

1 recognizes eight options for IDLC unbundling, citing the advantages and
2 disadvantages of each:

3 The most critical factor associated with unbundling
4 a customer loop is the type of loop facility that the
5 customer is already utilizing for service, such as all
6 copper, UDLC system, or IDLC system.

7 • If the customer is receiving service over all-
8 copper facilities, the transfer of the whole loop
9 is straightforward as indicated in Figure 12-32.
10 The ILEC removes the central office connection
11 to its switch and places a jumper from the MDF
12 to the meet point at the CLEC's collocation
13 cage. There is no need to rewire the outside
14 plant or visit the customer premises.

15 • If the customer is receiving service over a
16 UDLC system, the transfer of the whole loop
17 can be straightforward as shown in Figure 12-
18 3.2. The ILEC removes the central office
19 connection to its switch and places a jumper
20 from the MDF to the meet point at the CLEC's
21 collocation cage. Again, there is no need to
22 rewire the outside plant or visit the customer
23 premises.

24 • However, if the customer is served by an IDLC
25 system, the loop is digitally transmitted to the
26 ILEC switch. There are a variety of "technically
27 feasible" options available to the ILEC to
28 unbundle the loop. Each ILEC has established
29 its own set of approved unbundling options
30 along with the corresponding methods,
31 procedures, and practices needed for
32 implementing these options. Numerous
33 unbundling options are possible because many
34 of today's RDTs support multiple kinds of
35 interfaces such as: GR-303, TR-08, UDLC, and
36 D4 DS1.

37 • Also, some RDTs are capable of supporting
38 multiple GR-303 Interface Groups, thereby

1 permitting a single RDT to connect to multiple
2 switches.¹²

3 **Q. HOW DOES VERIZON’S APPROACH OVERSTATE COSTS?**

4 A. The bypass method chosen by Verizon requires central office and outside plant
5 rewiring to complete the new circuit from the MDF to the customer. This is truly
6 inefficient, costly and not forward-looking. The migration process should involve
7 merely an electronic cross-connect instruction to effectively move the customer’s
8 IDLC channel to the CLEC’s digital facilities. It does not require any manual
9 activities by the CO Frame technicians.

10 All other CO Frame tasks would be eliminated if Verizon adopted an
11 efficient hot-cut process. These include Task #15, “Load WFA tickets, check
12 status of order activity, and report completion of order/frame work for WFA
13 tickets (NDSUP and NDSUT) to the RCCC.” Verizon has also included, with
14 Tasks #17 & #18, a total of *****BEGIN VERIZON PROPRIETARY *******
15 ******* END VERIZON PROPRIETARY***** of labor for field installation
16 technicians when in fact no Field Installation work is necessary. For the “2 Wire
17 Hotcut Initial,” the existing loop will be reused. Any Field Installation cost is
18 sheer fantasy.

¹² Telcordia Technologies Special Report, SR-2275, Issue 4, October 2000, Section 12.13.2.1 Whole Loop Unbundling Configurations.

1 **B. VERIZON’S INAPPROPRIATE INCLUSION OF RECURRING**
2 **COSTS IN ITS PROPOSED NON-RECURRING CHARGES**
3 **ERECTS SIGNIFICANT BARRIERS TO ENTRY.**

4 **Q. HOW SHOULD THE COMMISSION DETERMINE WHICH FORWARD-**
5 **LOOKING COSTS SHOULD BE RECOVERED IN NON-RECURRING**
6 **PRICES RATHER THAN THOSE THAT SHOULD BE RECOVERED IN**
7 **RECURRING PRICES?**

8 A. As Ms. Murray explained in her direct testimony,¹³ the key distinguishing
9 characteristic between the costs that should be recovered in recurring charges and
10 those that can be—but do not have to be—recovered in non-recurring charges is
11 whether the cost, once incurred, is for facilities that can be reused to provide
12 service to a subsequent customer without change. If so, Verizon should recover
13 the cost through recurring charges, not non-recurring charges. This test excludes
14 any capital costs from non-recurring charges, because all capital items could be
15 used to supply service to another customer, and excludes as well all of the labor
16 costs of installing that plant, for the same reason. Once plant has been installed to
17 serve one customer, another customer at the same customer premises could reuse
18 that plant at no additional cost for that plant.

19 This leaves the costs of performing the transaction as the costs that can be
20 recovered in non-recurring charges for unbundled network elements. These are
21 the costs of actually performing the tasks of preordering, ordering and
22 provisioning.

1 **Q. IS THERE ANY OTHER GUIDE THAT THE COMMISSION CAN USE**
2 **TO DETERMINE THE RECURRING VS. NON-RECURRING NATURE**
3 **OF THE COSTS INCLUDED IN VERIZON’S NON-RECURRING COST**
4 **STUDIES?**

5 A. Yes. The Commission can distinguish between “temporary” changes to the
6 network that Verizon implements for the sole use of the requesting CLEC and
7 “permanent” changes to the network that Verizon keeps in place to benefit future
8 users, including its own retail operations. The process of interconnection is a
9 temporary condition that is bound by the life of the service or UNE. The activities
10 used to produce this interconnection, such as the “temporary” connections at
11 interconnection points within the network, are the one-time non-recurring costs.
12 This “temporary” vs. “permanent” distinction provides a good rule of thumb for
13 determining the proper cost causer. To comport with cost causation principles, a
14 non-recurring cost study must exclude all costs of constructing and maintaining
15 the elements of the forward-looking network, which are recurring costs, and
16 capture only the cost of temporary connections to the CLEC (*i.e.*, the transaction
17 costs).

18 **Q. DO VERIZON’S NON-RECURRING COST STUDIES REFLECT THE**
19 **RECOVERY OF CAPITAL COSTS ON A NON-RECURRING BASIS?**

20 A. Yes. Our review of Verizon’s non-recurring studies reveals that Verizon has
21 included capital equipment costs in some of its non-recurring costs. For example,

¹³ Murray Direct at 28-31.

1 a substantial portion of Verizon's proposed non-recurring "Add Electronics
2 (Repeater)" charge consists of the capital cost for the repeater (ISDN loop
3 extension equipment) itself.¹⁴

4 Furthermore, it is clear that Verizon has included in its non-recurring cost
5 study many costs that are usually capitalized, such as the labor cost to install plant
6 that is reusable, which we discuss in the next answer.

7 **Q. DO VERIZON'S NON-RECURRING COST STUDIES REFLECT THE**
8 **RECOVERY OF COSTS FOR FACILITIES THAT ARE REUSABLE?**

9 A. Yes. The reusability test that Ms. Murray advocated in her direct testimony
10 excludes from non-recurring costs the cost of the labor used to install facilities
11 that can be reused to provide service to a subsequent customer, because once the
12 plant has been installed to serve one customer, another customer at the premises
13 could reuse that plant at no additional cost for that plant. Verizon should have
14 included (and perhaps did include) these field-work costs in its recurring cost

¹⁴ Verizon's Cost Panel acknowledges that the electronics are investments, but contends that their costs should nonetheless be recovered through a non-recurring charge. Verizon Cost Panel Direct at 163. Verizon's cost panel claims that its proposed recovery of ISDN extension equipment investment through a non-recurring charge "addresses the fact that there is likely to be considerable customer churn in the market for advanced data services" and therefore the possibility that this churn would lead to "under-recovery of these costs." This argument has any merit. Apart from the fact that the cost of investment in copper extension electronics has no place in a forward-looking cost study at all, Verizon's proposed charge of \$1,758.58 would effectively close off all competition for ISDN over longer loops entirely.

1 study.¹⁵ However, Verizon has included in its non-recurring cost studies the labor
2 costs to install plant that is reusable.

3 For example, Verizon has included the labor costs to place a cross-connect
4 at the service area interface in its non-recurring loop costs. The connection
5 remains in place when a service disconnects; Verizon can reuse that connection.

6 Another example is the labor cost included in Verizon's proposed non-
7 recurring charge for loop conditioning. The facilities that become available as the
8 result of DSL loop conditioning are not returned to their prior state once the
9 competitor ceases their use. They become available to Verizon for assignment to
10 another competitor or to its own (or its affiliate's) retail customers.¹⁶

11 **Q. IS THE CROSS CONNECT AT THE SERVICE AREA INTERFACE A**
12 **TEMPORARY CONNECTION?**

13
14 **A.** No. The cross-wire that are placed at the service area interface (or Field
15 Distribution Interface (FDI) between the feeder and the distribution cables
16 supports the management of network. They are "left-in-place" when services
17 disconnect, to support new incoming request. In addition, these FDI cross-wires
18 are placed and rearranged during plant construction, the cost of which would be
19 reflected through the EF&I expenses of the recurring rates. In addition these cross-

¹⁵ The recurring cost analysis presented by Mr. Pitkin captures capital costs and the labor costs to install them.

¹⁶ As we explain later in this testimony, Verizon has also inappropriately included costs directly related to operation and upkeep of its network, such as repair or maintenance of its outside plant, in its non-recurring cost studies.

1 wires may be rearranged as the result of customer reported troubles, and the cost
2 of which is reflected as maintenance expense, and thus classified as a recurring
3 cost. This is a clear indication that the non-recurring rates should not include any
4 activates that are necessary for this cross-wire placement.

5 **Q. SHOULD THE COMMISSION ALLOW VERIZON TO RECOVER**
6 **CAPITAL AND OTHER RELATED COSTS THROUGH NON-**
7 **RECURRING CHARGES?**

8 A. Absolutely not. As Ms. Murray explained in her direct testimony, allowing
9 Verizon to recover capital and other related costs in non-recurring charges would
10 increase the barrier to entry that non-recurring charges inherently create.
11 Transforming these costs into non-recurring charges also would lessen the
12 likelihood that a new entrant could fully recover these costs from its end users.

13 **Q. VERIZON HAS ELIMINATED CERTAIN ALLEGEDLY NON-**
14 **RECURRING EXPENSES FROM EXPENSES USED TO DEVELOP**
15 **FACTORS FOR ITS RECURRING COST STUDY. DOES THIS**
16 **APPROACH ENSURE THAT ALL OF THE COSTS INCLUDED IN**
17 **VERIZON'S NON-RECURRING COST STUDY ARE PROPERLY**
18 **CATEGORIZED AS NON-RECURRING COSTS?**

19 A. No. We understand that Verizon has identified and removed from its expense
20 factor calculations for its recurring cost studies certain expenses associated with
21 the plant accounts that it claims represent non-recurring costs (using certain
22 revenues from non-recurring charges as a proxy for these non-recurring costs). In
23 theory, the activities performed by Verizon's technicians who booked expenses to
24 these accounts were the traditional one-time expenses associated with a
25 customer's service order request that Verizon claims are now non-recurring.

1 Verizon seems to believe that by removing these costs from its recurring cost
2 studies, it has transformed the costs into non-recurring costs. Verizon is incorrect.
3 The activities necessary to produce the elements that Verizon intends to lease to
4 competitors are in fact recurring cost activities. These activities support Verizon's
5 network in the long run; therefore, Verizon must recover the cost of these
6 activities in recurring rates to comply with this Commission's rate design mandate
7 and with the principle of cost causation.

8 **C. FIELD INSTALLATION COSTS ARE MORE APPROPRIATELY**
9 **RECOVERED THROUGH RECURRING CHARGES.**

10 **Q. PLEASE DESCRIBE AND IDENTIFY THE PROBLEMS ASSOCIATED**
11 **WITH THE FIELD INSTALLATION WORK GROUP.**

12 A. The Field Installation costs Verizon included in its NRCM are a good example of
13 how Verizon has included recurring costs in its non-recurring charges. We have
14 identified the following problems with the activities indicated in Verizon's
15 NRCM regarding the Field Installation work group:

- 16 • The Verizon Field Installation activities are necessary to produce
17 the loop element. As such, their cost is properly recovered as
18 recurring cost activities.¹⁷
19

¹⁷ *Local Competition Order* at ¶ 675, "The incremental cost of connecting a new residence to its end office, however, is the cost of the loop." *Id.* at ¶ 682, "We conclude that, under a TELRIC methodology, incumbent LECs' prices for interconnection and unbundled network elements shall recover the forward-looking costs *directly attributable to the specified element*, as well as a reasonable allocation of forward-looking common costs" and "The forward-looking costs directly attributable to local loops, for example, shall include not only the cost of the installed copper wire and telephone poles but also the

(continued)

- 1 • The work effort completed by Field Installation will not be undone
2 when the UNEs are disconnected, but will continue to benefit
3 Verizon's network.¹⁸
4
5 • Verizon improperly requires existing customers who are on IDLC
6 facilities to be moved onto UDLC or copper facilities for CLEC
7 migration requests.
8 • The modeling conventions representing the activities associated
9 with Field Installation technician are not consistent.
10
11 • Field Installation activities are not properly reflected in the field
12 installation rate design.
13
14 • Verizon's NRCM includes Field Installation tasks that are not
15 required on every request, and are not consistent with the way Field
16 Installation technicians are dispatched for retail services.
17

18 **Q. DO YOU HAVE AN EXAMPLE THAT DEMONSTRATES THESE**
19 **FLAWS?**

20 A. Yes. AT&T/WCOM NRCM-5, page 4, is a process workflow diagram that
21 displays the Field Installation activities that Verizon claims are necessary if it
22 must dispatch a technician on a "Two Wire New Initial" UNE loop request. This
23 workflow diagram demonstrates that the tasks incorporated in Verizon's claimed
24 non-recurring cost study will benefit Verizon when it reuses the network once the
25 CLEC has paid for the construction thereof.

cost of payroll and other back office operations relating to the line technicians, in addition to other attributable costs."

¹⁸ Unlike for loop elements, Field Installation is required on the Sub-Loop elements, because the technician must connect the CLEC's equipment to the ILEC's sub-loop. Nonetheless, Verizon has not modeled these tasks correctly, which we discuss below.

1 As this process flow diagram shows, the Field Installation technician
2 begins the process by retrieving the order with Task #1. Then, Verizon applies a
3 travel additive to move the technician to the job site with Task #2. At some point,
4 the Field Installation technician must analyze the order to determine to what work
5 locations are necessary to complete the loop element. We have mapped out three
6 possible locations: the FDI or cross-box, the drop wire terminal location, and the
7 NID or Premises location.

8 Task #4 is another travel additive (on top of task #2), which applies an
9 additional 16.36 minutes to locate the terminal or cross-box near the end user.
10 This amount of additional time seems unreasonable, because the technician
11 usually spots the cross-box as he or she approaches the customer's location. This
12 amount of time seems to reflect the worst-case scenario, possibly reflecting when
13 the technician was walking. If you consider the technician driving at 25 MPH,
14 this time would equate to almost 8 miles of driving, and that is well beyond any
15 average CSA boundaries. Once again, Verizon's model is unreasonable.

16 Once this additional travel is applied, Verizon claims it will need an
17 additional 20.76 minutes to "Verify that TC dial tone is present on assigned
18 facility." This activity is nothing more than opening up the FDI or Terminal,
19 placing alligator clips from a telephone headset on the assigned facilities and
20 verifying that the CLEC's dial tone is present. Even if one assumes that this task
21 also includes some site set-up time, it should take no more than 10-12 minutes.
22 This would be sufficient time even if Verizon's technicians needed to raise a

1 ladder or hoist themselves in a bucket truck. Again, Verizon's model includes
2 unreasonable, "worst-case" task times that conflict with Mr. Walsh's own
3 observations of real-world fieldwork.

4 Once the terminal is opened and dial tone verified, Verizon's non-
5 recurring cost study assumes that the technician will require another 21.81
6 minutes time to place a cross-wire 3-5 feet in length between the feeder and
7 distribution cable pairs. This is a truly absurd estimate for a task that is normally
8 completed in less than two minutes by a technician using a punch-down tool.

9 There may be a situation where the assignment is defective and the
10 technician places a call directly to the MLAC (Field Installation Task 6) and not
11 the RCCC as Verizon would have you believe. The MLAC receives the call and
12 works with the technician to effect a change in assignment. When Mr. Walsh
13 managed the MLAC Field Assistance position at NYNEX, his technicians did *not*
14 spend on average 49.90 minutes per call. Again, Verizon is modeling not an
15 efficient process, but a worst-case scenario. The average MLAC time that Mr.
16 Walsh recalls for a Cross-Box Field Assistance call is closer to 10-15 minutes,
17 including hold time. Usually, the technician knows ahead of time what facilities
18 he/she wants to use. The Field Assistance technicians Mr. Walsh managed
19 averaged between 20-30 calls a day. Based on the task times in Verizon's cost
20 study, the same technicians would have been only able to handle 7-8 calls a day.
21 At that pace, the Field Assistance work force that Mr. Walsh managed would have
22 to have been increased by a factor of 4.

1 Moreover, a pair swap away from defective plant should be considered a
2 recurring maintenance cost of Verizon's outside plant. The CLEC did not cause
3 the plant to become defective. The tasks necessary to produce the UNE element
4 now includes a correction to Verizon's OSS to reflect actual plant conditions.
5 This too is an ongoing recurring cost.¹⁹

6 Continuing with this assignment error, Verizon claims for task #7 that the
7 Field Installation technicians will spend another 43.32 minutes contacting the CO
8 Frame and/or the RCCC to accomplish the change of assignment. Given that
9 Verizon's own task time for CO FRAME task #18 is only 23.43 minutes, the time
10 reflected for Task #7 must mean that, in addition to calling the CO, the Field
11 Installation technician also contacts the RCCC for assistance. This makes no
12 sense. If Verizon's task times are not merely the artifacts of an erroneous survey
13 technique, then the task times incorporated in Verizon's NRCM likely include
14 "wait time," *i.e.*, non-productive "hanging around doing nothing" time, which is
15 neither efficient nor forward-looking.

16 Moreover, the assignment change reflects the re-arrangement of plant, a
17 recurring maintenance cost. While these Field Installation activities may be
18 necessary to ensure that Verizon is delivering the requested UNE, they are not

¹⁹ Verizon must agree because its model is devoid of any MLAC activity reflecting this change of assignment.

1 appropriately classified as non-recurring costs. We therefore recommend that the
2 Commission eliminate the field installation rate element from Verizon's non-
3 recurring charges for unbundled loop elements.

4 In addition, the Commission should require Verizon to remove all costs
5 for the Field Installation administrative support provided by the RCCC before
6 making any use of Verizon's non-recurring cost studies. These activities and their
7 cost do not belong in a non-recurring cost study. If a CLEC requires the
8 assistance of the Field Installation workforce to perform activities on the customer
9 side of the NID, the appropriate recovery may be arranged through time &
10 material charges.

11

12 **Q. ARE THERE TYPES OF RECURRING COSTS THAT VERIZON HAS**
13 **INCLUDED IN ITS NON-RECURRING STUDIES?**

14 A. Yes. Verizon has also inappropriately included costs directly related to operation
15 and upkeep of its network, such as repair or maintenance of its outside plant and
16 updating of its databases, in its non-recurring cost studies.

17

18 For example, Verizon has included interaction with the MLAC group in
19 the Field Installation's work activity (Task #6), although there is no matching
20 activity indicated for the MLAC. Based on Mr. Walsh's experience as a MLAC
21 manager, the MLAC workgroup does work with Field Installation technicians to
22 correct service order assignments. The work, however, is directly related with the

1 updating of the OSS databases to reflect actual conditions of the plant. When the
2 systems recognize the assigned facilities are no longer available, the system
3 automatically updates the service request with new assignments. Because this is
4 an ongoing cost to provide the elements, it should be categorized as a *recurring*
5 *cost*, which may be the reason Verizon has not included it its NRCM. Having
6 identified this *real world* MLAC activity as a recurring cost, then the associated
7 activity performed in the field, by the Field Installation technicians and the
8 administrative support organizations (such as the RCCC), would also be an
9 ongoing cost to provide the element, and should not be reflected in the
10 presentation of non-recurring cost.

11 **D. VERIZON'S NON-RECURRING COSTS FOR SERVICE**
12 **ORDERING INCLUDE EXCESSIVE LEVELS OF FALLOUT**
13 **THAT DO NOT REFLECT EFFICIENT, FORWARD-LOOKING**
14 **OSS AND IMPROPERLY INCLUDE COSTS THAT CLECS DO**
15 **NOT CAUSE.**

16 **Q. HAS VERIZON CORRECTLY MODELED THE USE OF ITS OSS FOR**
17 **PROCESSING UNE SERVICE ORDERS?**

18 A. No. A forward-looking cost study should reflect the greatest feasible electronic
19 exchange of information between companies. Verizon's non-recurring cost
20 studies fail to do so, in several ways.

21 First, Verizon assumes too high a level of manual intervention in the
22 service ordering process. A TELRIC study must recognize that CLECs will
23 interact with Verizon electronically when placing UNE orders. In an efficient
24 network, orders for UNEs flow through the OSS (preordering, ordering,

1 provisioning, repair, maintenance and billing) with little or no manual
2 intervention. Essentially, once the customer and desired services have been
3 accurately identified and transmitted into the system, the integrated software and
4 databases of the OSS perform the remaining functions necessary to align and
5 activate the necessary elements.

6 Verizon has needlessly introduced manual steps where automated
7 processes are readily available, more efficient, and less costly.

8 **Q. ARE THE LEVELS OF SERVICE ORDERING FALLOUT THAT**
9 **VERIZON HAS IDENTIFIED APPROPRIATE FOR A FORWARD-**
10 **LOOKING COST MODEL?**

11 A. No. Verizon has not made it easy for reviewers of its cost studies to determine
12 precisely how much fallout Verizon has assumed or to assess the “cost causer” for
13 that fallout;²⁰ nonetheless, it is evident that the levels of manual intervention
14 incorporated in Verizon’s non-recurring cost studies are excessive and that
15 Verizon has included in its non-recurring costs the cost to resolve fallout that
16 CLECs do not cause.

²⁰ There are two problems with analyzing the levels of manual intervention in Verizon’s cost studies. First, the TISOC work activity task descriptions provided in Verizon’s NRCM are insufficient to enable the identification of the cost causer. Second, the overall level of fallout and its causes are not obvious.

1 **Q. HOW SHOULD THE FALLOUT LEVEL IN A FORWARD-LOOKING**
2 **COST STUDY OF “SERVICE ORDERING” FOR UNES BE**
3 **DETERMINED?**

4 A. The determination of forward-looking fallout should proceed from the
5 assumption, with which Verizon apparently agrees, that CLECs will communicate
6 their orders to Verizon in an electronic format. Given this assumption, the
7 appropriate level of fallout can be determined via an analysis of the activities
8 performed by the TISOC workgroup based on the capabilities of OSS, its
9 software, and the reason for the manual work. AT&T/WCOM NRCM-5, page-6,
10 presents a process workflow diagram developed by Mr. Walsh that aids in this
11 analysis.

12 Electronic order processing does not necessarily eliminate all manual
13 intervention. But the cost of manual intervention should only be included in a
14 non-recurring cost study for UNE ordering if either (1) even a forward-looking
15 OSS designed to process orders efficiently would require manual intervention in
16 that particular circumstance or (2) a CLEC error or request causes Verizon to
17 incur costs for manual intervention when, absent that CLEC error or request,
18 Verizon could have processed the order without such intervention. Therefore, as
19 the process flow diagram shows, one must ask “Are there conditions that prevent
20 the electronic order creation, and if so, are these conditions the result of CLEC- or
21 Verizon-caused errors?” The answer to this question helps to establish cost
22 causation.

1 In theory, limitations in the OSS that recognize error-processing
2 conditions may prevent the order from being automatically established. If these
3 error-processing conditions were not errors in content or format, but limitations of
4 the software to process the information automatically, a non-recurring cost might
5 be appropriate. However, Verizon has not identified the level of fallout from this
6 condition. In any case, forward-looking OSS capability for processing UNE
7 orders should be at parity with similar retail operations; given this parity
8 assumption, no fallout for this condition would occur.

9 Errors could also result from the CLEC supplying incorrect data, thus
10 necessitating return of the service order to the CLEC for resolution. This can
11 either take place electronically or manually based on the limitations of the OSS.
12 If the ILEC has to perform manual identification and return of the errors, then a
13 non-recurring cost might apply. The cost causer for this type of condition would
14 be the CLEC. Here too, Verizon has not identified this level of fallout. However,
15 forward-looking OSS should be able to recognize the CLEC-caused errors and
16 automatically return those errors back to the CLEC for correction. Again, this
17 assumption is based on parity with similar retail processing.

18 If the error processing condition was the result of Verizon's incorrectly
19 stored information, then obviously Verizon is the cost causer. In this case, a non-
20 recurring cost to the CLEC would not be appropriate. Again, the level of fallout
21 for this condition is not obvious in Verizon's presentation of non-recurring cost.

1 The net result from this overall analysis would have been a flow-through
2 rate for each UNE representing the ILEC's opinion of the amount of order
3 processing that could be completed by the OSS automatically, and the level of
4 manual processing required to address only those situations when *CLEC-caused*
5 fallout occurred and needed manual resolution that would appropriately be
6 reflected as a non-recurring cost.

7 **Q. WHAT LEVEL OF FALLOUT DOES VERIZON'S NRCM MODEL**
8 **ASSUME FOR SERVICE ORDERING COSTS?**

9 A. AT&T/WCOM NRCM-5, page 5, is a process workflow diagram based upon the
10 TISOC work activity tasks presented in the Verizon NRCM. As this diagram
11 illustrates, Verizon's claimed non-recurring cost is not based on the cost causation
12 principle, but rather on the type of *service order* that Verizon receives. Moreover,
13 Verizon's task descriptions do not reflect an appropriate forward-looking
14 workflow.

15 Verizon's non-recurring cost studies generally identify an overall fallout
16 rate of 66% (52% from requests for new accounts, 5% from changes to existing
17 accounts, and 9% from changes on pending orders). Verizon's forward-looking
18 adjustments reduce this rate to 38.9% (66% times 59%). This representation of
19 claimed non-recurring cost casts serious doubts on what it represents or whether it
20 is based on valid assumptions.

21 What is obvious from the workflow diagram is that Verizon has modeled
22 *all manual intervention costs, regardless of the cost causer*. This is a violation of

1 fundamental cost-causation principles and results in an overstatement of the costs
2 attributable to CLEC orders.

3 **Q. PLEASE PROVIDE EXAMPLES OF INAPPROPRIATE FALLOUT**
4 **RATES AND MANUAL INTERVENTION INCLUDED IN THE VERIZON**
5 **NON-RECURRING COST STUDIES.**

6 A. While Verizon has identified the types of fallout encountered by the TISOC
7 workgroup, such fallout is inconsistent with the task descriptions provided.
8 Verizon claims that it should be able to recover from CLECs all of the time
9 necessary for the TISOC workgroup to receive the request, print and resolve the
10 error, and then type it manually into Verizon's OSS.²¹ As we described above,
11 these types of error conditions should result simply in the action necessary to
12 return the order to the originator, *i.e.*, the CLEC, for correction. The TISOC
13 workgroup does not correct the errors, but needs only to return the order with the
14 appropriate error condition routed back to the CLEC.

15 The OSS that detected the error in the first place should be automatically
16 programmed to re-direct the order back to the CLEC. Examples of errors in this
17 category included:

- 18 1. An invalid LSR field has been populated.
- 19
- 20 2. An LSR field contains invalid data.
- 21

²¹ Verizon's NRCM TISOC Task # 1, Receive Local Service Request (LSR) from the CLEC and print, review, type and confirm the order request for new installation and/or account.

Panel Reply Testimony on Non-Recurring Costs and Advanced Data Services

- 1 3. The address populated on the LSR does not match the address in
2 “LiveWire.”
- 3
- 4 4. A required field has not been populated.
- 5
- 6 5. The FEATURE Field contains invalid data.
- 7
- 8 6. A required form has not been submitted.
- 9 7. A supplemental service order has been sent on an LSR when the
10 service order has already been completed.
- 11
- 12 8. The LOOP is not qualified as requested (*e.g.*, loop length too long,
13 loaded facilities, no copper facilities available, spectrum
14 incompatibility issues).²²
- 15
- 16 9. The retail service or line cannot be migrated (*e.g.*, BOSS/CRISS
17 account is not live).
- 18
- 19 10. A problem with the telephone number provided (*e.g.*, incorrect
20 Area Code, incorrect Wire Center, no account found, no match to
21 end-user name, no match to end user address, status is non-
22 working, status is disconnected).
- 23
- 24 11. Due date is in jeopardy due to facilities (*e.g.*, facility problems, no
25 spare facilities, no copper facilities available).²³
- 26
- 27 12. Duplicate Purchase Order Number (*i.e.*, a new PON has been
28 received and the identical work being requested on the new PON is
29 pending or completed by another PON).
- 30

²² Here, Verizon is attempting to recover costs associated with its embedded network architecture. As we explain below, even the marginally “forward-looking” network architecture assumed in Verizon’s recurring cost studies reflects a network that is capable of provisioning DSL-based services without any loop “conditioning.” Hence, it is inconsistent with TELRIC principles for Verizon to impose non-recurring charges for discovering and then notifying a competitor that a supposedly DSL-capable loop is actually not capable of providing DSL-based services without loop “conditioning.”

²³ This is an error condition detected by the MLAC Assignment OSS (LFACS). The TISOC doesn’t detect this type of error. It results from no available inventory.

1 13. A pending order exists on the same account in which the LSR is
2 requesting activity.
3

4 In all of these examples provided, Verizon would have to have returned
5 service order to the CLEC for resolution. Therefore, the task descriptions are an
6 inaccurate reflection of the work required. Forward-looking non-recurring costs
7 should reflect only those instances for which the ILEC can demonstrate the
8 limitations of the OSS to process the request automatically, and conditions when
9 the CLEC was the reason for the Request for Manual Assistance (“RMA”). In
10 addition, when the data on the request is incorrect, the party responsible for the
11 resolution is the CLEC; therefore, orders must be returned to the CLEC for
12 resolution.

13 As we discuss below in greater detail, Verizon NRCM only reflects this
14 Service Ordering manual intervention on the “initial” element being ordered. If
15 there were conditions in which multiple elements were ordered under a single
16 request, and thus cause the TISOC manual intervention to occur, then the non-
17 recurring costs would be overstated.

18 Verizon’s approach to modeling costs in the other cost categories
19 (Provisioning, CO wiring, and Field Installation) differs from the modeling
20 approach it assumed for service ordering. For these other cost categories,
21 Verizon singles out the costs associated with just the UNE ordered. In theory,
22 Verizon can assess a non-recurring costs based on the number of elements being
23 ordered. To eliminate the over-statement of costs directly related to service

1 ordering of multiple elements, Verizon should have taken the same approach for
2 service ordering costs.

3 **E. THE “COORDINATION” ACTIVITIES OF THE RCCC**
4 **WORLDGROUP DEMONSTRATE THE INEFFICIENCY OF**
5 **VERIZON’S USE OF MANUAL LABOR INSTEAD OF**
6 **MECHANIZED PROCESSES.**

7 **Q. PLEASE COMMENT ON THE APPROPRIATENESS OF VERIZON’S**
8 **ASSUMPTIONS CONCERNING THE INVOLVEMENT OF THE RCCC**
9 **WORKGROUP.**

10 A. One of the major flaws in Verizon’s non-recurring cost studies is the inclusion of
11 excessive times for the RCCC workgroup. The degree to which the RCC
12 involvement exceeds any rational or efficient use of that workgroup is evident in
13 the same example discussed in our previous response—the non-recurring cost for
14 a CLEC’s request for a Two Wire New Initial UNE Loop with no field dispatch.
15 The first six RCCC tasks represented in Verizon’s non-recurring cost study for
16 this element are reflected in another process flow diagram (AT&T/WCOM
17 NRCM-5, page 2).

18 The workflow begins with RCCC task #1, which accounts for the time to
19 access a system to begin the coordination process. This task supposedly occurs
20 100% of the time. That is, Verizon allegedly examines every CLEC request to
21 begin manual intervention—even simple requests involving reuse of existing
22 facilities with no dispatch is required.

23 In the retail model, the OSS takes care of the coordination. The OSS
24 identifies work to be done, and assigns technicians to that work *automatically*.

1 But Verizon has chosen to disregard the ability of its OSS, and reflects a manual,
2 inefficient costly process. Verizon does attempt to make this manual process
3 forward-looking by applying a forward-looking adjustment that reduces the time
4 stated by 80%.

5 The RCCC Task #2 is another example of how Verizon has included costs
6 that are not applicable to situations when a CLEC places a service order for a
7 single UNE. In Massachusetts testimony, Verizon described RCCC task 2 as
8 follows:

9 For example, RCCC Activity 2 in the Verizon MA model represents the
10 time needed *to compare the due date and time for a new order with*
11 *similar information for existing orders* so that the orders can be
12 appropriately prioritized, and every order meets the due date requested by
13 the CLEC.²⁴
14

15 This testimony demonstrates that Verizon assumes each service order will
16 include requests for multiple UNEs.

17 Verizon's non-recurring cost model has one worksheet reflecting the non-
18 recurring cost for the "Initial" element ordered and another worksheet
19 representing the "additional" element(s) ordered. Yet, Verizon has incorrectly
20 reflected this cost for work associated with multiple UNE requests on the "initial"
21 request worksheet.

²⁴ 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 Massachusetts, July 18, 2001, (emphasis
added).

1 Task #2 also suggests that “some other work activity” will have to be done
2 once the order becomes analyzed. Verizon does not specifically state what the
3 screener does with this information; however, task #14 appears to be the outcome
4 once task #2 is completed. Because it does not specifically identify the screener,
5 like the other tasks do, the workflow diagrams leave this task unattached.

6 Task #3 suggests there is some roadblock that the screener eliminates, yet
7 Verizon never identifies the specific roadblock explains why it exists. This task
8 definition is too vague for parties to conduct a proper evaluation, much less
9 identify the cost causer.

10 Task #4 again suggests work associated with related orders. As we have
11 previously pointed out, such costs are only appropriate when multiple elements or
12 multiple orders are related.

13 What Verizon hasn’t stated is what happens when related orders are
14 encountered. Does the screener perform some other task? As this example has
15 just demonstrated, the work activities performed by the RCCC screener are highly
16 ambiguous as to when they would be encountered when a CLEC orders a single
17 “initial” 2 Wire UNE, and reflect cost for work that is unnecessary for this
18 condition.

19 The process workflow diagram continues with AT&T/WCOM NRCM-5,
20 page 3, and the picture becomes even clearer as to the additional non-recurring
21 cost that is applied to every CLEC’s request even though Field Installation
22 dispatch may not be necessary.

1 The focus of Verizon’s RCCC involvement centers on the catchall RCCC
2 Task #10 “[r]emove any facility roadblocks or problems.” Verizon has described
3 the purpose of the RCCC as follows: “It serves as the central organization for
4 coordinating the provisioning activities of various Verizon groups” and [the]
5 “Verizon point of contact with CLECs for obtaining all needed assistance.” As
6 the process flow demonstrates, the points of contacts addressed by task #10 are
7 the CLEC, Field Installation or the CO Frame. However, Verizon neglects to
8 classify the cost causer and to identify what is necessary to remove those facility
9 roadblocks or problems, making meaningful cost analysis impossible.

10 The workflow diagram includes a decision point to help clarify what
11 activities Verizon might assume. The first decision centers on an apparent
12 defective assignment condition in the CO Frame’s work tasks. A defective
13 assignment means the technicians cannot continue working on the request until a
14 change occurs; thus, it is a roadblock. The defect may be caused by either CLEC
15 errors or Verizon errors. When the CLEC has supplied incorrect data, the request
16 must be referred back to the CLEC to obtain a correction. The process
17 AT&T/WorldCom chose to model for this situation was an electronic message
18 entered into the OSS by the person who discovered the service order was in error
19 (*i.e.*, CO Frame technician), which is the most efficient way of doing business.
20 However, because Verizon has not “decoded” task 10, we have included
21 additional steps in the workflow diagram to help explain what is necessary.