

Level 3 Communications, LLC's Petition for)	Exhibit No. _____
Arbitration Pursuant to Section 252(b) of the)	Issue: NIM 4, 6; OET 5, 6, 7, 10-12; ITR 1-4,
Communications Act of 1934, as amended by)	10-14, 17, 18; ITR 5-9, 19; IC 1, 4, 6-9, 14,
the Telecommunications Act of 1996, to)	17, 19, 20, and 21; CHC 1
establish an Interconnection Agreement with the)	Witness: Rogier DuCloo
Southwestern Bell Telephone Company, L.P.)	Type of Exhibit: Rebuttal Testimony
d/b/a SBC Missouri)	Sponsoring Party: Level 3 Communications
_____)	Case No. TO-2005-01166
		Date: February 7, 2005

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

CASE NO. TO-2005-0166

REBUTTAL TESTIMONY

OF

ROGIER DUCLOO

ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC

February 7, 2005

1 **I. Introduction**

2 **Q. PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND**
3 **BUSINESS ADDRESS.**

4 A. My name is Rogier DuCloo. I am Director, Product Management with Level 3
5 Communications, LLC("Level 3"). My business address is 1025 Eldorado
6 Boulevard, Broomfield, CO, 80021.

7 **Q. PLEASE REVIEW YOUR EDUCATION AND RELEVANT WORK**
8 **EXPERIENCE.**

9 A. In my job as Director of Interconnection Services I am responsible for negotiation
10 and administration of interconnection agreements with ILECs, independent
11 telecommunications carriers, and CLECs. My Curriculum Vitae is attached as
12 Exhibit RD-1.

13 **Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY FILED ON**
14 **DECEMBER 13, 2004 BY MR. KENNETH WILSON ON BEHALF OF**
15 **LEVEL 3?**

16 A. Yes.

17 **Q. IS IT YOUR INTENTION TO ADOPT THE PREFILED DIRECT**
18 **TESTIMONY OF MR. WILSON AS YOUR OWN?**

19 A. Yes.

20 **Q. IF YOU WERE ASKED THE SAME QUESTIONS AS THOSE ASKED OF**
21 **MR. WILSON IN HIS DIRECT TESTIMONY, WOULD YOUR**
22 **RESPONSES BE THE SAME?**

23 A. Yes.

1

2 **II. Statement Of Scope And Summary**

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

4 A. Some of the SBC witnesses have clouded and confused the record in this case. I
5 would like to clear up this confusion and set the record straight. I have attempted
6 to put forward technical facts about the network and how Level 3 needs to
7 interconnect with SBC in an efficient manner. SBC has raised a number of issues
8 with my testimony that I must clarify. There may also be a few disputed positions
9 where the companies can agree to take issues off the table as what is important for
10 SBC is not as important for Level 3.

11 **Q. CAN YOU GIVE A PREVIEW OF THE ISSUES WHERE THE**
12 **COMPANIES CAN MOVE CLOSER TO AGREEMENT?**

13 A. Yes, two issues in particular can be resolved. SBC raises several technical issues
14 regarding the use of so-called "Local Only" tandem switches for both local and
15 toll traffic. While there are technical solutions that would allow these switches to
16 handle both types of traffic, Level 3 can agree to direct only local traffic to these
17 switches. Secondly, SBC focuses on how Meet Point traffic should not be
18 combined with local interconnection traffic on single trunks. This obscures the
19 real need of Level 3 to combine local traffic with toll traffic that terminates to
20 SBC customers. Meet Point traffic, traffic exchanged to and from Level 3 end
21 users and a third party IXC that is routed through the SBC tandem, is not the real
22 issue and Level 3 can agree to separate trunk groups for Meet Point traffic.
23 However, this does not eliminate the question of whether SBC can prohibit Level
24 3 from using existing trunks to carry IP enabled traffic.

1 **Q. HOW WILL YOU STRUCTURE YOUR REBUTTAL TESTIMONY?**

2 A. I will structure my rebuttal testimony to mirror the direct testimony Mr. Wilson
3 filed (and I have adopted), though in a much more abbreviated manner. I will
4 first clear up issues on the combining of local and toll traffic on single trunk
5 groups and the use of Percent Local Use (PLU) to accurately bill toll traffic. I
6 will then treat Out of Exchange Traffic and billing issues and briefly address a
7 number of miscellaneous issues.

8 **IV. Combining Different Traffic Types On Interconnection Trunks**

9 **Statement of the Issue:** Level 3 would like to combine local and toll traffic on
10 interconnection trunk groups. Combining traffic is both practical and efficient.
11 The issues that SBC raises in its testimony, while sometimes confusing, can be easily
12 answered.

13 **Q. WHAT ISSUES DOES SBC RAISE IN OPPOSITION TO THE**
14 **COMBINATION OF LOCAL AND TOLL TRAFFIC ON SINGLE TRUNK**
15 **GROUPS?**

16 A. SBC raises a number of issues including the inability of switching systems to
17 handle traffic in this manner (which is not true); the potential of fraud (which can
18 be perpetrated with or without combining traffic); and several other issues. I will
19 address SBC's concerns and inaccuracies in the following paragraphs.

20 **Q. SBC STATES THAT LOCAL ONLY TANDEMS CANNOT HANDLE**
21 **ACCESS TRAFFIC. IS THIS TRUE?**

22 A. It is both not true and not an issue. In the first place, most of SBC's tandems
23 already handle both local and access traffic. The SBC tandems that are currently
24 "Local Only" could be modified to handle access traffic. However, Level 3 is

1 willing to agree that trunks between Level 3 and SBC Local Only tandems will
2 carry only local traffic. Level 3 will restrict its request for combining local and
3 access traffic on single trunk groups to tandems that carry mixed traffic and
4 tandems that carry access traffic, as well as end offices. This concession should
5 remove the concern SBC has with respect to its Local Only tandems. Level 3 has
6 agreed to modify the contract terms accordingly.

7 **Q. WHAT IS THE CONCERN SBC HAS WITH RESPECT TO MEET POINT**
8 **TRAFFIC?**

9 A. SBC makes some largely irrelevant comments about the fact that Meet Point
10 traffic does not normally involve SBC customers. It is technically feasible to
11 combine Meet Point traffic with local traffic and toll traffic that is originated or
12 terminated to SBC customers. However, since Level 3 already has established
13 Meet Point trunk groups to SBC switches, Level 3 is willing to exclude Meet
14 Point Traffic from interconnection trunk groups. Meet Point trunk groups merely
15 provide a path between Level 3 and IXCs that have no direct connectivity with
16 Level 3. Level 3 is willing to accept the infrastructure that is currently established
17 for Meet Point trunking, provisioning trunk groups to tandems where Level 3
18 traffic is homed.

19 **Q. ARE MEET POINT TRUNK GROUPS THE REAL ISSUE?**

20 A. No. The real issue is the requirement that SBC is making for Level 3 provision a
21 Feature Group D (FG-D) trunk group for InterLATA calls as well as a local
22 Interconnection trunk group to every switch where Level 3 has any significant
23 amount of traffic. When traffic bound for a particular SBC end office reaches one

1 DS-1 equivalent, Level 3 has agreed to provision a Direct End Office Trunk
2 (DEOT). If Level 3 cannot combine both local and toll traffic on these DEOTs, it
3 will be forced to provision a series of additional trunk groups for its relatively
4 small amount of toll traffic.

5 **Q. CAN YOU SHOW THE DIFFERENCE BETWEEN MEET POINT**
6 **TRAFFIC AND THE DISPUTE ON COMBINING TRAFFIC IN A**
7 **DIAGRAM TO HELP DISPEL ANY CONFUSION THAT MAY EXIST?**

8 A. Yes, RD-2, Figure 1 shows both Meet Point Traffic (on the bottom), the SBC
9 proposal for separate trunk groups and the Level 3 proposal for combining local
10 and toll traffic on a single trunk group. All traffic except Meet Point traffic is
11 between SBC customers and Level 3 customers. Meet Point Traffic is between
12 Level 3 customers and the customers of third party IXCs.

13 **Q. SBC MAKES A STATEMENT THAT COMBINING LOCAL AND TOLL**
14 **TRAFFIC WILL LEAD TO BLOCKED CALLS DUE TO MISROUTING.**
15 **IS THIS TRUE?**

16 A. No, absolutely not. Both local and toll calls from SBC to Level 3 and Level 3 to
17 SBC can be completed reliably over shared trunk groups. Every call, no matter
18 whether it is local or toll, has a phone number associated with the party that is
19 being called. Both types of calls can be completed successfully in every case,
20 with no increase in misrouted calls.

21 **Q. ARE OTHER CLECS COMBINING LOCAL AND TOLL TRAFFIC ON**
22 **THE SAME TRUNKS WITHOUT PROBLEMS?**

1 A. Yes, AT&T and other companies have been combining local and toll traffic on the
2 same trunk groups for many years. This practice has not led to any increase in the
3 misrouting of calls.

4 **Q. SBC CLAIMS THAT COMBINING LOCAL AND TOLL CALLS ON THE**
5 **SAME TRUNK GROUPS WILL LEAD TO FRAUD. THEY CITE THE**
6 **INAPPROPRIATELY ROUTED TRAFFIC THAT MCI ROUTED TO**
7 **AT&T (WHICH AT&T CHARACTERIZED AS FRAUD) AS AN**
8 **EXAMPLE OF SUCH PROBLEMS. WHAT IS YOUR REACTION TO**
9 **THIS?**

10 A. Fraud can be perpetrated by one company on another whether traffic is combined
11 on one trunk group or separated onto two different trunk groups. If a company
12 wishes to deceive another by making toll traffic look like local traffic, they can
13 simply modify the SS7 messages to make the toll traffic look like local traffic and
14 put the calls on the local interconnection trunk. There are ways that a dishonest
15 company can fool its co-carrier with or without combining traffic on single trunk
16 groups. Level 3 is a company of high integrity and will allow SBC to audit its
17 call records if it believes PLU and PIU factors are being incorrectly calculated or
18 manipulated in some way.

19 **Q. DO YOU AGREE WITH SBC WITNESSES WHO CLAIM THAT IT IS**
20 **IMPROPER TO COMBINE INTEREXCHANGE SWITCHED ACCESS**
21 **TRAFFIC WITH LOCAL TRAFFIC ON THE SAME TRUNK GROUP?**

22 A. No, I do not. The use of an accurate PLU factor will accomplish the same goal of
23 properly assessing access charges without incurring the inefficiency of having

1 separate trunk groups. Level 3 wants to build an efficient, modern network. One
2 way to do this is to combine traffic of different types on single trunk groups. The
3 implication that the reason Level 3 wants to combine traffic is to deceive SBC and
4 somehow avoid access charges is way off base.

5 **Q. WILL LEVEL 3 ALLOW SBC TO EXAMINE CALL DETAIL RECORDS**
6 **TO VERIFY PLU FACTORS?**

7 A. Yes.

8 **Q. ARE PLU AND PIU FACTORS ACCURATE OR ARE THEY A GUESS AS**
9 **SBC SUGGESTS?**

10 A. Level 3 will calculate its PLU and PIU factors using actual call detail records.
11 This will be done on a regular basis. This is not a guess. SBC seems to think that
12 once traffic is combined, traffic studies cannot be conducted to determine accurate
13 PLU factors. This is absolutely not true. Call detail data will be collected and
14 evaluated against billing tables and a very accurate determination will be made
15 about the ratio of local to toll traffic.

16 **Q. IS THERE A POSSIBILITY OF AUTOMATED BILLING FOR A**
17 **BROADER CLASS OF CALLS IN THE FUTURE?**

18 A. Yes. In Accessible letter number CLEC04-444 dated November 30, 2004, SBC
19 gave notice of its intention to begin making changes to billing systems that will
20 result in “creating VoIP records,” effective December 13, 2004. This appears to
21 be similar to the proposal at page 56 of Mr. Wilson’s direct testimony in this
22 proceeding to attach an originating line identifier to call records.

1 **Q. IS A SINGLE LARGE TRUNK GROUP BETWEEN TWO SWITCHES**
2 **MORE EFFICIENT THAN TWO SMALLER TRUNK GROUPS?**

3 A. Yes. I demonstrated this in some detail in my direct testimony. SBC witness
4 Oyer is confused about Level 3's position on the efficiency of routing traffic
5 between two points on one trunk group instead of two. While it is true that SBC
6 would have a more efficient network with fewer switches, Level 3 is not
7 suggesting that SBC redesign their network at this point. We don't expect to pass
8 all our traffic to SBC on one huge trunk group. We are merely saying that traffic
9 between the Level 3 switch and any SBC switch should ride a single trunk group
10 for both local and toll traffic and not two trunk groups. Level 3 has agreed to put
11 direct trunks to SBC end offices when traffic exceeds one DS-1. This addresses
12 the congestion problem described by SBC, without imposing additional costs on
13 Level 3 that are not warranted. The issue of combining local and toll traffic on a
14 single trunk group has nothing to do with whether traffic is directed to a tandem
15 or an end office. Level 3 is always in favor of good, efficient engineering
16 practices.

17 **Q. IS THERE ANY NEED TO CONTINUE THE OLD PRACTICE OF**
18 **SEPARATING LOCAL TRAFFIC AND TOLL TRAFFIC ONTO**
19 **SEPARATE TRUNK GROUPS TO MAKE BILLING SIMPLER?**

20 A. No. The advent of high speed computers for recording and billing make it much
21 more sensible to gain the efficiency in trunking by combining traffic and sorting
22 out the billing with fast, accurate computers. We should take advantage of

1 progress in the speed of computers to make the network more efficient. SBC
2 would be well advised to do this within their network.

3 **Q. IS IT CHEAPER FOR SBC TO COMBINE LOCAL AND TOLL TRAFFIC**
4 **ON THE SAME TRUNK GROUPS?**

5 A. Yes. This is true for both interconnection facilities and facilities within the SBC
6 network. For interconnection, combining local and toll on the same trunk groups
7 saves SBC and Level 3 switch terminations and transport facilities. Within their
8 network, SBC could make the same savings if they put their local and toll traffic
9 on the same trunk groups. They are wasting resources by continuing to keep
10 traffic separated. In many cases SBC has already combined traffic within their
11 own network. They should allow Level 3 to obtain the same efficiencies.

12 **V. SS7 Issues**

13 **Statement of the Issue: SBC and Level 3 need to exchange SS7 messages in the**
14 **course of interconnection and the exchange of traffic. SBC would like to require**
15 **unnecessary, duplicative links between the two SS7 networks. Level 3 would like to**
16 **use the same SS7 links for both local and toll messages.**

17 **Q. WHAT IS LEVEL 3'S POSITION ON THIS ISSUE?**

18 A. This issue is similar to the previous issue on combining both local and InterLATA
19 switched access traffic on single trunk groups. Level 3 is proposing to use SS7
20 Quad Links for both local and toll traffic. This is an efficient use of scarce
21 resources for both the links (which are already provisioned in a redundant manner
22 for reliability) and ports on the Signaling Transfer Points (STPs). Level 3

1 proposes using the same PLU and PIU calculations discussed above for
2 calculation of charges for SS7 messages.

3 **Q. WHAT IS SBC'S POSITION ON THIS ISSUE?**

4 A. SBC is proposing that SBC and Level 3 put in separate, duplicative SS7 quad
5 links (one set for local traffic and one set for toll traffic) between their SS7
6 networks. SBC does not want Level 3 to use existing SS7 quad links for both
7 local and toll traffic.

8 **Q. WHAT IS THE SS7 NETWORK AND WHAT ARE SS7 QUAD LINKS?**

9 A. The SS7 network is the part of the PSTN that allows switches and databases to
10 communicate with each other. Its main function is for call set up, but it is also
11 used for database look up such as required by 800 service. SS7 quad links are the
12 data links that connect two SS7 networks. Without these links, neither SBC nor
13 Level 3 could complete calls to the other company's network. Figure 2 shows a
14 set of Quad Links connecting Level 3 Signaling Transfer Points (STPs) and SBC
15 STPs with the associated Interconnection Trunk Groups. Figure 3 shows the SS7
16 Quad links and the associated signaling and transport paths for "Local" traffic
17 over Interconnection Trunk Groups. Figure 4 shows Quad Links and the
18 associated signaling and transport paths for IntraLATA Toll traffic. Figure 5
19 shows Quad Links and the associated signaling and transport paths for InterLATA
20 Toll traffic.

21 **Q. WHAT EFFICIENCIES WOULD BE OBTAINED BY COMBINING**
22 **LOCAL AND TOLL SS7 MESSAGES ON ONE SET OF QUAD LINKS?**

1 A. Using the same quad links for both local and toll call set up messages will save
2 both SBC and Level 3 transmission links and ports on their SS7 switches. Since
3 transmission links and SS7 ports are provisioned in a redundant manner for
4 additional reliability, the SBC proposal will waste a significant number of
5 transmission links and ports on both networks, doubling the links and ports that
6 are needed. Figure 12 to RD-2 shows the Level 3 Configuration that requires
7 only one set of Quad Links between the companies. Figure 13 to RD-2 shows the
8 SBC proposal that would require a duplicate set of Quad links, wasting network
9 resources.

10 **Q. IS IT IMPOSSIBLE FOR SBC TO IMPLEMENT THE SHARING OF**
11 **LINKS BETWEEN LOCAL AND TOLL TRAFFIC AS MS. HARRIS**
12 **SUGGESTS?**

13 A. No, absolutely not. SBC does not need to distinguish between messages relating
14 to local calls and messages relating to toll traffic as Ms. Harris fears. There is a
15 simpler way to handle the billing issues for these messages. The same PLU and
16 PIU factors that are used to correctly bill access charges for the actual calls can be
17 used to charge for SS7 messages. The data traffic flowing between the two SS7
18 networks mirrors the actual call traffic flowing between the two networks as the
19 SS7 messages are setting up and managing the calls. The PLU and PIU for the
20 one can be used to accurately calculate billing for the other. SBC can simply
21 calculate the charges based on total messages and then factor the bill down using
22 the PLU and PIU. If, hypothetically, the bill from SBC to Level 3 for SS7
23 messages was \$20,000 for one month and the PLU is 65%, then the actual bill

1 would be \$7,000. The calculations are simple and eliminate the concerns
2 expressed by Ms. Harris.

3 **Q. IF THE COMMISSION DECIDES THAT LOCAL AND TOLL**
4 **MESSAGES CAN SHARE COMMON QUAD LINKS, SHOULD ACCESS**
5 **CHARGES APPLY TO ALL OF THE MESSAGES AS MS. HARRIS**
6 **SUGGESTS?**

7 A. No, that would be patently unfair to Level 3, especially since SBC customers
8 originate most of the local calls. Local calls should remain on a bill and keep
9 basis. Only messages for toll traffic should be assessed access rates. The method
10 I describe above will provide for the correct compensation without the difficulties
11 of billing each message as Ms. Harris suggests.

12 **Q. WHAT DOES MS. HARRIS SAY ABOUT THE USE OF SS7 QUAD LINKS**
13 **FOR LOCAL AND IP TRAFFIC?**

14 A. SBC makes the very troubling proposal in SS7 Appendix, Section 2.1.1 that SS7
15 quad links can not apply to calls “that are subject to traditional access
16 compensation”. I say this is troubling because, under SBC’s view of the world,
17 IP-Enabled Traffic is subject to access charges, thus precluding Level 3 from
18 using the SS7 Quad Links to exchange IP Traffic. Nowhere in the network today
19 are SS7 messages segregated into IP messages and non-IP messages. To segment
20 these messages would require the proliferation of SS7 Quad links throughout the
21 industry. A ruling in favor of this SBC proposal could disrupt call flow among
22 many companies, forcing whole network architectures to change.

1 **Q. WHAT SHOULD THIS COMMISSION DO WITH RESPECT TO THIS**
2 **SS7 ISSUE?**

3 A. The Commission should rule in favor of Level 3's language, which presents an
4 efficient and fair way of managing the SS7 network, saving transmission links
5 and SS7 switch ports in both the Level 3 and the SBC networks.

6 **VI. Out of Exchange Traffic (OET).**

7 **Q. WHAT IS OUT OF EXCHANGE TRAFFIC?**

8 A. OET is a term that was invented by SBC to refer to traffic that comes into their
9 switches, from within a local calling area but outside the SBC region. No other
10 LEC uses this term to my knowledge.

11 **Q. WHY HAS SBC DEDICATED AN ENTIRE ATTACHMENT TO OET?**

12 A. This is unclear. The only real issue with OET is how to handle interconnection of
13 traffic. This single issue can be adequately addressed in the NIM and ITR
14 attachments and is arguably already handled in those sections. The OET
15 attachment has a great deal of duplicative language that is cobbled together from
16 NIM, ITR and other sections of the Agreement. I have attached a matrix as an
17 attachment (RD-3), which compares each OET section with the corresponding
18 NIM and ITR paragraphs. This shows the very duplicative nature of the OET
19 section.

20 **Q. WHAT IS THE INTERCONNECTION ISSUE WITH OET?**

21 A. I don't believe there is a real issue, other than the issues already at dispute in the
22 NIM, ITR and IC attachments. Traffic coming from within a local calling area is
23 always local traffic, even when some of the traffic is from outside the SBC region.

1 There are no unique problems with such traffic and the current provisions in NIM,
2 ITR and IC adequately address the issues, though as I say, some of these issues
3 are still in dispute.

4 **Q. WHY DID OTHER LEVEL 3 WITNESSES CHALLENGE INDIVIDUAL**
5 **SECTIONS OF OET?**

6 A. SBC has included language in the OET attachment that will cause Level 3
7 problems, just as they have in the NIM, ITR and IC attachments. If the
8 Commission decides that the OET attachment should stay in the contract, then
9 that language should be corrected.

10 **Q. DO LEVEL 3 AND THE OTHER LEVEL 3 WITNESSES AGREE WITH**
11 **YOU THAT THERE IS NO NEED FOR THE OET ATTACHMENT?**

12 A. That is correct. Level 3 and its witnesses all agree that the OET attachment is
13 redundant and unnecessary and should be removed from the Agreement.

14 **Q. IF THE COMMISSION DECIDES NOT TO REMOVE THE OET**
15 **ATTACHMENT FROM THE AGREEMENT, WHOSE LANGUAGE**
16 **SHOULD BE USED IN THE AGREEMENT?**

17 A. The Level 3 language for OET is fair and equitable and is based on the language
18 that Level 3 has proposed in the NIM, ITR and IR attachments of the Agreement.

19 **VII. Billing Issues**

20 **Q: WHAT IS AT THE HEART OF THE BILLING AND RECORDING**
21 **ISSUES BETWEEN SBC AND LEVEL 3?**

22 A: SBC is an old Bell System company with a network of legacy circuit switches and
23 a history of billing large IXCs, such as AT&T, MCI and Sprint, for access traffic.

1 The legacy circuit switches use legacy recording and billing systems to track
2 access calls and create bills. The Ordering and Billing Forum (OBF) created
3 guidelines for the formatting of billing information that evolved with the legacy
4 recording and billing systems. Level 3 is a new company with new, IP Soft
5 Switches instead of legacy circuit switches. IP Soft Switches do not put out the
6 same content or the same format for call information as do legacy circuit
7 switches. OBF is currently working on guidelines for recording and billing
8 formats to track IP calls. However, there are no guidelines currently available for
9 immediate implementation.

10 **Q: GIVEN THE DIFFERENCES IN CIRCUIT AND IP SOFTSWITCHES**
11 **AND THE LACK OF GUIDELINES FOR RECORDING IP CALLS,**
12 **SHOULD THE CONTRACT BETWEEN SBC AND LEVEL 3 LOCK IN**
13 **THE OLD, LEGACY RECORDING FORMATS?**

14 **A:** Definitely not. It would be a mistake under these circumstances to lock Level 3
15 into the using the legacy formats. IP Soft Switches simply don't put out
16 information in the same manner or format as the legacy circuit switches. Using
17 the old MECAB format would be like trying to put a round peg in a square hole.
18 To the extent the companies find it necessary to exchange data prior to OBF's
19 establishment of appropriate guidelines, they should do so via a mutually
20 agreeable format. Once OBF has established a format for this traffic, the
21 companies should work together to decide the best course of action. At this time
22 there are no guidelines for the traffic between SBC and Level 3.

1 **Q. SBC WITNESSES SMITH (P. 5) AND READ (PP. 5-6) STATE THAT**
2 **MECAB IS A RECORDING STANDARD. IS THIS THE CASE?**

3 A: No. The MECAB format is a guideline, not a standard.

4 **Q. MR. READ STATES ON PAGES 5 AND 6 OF HIS TESTIMONY THAT**
5 **LEVEL 3 IS SUGGESTING THAT THE INDUSTRY STANDARDS CAN**
6 **BE IGNORED. IS THIS AN ACCURATE STATEMENT?**

7 A. Mr. Read is wrong on two counts. First, as I stated above, there are no industry
8 standards, only guidelines. Secondly, Level 3 will look closely at the industry
9 guidelines for IP traffic when they are available. Level 3 should not be forced to
10 use old guidelines that do not work for this traffic.

11 **Q: MR. READ FURTHER STATES THAT CARRIERS SUCH AS LEVEL 3**
12 **MUST ADHERE TO THE OBF MECAB DEFAULT BILLING**
13 **ARRANGEMENT (MULTIPLE BILL/SINGLE TARIFF FORMAT). IS**
14 **THIS AN ACCURATE STATEMENT?**

15 A. No it is not. Mr. Read makes some oblique reference to nationally accepted
16 compensation arrangements and jumps to a conclusion that Level 3 must therefore
17 adhere to SBC's preferred format. In the first place, a billing format is not a
18 compensation arrangement. In the second place, OBF MECAB has numerous
19 options besides Multiple Bill/Single Tariff. Other options available are, for
20 example, Multiple Bill/Multiple Tariff or Single Bill/Multiple Tariff. And third,
21 as I stated above there is currently no nationally accepted guideline for IP records.

1 **Q: DOES THE USE OF PLU AND PIU ON TRUNKS WITH COMBINED**
2 **TRAFFIC MAKE MANY OF THESE RECORDING AND BILLING**
3 **ISSUES MOOT?**

4 A. Yes it does. Many of the issues on formatting billing records for individual calls
5 can be eliminated if the companies use PLU and PIU (and eventually PIPU for IP
6 traffic). When the companies use PLU and PIU there is no need for recording and
7 formatting records for individual calls. Payments are made on call ratios that are
8 based on call detail studies. This is a simpler and more elegant method of trading
9 bills and saves both companies development time and money.

10 **Q: DO THE SBC WITNESSES MAKE SIMILAR ERRORS ON OTHER**
11 **BILLING ISSUES IN THEIR TESTIMONY?**

12 A: Yes, they do. For example, on page 7 Mr. Read states in his testimony that EMI
13 is an industry standard. EMI is a guideline, not a standard. Level 3's soft
14 switches produce the same information that is in EMI records, but not the same
15 format.

16 **Q. DOES MR. MCPHEE MISREPRESENT THE ISSUE REGARDING**
17 **LEVEL 3'S REQUEST THAT THE ORIGINATING PARTY PROVIDE**
18 **AN ORIGINATING CARRIER NUMBER (OCN)?**

19 A: Yes, he is missing the whole point. Level 3 needs to be able to accurately bill
20 reciprocal compensation for local calls that are originated by carriers who are
21 using SBC facilities via UNE-P, resale or other means. SBC currently will not
22 provide the information that Level 3 needs to identify the correct carrier to bill.
23 Requiring SBC to provide OCN will solve this problem. OCN is not a separate

1 record as Mr. McPhee suggests; it is a field in the record, which indicates the
2 carrier that “owns” (for billing purposes) the telephone number of the originating
3 party.

4 **VIII. Additional Issues**

5 **Q. DOES THE SBC WITNESS JAMES OYER MAKE ANY ERRORS OR**
6 **MISSTATEMENTS IN HIS TESTIMONY THAT YOU HAVE NOT**
7 **ADDRESSED IN YOUR TESTIMONY ABOVE?**

8 A. Yes, he makes a number of errors and misstatements and confuses additional
9 issues. The following paragraphs will briefly indicate the points that I have not
10 already covered.

11 **Tandem switching using an end office:** Mr. Oyer at page 23 goes into some
12 detail about how SBC does not use end office switches in a tandem capacity. All
13 switches have the capability to switch an incoming trunk group to an outgoing
14 trunk group. This is basic tandem switching capability. Normally SBC does not
15 take advantage of this capability with end office switches, reserving tandem
16 switching for designated tandem switches. However, the SBC network is very
17 large, with many hundreds of switches. It is my experience that in exceptional
18 circumstances, ILECs will use an end office as a tandem for some network
19 configurations. It may be to reach a small ICO in a rural area. I know of a
20 specific circumstance where Qwest does this. Qwest witnesses said for years that
21 they didn’t do tandem switching with end offices, not knowing that field
22 engineers had needed the capability and used it. All Level 3 is asking is for SBC
23 to allow it to use this capability in a particular switching office if SBC is using it

1 for themselves. If SBC is not using this capability, then Level 3 would not use it
2 either.

3 **Misrouting of Calls:** Mr. Oyer at page 24 states that Level 3's proposed
4 language would create misroutes, leading to blocked or failed calls. This is
5 absolutely false. I have been in network systems engineering for ___ years,
6 helping to design the SS7 system, 4ESS and 5ESS toll and local switches and in
7 network performance and network architecture for the AT&T network. I can say
8 with certainty that Level 3's contract language can be implemented with
9 absolutely no danger of increases in misrouted calls.

10 **Transit Traffic:** If the transit traffic provisions are removed from the
11 Interconnection Agreement, there is no assurance that SBC will continue to
12 provide this function or raise the prices so high that it forces everyone into direct
13 trunking for even de minimis traffic levels. Every interconnection agreement that
14 I have worked on has had transit traffic provisions. Transit traffic can flow in the
15 normal traffic stream. There is no violation of LERG routing as Mr. Oyer
16 suggests in his testimony. Level 3 provisions direct trunks to SBC tandem offices
17 as they are needed. As has been discussed earlier; and as Mr. Oyer admits in
18 several places, tandems can switch traffic to other tandems. Further, Level 3 has
19 agreed to establish direct trunks to other carriers once traffic to that carrier
20 reaches the DEOT threshold for three consecutive months. Mr. Oyer's analogy
21 on pages 28-29 is out of place. We are not talking about international traffic, and
22 Level 3 has no intention of inappropriately routing traffic as did MCI to AT&T.

1 Level 3 simply wants the ability to continue routing transit traffic the way it is
2 routed today, which is causing no problems.

3 **Switch Definitions:** Mr. Oyer has spent considerable time replying to the
4 testimony Level 3 submitted on switch definitions. The point of this debate is the
5 fact that SBC builds restrictions into the contract language based on switch
6 definitions. In reality, a switch is a switch and can be provisioned to perform end
7 office or tandem functions or both. This is borne out in SBC's network as most of
8 SBC's tandem switches are in fact dual purpose, handling both local and toll
9 traffic, which makes the debate on functionality in those locations moot. Mr.
10 Oyer contends that my testimony contradicts itself with respect my positions on
11 SBC's definition of Local Tandem and my suggestion to only have one definition
12 of "tandem switch." It is ironic that Mr. Oyer thinks my suggestion is
13 contradictory when SBC, after going through pains to define differences between
14 Local Only Tandems, Local/IntraLATA Tandems, Local/Access Tandems and
15 Access Tandems then throws in the definition of a "Local Tandem" which
16 includes all of these. So what would be a non-Local Tandem in SBC's zoo of
17 tandem switch definitions? If all tandems are local tandems, then why not settle
18 on one definition of a tandem switch? Since Mr. Oyer does not completely agree
19 with my suggested definition of Tandem Switch, I will amend it as follows:

20 "Tandem Switch" is defined as a switching machine within the public
21 switched telecommunications network that is used to connect and switch
22 trunk circuits between and among other switches."
23

24 However, I will point out that my original definition was consistent with
25 Paragraph 1.24 in the General Terms and Conditions:

1 “Tandem Office Switch” or “Tandem(s)” is a switching machine that
2 meets the following criteria, and does not include a PBX.
3

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

5 A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Level 3 Communications,)
LLC's Petition for Arbitration Pursuant to)
Section 252(b) of the Communications Act of)
1934, as amended by the Telecommunications)
Act of 1996, and the Applicable State Laws for)
Rates, Terms, and Conditions of)
Interconnection with Southwestern Bell)
Telephone Company, L.P., d/b/a SBC Missouri.)

Case No. TO-2005-0166

AFFIDAVIT

I, Rogier Ducloo, of lawful age, being duly sworn upon his oath, deposes and states the following:

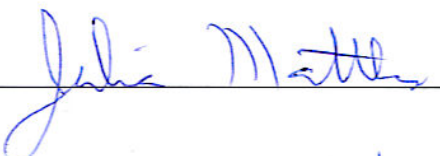
1. My name is Rogier Ducloo. I am employed by Level 3 Communications, LLC as Director, Product Management
2. Filed herewith and made a part hereof for all purposes is my Rebuttal Testimony in this case.
3. I hereby affirm that my testimony filed herewith, including all answers to the questions therein, is true and correct to the best of my knowledge, information and belief.

Signed:



Rogier Ducloo

Subscribed and sworn to before me this 4th day of February 2005.



Notary Public

My Commission expires: 11/18/07

