

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

---

Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts

---

D.T.E. 01-20

**SURREBUTTAL TESTIMONY OF RICHARD J. WALSH**

**ON BEHALF OF AT&T AND WORLDCOM**

**(Non-Recurring Costs)**

**December 17, 2001**

I.	INTRODUCTION.....	1
II.	RESPONSE TO VERIZON’S CRITICISMS .....	2
A.	NON-RECURRING COSTS AT THE ORDERING STAGE.....	5
B.	NON-RECURRING COSTS AT THE PROVISIONING STAGE .....	8
1.	COST CAUSATION ISSUES, INCLUDING FALLOUT FLOW THROUGH .....	8
2.	RCCC ACTIVITIES.....	11
C.	NON-RECURRING COSTS ASSOCIATED WITH CENTRAL OFFICE WIRING AND FIELD INSTALLATION .....	21
D.	NON-RECURRING COSTS FOR PROVISIONING OF LOOPS.....	23
E.	NUMBER OF ELEMENTS MODELED .....	32
F.	WORK TIMES AND ACTIVITIES.....	34

TABLE OF CONTENTS

Page

1 **I. INTRODUCTION**

2

3 **Q. ARE YOU THE SAME RICHARD J. WALSH WHO HAS PREVIOUSLY**  
4 **PRESENTED TESTIMONY IN THIS PROCEEDING?**

5 A. Yes.

**Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

6 A. The purpose of my testimony is to respond to Verizon’s specific criticisms of the AT&T  
7 Non-Recurring Cost Model (AT&T NRCM) which were presented by Carlo Michael  
8 Peduto II (“Peduto”) and Bruce F. Meacham (“Meacham”). Specifically, I will address  
9 Verizon’s criticisms of the AT&T NRCM and demonstrate the effect on estimated non-  
10 recurring costs of the inappropriate assumptions and faulty methodology advocated by  
11 Peduto and Meacham and embodied in the Verizon NRCM.

12 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

13 A. After a brief introduction, I respond to each of the criticisms of the AT&T NRCM raised  
14 in Verizon’s Rebuttal testimony.

15 My response to those criticisms is divided into six subject matter areas:

16 ?? Non-Recurring Costs at the Ordering Stage;

17 ?? Non-Recurring Costs at the Provisioning Stage;

18 ?? Non-Recurring Costs Associated with Central Office Wiring and Field

19 Installation;

**TABLE OF CONTENTS**  
(continued)

**Page**

1            ?? Non-Recurring Costs for Provisioning of Loops;

2            ?? Number of Elements Modeled; and

3            ?? Work Times and Activities

4            In each section I provide examples which form the basis for my conclusion that Verizon's  
5            critiques are without foundation.

6

7    **II.    RESPONSE TO VERIZON'S CRITICISMS**

8

9    **Q.    DO VERIZON'S CRITICISMS REFLECT A CLEAR UNDERSTANDING OF**  
10 **WHAT COSTS SHOULD BE RECOVERED IN RECURRING AND NON-**  
11 **RECURRING RATES?**

12    A.    No. It is clear from Verizon's rebuttal testimony that Verizon believes that any activity  
13            which can be tied in any way to a CLEC's UNE request should be recovered in non-  
14            recurring charges. This is simply incorrect.

15            As I explained in more detail at pages 9-12 of the Direct Testimony of Richard J. Walsh,  
16            Verizon will incur any number of one-time costs which are not properly included in a  
17            non-recurring cost model. A non-recurring cost charge should include only one-time  
18            costs incurred in performing activities required to initiate or provide wholesale services,  
19            interconnection or unbundled network elements to a particular end user and which  
20            benefit only that end-user. One-time activities which are actually recurring cost activities  
21            are those which have the capacity to benefit numerous end-users such as, for example,

## TABLE OF CONTENTS

(continued)

Page

1 construction or maintenance of facilities. The expense of such one-time activities which  
2 provide benefit to multiple end-users or to the network itself are properly recovered  
3 through recurring rates.

4 For this reason, proper classification of non-recurring cost activities and other one-time  
5 activities is of critical importance. This classification process demands that each activity  
6 necessary to produce an element be designated as a recurring or non-recurring cost  
7 activity. The activity classification should not be dictated by Verizon's past accounting  
8 practices, but should be derived from examining the benefit that the activity provides. If  
9 the activity provides a benefit only to the CLEC ordering service, that activity is non-  
10 recurring. If, instead, the activity produces a benefit to the network, the ILEC, or other  
11 CLECs, in addition to the CLEC ordering service, the activity should be classified as a  
12 recurring cost activity.

13 For example, certain interconnection costs are properly classified as non-recurring costs.  
14 The process of interconnection for which non-recurring costs classification is appropriate  
15 is best described as a temporary condition that is bound by the life of the service or  
16 UNE. The activities used to produce this interconnection, such as the "temporary"  
17 connections at interconnection points within the network, are the one-time non-recurring  
18 costs. For instance, if cross-wires are to be placed to support the CLEC  
19 interconnection, and subsequently removed when the CLEC ceases the use of the UNE,

## TABLE OF CONTENTS

(continued)

Page

1 the cross-wire placement and removal activities are properly classified as non-recurring  
2 cost activities. The temporary nature of the service provided makes it appropriate to  
3 recover the cost from a single cost causer. If the cross-wire connections are not  
4 disconnected and remain in-place to serve future customers (i.e., other CLECs or  
5 Verizon retail customers) the activity cost should be treated as a recurring cost,  
6 spreading the cost among all who benefit from the underlying activity.

7 In contrast to appropriate temporary interconnection activities, the Field Installation  
8 activities included within the Verizon NRCM provide good examples of activities  
9 performed by Verizon in the installation of the service or UNE, but not later  
10 disconnected or un-done. For instance, the placement of a cross-wire is a permanent  
11 modification to Verizon's plant and the cost of that activity must be recovered through  
12 recurring rates.

13 This "temporary" vs. "permanent" distinction provides a good rule of thumb for  
14 determining the proper cost causer. To comport with cost causation principles, a non-  
15 recurring cost study must exclude all costs of constructing and maintaining the elements of  
16 the forward-looking network, which are recurring costs, and capture only the cost of  
17 temporary connections to the CLEC.

18 Furthermore, this distinction between recurring and non-recurring costs should not be  
19 surprising to Verizon. The FCC, in its First Report and Order, required that costs be

**TABLE OF CONTENTS**  
(continued)

**Page**

1 recovered in the way they are incurred. This essentially means that recurring costs must  
2 be recovered through recurring charges and non-recurring costs must be recovered  
3 through non-recurring charges. The FCC emphasized the importance of this distinction,  
4 stating that “We find that recovering a recurring cost through a nonrecurring charge  
5 would be unjust and unreasonable because it is unlikely that incumbent LECs will be able  
6 to calculate properly the present value of nonrecurring costs.” (FCC First Report and  
7 Order at 746). The FCC further instructed that “state commissions take steps to ensure  
8 that incumbent LECs do not recover nonrecurring costs twice and that nonrecurring  
9 charges are imposed equitably among entrants.” (FCC at 750). Peduto and Meacham’s  
10 criticism of the AT&T NRCM fails to recognize and apply these basic costing principles.

11 **A. NON-RECURRING COSTS AT THE ORDERING STAGE**

12  
13 **Q. VERIZON HAS CRITICIZED AT&T FOR NOT INCLUDING ENOUGH**  
14 **MANUAL PROCESSING TIME IN THE ORDERING STAGE. IS THIS A**  
15 **VALID CRITICISM?**

16 A. Absolutely not. Verizon would have the Department believe it has a sophisticated  
17 electronic interface to receive CLEC requests but that the service order processing  
18 system does not have the capacity to interpret the data submitted and generate an actual  
19 request. This is patently untrue.

20 Verizon bemoans “AT&T’s failure to recognize that some orders are not designed to  
21 flow through the system” (rebuttal at 7, emphasis added), yet Verizon has neither

**TABLE OF CONTENTS**  
(continued)

**Page**

1 specifically identified these types of orders, nor has it presented evidence to explain why  
2 any manual ordering process would be designed for a forward-looking environment.  
3 Instead Verizon asks AT&T, WorldCom, and the Commission to take on faith that “the  
4 only manual processing costs during the ordering stage that Verizon MA’s model takes  
5 into account are for those types of orders that *by design* are intended to be handled  
6 manually” (rebuttal at 7) and that Verizon’s “design” of a manual process for these  
7 orders is the least cost, most efficient, forward-looking method for service ordering.

8 The AT&T NRCM, on the other hand, acknowledges that fallout will occur on some  
9 orders, but assumes that fallout should not occur on the most common orders processed,  
10 the average, everyday orders. AT&T/WorldCom’s global 2% fallout rate accounts for  
11 both situations.

12 It should be noted that AT&T/WorldCom is not advocating that ILECs such as Verizon  
13 should experience a fallout percentage of only 2%. The global 2% fallout rate accounts  
14 for errors caused by the CLEC for which Verizon’s systems cannot automatically correct  
15 itself and must return the request to the CLEC and thus requires manual processing to  
16 continue the order’s fulfillment. This global fallout rate does not include OSS error  
17 conditions which when resolved by Verizon will provide a benefit to Verizon Network  
18 (including the data stored within the OSS). It is assumed that the proper cost

## TABLE OF CONTENTS

(continued)

Page

1 classifications of these activities are recoverable in recurring rates. As stated previously,  
2 Verizon has yet to provide any empirical evidence that suggests otherwise.

3 **Q. DOES VERIZON’S CHOICE TO MODEL MANUAL PROCESSING OF**  
4 **SERVICE ORDERS RAISE ANY OTHER ISSUES?**

5 Yes. Verizon’s choice to model a manual process whenever multiple elements are  
6 ordered on a single request inappropriately inflates non-recurring costs. This results from  
7 Verizon’s misunderstanding of the difference between recurring and non-recurring costs.  
8 Verizon admits that “[o]ne type of order that requires manual intervention by design is a  
9 service order for more than five new POTS loops at a single location. To process such  
10 an order, Verizon MA’s NMC representatives must request that Verizon MA’s outside  
11 plant engineers perform a facility check to verify that there are enough facilities at that  
12 particular location to fulfill the request.” (Rebuttal at 9) Verizon fails to recognize that  
13 activities designed to determine and fulfill demand, such as the facilities checks at issue  
14 here, should, in fact, be recovered in recurring rates. By its very nature, the engineering  
15 department’s work in this context is a recurring cost; an ongoing cost associated with the  
16 development and implementation of the network. Simply renaming this type of service  
17 ordering related work activity as “designed fallout” does not convert a recurring task to  
18 a non-recurring cost activity.

19 In deciding whether and/or how to build or rearrange plant to meet a particular request,  
20 Verizon does not consider the particular request in a vacuum. Instead, Verizon

## TABLE OF CONTENTS

(continued)

Page

1 considers all future demand, including the facilities that Verizon itself or other customers  
2 may need. If Verizon anticipates that future demand will require network adjustments,  
3 technicians dispatched to do such a facilities check will be asked to make those  
4 adjustments. Characterizing facility checks as “designed fallout” is simply an attempt to  
5 pass through to the CLEC in the form of a nonrecurring charge for monitoring demand  
6 and most efficiently adjusting its network to meet future demand.

### 7 **B. NON-RECURRING COSTS AT THE PROVISIONING STAGE**

#### 8 9 1. COST CAUSATION ISSUES, INCLUDING FALLOUT FLOW THROUGH

#### 10 **Q. VERIZON MAKES THE ACCUSATION THAT AT&T’S NRCM DOES NOT** 11 **INCLUDE ENOUGH NON-RECURRING COST IN THE PROVISIONING** 12 **STAGE AND ALLEGES THAT A “98% FLOW THROUGH RATE FOR** 13 **PROVISIONING IS BASELESS.” HOW DO YOU RESPOND?**

14 A. AT&T/WorldCom’s testimony and supporting documentation recognize that fallout does  
15 occur and that, using existing systems, rates of fallout may be higher than 2%. However,  
16 this rate of fallout results from defects in the database inventory. The CLEC does not  
17 cause the ILEC’s OSS databases to include data inconsistent with actual network  
18 conditions, and thus the CLEC is not the cost causer of any resulting fallout. Even  
19 Verizon admits that “some amount of mismatched information is inevitable and is part of  
20 doing business.” (Rebuttal at 52). Therefore, even using Verizon’s own concept of cost  
21 causation, a CLEC order does not cause any cost which results from Verizon’s  
22 mismatched information. Corrections to those databases and the links between them will

## TABLE OF CONTENTS

(continued)

Page

1 allow future orders to flow through, creating benefits for Verizon and other users. As a  
2 result, these activities are recurring in nature and should be recovered in recurring rates,  
3 not in non-recurring rates. To compound this problem, Verizon, has chosen to model  
4 backward-looking database technology with front-end editors incapable of rejecting  
5 back to CLECs flawed orders, which should be easily accomplished using forward-  
6 looking technology. Charging CLECs a non-recurring cost to correct the OSS  
7 databases or compensate for inefficient equipment that causes service order fallout is not  
8 appropriate.

9 However, AT&T/WorldCom's flow through assumption does recognize that sometimes  
10 errors in CLEC-entered data on the service order request may cause the order to fall  
11 out. Because resolution of that particular type of fallout will benefit only the CLEC, the  
12 cost of that resolution is properly a non-recurring cost. These circumstances are  
13 reflected in AT&T/WorldCom's 2% fallout rate at the provisioning stage.

14 **Q. DO VERIZON'S CRITICISMS OF TMN, EASE, AND US WEST SYSTEMS**  
15 **HAVE ANY RELEVANCE TO THE VALIDITY OF THE AT&T NRCM'S**  
16 **FALLOUT ASSUMPTIONS?**

17 A. No. Verizon attempts to discredit the AT&T NRCM's fallout assumptions by attacking  
18 the viability of the TMN, EASE, and US WEST systems which AT&T/WorldCom uses  
19 as examples. This critique misses the point. AT&T/WorldCom is not advocating the  
20 wholesale transplantation of any of these models into the competitive local service  
21 market. The cited systems are only examples of forward-looking models. They are

**TABLE OF CONTENTS**  
(continued)

**Page**

1 offered to demonstrate the level of efficiency possible when ILECs focus on reducing  
2 overall costs. Verizon, unfortunately, has no such incentive in this proceeding. Instead,  
3 the incentive here is for Verizon to inflate NRCs as much as possible. The higher the  
4 costs presented by Verizon in this proceeding, the more likely it will be that Verizon will  
5 successfully maintain its monopoly status.

6 **Q. CAN YOU GIVE OTHER EXAMPLES WHERE VERIZON IMPROPERLY**  
7 **LABELS THE CLEC ORDERING SERVICE THE COST CAUSER FOR AN**  
8 **ACTIVITY?**

9 A. I also disagree with Verizon's implication that the CLEC ordering service causes the cost  
10 of dispatching a Field Installation technician to condition and/or perform other work on  
11 loop elements. Loop elements are accounted for in the recurring rates consumers pay.  
12 That accounting assumes that Verizon is being compensated for loops that actually  
13 function. A loop without a field cross-connect cannot provide service to a customer and  
14 is, by definition, a defective loop. An unconditioned copper loop cannot function to  
15 provide advanced services. If Verizon has modeled its recurring loop rates on loops or  
16 other facilities incapable of actually providing service, then Verizon has failed to model  
17 the total demand required under TELRIC. The solution is not to pad non-recurring rates  
18 with field cross-connect charges and loop conditioning charges. Again, the CLEC did  
19 not cause defective loops or Verizon's modeling choices.

20 Similarly, the CLEC is not the cost causer when Verizon chooses an inefficient method  
21 for migrating a customer on IDLC to a CLEC. When Verizon chooses to accomplish

**TABLE OF CONTENTS**  
(continued)

**Page**

1 this migration using a bypass method which requires the participation of Field Installation  
2 and CO Frame workgroups, the cost causer is Verizon. This fact is made even more  
3 apparent by the fact that Verizon fails to model *any* of the other technically feasible  
4 methods of interconnection using IDLC.

5 The AT&T NRCM clearly recognizes that CLEC orders will, at times, cause costs  
6 which should properly be recovered through non-recurring rates. If the activity provides  
7 a benefit to Verizon or to its network, however, then that activity, though it may have  
8 been prompted by the CLEC order, was not caused by the CLEC and should not be  
9 recovered in non-recurring rates.

10 **Q. VERIZON ALSO COMPLAINS THAT THE AT&T NRCM IGNORES**  
11 **NECESSARY DESIGN TIME. HOW DO YOU RESPOND?**

12 A. The level of design time modeled by Verizon is simply not necessary in a forward-  
13 looking least cost environment. Verizon is correct that if design were accomplished using  
14 manual processes, it would be both time consuming and expensive. Fortunately for  
15 consumers and CLECs alike, manual design time is not required in a forward-looking  
16 system. Design can be accomplished without manual intervention using forward-looking  
17 OSSs integrated with the TIRKS system. This is not a pie in the sky proposition. On  
18 the retail side, flow-through design processes are already in place. For example,  
19 assignment for a four wire loop comes through the TIRKS system are done

**TABLE OF CONTENTS**

(continued)

**Page**

1 automatically. Thus, the AT&T NCRM properly excludes design time, which is not  
2 necessary in a forward looking environment.

3 2. RCCC ACTIVITIES

4 **Q. IN ADDITION, VERIZON CLAIMS THAT THE “AT&T NRCM**  
5 **INAPPROPRIATELY DISREGARDS THE NECESSARY COORDINATION**  
6 **ACTIVITIES PERFORMED BY THE VERIZON REGIONAL CLEC**  
7 **COORDINATION CENTER (RCCC).” DO YOU AGREE?**

8 A. No. First and foremost, I disagree with Verizon’s characterization of all RCCC activities  
9 as “necessary.” The Rhode Island Public Utilities Commission recently ordered that no  
10 coordination costs be included in any TELRIC cost studies filed in a specified docket,  
11 stating that,

12 The Commission shares the Division’s concern that the costs associated  
13 with the Coordination Bureau are unnecessary. Special coordination  
14 charges that apply only to work being done for UNEs might well amount  
15 to double-recovery of ordinary supervision overhead expenses and  
16 could, therefore, constitute a barrier to entry.<sup>1</sup>

17 In fact, many of the RCCC activities included in the Verizon NRCM represent charges  
18 for tasks which may not take place at all. For example, Verizon states that it only intends  
19 to dispatch a Field Installation technician if a cross-connect is required. This decision is  
20 reflected in the non-recurring rates for field installation tasks. However, the tasks that the  
21 RCCC performs are largely associated with this workgroup. Therefore, even though the  
22 Verizon NRCM may not reflect charges on every order for a Field Installation

**TABLE OF CONTENTS**

(continued)

**Page**

1 technician’s time, the Verizon NRCM does, in fact, impose charges for the RCCC to  
2 interact with that workgroup. It strains credibility to argue that the RCCC is “necessary”  
3 to coordinate work which will not take place in situations where existing facilities are  
4 used to provision a request.

5 Second, many of the activities of the RCCC are necessary for building and maintaining  
6 the plant and, therefore, should be recovered through recurring, not nonrecurring, rates.  
7 These activities include recording testing results, updating databases, and providing  
8 general administrative support activities.

9 **Q. CAN YOU GIVE EXAMPLES OF INSTANCES IN WHICH THE VERIZON**  
10 **NRCM ASSESSES COSTS FOR RCCC TASKS WHICH ARE INEFFICIENT,**  
11 **UNNECESSARY OR BOTH?**

12 A. Yes. To illustrate the ways in which RCCC involvement in the Verizon NRCM is  
13 overstated, I have created Figures RJW-01 and RJW-02. Figure RJW-01 presents the  
14 beginning of the RCCC coordination process as modeled by Verizon and Figure RJW-  
15 02 displays the remaining RCCC tasks. These diagrams, and the explanation  
16 accompanying them, demonstrate that the RCCC provides unnecessary and expensive  
17 manual coordination unneeded in a forward-looking context.

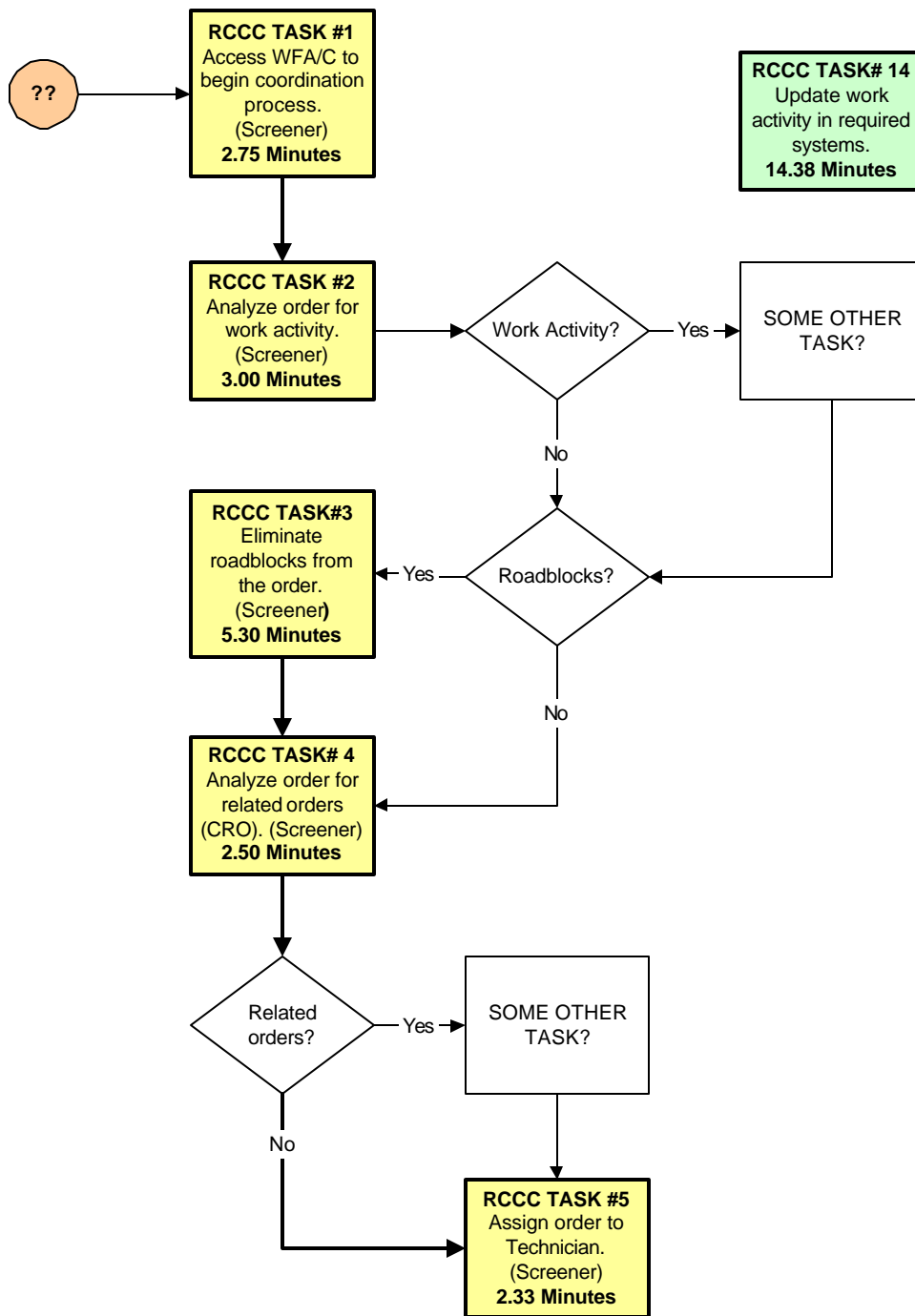
18 Using as an example, a 2 Wire Loop with no field dispatch, Exhibit RJW-01 displays the  
19 first 6 RCCC tasks included by Verizon as a logical process flow.

---

<sup>1</sup> Report and Order, In re: Review of Bell Atlantic-Rhode Island TELRIC Study, Docket No. 2681, April

1

FIGURE RJW-01



2

## TABLE OF CONTENTS

(continued)

Page

1 RCCC Task #1, which begins the provisioning process in the RCCC, has an occurrence  
2 factor of 100% in the Verizon model. Verizon is therefore arguing that this manual  
3 coordination task, accessing a system and beginning the coordination process, is  
4 necessary in every case. As I have previously explained, there is no need for RCCC  
5 involvement in a simple request for reuse of existing facilities to provision a single two  
6 wire loop. This 100% occurrence percentage is particularly inappropriate given that, in  
7 the retail model, the OSS is responsible for this coordination function, completely  
8 eliminating the need for manual intervention. In the retail context, the OSS automatically  
9 identifies work to be done and assigns technicians to that work. Manual intervention is  
10 necessary only in special circumstances. Despite this existing capacity, Verizon has  
11 chosen to disregard this ability of the OSS, and instead reflects a process that is manual,  
12 inefficient, and costly. Verizon's sole attempt to make this manual process even remotely  
13 forward-looking is applying a forward-looking adjustment factor, reducing the incidence  
14 of Task #1 to 80% of its original value. That adjustment is too little, too late and fails to  
15 make the Verizon model forward looking.

16 RCCC Tasks #2 and #4 are additional examples of Verizon's inclusion in the NRCM of  
17 charges for work which will not take place. Verizon attempts to justify the use of Task  
18 #2 stating that it represents the time needed to compare the due date and time for a  
19 new order with similar information for existing orders so that the orders can be  
20 appropriately prioritized, and every order meets the due date requested by the CLEC."

**TABLE OF CONTENTS**  
(continued)

**Page**

1 (emphasis added) (Rebuttal at 22). This statement assumes that no CLEC will ever  
2 order a single loop. If a CLEC does order a single loop, there is simply nothing which  
3 needs to be compared to that order's due date and time. Even though Verizon has  
4 separate worksheets for the "initial" element ordered and any "additional" element(s), the  
5 cost of Task #2 shows up on the "initial" request worksheet. Again, Verizon is asking  
6 the CLEC to pay for unnecessary work.<sup>2</sup>

7 Similarly, Task #4 is ambiguous and suggests that even single orders will be assessed a  
8 cost for work associated with related orders. As discussed above, no cost should be  
9 assessed for Task #4 unless related multiple elements or orders are involved. In  
10 addition, Verizon hasn't specified what happens when related orders are encountered.  
11 Does the screener perform some other task? Without this information it is impossible to  
12 assess whether the work activities involved are necessary in a forward-looking  
13 environment.

14 Task #3 is equally problematic in that it suggests there is some form of a roadblock that  
15 the screener eliminates, but does not identify that roadblock or the party which caused  
16 the roadblock. Even using Verizon's own definition of a non-recurring cost, the available  
17 description of Task #3 provides insufficient information to allow CLECs or the

---

<sup>2</sup> Task #2 is also interesting because it suggests that some other work activity may be necessary once the order is analyzed. Although Verizon doesn't specifically state what the screener does with the news that this "work activity" is necessary, task #14 appears to be the outcome. However, because Task #14 does not

**TABLE OF CONTENTS**  
(continued)

**Page**

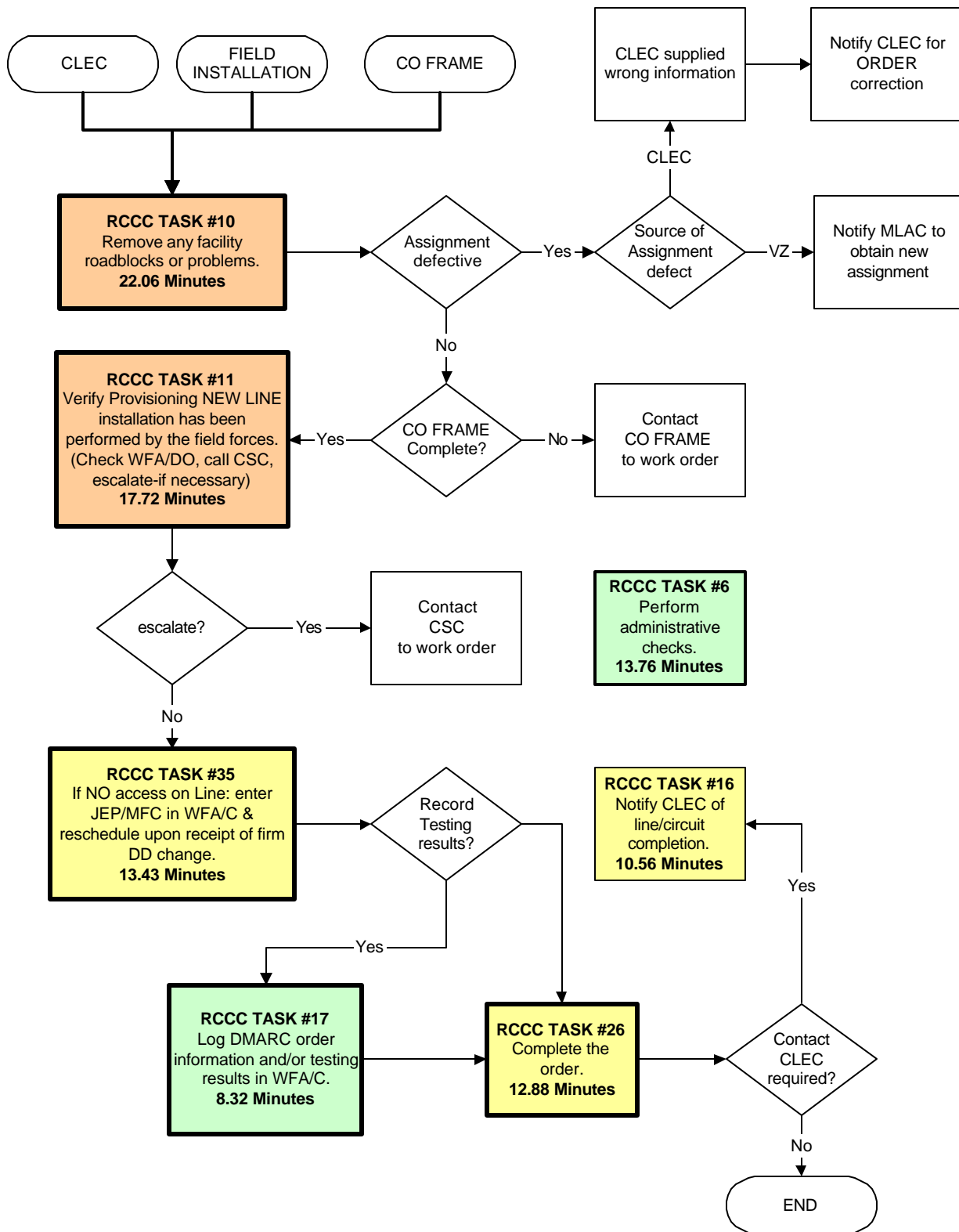
1	Department to conduct a proper evaluation of whether removal of such “roadblocks” is
2	properly classified as a non-recurring cost.

---

identify the screener as the party doing the work and because the other activities do, I have left Task #14 unattached in process flow diagram RJW-01.

**TABLE OF CONTENTS**  
(continued)

**Page**



1  
2

**FIGURE RJW-02**

**TABLE OF CONTENTS**  
(continued)

**Page**

1 Figure Exhibit RJW-02, depicting the remainder of the Verizon RCCC tasks in a logical  
2 process flow, further illustrates the manner in which the RCCC tasks modeled result in  
3 the assessment of non-recurring costs for recurring cost activities and activities which will  
4 not take place.

5 Task #10, “[r]emove any facility roadblocks or problems,” is the most time-consuming  
6 RCCC task in the Verizon NRCM and clearly illustrates the way in which the Verizon  
7 model assesses non-recurring charges for recurring cost activities. As discussed above,  
8 Verizon has identified the function of the RCCC as “serv[ing] as the central organization  
9 for coordinating the provisioning activities of various Verizon groups and as Verizon  
10 MA’s point of contact with CLECs for obtaining all needed assistance.” Verizon does  
11 not, however, identify the cause of this need for coordination. If coordination is needed  
12 because of defective plant or another failure on Verizon’s part, that coordination is a  
13 recurring cost activity. If, on the other hand, coordination is necessary because of a  
14 condition caused by the CLEC, then resolution of that condition is properly a non-  
15 recurring cost activity. By simply charging the cost of all coordination to the CLECs as a  
16 non-recurring cost, Verizon is, yet again, violating the principles of TELRIC.

17 To further illustrate this point, I have added a decision point in Figure RJW-02 to allow  
18 cost causation for defective assignments to be determined. Only CLEC-caused errors  
19 should result in a non-recurring charge. Moreover, Verizon has chosen to model a

## TABLE OF CONTENTS

(continued)

Page

1 particularly inefficient method for resolution of those errors, unnecessarily inflating non-  
2 recurring costs. AT&T chose to model the most efficient method of error resolution,  
3 using an electronic message inputted into the OSS by the person who discovered the  
4 service order was in error. Unlike the efficient technique modeled by AT&T, Verizon  
5 modeled a costly manual procedure which calls for the technician to contact the RCCC,  
6 convey his findings, and have the RCCC contact the CLEC to inform the CLEC that  
7 Verizon cannot complete the request as ordered and the reason for that failure. At that  
8 point, the CLEC is then responsible for issuing a corrected request and the entire  
9 provisioning process begins again.

10 The Verizon NRCM also models a particularly inefficient and costly method for resolving  
11 error conditions caused by Verizon, which should not be included in non-recurring  
12 charges at all in the first place. Defective outside plant is a classic example of a Verizon-  
13 caused recurring cost which is out of place in the Verizon NRCM. The resulting repairs,  
14 OSS changes, and administrative support are reflected in ongoing network maintenance  
15 costs. Any attempt to recover those costs a second time, on the non-recurring side, is  
16 improper. Perhaps even more improper is Verizon's plan to charge a field installation  
17 dispatch non-recurring cost for fixing or changing the defective assignment. Again, the  
18 CLEC did not ask to be assigned defective facilities nor did it cause those facilities to  
19 become defective. The CLEC's presence at the time the error was discovered is no  
20 justification for assessment of a non-recurring charge.

**TABLE OF CONTENTS**  
(continued)

**Page**

1 Furthermore, the resolution process modeled by Verizon is inefficient and backward-  
2 looking. The most efficient way to resolve a problem of this kind is for the Verizon  
3 technician to contact the MLAC directly and arrange a change in assignment. The  
4 RCCC is, therefore, an unnecessary and inefficient intermediary. As in the previous  
5 example, once the MLAC changes the assignment in the OSS, that system will  
6 automatically undo the previous assignments, and make the appropriate changes,  
7 notifying only those workgroups involved. Again, the RCCC is unnecessary.

8 Another potential Task #10 activity, RCCC participation in resolving CLEC concerns  
9 regarding non-working facilities, results in similarly inappropriate non-recurring charges.  
10 Non-working facilities may be caused by a defective assignment, the condition discussed  
11 above, or they may be caused by the simple fact that the CO FRAME workgroup has  
12 failed to complete its assigned tasks in a timely manner. The Verizon NRCM improperly  
13 assesses a non-recurring charge to the waiting CLEC for the RCCC activity in contacting  
14 the CO FRAME workgroup and reminding that group to finish its work. This is neither  
15 efficient nor necessary and should certainly not result in a non-recurring charge to the  
16 CLEC.

17 Figure RJW-02 also depicts a number of RCCC tasks which impose field installation  
18 coordination costs even when field installation is unnecessary. For example, RCCC  
19 Task #35 imposes a charge for 13.43 minutes of time spent coordinating on those

**TABLE OF CONTENTS**  
(continued)

**Page**

1 occasions when a Field Installation technician is not able to gain access to an end-user's  
2 premises and/or demarcation point to access the NID.<sup>3</sup> This task is superfluous if the  
3 technician has not been dispatched because facilities are being reused. A similar situation  
4 is presented by RCCC Task #11 which imposes a charge for 17.72 minutes of time for  
5 the RCCC to check the WFA/DO system used by the Field Installation technicians.  
6 RCCC Task #17 allocates 8.32 minutes for the RCCC to update the OSS after the  
7 Field Installation technician reports the testing results or DEMARC (NID) information.  
8 Again, where facilities are being reused, there is nothing to report and no field technician  
9 to report it. Nonetheless, Verizon imposes a non-recurring charge. These improper  
10 charges must be removed.

11 **C. NON-RECURRING COSTS ASSOCIATED WITH CENTRAL OFFICE WIRING AND FIELD**  
12 **INSTALLATION**

13  
14 **Q. VERIZON HAS CRITICIZED AT&T/WORLDCOM FOR ASSUMING 100%**  
15 **DIP/DOP AS INPUT VALUES IN THE AT&T NRCM. HOW DO YOU**  
16 **RESPOND?**

17 A. This criticism is a red herring, designed to confuse the real issue. The AT&T NRCM's  
18 input assumption of 100% Dedicated Inside and Outside Plant is a cost modeling  
19 convention and does not indicate an expectation that Verizon will actually deploy 100%  
20 DIP/DOP. This convention was used, instead, to eliminate two instances of double  
21 counting in plant construction and maintenance costs. By assuming 100% DIP/DOP, the

---

<sup>3</sup> This is Field Installation Task #3.

## TABLE OF CONTENTS

(continued)

Page

1 AT&T NRCM excludes the cost of building and maintaining the network from non-  
2 recurring costs. Verizon may install jumpers, cross-connects, or other plant elements in  
3 the course of maintaining its plant. Those costs, however, should be recovered in the  
4 recurring rates for the individual elements delivered to CLECs.

5 The only instance in which the AT&T NRCM assumes that DIP will actually be reused is  
6 in the case of UNE-P provisioning. This assumption reflects the same approach Verizon  
7 itself takes to provisioning this element. The rationale for this choice is simple. Reuse of  
8 DIP for provisioning UNE-P has become the industry standard because it is both  
9 economical and efficient.

10 Verizon's recognition that not every UNE loop request will warrant a Field Installation  
11 non-recurring charge is an implicit recognition of the principles described above.

12 Verizon's choice not to charge field installation costs on every order is a recognition that  
13 for some orders, all necessary components have already been assembled and the costs  
14 of that assembly have been or will be recovered in recurring rates.

15 A more explicit recognition of this principle is evident in Verizon's treatment of cost  
16 recovery for placement of Drop Wires. The Drop Wire is nothing more than a field  
17 cross-connect between the Distribution (feeder), and the NID. Drop Wires will have to  
18 be placed in conjunction with many service requests.<sup>4</sup> This is a real world telephony

---

<sup>4</sup> Verizon has identified conditions in which it would dispatch a Field Installation technician such as

**TABLE OF CONTENTS**  
(continued)

**Page**

1 activity. However, Verizon has included no time in its NRCM for accomplishing this  
2 task, reflecting the fact that these costs are properly recovered in recurring rates.

3 **Q. VERIZON HAS ALSO CRITICIZED THE AT&T NRCM FOR ASSUMING**  
4 **THE USE OF 100% LOW PROFILE COSMIC DISTRIBUTING FRAMES.**  
5 **IS THIS A VALID CRITICISM?**

6 A. No. This critique is another smokescreen. AT&T/WorldCom assumes the use of 100%  
7 low profile COSMIC frames because the OSS has the inherent ability to manage  
8 jumpers on those frames. This assumption was included in the AT&T NRCM simply to  
9 provide a forward-looking basis for non-recurring costs. In contrast, the Verizon  
10 NRCM makes no explicit or equipment-based costing assumptions regarding frame use.  
11 This makes it impossible for CLECs or the Department to evaluate whether Verizon's  
12 equipment assumptions are properly forward-looking. Instead of providing this  
13 information, Verizon criticizes others for doing so. Verizon's failure to describe the  
14 equipment it is assuming in its model simply provides it the freedom to covertly assume  
15 the worst case scenario in all situations, inflating non-recurring costs.

16 **D. NON-RECURRING COSTS FOR PROVISIONING OF LOOPS**

17

---

“for new loops where there is no pre-established cross-connection of the feeder cable to the distribution cable at the FDI.” This new loop suggests that there would be no drop wire as well.

**TABLE OF CONTENTS**  
(continued)

**Page**

1 **Q. VERIZON HAS CRITICIZED THE AT&T MODEL WITH RESPECT TO**  
2 **MIGRATING A CUSTOMER ON IDLC TO A CLEC. WHAT IS YOUR**  
3 **RESPONSE?**

4 A. Verizon asserts that “AT&T’s proposed method is not commercially or technically  
5 feasible at this time — that is, the requisite technology and systems are not currently  
6 available.”<sup>5</sup> This claim is simply false. As of the date this testimony was drafted, an  
7 internet search of “Unbundling IDLC” yielded 52 sites. One particular site titled “*The*  
8 *Virtual RDT, Key to Unbundling the Local Exchange*”  
9 (<http://www.sonetech.com/conferences/nfoec-vrdt.html#r1>) concluded that:

10 “[p]roviding Concentrated Access using the Multihosting or Virtual  
11 RDT concept is the essence of local access. It provides access to  
12 subscriber lines without the need for dedicated special access circuits  
13 for each subscriber’s line. It decouples switching and software based  
14 services (which can be provided from a remote host) from functions,  
15 which can be performed by standardized commodity transmission  
16 products available from many vendors. Concentrated Access can  
17 provide the key which unlocks the Local Exchange Network to open  
18 and fair access to all.”

19 This paper builds on the conclusions of John Eaves and Paul Zimmerman of Bellcore in a  
20 paper entitled "Impact of SONET on the Evolution of Telecommunications Network  
21 Architectures and Switched-Service Capabilities." Eaves and Zimmerman’s paper dates  
22 back to 1992 and shows how the capabilities of Integrated Digital Loop Carrier (IDLC)  
23 systems conforming to Bellcore TR-303 can be used to provide sophisticated switched

---

<sup>5</sup> Peduto and Meacham testimony at 40.

**TABLE OF CONTENTS**  
(continued)

**Page**

1 services to any subscriber in a LATA from a small number of host switches.<sup>6</sup> A more  
2 recent report from Telcordia Technologies (the former Bellcore) entitled “Telcordia  
3 Notes on the Networks” (SR-2275, Issue 4, October 2000) recognizes 8 options for  
4 IDLC unbundling, citing the advantages and disadvantages of each. One of the options  
5 recognized by Telcordia as being technically feasible is the method of interconnection  
6 proposed by the AT&T NRCM.

7 Verizon, however, has modeled the Bypass method for IDLC migration. This method  
8 requires dispatch of a technician to perform central office and outside plant rewiring to  
9 complete the new circuit from the MDF to the customer. Not only is the method  
10 inefficient, the inclusion in the Verizon NRCM of the wiring costs it necessitates  
11 represents a failure to recognize that these costs are recurring and should be recovered in  
12 recurring rates.

13 **Q. HAS VERIZON AT LEAST MODELED AN EFFICIENT APPROACH TO**  
14 **THE INEFFICIENT METHOD OF INTERCONNECTION IT HAS**  
15 **ASSUMED?**

16 A. No. Verizon instead models CO FRAME tasks which are ambiguous, overstate work  
17 times, and assume inefficient practices. The way Verizon has chosen to model the CO  
18 FRAME tasks also results in CLECs being charged for work tasks that will not in fact be  
19 performed when Verizon does not dispatch a field installation technician.

---

<sup>6</sup> Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface, TR-NWT-000303, Issue 2, Bell Communications Research, December 1992.

**TABLE OF CONTENTS**

(continued)

**Page**

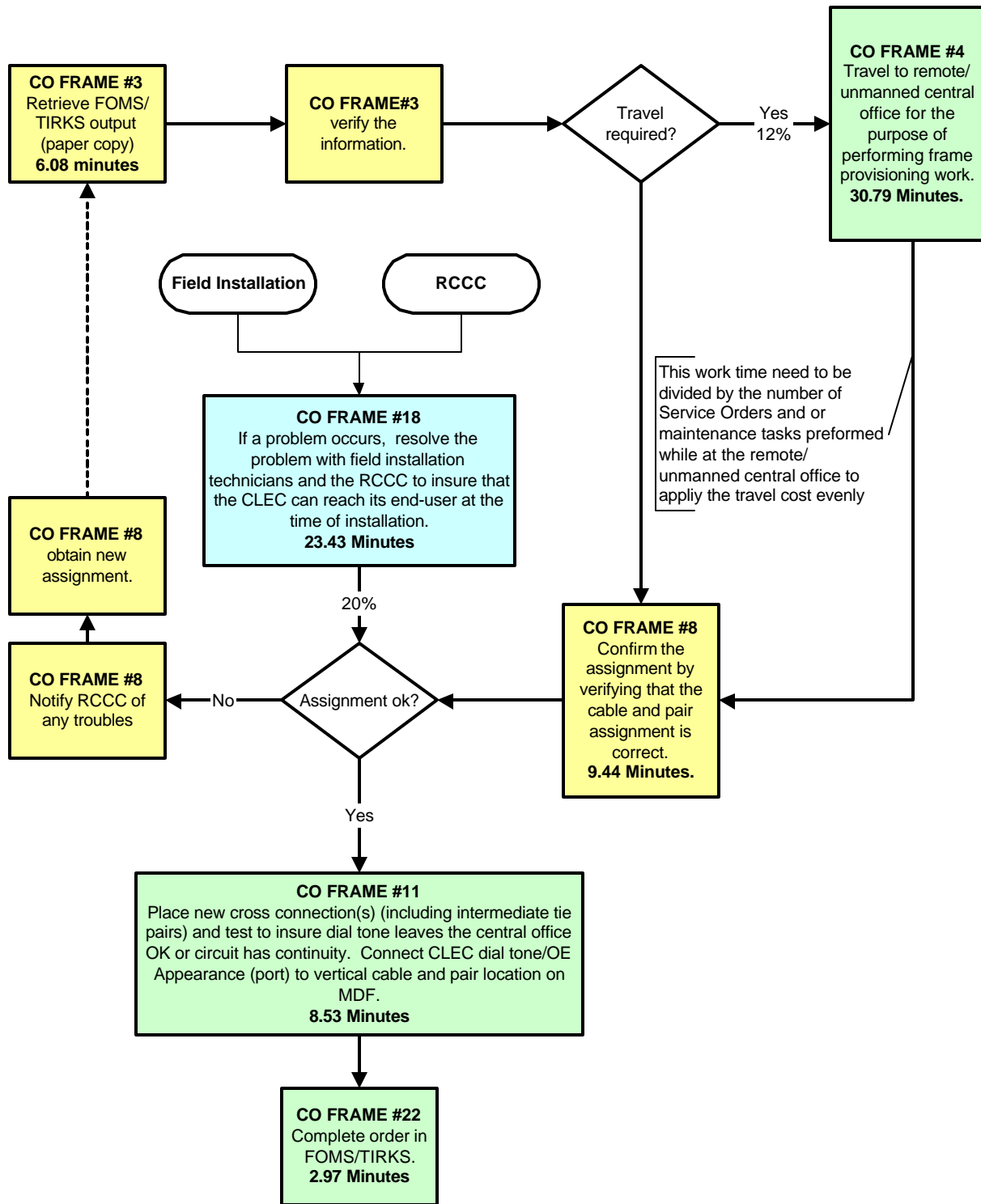
1 In order to clearly illustrate these points, I have prepared a process flow diagram, Figure  
2 RJW-03, using all but one of the CO FRAME work tasks listed in Verizon's NRCM  
3 (worksheet #1) for provisioning the Two Wire New Initial UNE assuming the re-use of  
4 existing outside plant.<sup>7</sup> RJW-03 is not a process view of all provisioning activities. It  
5 reflects the CO FRAME activities because they represent *the core activities* necessary  
6 to place a cross-connection between the ILEC's cable pair and the CLEC's CFA.

---

<sup>7</sup> The only CO FRAME task I did not discuss is CO FRAME task #22, the completion of the order in the OSS.

**TABLE OF CONTENTS**  
(continued)

Page



1  
2

**TABLE OF CONTENTS**  
(continued)

**Page**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

**FIGURE RJW-03**

First, Verizon inflates non-recurring costs by combining several tasks in one. Verizon starts its CO FRAME provisioning process with Task #3. Task #3, however, is actually 2 tasks. Task #3 should be divided into two parts; first, retrieving the order, as part of a work package, and second, verifying the information for each individual order. Though orders cannot be verified in groups, CO FRAME technicians do normally retrieve their orders in a work package which includes a number of orders. Because the average number of orders collected in the retrieval portion of Task #3 is greater than 1, the total time it takes to retrieve a group of orders needs to be divided by the average number of orders retrieved.

My personal experience in observing CO Frame technicians performing this task in a retail environment leads me to believe that a technician will spend approximately ten minutes to pick up 8-10 orders in a single work package. Assuming the technician takes another 15 minutes to give the work package a cursory review, the total time for retrieval of the 8-10 orders would be approximately 25 minutes, or 2 and a half minutes for each order. In the face of this calculation, Verizon's 6.08 minute estimate for Task #3 is demonstrably unreasonable. Using Verizon's work times, and assuming a technician's average work package includes ten orders, Task #3 implies that a technician would need an entire hour to pull, retrieve, and analyze a work package before beginning any actual

**TABLE OF CONTENTS**

(continued)

**Page**

1 wiring. This does not reflect the efficient, forward-looking, least cost method for  
2 provisioning UNEs.

3 Verizon makes a similar error in calculating the time necessary for a technician to travel  
4 to an unmanned central office. It is true that because not all MDF facilities are in staffed  
5 central offices, some percentage of CLEC orders will require a technician to travel to a  
6 remote/un-manned CO. However, here too, because it is not efficient to make this  
7 journey and perform a single task, this travel time should be divided by the total number  
8 of tasks that a CO FRAME technician will undertake while at the destination office.

9 In my experience at NYNEX, CO frame technicians dispatched to remote offices were  
10 at those offices for a few hours during which the technicians performed both service  
11 order and maintenance activities. It is reasonable to assume a minimum of 4 tasks per  
12 trip. Using Verizon's estimated travel time, and multiplying that time by 4 would yield  
13 over 2 hours of travel attributed to a single trip for a single technician assigned to perform  
14 four tasks. Given the size of the Commonwealth of Massachusetts, this time is obviously  
15 overstated. If, instead, travel time to unmanned offices is divided by the number of tasks  
16 to be performed, Verizon will not receive the financial windfall of being compensated for  
17 an hour and a half of unused technician time every time it dispatches technicians to  
18 perform multiple tasks.

## TABLE OF CONTENTS

(continued)

Page

1 Perhaps more troubling is the Verizon NRCM's occurrence factor for travel to  
2 unmanned central offices. For the 2 Wire Loop UNE Verizon claims this requirement is  
3 necessary 12% of the time. This leads to the natural conclusion that 12% of facilities are  
4 in non-staffed central offices. However, for 2 Wire Loop hot-cuts, travel to an  
5 unmanned office is necessary 24% of the time. There is no logical way to explain this  
6 difference and certainly no reason sufficient to explain a 100% increase in occurrence  
7 factor. Verizon has the means to properly calculate the percentage of facilities located in  
8 non-staffed central offices, and to use this percentage consistently throughout the Verizon  
9 NRCM. The fact that it has failed to do so calls the entire Verizon NRCM into question.

10 Like CO FRAME Task #3, CO FRAME Task #8,<sup>8</sup> includes three tasks which must be  
11 separated to make the Verizon NRCM understandable. Task #8 is a decision point. If  
12 the cable pair and assignment is correct, there is no need to notify the RCCC of any  
13 troubles or obtain a new assignment. Rather than model that decision point and provide  
14 individual occurrence factors, though, the Verizon NRCM simply uses a global  
15 occurrence factor of 75% for all three activities and charges each CLEC for all of them  
16 on three out of four orders, whether or not all three activities actually take place. Again,  
17 Verizon has used vague task descriptions to guarantee a windfall paid for by the CLECs.  
18 Because Verizon bundled these activities together, it is also impossible to tell how much

---

<sup>8</sup> CO FRAME TASK #8, "Confirm the assignment by verifying that the cable and pair assignment is correct. Notify RCCC of any troubles and obtain new assignment."

**TABLE OF CONTENTS**  
(continued)

**Page**

1 time the Verizon NRCM attributes to each individual activity. Some percentage of the  
2 total time results from the re-verification (verification was also performed in task #3),  
3 some from the discovery of defective assignments, and some from interaction with the  
4 RCCC. Only Verizon knows how much time is attributable to each.

5 Based on my experience with CO FRAME technicians performing retail MDF service  
6 order wiring, I am also confident that the work time listed in the Verizon NRCM for  
7 Task #8 is seriously overstated and/or includes activities included a second time in Task  
8 #11. Based on the fact that the Verizon NRCM includes 9.44 minutes for completion of  
9 Task #8, I can only conclude that the activity includes the time necessary for a technician  
10 to walk over to the MDF and compare the information on the order to the facilities on  
11 the frame. This verification activity should happen at the same time as, and include, the  
12 beginning of actual cross-wire placement. When setting out to confirm the order by  
13 verifying cable and pair assignment, the technician takes the cross-wire in hand and goes  
14 to the CLEC's equipment location first. If the equipment location is available, as  
15 indicated on the order, the technician begins cross-wiring activity by cutting in the wires  
16 and placing the cross-wire along the horizontal shelves to the cable pair location. If the  
17 assigned cable pair is available, the technician then terminates the remaining end of the  
18 cross-wire.

## TABLE OF CONTENTS

(continued)

Page

1 Instead of modeling the efficient verification and wiring procedures as part of a single  
2 process in practice during my tenure at NYNEX, Verizon has improperly modeled two  
3 separate, but overlapping tasks; a verification activity Task #8, and a cross-wire  
4 placement activity Task #11 (totaling 17.97 minutes). This time is also substantially  
5 overstated. The actual time needed for this verification/cross-wire placement is closer to  
6 2.5 minutes. This amount of time was used as a standard increment by NYNEX, when  
7 I worked as an engineer, for calculating the time and expense involved in similar cross-  
8 wiring activities.

9 The remainder of Task #8, which takes effect in situations where the verification/wiring  
10 portion of Task #8 *does* reveal a defective assignment, assumes an equally inefficient  
11 course of conduct. Under those circumstances, the Verizon NRCM suggests that the  
12 Frame Technician contacts the RCCC and obtains a new assignment. Use of this costly  
13 procedure is particularly odd given the fact that in the retail model, the technician would  
14 simply place the order into a jeopardy state. Placement in jeopardy electronically notifies  
15 other departments of the FRAME's inability to "work" the order. All processing then  
16 stops until the order is corrected, or until the technician is re-notified (electronically) that  
17 the condition reported is not valid and is instructed to "work" the order as is. In either  
18 case, someone other than the CO FRAME technician must fix the problem and CO  
19 FRAME work does not resume until the CO frame technician has further directions.

**TABLE OF CONTENTS**  
(continued)

**Page**

1           There is no reason that the jeopardy process should be different for CLEC orders and  
2           no reason to notify the RCCC requesting that the RCCC obtain another assignment.  
3           Today’s OSS make it unnecessary to notify anyone manually of a problem with an order.  
4           Therefore, an efficient NRCM would not include any involvement of the RCCC in the  
5           process of provisioning the two wire loop element thus far.

6           The Verizon NRCM also includes non-recurring costs for field installation activities even  
7           when those activities are not required. In the center of figure RJW-03 is the “catch all”  
8           CO FRAME Task #18, the description of which states “[I]f a problem occurs, resolve  
9           the problem with field installation technicians and the RCCC to insure that the CLEC can  
10          reach its end-user at the time of installation.” Verizon assesses 23.43 minutes of time for  
11          this task and makes no provision for its exclusion even when facilities are being reused  
12          and no field installation is necessary. In those cases where field installation *is* necessary,  
13          Verizon should have modeled this activity separately, creating two different worksheets;  
14          one depicting the situation in which field installation activities are necessary and one  
15          where they are not.

16   **E.    NUMBER OF ELEMENTS MODELED**

17

**TABLE OF CONTENTS**  
(continued)

**Page**

1 **Q. VERIZON HAS CRITICIZED THE AT&T NRCM ON THE GROUNDS**  
2 **THAT IT “FAILS TO ACCOUNT FOR THE NON-RECURRING COSTS OF**  
3 **NUMEROUS ELEMENTS.” IS THIS A VALID CRITICISM?**

4 **A.** No. Again, Verizon has pointed to a red herring in an attempt to undermine the validity  
5 of the AT&T NRCM.

6 Verizon’s NRCM presents costs for many more “UNEs” than does its recurring model.

7 In fact, the vast majority of purported UNEs described in the Verizon NRCM are simply  
8 essentially indistinguishable versions of about thirty unique UNEs. For example,

9 Customer Specified Signaling (CSS) Two and Four wire loops are functionally the same

10 as two and four wire loops. The only difference between the two kinds of loops is that

11 when they are provided on DLC electronics, they will require a different plug-in at the

12 remote terminal. Given that the cost of this plug-in will be recovered in recurring rates,

13 there is no need to separately model non-recurring costs in this instance. The task of

14 establishing non-recurring costs simply does not require loops to be separately classified

15 based on the service provided. Verizon has created a distinction without a difference

16 and then criticized AT&T/WorldCom for failing to follow suit.

17 Interestingly, Verizon also claims the AT&T NRCM does not produce non-recurring

18 cost for elements #45 - Entrance Facilities 2 Wire Voice Grade, and #46 - Entrance

19 Facilities 4 Wire Voice Grade. A review of the Verizon NRCM leads to the surprising

20 conclusion that neither does Verizon. The Verizon NRCM indicates the cost for these

21 items as “(Reserve).”

**TABLE OF CONTENTS**

(continued)

**Page**

1 Verizon also says the AT&T NRCM does not produce costs for Elements “#65 -  
2 Manual Loop Qualification, #66 - Engineering Work Order, or #67 - Engineering Work  
3 Order.” As has been explained in detail in prior testimony, AT&T has not produced  
4 non-recurring costs for these activities because they are, in fact, recurring cost activities.  
5 They simply do not belong in a proper, non-recurring cost model.

6 **Q. VERIZON CRITICIZES THE AT&T NRCM FOR MODELING DS1 AND**  
7 **DS3 HOTCUTS AND MIGRATION, CLAIMING THAT THOSE SERVICES**  
8 **ARE CURRENTLY DIFFICULT TO PROVIDE. IS THIS A VALID**  
9 **CRITICISM?**

10 A. No. There is no reason that a forward-looking model should not assume advances in  
11 technology sufficient to allow these services to be provisioned efficiently. A properly  
12 forward-looking NRCM should, therefore, reflect everything that is possible in a  
13 forward-looking environment.

14 **Q VERIZON HAS CRITICIZED AT&T FOR ASSUMING ITS COPPER-FIBER**  
15 **RATIO AND ELECTRONIC PROVISIONING OF LOOPS AS A WAY OF**  
16 **DISCOUNTING THE COST OF PROVISIONING ACTUAL LOOPS. HOW**  
17 **DO YOU RESPOND?**

18 A. This criticism is without foundation. As explained above, Telecordia, a reliable source,  
19 has explained in detail the technical feasibility of electronic cross-connects at the MDF.  
20 Verizon has been aware of this technology for many years. However, instead of  
21 addressing the technology described, Verizon simply denies the possibility of electronic  
22 cross-connects. This distortion arises from the fact that Verizon’s NRCM focuses on

TABLE OF CONTENTS

(continued)

Page

1 the current cost of provisioning actual loops, and not the forward-looking TELRIC cost  
2 that should be modeled.

3 Verizon even fails to allow for electronic provisioning of UNE-P, simply rolling UNE-P  
4 and 2 wire UNE loops together and applying the same copper (analog)/ IDLC ratio.

5 **F. WORK TIMES AND ACTIVITIES**

6

7 **Q. VERIZON CLAIMS AT&T'S WORK ACTIVITY TIMES ARE**  
8 **UNDERSTATED AND INADEQUATELY SUPPORTED. HOW DO YOU**  
9 **RESPOND?**

10 A. The difference between the Verizon NRCM and the AT&T NRCM lies in the fact that  
11 AT&T assumed a level of efficiency one would expect to have in a fully-deployed  
12 forward-looking network. Verizon's model, on the other hand, assumed inefficiency and  
13 failed to present process flows to avoid revealing that fact. After hearing testimony from  
14 both sides, the Rhode Island Public Utilities Commission (the "Commission") agreed with  
15 AT&T, reducing the time estimates used to develop Verizon's NRCs to approximately  
16 57% of those originally filed by Verizon. April 11, 2001 Rhode Island Report and  
17 Order at 68. The Commission accomplished this reduction by ordering that non-  
18 recurring costs be calculated either by using the functional work time estimates in the  
19 AT&T NRCM or, in the alternative, if the Verizon NRC model is used, by adopting the  
20 New York commission's approach of using minimum rather than mean, Task Oriented  
21 Costing times. *Id.*

**TABLE OF CONTENTS**  
(continued)

**Page**

1           As Verizon readily admits, its nonrecurring cost studies are based on its existing network  
2           architecture and the actual technologies Verizon plans to deploy in the foreseeable future.  
3           This reliance on actual, existing network equipment, configurations, processes and  
4           procedures and actual planned enhancements does not -- indeed cannot -- satisfy the  
5           requirement that the non-recurring cost study be based on the least cost, most efficient  
6           and forward-looking network and systems currently available.

7           **Q.    CAN YOU PROVIDE EXAMPLES OF THE INEFFICIENCIES AND**  
8           **OVERSTATEMENTS INCORPORATED IN VERIZON’S NRCM?**

9           A.    Yes. In order to illustrate these points, Figure RJW-04 presents, in a logical process  
10           flow diagram, Verizon’s modeled Field Installation workgroup activities for provisioning  
11           a 2 Wire UNE loop “initial” request.

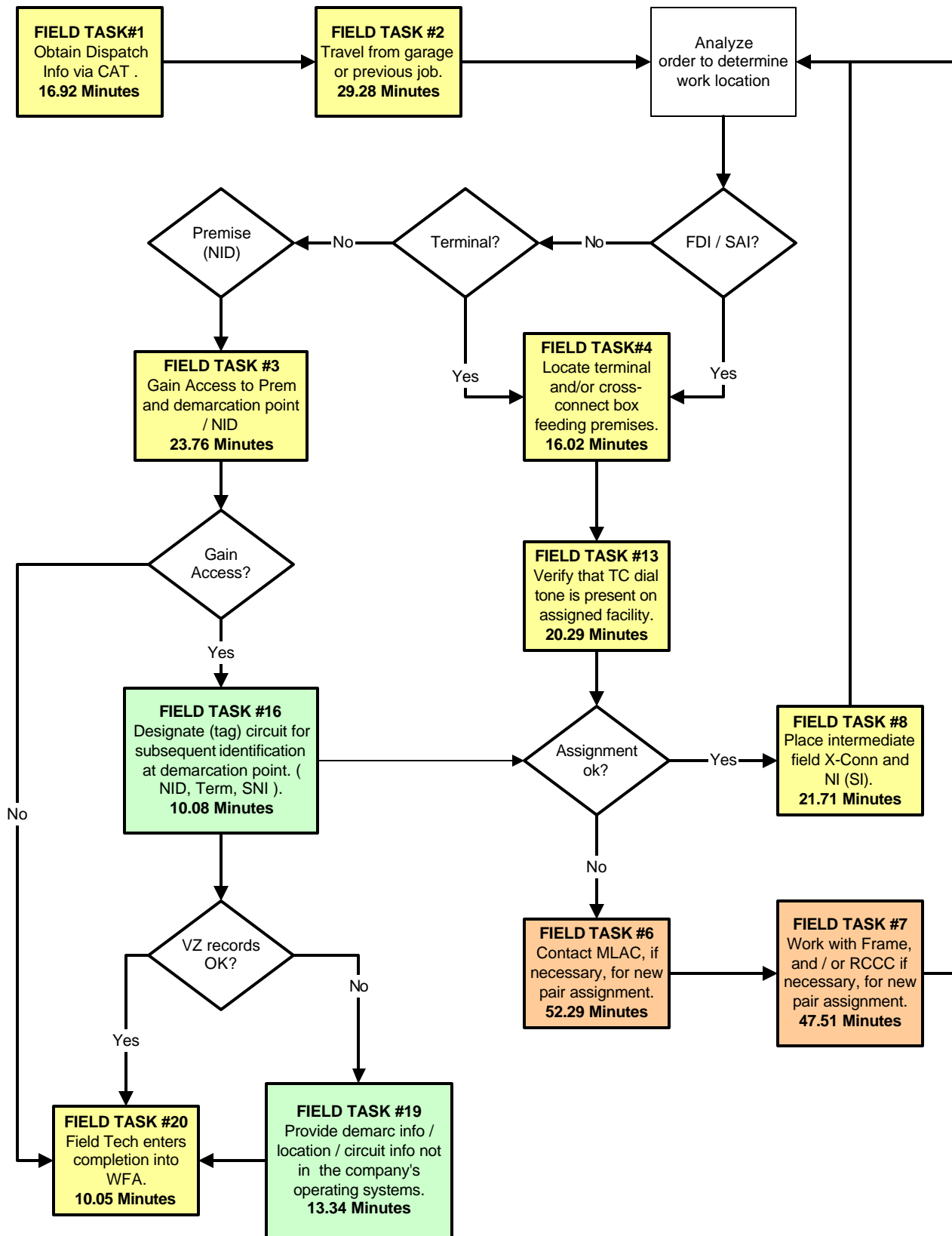
12           As I have explained in my prior testimony, Field Installation activities between the end  
13           user’s NID and the Central Office should be recovered through recurring rates.

14           However, even if field installation charges were an appropriate part of a non-recurring  
15           cost model, the charges proposed by Verizon are overstated, relying on inefficient  
16           procedures and inflated work and travel times.

**TABLE OF CONTENTS**

(continued)

Page



**FIGURE RJW-04**

## TABLE OF CONTENTS

(continued)

Page

1 Field Installation travel times in the Verizon NRCM are overstated. After retrieving the  
2 work order, Task #1, Field Installation Task #2 provides the technician 29.28 minutes to  
3 travel to the work site.<sup>9</sup> Upon arriving at the work site, Task #4, locate terminal and/or  
4 cross-connect box feeding premises, allocates an additional 16.02 minutes for the  
5 technician to pinpoint the exact location of the work to be done. This amount of  
6 additional time is unreasonable. As the technician approaches the customer's location,  
7 during the time allocated by Task #2, he/she can readily locate the cross-connect box.  
8 Even if it might take some small amount of time to locate the box, it strains credulity to  
9 argue it could take an additional 16.02 minutes. A technician traveling 25 MPH in his  
10 vehicle would be able to cover 8 miles in the 16.02 minutes allotted to this task, a  
11 distance well beyond any average CSA boundaries.

12 After the Field Installation technician has invested an irrationally inflated amount of time in  
13 arriving at the work site, the Verizon NRCM allocates a similarly inflated amount of time  
14 for the technician to accomplish each required task. For example, Verizon asserts that  
15 20.29 minutes is required to complete Task #13, “[v]erify that TC dial tone is present on  
16 assigned facility.” This task, however, requires nothing more than opening up the FDI or  
17 Terminal, placing alligator clips from a telephone headset on the assigned facilities, and

---

<sup>9</sup> The field installation work site may be the FDI or cross-box, the drop wire terminal location, or the NID. If the work site is the NID, then Field Installation Task #4, locate terminal and/or cross connect box feeding premises, is unnecessary. Correspondingly, if the work location is either the FDI or the drop-wire terminal location, then Field Installation Task # 3, gain access to premises and demarcation point/NID, is unnecessary. Charging for both tasks when work is done in only one place is inappropriate and should not

**TABLE OF CONTENTS**  
(continued)

**Page**

1 using that handset to listen for a dial tone. Even assuming that some set-up time will be  
2 required, Task #13 should take no more than 10-12 minutes. This estimate is valid even  
3 if the technician must raise a ladder or position a bucket truck. Similarly, Task #8  
4 allocates 21.71 minutes for a technician to place a cross-wire 3-5 feet in length between  
5 the feeder and distribution cable pairs. To accomplish this task, the technician uses a  
6 punch down tool which normally allows him to complete the task in less than 2 minutes.  
7 Verizon's allocation of more than ten times that amount of time is both inexplicable and  
8 absurd.

9 Verizon also models inefficient methods with inflated work times for resolution of  
10 problems in the field. If an assignment is defective, the technician calls the MLAC, Field  
11 Installation Task #6, to get a new assignment. This phone call purportedly takes 52.29  
12 minutes. At NYNEX, I managed the MLAC Field Assistance position and I can assure  
13 you that my MLAC technicians did not spend 52.29 minutes on average per call. The  
14 average time associated with Cross-Box Field Assistance calls is closer to 10-15  
15 minutes per call, including hold time. Usually, the technician has determined prior to  
16 placing the call what facilities he wants to use to complete his task. My MLAC Field  
17 Assistance technicians handled an average of 20-30 calls a day. Using the work times in  
18 the Verizon NRCM as a guide, each technician would have been able to handle only 7-8  
19 calls a day.

---

be allowed.

**TABLE OF CONTENTS**

(continued)

**Page**

1 Only when the 52.29 minutes allocated to Task #6 have passed, does the RCCC,  
2 perhaps, become involved. Verizon asserts that a field installation technician will then  
3 spend another 47.51 minutes contacting the CO Frame and/or the RCCC to get the  
4 change of assignment ironed out. Given that CO FRAME Task #18, completing the  
5 wiring, takes only 23.43 minutes, a CLEC is left to wonder how the technician engaged  
6 in Field Installation Task #7 is spending the remainder of his time. One possible  
7 explanation is that the technician is granted a certain amount of time to call the RCCC to  
8 see if they can get the CO FRAME technicians to complete the necessary wiring. Given  
9 that the field technician just got off the phone with the MLAC and CO FRAME  
10 technicians, having spent over an hour chatting, what efficient purpose could be served  
11 by bringing the RCCC into the picture. The only possible plausible conclusion to draw  
12 from this data is that Verizon has rolled break time, waiting time, and other non-  
13 productive time into the Verizon NRCM. Again, this is not the least cost, most efficient,  
14 forward-looking procedure.

15 **Q. VERIZON CLAIMS AT&T WORK ACTIVITY TIMES ARE**  
16 **UNDERSTATED AND INADEQUATELY SUPPORTED WITH RESPECT TO**  
17 **LOOP QUALIFICATION. HOW DO YOU RESPOND?**

18 A. As discussed above, because this data, once compiled, will be available to both CLECs  
19 and ILECs, the cost of creating the database should be recovered as a recurring cost  
20 and not assessed piecemeal to the first CLEC unlucky enough to request qualification  
21 information about a loop. Verizon readily admits,

**TABLE OF CONTENTS**

(continued)

**Page**

1 [t]his Database supports both Verizon's retail service and the provision  
2 of unbundled ADSL/HDSL-compatible loops to CLECs. The costs  
3 associated with the mechanized loop qualification database process are  
4 recovered as a recurring rate as part of the Unbundled xDSL  
5 Conditioning and Qualification set of charges.

6 Rebuttal at 54. No further non-recurring charge is appropriate.

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 **A.** Yes.