially on complex accounts. Also, the RCMAC will continue to manage last-minute

postponements and cancellations in order to prevent end user service outages — the vast majority as a result of the CLEC's inability to proceed with the migration. In short, this is one context in which mechanization would often be less efficient and effective than continued reliance on manual processing.

Q. Do you agree that the CPC workgroup reflects an "unreasonable" level of manual involvement, and that the forward-looking adjustment suggests "no difference" in the near future? [AT&T/WorldCom NRC Rebuttal Panel at 51-52.]

A. No. AT&T/WorldCom have labeled the rates of manual processing at the CPC "unreasonable" without even considering the precise type of work performed by that group. Circuits routed to CPC for design are, by their nature, special. They are outside the "assembly line" capabilities of the provisioning process and invariably require some level of "custom" design and some degree of human coordination. Many "Task-Mate" tools have been developed in the CPC to enhance engineer productivity, but these tools cannot substitute for the human judgment that is necessary to respond to the unique demands faced by the CPC. These activities therefore will require manual involvement for the foreseeable future.

B. The Activities Performed by Verizon VA's Work Groups, Such as the RCCC, Are Necessary and Forward-Looking.

Q. Do you agree that the RCCC is unnecessary because its work is duplicative of other groups' work? [AT&T/WorldCom NRC Rebuttal Panel at 42, 44-46.]

A. No. AT&T/WorldCom's complaint is highly ironic since it is the CLECs themselves that have vociferously demanded not only the existence of an organization like the RCCC, but

also asked that its role be expanded. Indeed, even in their rebuttal, AT&T/WorldCom concede that the "RCCC is there to assist CLECs in assuring services are delivered when ordered" and agree with Verizon that "the RCCC 'serves as the central organization for coordinating the provisioning activities of various Verizon groups and as the Verizon point of contact with CLECs for obtaining all needed assistance.'"[43/] Thus, AT&T/WorldCom's suggestion that the Commission simply ignore the costs of the RCCC is disingenuous and unjustified. It is clear, for example, that AT&T's Operations Departments want — and indeed demand — increased functionality in the RCCC (and the RCMC). AT&T and other CLECs cannot in one breath demand increased functionality and then, in the next, accuse Verizon VA of imposing "unnecessary" costs when it provides what CLECs have demanded. Rather, CLECs, like all customers, must pay for the service they insist upon.

The RCCC's role is particularly critical in the performance of Hotcuts. A Hotcut requires the involvement of various Verizon organizations and, importantly, precise coordination with the CLEC. The RCCC is responsible for ensuring that a loop is simultaneously disconnected from Verizon VA and connected with the CLEC's facilities so as to minimize interruption of service to the end user. In the New York § 271 hearings, AT&T's was among the loudest voices insisting on the creation of *further* checkpoints in Verizon's Hotcut process. AT&T, therefore, has demanded enhancement and augmentation of the functions performed by the RCCC.

43/ AT&T/WorldCom NRC Rebuttal Panel at 44.

Another typical situation in which the RCCC's work is critical is responding to CLEC requests for expedites, postponements, and cancellations. Without the RCCC coordinator, CLECs would have no point of contact that could quickly respond to their requests to change an order.

Q. AT&T/WorldCom contend that Verizon VA includes "excessive times for the RCCC workgroup," and cite, as an example, "the non-recurring cost for a CLEC's request for a Two Wire New Initial UNE Loop with no field dispatch." [AT&T/WorldCom NRC Rebuttal Panel at 38.] Please respond.

A. The "Connect Forward Looking Time" needed by the RCCC to provision a Two Wire New Initial UNE Loop is 12.50 minutes. As described in the NRCM, there are 13 discrete tasks performed by the RCCC to provision the loop. This figure thus breaks down to less than one minute per task — a reasonable time estimate. Below we respond to AT&T/WorldCom's specific criticisms of these tasks.

Q. Is it true that RCCC Task #1, "which accounts for the time to access a system to begin the coordination process," "occurs 100% of the time" according to Verizon VA's model? [AT&T/WorldCom NRC Rebuttal Panel at 38.]

A. Yes. The fact that a task is assumed by the NRCM to take place "100% of the time" should not be a cause for suspicion. In any business, there are some tasks that must be performed to produce *every* unit supplied. This task — in which the RCCC screens each

and every order to determine how to go about meeting CLEC needs — must be performed in each case, and must be performed manually.

Q. Please respond to AT&T/WorldCom's claim that Verizon VA assumes that each service order will include requests for multiple UNEs, because, in testimony submitted to the Massachusetts Department of Telecommunications and Energy, Verizon's witness stated that RCCC Task #2 "represents the time needed to compare the due date and time for a new order with similar information for existing orders so that the orders can be appropriately prioritized." [AT&T/WorldCom NRC Rebuttal Panel at 39.]

A. The testimony that AT&T/WorldCom mention described the RCCC's role in coordinating Hotcuts.[44/] The example that Mr. Meacham and Mr. Peduto offered in the Massachusetts testimony reflected just one case in which AT&T/WorldCom's model had failed to include a necessary activity that *was* included in Verizon's model. Given the unique risks of service interruption that attend the Hotcut process, it is necessary to prioritize and coordinate work to ensure a smooth cut-over.[45/]

But this does not mean that RCCC Task #2 is only applicable when a CLEC orders multiple elements. Task #2 accounts for the time needed by the RCCC Screener to "analyze the order for work activity." This means that the Screener evaluates the order to

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44/ *See* Commonwealth of Massachusetts Department of Telecommunications and Energy D.T.E. 01-20, Testimony of Carlo Michael Peduto II and Bruce F. Meacham, on behalf of Verizon New England, Inc. D/B/A Verizon MA, July 18, 2001, at 21-22.

45/ Indeed, the "existing orders" referenced by Mrs. Meacham and Peduto are not limited to requests for the same type of service, or even requests from the same CLEC.

determine the date due, the type of product or service ordered by the CLEC (*e.g.*, a new loop, a Hotcut, a disconnect, etc.), and whether the order is a "supplement" — *i.e.*, a new version of an already existing order. The outcome of the Screener's analysis determines the next step in the provisioning process. For example, if the order provided for a very short date due interval, the Screener would implement manual notification of field work groups to ensure that it could be accommodated. If the order were a "supplement," the Screener may have to compare it with the initial order to ensure that there are no conflicts. Depending on the product or service ordered by the CLEC, the Screener may choose a properly skilled RCCC coordinator to which the order should be assigned. Thus, the Screener's activities are necessary in many contexts, not simply the context of an order for multiple elements.

Q. Do you agree that RCCC Task #3's definition is too vague, because it "suggests there is some roadblock that the screener eliminates," but does not identify the specific roadblock? [AT&T/WorldCom NRC Rebuttal Panel at 40.]

A. No. RCCC Task #3 accounts for the time required by the RCCC Screener to check the OSS and Service Order Processor (SOP) for any obvious inconsistencies or errors. For example, if an order requiring CPC design does not have an indication that design is scheduled or in progress, the Screener would take action to resolve this issue. The task description is not more specific because the variety of potential roadblocks renders such specificity untenable. In fact, it is precisely because roadblocks can assume many diverse forms that human intervention is often required to address them.

Q. Do you agree that RCCC Task #4 "suggests work associated with related orders," and therefore should not be charged unless the CLEC orders multiple elements or submits multiple orders? [AT&T/WorldCom NRC Rebuttal Panel at 40.]

A. No. RCCC Task #4 accounts for the time required by the RCCC Screener to check the OSS and SOP to determine whether a disconnect order has been issued that is related to the new connect order, thus signifying the need for a coordinated Hotcut, rather than connection of a new loop. This task is part of the screening process. Failure to ensure this important relationship between the new UNE order and the disconnect order can result in full or partial end-user outage at the time of migration. AT&T/WorldCom are incorrect in assuming that this task is related to ordering multiple elements. In most cases, orders for multiple elements are processed and provisioned on a single service order. For example, five new loops can be supplied on one service order.

Q. Is it true that meaningful analysis of RCCC Task #10 — which AT&T/WorldCom dub the "focus" of RCCC activity — is impossible? [AT&T/WorldCom NRC Rebuttal Panel at 41.]

A. First, while task #10 is a key RCCC activity, it is *not* the focus of that group's work. The RCCC's central function is to ensure the smooth migration of customers from Verizon retail service to CLEC service. There are 37 other RCCC activities, each of which plays an important role in guaranteeing a smooth Verizon VA-to-CLEC transition. Specifically, RCCC Task #10 accounts for the time it takes the RCCC Coordinator to contact the CLEC when a no dial tone condition exists at the CLEC port or to contact the

appropriate Verizon organization to correct facility or record problems that may place the order in jeopardy, or both.

Q. Does RCCC task #35 duplicate Field Installation task #3? [AT&T/WorldCom NRC Rebuttal Panel at 45.]

A. These are two different tasks, which will be performed by two different entities. Field Installation task #3 accounts for the time the field technician spends attempting to gain access to the end user's premises and the NID to install a loop. When the field technician fails to gain access to the premises and the NID, he or she will contact the RCCC. RCCC task #35 accounts for the time it takes the RCCC to (1) be notified of the field technician's failure to gain access, (2) update WFA systems to reflect the "no access" situation, (3) and notify the CLEC of the failure and of the CLEC's need to contact its end user to reschedule the "date due." Thus, the tasks are not redundant, and it is appropriate to include both activities in the identification of costs.

Q. AT&T/WorldCom complain that RCCC tasks #11 and #17 are charged in every case, even though the work they represent would not be performed when Verizon VA reuses existing facilities. [AT&T/WorldCom NRC Rebuttal Panel at 45.] Please respond.

A. AT&T/WorldCom are simply wrong. Verizon VA does *not* assume that these activities are performed in every case. Rather, Verizon VA applies a Typical Occurrence Factor and a Forward-Looking Adjustment Factor to account for those cases in which the activities need not be performed. RCCC task #11 is only assumed to take place in *5%* of

all cases in the forward-looking model, while RCCC task #17 is expected to occur in only *20%* of all instances. The Verizon VA NRCM discounts the costs associated with each of these activities accordingly.

Q. Do you agree that when an assignment problem is the result of a Verizon network defect, the costs associated with correction of the condition should be collected in recurring maintenance charges, because the CLEC's order "did not cause the plant to become defective"? [AT&T/WorldCom NRC Rebuttal Panel at 42-44.]

A. The issue is not, as AT&T/WorldCom suggest, whether the CLEC's order caused the underlying defect, but rather whether fulfilling the order caused Verizon VA to incur the costs associated with solving the problem. Here, the correction of the problem merely facilitates the order. In a case such as this, Verizon VA typically will only fix the data necessary to facilitate provisioning. Thus, charges such as this are appropriately collected on a non-recurring basis. To the extent that Verizon VA also performs maintenance on the underlying database in the course of addressing this sort of problem, costs associated with such maintenance would only be included in *recurring* rates — just as AT&T/WorldCom propose.

Q. Would you please summarize your comments regarding provisioning generally?

A. Certainly. Special or complex CLEC requests often require manual handling in the provisioning phase. Moreover, even when orders are *designed* to flow through the provisioning phase, they do not necessarily do so in all cases. Thus, manual processing is, and will continue to be, an inherent part of the provisioning process.

AT&T/WorldCom downplay the importance of numerous Verizon VA organizations involved in provisioning, but their criticisms are misplaced. Organizations such as the MLAC, the RCMAC, and the RCCC are essential to the provisioning process. Indeed, in many cases, these organizations exist to perform services that the CLECs — including AT&T and WorldCom — have *demanded* in other contexts. Having insisted upon expansions of Verizon VA's capabilities, they cannot now avoid the attendant costs.

Finally, although AT&T/WorldCom criticize the levels of fallout that are assumed for various work groups involved in the provisioning process, they provide *no evidence* that the levels are, in fact, any lower.

VI. LOOP PROVISIONING (JDPL Issues II-1 to II-1-d; II-2 to II-2-d; IV-36)

A. Verizon VA's Non-Recurring Charges for Loops Are Appropriate.

Q. Please respond to AT&T/WorldCom's "review of the work activities Verizon claims are necessary for the Two Wire Initial UNE Loop." [AT&T/WorldCom NRC Rebuttal Panel at 92-97.]

A. AT&T/WorldCom's criticisms of the time taken by many of the CO tasks required to provision this element are misplaced.

AT&T/WorldCom first criticize the time taken for CO Task #3. To perform that task, the Frame Technician must obtain a paper copy of the frame request, which has been sent through the SWITCH/FOMS system. Verizon VA's NRCM shows a time of

5.50 minutes for this task based on the survey responses by workers who actually perform it. This is a very reasonable time for this task, especially when one considers that the Frame Technician must access a SWITCH/FOMS terminal, perform certain transactions to retrieve the work, print the work, and verify the information on the work order. AT&T/WorldCom hypothesize that this task should take 2.5 minutes on the ground that a worker might retrieve multiple orders at one time. However, they offer no basis to suggest that workers, when asked the average time to complete this task for one order, did not take this into account. Indeed, AT&T/WorldCom's own analysis suggests that they must have done so: AT&T/WorldCom hypothesize that the total time to retrieve a group of orders is on average 25 minutes. They then assert that the time in Verizon VA's NRCM must represent the total time to retrieve the group instead of just one order. But Verizon VA's task time of 5.5 minutes is much closer to AT&T/WorldCom's hypothesized time of 2.5 minutes for a single order than to the 25 minutes it supposes for a group.

CO TASK #4 accounts for 33.20 minutes of travel time to a remote/unmanned CO to perform the Frame provisioning work. AT&T/WorldCom state that the Frame Technician should perform four tasks at a remote CO. The Verizon VA NRCM is in agreement. The NRCM assumes that in 48% of all cases, the Frame Technician must travel to a remote CO, and that four orders are worked per trip. As explained below, the 48% occurrence is thus divided by four (to signify four orders per trip) to derive the 12% occurrence rate used in the model.

CO Task #8 requires the Verizon Frame Technician to verify the cable and pair facilities. This task involves checking the connection at the assigned loop appearance on the MDF as well as the CLEC's Connecting Facilities Assignment ("CFA") appearance on the MDF to ensure that both are available for assignment. Assessment of the facilities requires more than simple visual inspection; it involves use of test equipment by the frame technician to ensure that dial tone — and the *correct* dial tone — is present. This is a necessary step because the telephone network is complex, especially when two LECs are involved. Continual checks must be performed to minimize problems during the provisioning process. The CLEC may be the cause of the error (as a result, for example, of having provided incorrect equipment port information). This type of error may require Verizon to obtain a new cable and pair assignment, and rewire the connections to the new assignment. Nonetheless, Verizon VA's average work time for this activity is only 9.44 minutes.

CO Task #11 requires the Frame Technician to place a cross connect between the CLEC port and the Verizon MDF appearance of the cable pair. This step may be complicated if the use of tie cables becomes necessary. A technician will also make a dial tone or continuity check during this step. Thus, the 8.53 minutes allotted to this task in the Verizon VA NRCM is reasonable.

AT&T/WorldCom contend that tasks #8 and #11 should take, collectively, 2.5 minutes. This estimate is unreasonable. On conventional frames, the jumper must be terminated at the CLEC switch port and then run down the horizontal shelf. This could

be several hundred feet in length. Along the way, the jumper must be placed into the rack with a "stick" to ensure that it does not spill out onto the connecting blocks. This task requires deliberate, methodical, and therefore time-intensive work to ensure the quality of the service being provisioned and the reliability of other services transiting the Frame.

In some buildings, with multiple frames, jumpers may have to be run on multiple frames, multiplying the necessary work. Where there are COSMIC frames, multiple inter-module tie pairs will need to be placed. Finally, when the technician gets to the location of the assigned cable pair, he or she must clip on with the "butt-in" set, re-verify dial tone (to ensure that the jumper has continuity to the CLEC CFA), double check the dial tone using the automatic number announcement circuit ("ANAC") function, and terminate the jumper to the cable and pair. The proposal that this activity would normally take only 2.5 minutes is ludicrous.

Finally, CO Task #18 may require the Verizon Frame Technician to work with the Verizon Field Technician to resolve any problems related to the provisioning of the loop. For example, if the Field Technician needs to perform a cable pair rewiring, then the Frame Technician also needs to rewire the cross connect between the CLEC port and the MDF. Also, the Frame and Field Technicians may work together to perform certain tests, including, for example, continuity tests, on the facility. Moreover, Verizon VA assumes only a 20% Typical Occurrence Factor for this activity. The times reflected in Verizon VA's NRCM are entirely reasonable given the work involved.

Thus, AT&T/WorldCom's criticisms are premised on an unrealistic vision of the tasks required to provision this element, whereas the Verizon VA figures are based on the actual experience of the workers who perform these tasks on a routine basis.

Q. AT&T/WorldCom contend that several tasks assumed for subloop unbundling are, in fact, unnecessary for various reasons. [AT&T/WorldCom NRC Rebuttal Panel at 97-98.] Please respond.

A. First, AT&T/WorldCom dispute the need for Field Installation Task #3, "Gain Access to Premises and demarcation point/NID." But the UNE product "Distribution Sub Loop" would include the facilities up to *and including* the NID, and thus access to this element is needed.

Second, Task #6 and Task #7 reflect the time needed for a Verizon technician to resolve facility problems. The Field Technician will normally work with the RCCC and MLAC to obtain a new facility assignment when needed. AT&T/WorldCom are correct in stating that the Frame is not involved in this particular scenario. That is why our Task #7 description states "Work with Frame *and/or RCCC*." Coordination with one entity or the other will be required in all instances.

Third, AT&T/WorldCom claim that the times for task #8 and task #13 are overstated. Task #8 involves placement of a field cross connection and a Network Interface Device ("NID") if one is not already installed, as well as the travel time related

to these tasks. A time estimate of 21.81 minutes thus seems quite conservative, given that the technician is expected to place a NID (if none is already installed), travel from the end-user premises to the FDI, erect appropriate Work Area Protection, locate the appropriate wiring within the FDI, test for dial tone, ensure that the dial tone present is the *correct* dial tone, place the cross-connect, and recover the Work Area Protection at the FDI. Similarly, Task #13 involves performance of a CLEC dial tone check and/or metallic testing. The time of 20.76 minutes in the Verizon VA NRCM is also reasonable, considering the work steps involved. For example, the technician must drive to the end-user premises, erect appropriate Work Area Protection, go to the NID, test for dial tone, and ensure that the dial tone present is the *correct* dial tone.

Q. Are AT&T/WorldCom correct in stating that Verizon VA's NRCM includes "no assumption as to how many tasks will the technician perform [sic] while at the remote office so that the travel cost can be divided equally"? [AT&T/WorldCom NRC Rebuttal Panel at 62.]

A. No, they are not. Verizon VA accounts for this concern in its Typical Occurrence Factors. For example, Verizon VA's model assumes that a technician would have to travel 48% of the time to do frame work. However, on average, Verizon VA technicians travel with four orders, which is the same figure AT&T/WorldCom suggest. Thus, Verizon VA applied an occurrence factor *not* of 48%, but of 48%/4 = 12%. Thus, Verizon VA's model does, in fact, account for the number of orders a technician will handle on a trip.

Indeed, the 12% figure used in Verizon VA's NRCM is lessened even further when additional services are considered. The Verizon VA NRCM recognizes the efficiencies of multiple line orders and, unlike AT&T's model, applies frame travel on a per order basis. Thus, for example, if five lines were ordered at the same time, the per line or loop percentage occurrence for travel would drop to 12%/5, or 2.4%.

B. <u>Verizon VA's NRCM Correctly Models the Steps for a Hotcut.</u>

Q. AT&T/WorldCom note that the frequency of travel assumed by CO Frame task #4 for the Hotcut process is double the frequency stated for the 2-wire UNE. What accounts for this difference? [AT&T/WorldCom NRC Rebuttal Panel at 62.]

A. Hotcuts give rise to a high risk that an end-user's service will be interrupted when he or she is migrated from one carrier to another. This risk requires technicians to make two visits. During the first visit, which occurs one to two days before the "due date," the technician will make all preparations necessary for the Hotcut, will perform the actual wiring, and will ensure that the appropriate CLEC's dial tone is in place and ready for the Hotcut to occur. On the second visit, the technician actually performs the Hotcut. Because technicians must make two site visits for a Hotcut, but only one visit for a new 2-wire UNE, the travel time figure for the former is twice that for the latter. AT&T/WorldCom's workflow diagram NRCM 5, page 7 fails to recognize the two necessary visits, and thus misrepresents the Hotcut process.

As described in more detail below, this process was developed in consultation with CLECs seeking to minimize disruptions. In the New York § 271 collaboratives,

AT&T was particularly vocal in insisting that Verizon perform the preparation work well ahead of the due date in order to ensure that CLECs have adequate time to resolve any problems encountered. Moreover, this Commission has "commend[ed] Bell Atlantic for" responding to CLEC demands by "developing [a] 'due date minus two' jeopardy process" in New York. The Commission recognized that the pre-cutover visit "appears to be critical to the proper functioning of the hot cut process."[46/]

As noted above, the necessity of caution in this area is highlighted by the fact that if Verizon VA had followed the procedures that the CLECs advocate here, 11% of all customers who were migrated from Verizon VA to AT&T in July of this year would have been left without service as a result of AT&T's unpreparedness.

Q. Do you agree that in the context of a two-wire Hotcut, CO Frame Task #6 is inefficient because it includes activity that should be performed at the same time as task #5? [AT&T/WorldCom NRC Rebuttal Panel at 62.]

A. Task #5 represents the Verizon dial tone check, which verifies that the dial tone is present on the correct cable and pair. This step requires the use of a hand-held portable test set —often called a "butt-in set" — which is clipped on the end user's cable and pair. Task #6, in contrast, involves the placement and testing of cross connections. These tasks are thus distinct.

46/ Memorandum Opinion and Order, *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York*, 15 FCC Rcd 3953, at ¶ 186 (1999) ("New York Section 271 Order").

Moreover, contrary to AT&T/WorldCom's implication, there is no reason to believe that the individuals surveyed did not, in fact, assume that the tasks would be performed together. Rather, Verizon workers were asked how long each task took, and they reported answers reflecting their experience. That the two activities might be performed together does not, of course, mean that either can be performed in zero time.

Q. AT&T/WorldCom question the need for the RCCC to review the Hotcut order with the CLEC. Specifically, they imply that CO Frame Task #7 duplicates verification work that is performed as part of task #5 and task #6. [AT&T/WorldCom NRC Rebuttal Panel at 63.] Please respond.

A: CO Frame task #7 is part of the industry-accepted process and functions as a safeguard to ensure that the Hotcut goes smoothly. Often, the CLEC ordering organization is separate from the CLEC operations organization — indeed, they are sometimes located in different cities. Thus, even if the ordering organization knew exactly what it *meant* to order, the provisioning organization may have a different understanding when it reviews the internal document. Sometimes, the condition of the CLEC's port changes between the day Verizon VA first check it and the actual frame due time on the due date. The order review step — encompassed in Task #7 — allows both companies to discuss the specifics of the Hotcut and to ensure that the ports, telephone numbers, and other details are correct. It is not at all uncommon to find discrepancies during this review process. For example, Verizon VA has encountered situations in which the LSR requests to migrate all five lines on a five-line account, but in fact the CLEC operations department plans to migrate only two of the lines. Absent verification, Verizon would disconnect

service on all five lines on the due date, leaving three lines without service. Many discrepancies of this sort have the potential to cause costly end-user service outages if left unattended. Thus, overall, this step tends to reduce a CLEC's total costs.

Q. AT&T/WorldCom contend that an efficient Hotcut process would eliminate many CO Frame tasks. For example, they claim that Verizon VA could eliminate Task #15, "Load WFA tickets, check status of order activity, and report completion of order/frame work for WFA tickets (NDSUP and NDSUT) to the RCCC." Please comment. [AT&T/WorldCom NRC Rebuttal Panel at 18.]

A. In assuming the existence of the virtual loop, AT&T/WorldCom wrongly assume away most of the CO Frame tasks associated with the Hotcut process. In fact, every Hotcut will require CO Frame tasks to be performed, both now and in the future. Specifically, task #15 consists of the administrative documentation in Verizon VA's OSSs of the physical work performed by the CO Frame technician. This administrative documentation is obviously a necessary and routine follow-up to the physical work performed by the technician on the Frame.

Q. Is it true that Task #17 and Task #18 account for "labor for field installation technicians when in fact no Field Installation work is necessary," because for an initial Hotcut, "the existing loop will be reused"? [AT&T/WorldCom NRC Rebuttal Panel at 18.]

A. AT&T/WorldCom incorrectly suggest that Verizon VA includes time in its NRCM study of "2 Wire Hotcut Initial" for CO Frame activities 17 and 18. It does not. Both of these

activities occur when Verizon VA provisions an "IDLC to Copper Hotcut Initial" element, but not when it provisions the "2 Wire Hotcut Initial" element.

Q. Is AT&T/WorldCom's characterization of CO frame Tasks #6, #7, and #10 correct? [AT&T/WorldCom Rebuttal Panel at 62]

A. No, it is not. AT&T/WorldCom imply that task #6 involves the frame technician's movement back to the CLEC's equipment to place a cross-wire when the technician might simply have placed the wire when at that location previously. This is incorrect. Task #6 does not include such time, but rather accounts for the time it takes the technician to connect the jumper to the CLEC port assigned on the order, run the jumper between that CLEC port and the loop to be reused on the cable head, and tag it and turn it back at the cable head. At the completion of this work activity, a final check must be made to ensure that CLEC dial tone is available at the tagged end of the jumper where the Hotcut is to be performed. Therefore, *some* repetitive movement is necessary to ensure proper functionality is available to perform the Hotcut successfully. Nonetheless, there is far less repetitive movement in this task than the CLECs suggest.

Task #7, too, involves less repetition than AT&T/WorldCom imply. Contrary to their suggestion, this task need not involve the technician's movement back to the CLEC equipment. And task #10 typically is performed *not*, as the CLECs state, immediately following completion of task #7, but rather on the date due — that is, one or two days later.

1 **Q. How do you respond to AT&T/WorldCom's contentions that the Verizon VA**
2 **Hotcut process is too involved? [AT&T/WorldCom NRC Rebuttal Panel at 64-66.]**
3 A. First, AT&T/WorldCom's argument represents hypocrisy of the highest order. As
4 described in more detail below, most of the processes about which they now complain are
5 in place precisely because CLECS, *including AT&T*, requested them in order to ensure a
6 smooth Hotcut process. This Commission should reject AT&T/WorldCom's attempt
7 here to avoid the costs associated with the services and capabilities that *they* have
8 demanded. When Verizon first established wholesale operations, it developed what it
9 believed to be adequate processes. Members of the CLEC community, including AT&T,
10 requested more comprehensive processes during a series of quarterly industry meetings
11 known as "Verizon User Group Meetings" (or, formerly, as "Bell Atlantic User Group
12 Meetings"). In addition, during the New York 271 Collaborative Meetings, CLECs
13 demanded — and won — more safeguards built into the Hotcut process. In response to
14 the CLECs' demands, Verizon adopted a panoply of procedures designed to ensure a
15 smooth Hotcut process. Thus, for example, Verizon added more comprehensive
16 verification procedures and built expanded communications between Verizon and the
17 CLEC into the Hotcut process. In the course of implementing these new procedures,
18 Verizon solicited feedback from the CLECs, and made adjustments in response to that
19 feedback. Verizon then sought, and obtained, ISO-9002 certification for the new Hotcut
20 procedures; widely publicized these procedures to other carriers; and implemented
21 metrics allowing close monitoring to ensure compliance. Thus, the Hotcut process used
22 by Verizon VA today is a direct result of the CLECs' own requests. AT&T/WorldCom's
23 attempt here to reject the associated charges, with the assertion that "[e]ach company

1 should bear its own costs of minimizing customer disruption"[47] is disingenuous and
2 hypocritical.
3
4 Experience demonstrates that any suggestion that the processes in place are overly
5 cautious is entirely misplaced. As this Commission has noted, "[t]he ability of a BOC to
6 provision working, trouble-free loops through hot cuts is of critical importance in view of
7 the substantial risk that a defective cut will result in end-user customers experiencing
8 service disruptions that continue for more than a brief period."[48] And, indeed, in July of
9 this year, if Verizon VA had followed the procedures AT&T recommends here, 11% of
10 all customers who were migrated from Verizon VA to AT&T would have been left
11 without service for some period, because AT&T was not, at the requisite time, prepared
12 to serve the end user. Instances like these demonstrate the necessity of a cautious
13 approach to Hotcuts.
14

47/ AT&T/WorldCom NRC Rebuttal Panel at 6.

48/ *New York Section 271 Order* at ¶ 299.

Q. AT&T and WorldCom offer a simplified vision of what they claim should be entailed in a "Hotcut." In their view, the OSS can, on its own, perform the migration by de-activating service with the first carrier and activating service with the other. They claim that "[t]here is no obligation to have the CLEC's dial tone residing on its equipment before the specified due-date and due-time," and that Verizon VA's process is therefore "counter-productive." What is Verizon VA's response? [AT&T/WorldCom NRC Rebuttal Panel at 64-66.]

A. The fanciful automated alternative imagined here by AT&T/WorldCom is wildly unrealistic. Verizon VA has designed and implemented a detailed process to ensure that this complex migration occurs successfully. The ILEC (Verizon VA) does not turn off its dial tone at the exact date and time scheduled for migration. Typically, unconditional 10-digit trigger technology is employed (to ensure successful Number Portability after the Hotcut) and the Verizon VA dial tone is disconnected at 11:59 pm on the date due — well after the customer has been migrated to the CLEC. This is yet another safeguard employed by Verizon VA to ensure the continuity of service to the end-user in the days/hours surrounding the migration. Meanwhile, the CLEC is supposed to have its dial tone activated one day prior to the due date. This allows the CLEC, ILEC, and customer to resolve any problems *before* the scheduled Hotcut. The entire process is designed to ensure a smooth transition of service and to minimize service interruption for the end user. AT&T/WorldCom's simplistic alternative is untenable, because the processes involved are so complicated, and so subject to unplanned disruption, that human intervention is necessary to ensure completion of the multiple steps that must be intricately coordinated between Verizon and the CLEC.

Q. Assuming that AT&T/WorldCom have simply changed their minds, is there anything wrong with their view of the ideal Hotcut process?

A. Yes. AT&T/WorldCom have, in effect, attempted to analogize the Hotcut process to CO conversion.[49/] But this analogy is inapt; there are huge differences between these processes. First, the Switch Conversion process involves taking *all* the customers from one Verizon switch and moving them simultaneously to another Verizon switch, while the Hotcut process involves taking only a *few* customers (selected by the CLEC) from the Verizon switch and moving them simultaneously to the CLEC switch.

Second, AT&T/WorldCom allege that Verizon VA should place "a new cross wire 'on top of' the existing wires at the cable pair location and terminate[] the remaining end at the CLEC's equipment appearance (CFA)."[50/] Then, they contend, Verizon VA can simply transfer service at the appropriate date and time. However, such a technique would pose unacceptable risks to both Verizon VA's network and the CLEC's. The placement of a second cross-wire would, in effect, connect the Verizon VA switch and the CLEC switch. This would give rise to a substantial risk that the "dueling" switches would damage one system or the other by sending messages, for example, that trigger unwarranted "maintenance" procedures. Moreover, even if the switches were not damaged, there would be an unacceptable likelihood that the two switches would cause loss of service to the end user in advance of the Hotcut. This cross-battery condition also

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49/ AT&T/WorldCom NRC Rebuttal Panel at 64-65.

50/ *Id.*

will likely generate an unnecessary trouble report, contributing to higher maintenance costs that would be, but are not now, included in the recurring rates.

Third, switch conversion in the context imagined by AT&T/WorldCom would require application of a very powerful tool known as "the Cutover Program." Use of this program in the Hotcut context could disrupt end-user service, and thus would be inappropriate. Normal execution of the Cutover Program puts both switches into unstable states before, during, and after execution of the program. Simply having such a Cutover Program resident in the switch introduces some level of risk that must be closely controlled by those responsible for each switch for as long as the Cutover Program is resident. For example, unrelated maintenance events in a switch in which a Cutover Program is resident have been known to inadvertently invoke or reverse actions of the program. Improper operation of such programs will result in the disruption of service to some or all of the end users served by the switch before and/or after "conversion." For example, a cutover program problem occurring prior to the Hotcut could disrupt service to the end-user while he or she is still being served by the Verizon switch. A problem in the cutover program after the Hotcut could disrupt service to the end-user going forward while served by the CLEC switch.

Thus, in addition to constituting "automation overkill" for the task at hand, the use of the "Cutover Program" to perform Hotcuts on a routine basis, on such a small number of lines each time, between two separate LECs (Verizon VA and the CLEC), would be foolhardy in light of the accompanying risks. If AT&T and WorldCom truly

1 believed that "[m]inimizing service disruptions should be a basic business priority for
2 both Verizon and new entrants,"[51] they would agree.
3
4 **Q. Have any other carriers employed the Hotcut process described by**
5 **AT&T/WorldCom?**
6 A. Not to our knowledge. No LEC wishes to expose its network to the risks of being tied to
7 another LEC's network in such an unstable manner. Indeed, the switch vendors
8 themselves have never, as far as we are aware, even suggested that the Cutover Program
9 (which they developed) is an effective Hotcut tool. Switch vendors recognize the risks
10 envisioned by the LECs, recognize the cost to enhance their cutover programs to
11 eliminate such risks, and have decided that the benefits of automation do not warrant the
12 attendant costs.
13
14 **Q. Are AT&T/WorldCom correct in arguing that Verizon VA does not charge its own**
15 **customers for "coordination" expenses, and thus should not charge CLECs for**
16 **those expenses? [AT&T/WorldCom NRC Rebuttal Panel at 68.]**
17 A. No. AT&T/WorldCom have misunderstood, or misstated, the facts. To the extent that
18 Verizon VA incurs similar expenses in the retail markets, Verizon VA's prices of course
19 reflect those expenses, even if not in an itemized fashion.
20

51/ AT&T/WorldCom NRC Rebuttal Panel at 67.

1 **VII. UNE-P ISSUES (JDPL Issues II-1 to II-1-d; II-2 to II-2-d; IV-36)**

2

3 **Q. AT&T/WorldCom complain that Verizon "proposes to assess non-recurring charges**
4 **for field installation for both the initial and migration of the 2-wire UNE Platform."**
5 **They claim that "it is difficult to conceive of a situation where the CLEC could**
6 **possibly be the cost causer of field work where a working combination of elements**
7 **currently in service is simply being migrated by an electronic order."**
8 **[AT&T/WorldCom NRC Rebuttal Panel at 58.] Please respond.**

9 A. AT&T/WorldCom apparently misunderstand Verizon VA's NRCM. Field installations
10 are only billed on a per-occurrence basis. That is, Field Installation charges are assessed
11 only if required to satisfy a CLEC request for service. If a field visit is not necessary, no
12 charge is applied. As the CLECs suggest, there normally will be no field installation
13 costs for UNE-P migrations. Such a charge will only apply if the field visit was
14 specifically requested by the CLEC, as field visits sometimes are.

15

16 **Q. AT&T/WorldCom next contend that Verizon VA's UNE-P non-recurring cost**
17 **studies "improperly reflect more complex and costly provisioning and installation**
18 **activities than Verizon would use for retail services. This is particularly true for the**
19 **RCCC costs that simply do not exist in a retail environment." [AT&T/WorldCom**
20 **NRC Rebuttal Panel at 58-59.] How do you respond?**

21 A. Verizon VA's retail costs *do* reflect any necessary internal intracompany costs related to
22 the control and provision of service to retail customers. However, integrated retail
23 services provided by a single carrier (Verizon VA) do not require the same level of
24 contact, coordination, and control as do wholesale services, which must recognize not

only the totality of assembled multiple network elements provided by more than one carrier, but also the presence of another provider even when Verizon VA provides network elements in combination (UNE-Ps) on behalf of that carrier.

The RCCC is Verizon's response to CLEC requests for quality assurance and circuit coordination for the wholesale services they order. It provides the CLEC with a single point of contact with Verizon for provisioning matters. In a non-competitive world where service is integrated and bundled by and for a single carrier an RCCC would not be necessary. In this world, however, it is necessary, as evidenced by the fact that the CLECs themselves demanded the very tasks it performs.

Q. Is it true that "it is inappropriate to include CO wiring and Field Installation costs as part of the UNE-P non-recurring costs," because Verizon VA should instead have assumed the use of dedicated inside plant ("DIP") and dedicated outside plant ("DOP")? [AT&T/WorldCom NRC Rebuttal Panel at 59.]

A. No. First, as previously mentioned, the field installation costs support a separate rate element that, in the case of UNE-Ps, would only apply when the CLEC *requests* Verizon VA field work. This is an *option* provided to the CLEC by Verizon VA, not a known requirement.

Second, as described in detail in Verizon VA's rebuttal testimony, use of 100% DIP and DOP would be inefficient and is not used by any real-world carrier.[52/] A 100%

[52/] VZ-VA NRC Panel Rebuttal Testimony at 26-33; 39-45.

DIP approach would require a separate piece of OE for each and every cable pair. This is totally unrealistic and would drive recurring cost up substantially. Moreover, in a competitive environment, it is not at all clear to which carrier DIP should be dedicated. AT&T/WorldCom make no mention of how the cost to provide DIP should be recovered. A 100% DOP approach would be similarly inefficient. Though outside plant is not automatically disassembled upon disconnection of a service, such disassembly is very likely if "dedicated" facilities lay idle and their component parts are needed to serve another customer.

Q. Do you agree that "[i]t is literally impossible . . . for the MLAC to be involved with a no-fallout UNE-P order," because the MLAC "is responsible for 'Assign[ing] outside plant and central office facilities for *non-flow through service orders*'"? [AT&T/WorldCom NRC Rebuttal Panel at 59.]

A. No, it is not. In order to switch a loop from a retail service to UNE-P, Verizon VA will virtually "disconnect" the elements making up the retail service, and then instantly "reconnect" them as a UNE loop and UNE switch port. This operation is necessary to adjust Verizon VA's systems to recognize the loop and port as parts of a CLEC service rather than components in Verizon VA's retail service. During this reconfiguration, the loop acquires a serialized circuit ID by which it will be identified in future dealings with Verizon VA, and the attributes of the switch port are changed within the Verizon VA switch to allow message unit (end-user usage) data to be collected and delivered to the CLEC. In some cases, the reconfiguration will cause a record mismatch, which will result in the order "falling" from LFACS to the MLAC for manual resolution. Orders

such as this have "flowed through" the ordering systems, but they have "fallen out" of the provisioning process and must be addressed by the MLAC.

VIII. RATE STRUCTURE (JDPL Issues II-1 to II-1-d; II-2 to II-2-d; IV-36)

A. Verizon VA Has Employed the Proper Approach to Distinguishing Recurring Costs From Non-Recurring Costs.

Q. Do you agree that a non-recurring charge should not be imposed whenever the task in question might someday benefit another carrier or that, relatedly, the Commission should distinguish between "temporary" changes to the network that Verizon VA implements for the sole use of the requesting CLEC and "permanent" changes that Verizon VA "keeps in place to benefit future users, including its own retail operations"? [AT&T/WorldCom NRC Rebuttal Panel at 19-20.]

A. No. As explained in Dr. Shelanski's rebuttal testimony, a non-recurring charge is appropriate for one-time costs that are incurred as a direct result of receiving and filling a CLEC request for service, even if in some cases, those costs are associated with facilities that might be reused.[53/] This cost-causation standard is grounded in well-established principles, and AT&T has offered no countervailing authority other than its own assertions.[54/] The CLECs' proposed test — which essentially would forbid recovery on a non-recurring basis of any charge associated with an expense that might, possibly, someday benefit other CLECs — has no economic or other basis and amounts to nothing more than an attempt to shift costs directly associated with CLECs' requests for service

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53/ *See* Shelanski Rebuttal at 9, 15, 17-19.

54/ *See id.*