

**BEFORE THE
COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION**

IN THE MATTER OF)	
)	
Verizon Virginia Inc.'s)	Case No. PUC2002-00046
compliance with the conditions)	
set forth in 47 U.S.C. §271(c))	

**TESTIMONY OF VALERIE EVANS AND MICHAEL CLANCY
ON BEHALF OF
COVAD COMMUNICATIONS COMPANY**

1. My name is Valerie Evans, Vice President – External Affairs for Covad Communications Company. I act as a liaison between Covad’s business personnel and Verizon. I am also responsible for participating in various federal and state regulatory proceedings, representing Covad.

2. Before joining Covad, I was employed by Verizon Communications for 13 years. After joining that company in 1985, I held various management positions including Assistant Manager of Central Office Operations and Manager of Installation, Maintenance and Dispatch Operations. In those positions, I oversaw the installation and maintenance of services to retail customers. Specifically, I supervised several groups that were responsible for the physical end-to-end installation of facilities and the correction of any defects or problems on the line. In 1994, I became Director of ISDN Implementation. In that position, I established work practices to ensure delivery of ISDN services to customers and to address ISDN facilities issues -- issues very similar to those encountered in the DSL arena.

3. My name is Michael Clancy, Director of External Affairs for Covad. Prior to my current position, I performed customer support and operations functions for Covad's New York Tri-State region. In particular, I was responsible for building out Covad's network in New York and all other operations activities.
4. Prior to coming to Covad, I was employed by Verizon New York Inc., in various Network Services, Special Services, and Engineering assignments, with increasing levels of responsibility, for over 27 years. My last assignment in Verizon New York was Director of Interoffice Facility Provisioning and Process Management.

LOOP CONDITIONING

5. There are, broadly speaking, essentially three types of conditions on a loop that can affect DSL -- loop length, load coils and bridge taps, and the presence of Digital Loop Carrier ("DLC"). With loops that are longer than 18,000 feet, Verizon has installed certain devices on the copper line to enhance and/or support voice service.¹ These devices are called load coils and they impede high frequency digital transmissions. For example, both ISDN and DSL services are affected by these devices because of encumbrances that are placed on the line to support voice service. These encumbrances must be removed for the loop to be able to support DSL or digital transmissions, a process called conditioning.
6. However, the activities involved in conditioning loops for DSL are not out of the normal for Verizon. Loop conditioning involves routine maintenance and provisioning activities that are performed on a loop to make it capable of

¹ Short loops do, on occasion, have load coils but this is not common.

transmitting *voice or data*. Verizon has been performing loop conditioning for over 10 years. Loop conditioning is not something special that only DSL providers need; Verizon regularly grooms its network to support the multitude of services they provide over loops. For example, Verizon conditions loops for its own purposes to provide voice, ISDN, Frame Relay and DSL services -- to name a few services -- to its retail customers.

7. Load coils: Load coils are devices that compensate for signal loss in the voice frequency that occurs with longer loops. The problem is that load coils were designed to solve a particular problem – boosting the signal strength of plain old telephone service. Unfortunately, load coils block the higher frequencies used by digital data signals of DSL transmission technologies.
8. Bridge Taps: In order to account for various network configurations, ILECs, like Verizon, installed copper wire with a number of spurs leading from it that could be tapped into depending on where the end user was ultimately located. These spurs are called bridge taps. Typically, DSL signals can work acceptably in the presence of a small amount of bridge taps – just how much bridge tap can be tolerated depends on the DSL technology that is used. In any event, the presence of bridge taps cause significant reflection and attenuation impairments when signals encounter a bridge tap that is of resonant length. In addition, the more bridge taps that are present, and especially the presence of taps of resonant length, the more difficulty they cause to DSL service.
9. Digital Loop Carrier (“DLC”): Another factor that affects DSL service is the presence of DLCs. ILECs, like Verizon, are upgrading their networks by

increasing the amount of fiber in their networks both to replace existing copper facilities and to meet new demand. With a fiber-based network configuration, there is typically a fiber feeder facility that runs from the central office to a remote location such as a remote terminal, where the DLC is located, and then a copper facility that runs from the remote terminal to the end user's premises.

While DLC systems facilitate the transmission of digital signals along the loops they serve, bandwidth and signal characteristics are limited by the functionality and equipment that forms part of the DLC. At this time, Covad is limited by the equipment Verizon is deploying in its DLC to providing its IDSL service, Covad's lowest speed service. Alternatively, Verizon, for a fee, will provide CLECs with line station transfers where it will move a customer with a DLC line to a full copper loop, if one is available, at the CLEC's expense. Line station transfers are provided as a surrogate to DSL over fiber feeder, or DLC.

10. It is our understanding that neither retail customers nor purchasers of unbundled loops typically pay unique, non-recurring charges for a line and station transfer, even though Verizon might perform a line and station transfer to provide either a retail service or a non-DSL-related unbundled loop. Hence, Verizon's imposition of line and station transfer charges on DSL competitors is discriminatory.

PRE-QUALIFICATION

11. As discussed above, DSL requires the loop to have certain characteristics in order to work. Verizon asserts that its mechanized pre-qualification database, LiveWire, tells CLECs whether a loop is qualified for DSL prior to submission of an order. LiveWire identifies the presence or absence of load coils or bridge taps,

the length of cable, whether a binder group contains spectrally incompatible services, or a determination of whether the loop is on copper or fiber. In Covad's experience, LiveWire falsely reports certain loops as non-qualifiers. As a result, Covad can either turn away a customer because of the incorrect report or incur manual loop qualification charges to show that the loops are actually compatible with DSL service. Covad has experienced numerous instances where it must turn away a customer because LiveWire incorrectly reports that the customer is served by a long loop. In response, the customer will inform Covad that a neighbor has DSL, so its loop cannot be too long. Covad is compelled to submit a manual loop qualification request that reveals that the loop actually is compatible with DSL service.

12. More disturbing, Covad is currently receiving responses from LiveWire indicating that the loop has a length of 99,000 feet or zero feet and is non-qualified. Clearly, there are no 99 kilofeet loops and no zero foot loops and so we are compelled to conduct a manual workaround that increases delay and the costs associated with provisioning these loops. These manual workarounds often reveal that the loops actually are compatible with DSL service. Until this problem is fixed, Covad will continue to incur additional costs to the business and unreasonable provisioning delays for every LiveWire response that erroneously reports a loop to be 99 kilofeet or zero feet long.
13. Incorrect spectrum compatibility issues have also prevented Covad from submitting valid DSL loop orders. Several months ago, Verizon articulated to Covad its firm policy of rejecting any Covad line sharing order submitted, where

the loop may be located in the same binder group as a loop over which Verizon currently serves one of its retail customers with AMI T-1 service. Pursuant to an FCC mediation session, a sample of rejected line sharing orders submitted during February 2002 were jointly reviewed by Covad and Verizon. The test sample revealed that of approximately 240 line sharing orders that Covad submitted having received a “loop not qualified” response due to spectrum compatibility concerns, only one of those orders actually had a T-1 in the binder group. In other words, LiveWire was wrong approximately 99% of the time in the case of our sample. To date, this matter has already prevented Covad from provisioning DSL to well over a thousand customers that requested service with Covad.

14. Verizon considers loops over 18 kilofeet as Digital Designed loops that require conditioning at significant costs to CLECs. Covad is not now providing DSL service to customers who are served by long copper loops over 18 kilofeet. The conditioning charges that Verizon imposes on CLECs make it uneconomical for Covad to offer service to these customers. In this way, Verizon has succeeded, by imposing excessive costs on us, in limiting Covad’s DSL service.
15. As already discussed, the presence of DLC on a line limits our ability to provide DSL services. To address this situation, Verizon, for a fee, will provide CLECs with line station transfers where it will move a customer with a DLC line to a full copper loop, if one is available. Verizon’s pre-qualification tool often indicates that only DLC is available in a binder group, thereby preventing Covad from requesting a line station transfer to a full copper loop. Based on data, Covad

- believes that upwards of 30% of the pre-qualification responses of “loop not qualified” due to DLC are incorrect and could be served by available copper.
16. The scope of KPMG’s pre-order testing did not test the accuracy of Verizon’s pre-qualification database. If an order from KPMG’s pseudo-CLEC came back non-qualified for whatever reason, KPMG incorrectly assumed the result was accurate and complete. KPMG never attempted to provision any of its own pseudo-DSL facilities that were not qualified based on pre-qualification test results. Rather, the DSL loops in KPMG’s provisioning test were all commercial loops where an actual CLEC would have initiated the pre-order transaction. As a result, KPMG did not develop any correlation between the pre-qualification database and the ability to provision the loops.
 17. CLECs should not have to pay for loop qualification because of Verizon’s failures and inaccuracies. The Commission should require Verizon to correct these clear discrepancies in its database prior to 271 approval. Updating and maintaining Verizon’s database on its loop inventory is the responsibility of Verizon. It is a function of doing business, a surrogate to direct access to an existing OSS, and the cost to perform that function is a cost of doing business, that is recovered through charges to CLECs. CLECs rely upon this information to make business decisions. Compliance with Verizon’s own guidelines related to its database would have resulted over the past 20 years, in more of the pertinent information being included, given the frequency of plant additions and rearrangements. As long as Verizon can continue to pass on to competitors the cost of whatever manual processes it employs, the company will have every incentive to not update its

mechanized database. Thus, the Commission should not permit Verizon to assess a manual loop qualification charge for competitors to obtain information that should be available electronically through LiveWire. CLECs are already charged a monthly recurring charge for electronic access to LiveWire.

18. To the extent that information needed for loop qualification resides only in Verizon's "plats" (which are paper plant records), rather than in electronic databases, it reflects Verizon's failure to populate its databases as it should have given the upgrades that Virginia ratepayers have been funding for years. It is Verizon's responsibility to follow its own practices for fully and accurately populating its databases, and maintaining those databases in such a way that they contain accurate information. The costs for populating and maintaining OSS databases have traditionally been passed on to consumers as part of recurring costs. In a competitive environment, the incumbent should pay for error correction, should it be found that existing practices are either not being followed, or are not being done accurately. If loop qualification information that should have been in LiveWire is missing, then Verizon should obtain the appropriate information, correct its own database(s), and provide the information to the requesting carrier, in an expeditious manner, without new charges being imposed on the competitor. If anything, Verizon should be compensating the competitor for harmful delay associated with waiting for the information to be obtained manually, rather than via a real-time mechanized interface.

DSL LOOPS

19. Verizon's current business target of provisioning loops within six days is outdated and should be significantly shortened. If Verizon is claiming that it provides good performance on loop provisioning intervals, then it should be the goal of the Commission to continually seek to raise the bar and have the intervals shortened in order to bring advanced services to Virginia consumers more quickly.
20. Verizon has not met its obligation to provide nondiscriminatory access to unbundled loops. Verizon's policy of providing a retail DS-1 access service instead of the UNE DS-1 loop that CLECs request concedes that it is technically feasible to provision a loop to support DS-1 digital signals to the address requested by the CLEC. Verizon is denying CLECs access to the UNEs to which they are entitled to by law and is also engaging in a discriminatory practice of provisioning loops for its retail arm while refusing to do so for requesting carriers.
21. Verizon asserts that it is prepared to "cooperatively test" a loop with a CLEC to verify continuity and ensure that the loop meets the requirements as communicated in Verizon's Technical Requirements documents for digital loops. Cooperative testing is the process by which a Verizon technician who has completed a Covad loop installation calls a Covad provisioning center employee and sends a "short" over the line. If Covad believes that the loop works – indicated by "seeing" the short through test equipment installed in Covad's collocation space, then the Covad employee provides Verizon a serial number indicating that Covad "accepts" the loop as good.

22. In order for a cooperative test to be valid, the Verizon field technician must be at the customer's network interface device ("NID"), the terminating point of the loop at the customer's premises. Only from the NID can the technician test the loop all the way back to the central office. If the technician, for example, tests the loop from a cross box rather than the NID, the technician is testing only the portion of that loop between the cross box and the central office, and failing to test the portion between the cross box and the NID. Therefore, if there was a problem in the portion of the loop not tested, it would not be revealed during cooperative testing. In sum, just because Verizon says it cooperative tested a loop, there is no way of ensuring that the Verizon technician was at the NID when the test was conducted.²
23. There are certain things that need to be resolved before Verizon is permitted into the long distance market. Verizon should be required to label, or "tag", all circuits at the demarcation point. The need for this process is that Covad (i) knows that Verizon has terminated the loop at the customer's premises and (ii) knows where the loop is located. For instance, a loop may be terminated on a pole or in a basement of a multi-dwelling unit instead of to the customer's premises. If Verizon does not complete this activity, a CLEC will not be able to provide voice or data service.
24. It is important to remember that cooperative testing is not something Verizon does voluntarily – indeed, it opposed the idea vehemently when Covad first asked

² Covad has no way of knowing where the Verizon technician actually is located during the cooperative testing procedure.

Verizon to do it, claiming that is was unnecessary and time consuming. Because Verizon's DSL loop performance was so bad, Verizon eventually acquiesced.

The cooperative testing process forces Verizon technicians to pay more attention to the quality of their loop provisioning and ensures that Verizon correctly provisions what CLECs have ordered.

25. The FCC has noted two important reasons why measurement of trouble tickets within 30 days is important for determining checklist compliance. First, trouble reports within 30 days are "indicative of the quality of network components supplied by the incumbent LEC." Second, the Commission concluded that advanced services customers that experience substantial troubles in the period following installation of a DSL-capable loop are unlikely to remain with a competing carrier.
26. Verizon's maintenance record is poor (see Attachment 403, PR-6-03). Verizon has developed a novel approach to excusing its poor loop provisioning record. It disregards the troubles reported that Verizon did not identify as found in its network. Verizon states that this metric measures CLEC performance, not Verizon's service quality.³ This assertion ignores the fact that a Verizon technician will close a trouble ticket as "no trouble found" even though the trouble is actually in Verizon's network.
27. Covad has on many occasions filed repeat trouble tickets, which were incorrectly closed by Verizon due to trouble not found by Verizon and then subsequently found to be in Verizon's network, indicating poor maintenance and repair service.

³ Verizon-VA Checklist Declaration at 57.

Verizon does not adequately capture the rate of repeat trouble reports because it only measures the percent of repeat reported troubles cleared and found to be in its network (see Attachment 403, MR 5-01). It ignores the fact that CLECs must often file numerous reports for the same trouble, before Verizon can correctly identify the problem in its network. Presumably, if four reports are filed for the same incident, Verizon will only count the last report that prompted it to finally determine the source of the trouble on its network, rather than all of the repeat trouble reports. As a result, Verizon excludes valid CLEC trouble reports from this measurement and the repeat trouble report percentage is skewed too low.

28. For UNE POTS Provisioning performance, Verizon admits that its repair quality performance in fixing POTS troubles as measured by “%Repeat Reports within 30 Days” (MR 5-01) was not in parity for the November 2001 through January 2002 time period.⁴ Verizon mentions that there are reports that are not repaired because of “no access” or because Verizon cannot gain access to the end user’s premises to complete the installation.⁵
29. There is much reason to doubt Verizon’s characterization of no access situations. Many of the so-called no access orders are caused by Verizon’s provisioning failures. This suggests that Verizon cannot necessarily explain away these unsuccessful trouble reports on the basis of no access.
30. In many cases, reports will be “no access” because Verizon gave Covad insufficient notice that they would be coming out to the customer’s premises.

⁴ Verizon-VA Checklist Declaration at 57.

⁵ *Id.*

Many times, these reports were scheduled as a subsequent due date to the original install. Had Verizon completed the work on time the first time, this entire communication issue would not have existed. Subsequent due dates are often required when Verizon fails to notify Covad of problems assigning facilities prior to the due date. This causes significant customer dissatisfaction because the customer has stayed home and Verizon never showed up. Also, some trouble reports included in the no access category could not be completed because the Verizon technician could not gain access to *Verizon-owned facilities*.

31. No access is a problem because it causes a significant delay in service installation. Covad's end users have to stay home more than one time for Verizon to complete its installation, which makes Covad's end users and customers frustrated and unhappy. Subsequent appointments are often at least a week later than the original date, adding more delay. In some instances, end users report that they were indeed home when Verizon reported the no access. This puts us in a "he-said, she-said" situation with our customers. Also, Covad incurs a financial penalty from the ILEC for each no access situation and for the processing to generate the new date. Covad has every incentive, therefore, to reduce the no access problem.

REMOTE TERMINAL ISSUES

32. Verizon claims that CLECs seeking to provide line sharing over fiber loops may collocate at the remote terminal ("RT"), which houses the digital loop carrier ("DLC") equipment that drives fiber optic cable, and use one of two options to get

- back to the central office: (1) buy unbundled dark fiber or (2) buy a transport facility between the remote terminal and central office.⁶ Additionally, CLECs may request a line and station transfer to have the loop put on all copper facility.⁷
33. Verizon's solutions for providing DSL where there are DLC systems are insufficient for many reasons. In fact, Covad does not now have a commercially viable method of provisioning DSL through Verizon's RTs, and Verizon refuses to admit that it has any obligation to facilitate such access.
34. This issue is not new and should have been resolved *5 years ago* when Covad first requested remote terminal access. Covad first requested a remote terminal solution of Verizon, then Bell Atlantic, in 1997 in its initial interconnection agreement negotiations with Verizon in New York and again in 1998 when it was negotiating interconnection contracts for the then-Bell Atlantic-South region (including Virginia). These negotiations failed to give Covad a commercially viable means to access fiber-fed loops.

⁶ Verizon-VA Checklist Declaration at 71. Under its proposal, Verizon expects CLECs to collocate a traditional DSLAM at a remote terminal. While Covad wants the option of traditional collocation, Verizon's proposal does not solve the problem of obtaining access to fiber loops in many instances because (1) it may be cost prohibitive to collocate a traditional DSLAM at the remote terminal; and (2) there may not be space for requesting carriers to do so; and (3) the means to connect the DSLAM to the unbundled fiber feeder network element may not be commercially viable. It may well not be commercially viable to place a traditional DSLAM at the remote terminal and run a cross-connection to the fiber feeder network element every time a new line sharing arrangement is to be provided. While the costs of collocating a traditional DSLAM alone make this arrangement impractical, the additional costs of dispatching technicians to run cross connections at the remote terminal compound this effect.

⁷ *Id.* Line and station transfers are merely short-term fixes as Verizon increases the amount of fiber in its network and retires old copper facilities. The more efficient, practical, and forward-looking solution would be to allow CLECs to use all the features, functions, and capabilities of fiber.

35. After the FCC's *UNE Remand Order* required incumbent LECs to facilitate remote terminal access, Covad once again in 2000 formally tried to negotiate access to fiber-fed loops, another failed attempt that resulted in arbitrations in several Bell Atlantic states. In Massachusetts, the regulators ordered Verizon to file a tariff incorporating Covad's proposals. In New York, the regulators ordered Verizon to plan with CLECs as it rolls out its own DSL over fiber product. In Maryland and Pennsylvania, the regulators ordered Verizon to collaborate with Covad on these issues. And yet, Covad and other CLECs still do not have a commercially viable means to provide DSL services through Verizon's remote terminals -- despite the fact that Verizon is now focused on DSL over these architectures and is deploying this capability for its own retail purposes this calendar year. Verizon announced the introduction during the third quarter of 2002 in the Verizon East (former Bell Atlantic/NYNEX) territory of an end-to-end DSL access service at the remote terminal over next generation digital loop carrier ("NGDLC") equipment, also known as Packet at the Remote Terminal Service ("PARTS") architecture.⁸
36. Verizon -- like other ILECs -- is increasing the amount of fiber in its network both to replace existing copper facilities and to meet new demand. Fiber loops are served by Digital Loop Carrier ("DLC") systems that are housed in Verizon's remote terminals. Typically, fiber loops are designed as follows: (1) the feeder of

⁸ See Verizon Letter and Notice (dated May 7, 2002) to the Massachusetts Department of Telecommunications and Energy.
<http://www.state.ma.us/dpu/telecom/98-57phaseiii/37vznoticelet.pdf>
<http://www.state.ma.us/dpu/telecom/98-57phaseiii/37vznotiletatt.pdf>

- the loop is made of fiber optic cable that terminates to a remote terminal in the field (within several thousand feet of the customer); (2) at the remote terminal, there are DLC electronics at the end of the fiber portion of the loop; (3) these DLC electronics transform the signal on the loop from optical to electrical form; (4) as the loop signal exits the DLC electronics in electrical form, it travels over a copper cross-connect to the copper distribution cable; and (5) that copper distribution carries the DSL signal travels to customer's location.
37. From a business and competitive perspective, fiber-fed DLC systems have a number of advantages. For one, fiber increases the bandwidth available to end-users supported by that system. This is because DLC both shortens the length of the copper loop serving a particular consumer (which increases bandwidth of DSL technology that rides on the copper loop) and takes advantage of fiber optic technology to the neighborhood node or "gateway." DSL is a technology that is limited by loop length: the longer the copper loop, the slower the speed of service. By decreasing the length of the copper wire, a consumer can obtain a higher-quality, higher-bandwidth DSL service.
38. Fiber also has the potential to address some of the other very serious facilities issues that CLECs encounter in obtaining unbundled loops, such as the lack of facilities (copper exhaust) and defective facilities.
39. CLECs are entitled to the full "features, functions and capabilities" of unbundled network elements—not just to the features, functions and capabilities that Verizon's retail side chooses to sell. Verizon's network can support DSL over DLC if it utilizes or has deployed digital loop carrier equipment that is designed

- to support advanced services. The appropriate standard is not whether Verizon is *currently using* its network *actually to provide* DSL service over DLC, as advocated by Verizon. Rather, the proper standard is whether Verizon could use its network to do so. In that case, Covad must have an equal opportunity to use Verizon's network in that manner.
40. One type of DLC that supports voice *as well as data* services is called Next Generation DLC or "NGDLC." If CLECs have access to fiber loops fed by NGDLC, they can provide a number of types of DSL service, including asymmetric and symmetric services.
41. The unbundling obligations of the 1996 Act provide CLECs like Covad access to last-mile connectivity via unbundled local loops. The FCC has consistently defined loops as facilities that run from the ILEC central office to the end user's premises. In short, the FCC's rules ensure that CLECs can access a transmission facility that runs from the CLEC's collocation space in the ILEC's central office all the way to its customer. The loop may consist entirely of copper, or it may be a mix of copper and fiber, or it may be all fiber – but it is still a loop. Regardless of the makeup of the loop, and regardless of the type of voice or data service that the CLEC will offer over the loop, Verizon is obligated to provide unbundled access to the loop. Furthermore, the FCC has already declared that the fiber portion between the remote terminal and the central office is a subloop. Specifically, in footnote 19 of the *Line Sharing Reconsideration Order* the Commission states: "...the subloop element includes, among other possible portions, the portion of the loop between the remote terminal (or

feeder/distribution interface) and the customer's premises (distribution), as well as the portion of the loop between the central offices and the remote terminal (feeder), as distinct unbundled network elements....Subloop elements include attached electronics (e.g. multiplexing equipment used to derive the loop transmission capacity.”

42. Unbundled access provides CLECs (and their customers) with long-term certainty that they will be able to continue to provide service to consumers on an economic basis. Without the ability to provide DSL-based services over the NGDLC architecture on an economic basis, Covad and other CLECs will be denied the ability to provide competitive services to entire neighborhoods in Virginia, which results in a detrimental impact on competitive entry that is likely to harm consumers throughout the state. Indeed, Verizon would have a perverse incentive to deploy NGDLC in as many neighborhoods as possible in order to foreclose any CLEC access to loops
43. Verizon -- like other ILECs -- is increasing the amount of fiber in its network both to replace existing copper facilities and to meet new demand. As a result, Verizon will have the incentive to use the majority of its capital budget on the upgraded architecture, while the existing copper network is left to deteriorate. Without access to the upgraded architecture all long-term certainty is removed that the existing copper will exist or even be suitable to provide DSL services.
44. To reflect the various opportunities for unbundling of fiber-fed DSL-capable loops, the Commission should require Verizon to offer an end-to-end UNE loop provisioned over the fiber-fed NGDLC architecture, and the right to request the

full set of features and functions supported on the NGDLC platform, as those features and functions become commercially available.

45. If the Commission should decide not to require Verizon to offer an end-to-end PARTS UNE loop, plus access to the full set of features and functions of the NGDLC platform, then the only option that will allow CLECs to use the PARTS platform and be able to differentiate their products is for the Commission to require Verizon to unbundle all of the components of the PARTS architecture, including giving CLECs the ability to own and collocate line cards in the NGDLC.

COLLOCATION

46. Covad objects to Verizon's requirement that CLECs must move their virtually collocated equipment to another part of the central office in order to convert the arrangement to cageless collocation. There is no technical difference between a virtual collocation and cageless collocation except that with virtual, the CLEC must cede ownership and control of its equipment to its competitor, Verizon. Verizon's position on the virtual-to-cageless conversion required Covad to: (1) incur the cost of buying additional equipment to collocate in another, secured part of the central office; (2) incur the cost of a second collocation application; (3) await a full collocation interval (presumably 105 calendar days) for Verizon's site preparation and installation of additional security; (4) interrupt customer service while it turns up service in the new collocation site; and (5) delay service to other, prospective customers who are served out of these central offices. KPMG did not review any collocation projects relating to conversion from virtual to cageless

spaces. KPMG tests did not look at any situations that required actual collocation arrangements.

BILLING

47. Verizon's billing system and performance continues to be fraught with problems. Contrary to Verizon's claim, KPMG's Virginia test falls short of addressing all stages of a CLEC's relationship with Verizon, particularly in the billing domain. KPMG admitted that its testing did not create and test for key aspects of a CLEC's interaction with Verizon, including, among other things, billing disputes or queries or any instances of backbilling. More telling, KPMG did not examine or audit any Verizon-generated bills for CLECs in Virginia that actually had real customers, nor did KPMG interview any CLECs regarding their actual billing experiences with Verizon. In short, KPMG's limited evaluation of Verizon's billing procedures and bills does not accurately reflect an actual CLEC's experiences with Verizon's various billing processes.
48. Verizon's real life billing practices fall short of meeting the FCC's pro-competitive truth-in-billing principles and guidelines. In particular, Verizon has not provided Covad with adequate descriptions and clear identification of charges on bills that would allow Covad to understand and compare the charges on the bill to the products and services it had ordered. Covad has persistently asked Verizon since October 2001 for a mapping of the "ordering" codes to the "billing" codes. Specifically, Covad has asked Verizon to provide (1) a description of each element that we order from Verizon; (2) the Universal Service Order Code(s) ("USOC(s)") that correlate to the particular UNE description; and (3) the Network

- Channel and Channel Interface (“NC/NCI”) Codes, secondary codes and specification codes that are associated with the correlated UNE description and USOC(s). While Verizon has acknowledged Covad’s need for such information in order to validate billing, to date, over 6 months after our initial request, Verizon has not adequately addressed Covad’s concerns.
49. This problem is made worse by Verizon’s appalling billing practices, including, but not limited to, backbilling, inaccuracies and manual processes. As noted above, KPMG observed no instances of backbilling. In reality, Verizon has backbilled Covad for charges that are two to three years old. Recently, Covad received a bill from Verizon amounting to approximately \$1.1 million for various unidentified backbilled charges dating back to July 1, 2000. Disturbingly, the charges were assessed to a New York bill, however, the charges extended across numerous jurisdictions, including Virginia.
 50. After expending significant resources to identify what the \$1.1 million in charges were for, Covad determined, and Verizon agreed, that over \$336,000 were invalid charges. Verizon’s bill was at least 30% inaccurate and Covad continues to work diligently to validate the remaining balance.
 51. What makes this interaction more burdensome is Verizon’s manual processes. Verizon manually places charges on Covad’s bills and then provides a spreadsheet as support for the charges. This method is excessively troublesome for CLECs and prolongs an already lengthy and unreasonable claims and dispute process. Very often, the resolution of disputes extend well beyond the target 30

day window and requires numerous phone calls and e-mails in order to resolve basic claims.

52. Verizon is not adequately updating its billing system to support new products. When Verizon provides a new product, it does not create billing codes for elements that will allow it to bill on a mechanized basis. As a result, Verizon is manually processing invoices and spreadsheets, increasing human error and greatly increasing the chance for incorrect billing. Further, once the billing is mechanized, this is not effectively communicated through the Verizon organization and the CLEC sometimes is doubled billed, on a manual and mechanized basis.
53. The Commission should determine that Covad is not required to pay unverifiable charges until Verizon has provided a reliable and accurate source of information for purposes of ordering and billing review. In addition, the Commission should require Verizon to mechanize the billing process for new products and elements within 60 days of the product or element's introduction. CLECs should not be required to pay invoices until Verizon has provided them on a mechanized basis. Finally, the Commission should limit Verizon's ability to backbill CLECs to a 6-month period.
54. Due to the limited scope of KPMG's testing, these were not issues that were reviewed in its analysis. KPMG did not create and test for billing disputes, claims or queries. As has been shown, Verizon's billing methods are often antiquated and far from accurate. Covad's experiences on the billing resolution front have been painful, to say the least.

This concludes our joint declaration.