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, to establish an Interconnection Agreement with the Southwestern Bell Telephone Company, L.P. d/b/a SBC Missouri	)	Exhibit No. _____ Issue: NIM 4, 6; OET 5, 6, 7, 10-12; ITR 1-4, 10-14, 17, 18; ITR 5-9, 19; IC 1, 4, 6-9, 14, 17, 19, 20, and 21; CHC 1 Witness: Richard Cabe, Ph.D. Type of Exhibit: Direct Testimony Sponsoring Party: Level 3 Communications Case No. TO-2005-_____ Date: December 13, 2004

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

CASE NO. TO-2005-_____

DIRECT TESTIMONY

OF

RICHARD CABE, PH.D.

ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC

December 13, 2004

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Richard Cabe and my business address is 221 I Street, Salida, Colorado.

Q. PLEASE BRIEFLY DESCRIBE YOUR PROFESSIONAL BACKGROUND.

A. I am an economist in private practice, specializing in economic analysis of regulatory matters in the telecommunications industry. I have presented testimony in matters concerning competition in the telecommunications industry to the public utility commissions of Alabama, Alaska, Arizona, Colorado, Florida, Georgia, Iowa, Kentucky, Louisiana, Mississippi, Nevada, New Mexico, North Carolina, Oregon, South Carolina, Tennessee, Texas, Utah and Washington, and to the Federal Communications Commission. Until May of 1999, I was employed as Associate Professor of Economics and International Business at New Mexico State University. In that position, I taught graduate and undergraduate economics courses and arranged the telecommunications curriculum for conferences sponsored by the Center for Public Utilities. Over my last several years at the university, I offered graduate courses in Industrial Organization, Microeconomic Theory, Antitrust and Monopoly Power, Game Theory, Public Utilities Regulation, and Managerial Economics for MBA students. My experience with telecommunications regulation began in January of 1985 when I was employed by the Washington Utilities and Transportation Commission. During my employment at the Washington Commission, I served as a staff member to the Federal - State Joint Board in CC Docket No. 86-297. When I left the Commission staff to complete my doctoral degree, my title was

Telecommunications Regulatory Flexibility Manager. My consulting clients since I left the Washington Commission have included aspiring new entrants into the local telecommunications market, state commissions, and consumer advocates. My resume is attached as Exhibit RC-1.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This testimony was prepared on behalf of Level 3 Communications, LLC. ("Level 3"), a certificated competitive local exchange carrier ("CLEC") in Missouri.

PURPOSE OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address certain issues identified in the Level 3 Petition for Arbitration ("Petition").[1] Specifically, I will address **Issue 1** Restrictions on the Use of Local Interconnection Trunks; **Issue 2** Transit Traffic; **Issue 4** Using Interconnection for Internet Enabled Traffic, and **Issue 5** Intercarrier (Reciprocal) Compensation. I will also discuss the relevance, if any, of the geographic end points of calling and called parties in relation to intercarrier compensation. While some of these issues are primarily engineering issues, I will be addressing them from an economic perspective.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

[1] See, Petition of LEVEL 3 COMMUNICATIONS, LLC for Arbitration Pursuant To Section 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, and Applicable State Laws for Rates, Terms and Conditions of Interconnection with Southwestern Bell telephone Company d/b/a SBC Missouri ("Petition").

A. My testimony is organized by issue. Discussions of the Tier 1 issues can be found on the following pages:

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. I will provide the summaries by Issue:

Issue 1 – (DPL Issues NIM 4, 6; OET 5, 6, 7, 11, 12; ITR 1-4, 10-14, 17, 18; NIM 6; IC 1, 17).– Restriction on Use of Local Interconnection Trunks.

Level 3 proposes terms in its Interconnection Agreement that would permit Level 3 to build its interconnection network based on the actual customer demand and the need for network facilities and trunks. SBC is seeking to impose unnecessary additional network costs upon Level 3 – through the inefficient use of trunks -- that would put Level 3 at a significant competitive disadvantage to SBC and other carriers. SBC's proposed language in the interconnection agreement would require Level 3 to operate its network in an extremely inefficient manner, and a manner in which SBC does not operate its own network. SBC uses trunks in a cost efficient manner such that multi-jurisdictional traffic is carried on a single trunk. This method of network operation provides economic efficiencies since it allows for the optimal use of trunk capacity and facilities. However, SBC insists that Level 3 dedicate

trunks based on traffic types, essentially requiring Level 3 to establish multiple interconnection networks. Level 3 would, therefore, be required to establish and maintain a separate trunk for artificially discrete types of traffic carried, regardless of efficient trunk utilization. In effect, Level 3 would be prohibited from taking advantage of the very economic efficiencies that are available to SBC. If SBC, for business reasons unconnected with network efficiencies such as customer billing, chooses to segregate its traffic on separate trunks, that is its decision. These costs should not be foisted onto other carriers for no other reason than constructing a barrier to competition.

Issue 2 – (DPL Issues ITR 5-9; OET 10) -- Transit Traffic.

Level 3's proposed Interconnection Agreement would provide that the parties transit traffic originating from or terminating to a third party to the other carriers' network. SBC has taken the position in this arbitration that it is no longer required under the Act to transit traffic from Level 3 to other carriers. It is critical that Level 3 continue to rely on SBC to provide indirect interconnection with other carriers in order to continue to efficiently serve its customers in Missouri and to not be disadvantaged *vis-à-vis* SBC. As the historic monopoly provider with near ubiquitous third party interconnection, SBC is seeking to abrogate its responsibility to facilitate the exchange of traffic between carriers. SBC is compensated for this function and is not inappropriately financially disadvantaged or operationally harmed by providing the transit function for the industry. Indeed, this is one of the legacy

requirements for ILECs resulting from their historical monopoly status. The Arbitrator should maintain the status quo with respect to this issue, and require SBC to continue to transit traffic for the industry.

Issue 4 – (DPL Issues ITR 19 and IC 1, 8, 9 and 14) **--** Using Co-carrier Interconnection Facilities for Internet-Enabled Traffic.

Internet enabled services, such as voice over Internet protocol ("VoIP") provided by Level 3 to its ISP and ESP customers, are information services that are carried over the co-carrier infrastructure. Consistent with FCC and state regulatory decisions, access charges or other non-cost-based intercarrier compensation schemes should not apply to such services.[2] Indeed, the RBOCs are leading the way in deploying such services and have supported the FCC in its decision to allow VoIP to evolve in a regulation-free zone. As SBC itself has acknowledged,

> These [IP Enabled] services are also indivisibly interstate because of their inherent geographic indeterminacy and portable nature, combined with their capacity to facilitate multiple simultaneous communications with a variety of information sources, make it infeasible to segregate any intrastate component for regulatory purposes. IP-enabled services fall categorically within the [FCC] Commission's exclusive jurisdiction, and the [FCC] should resolve any uncertainty on this point by explicitly pre-empting any state level common carrier regulation of information services.[3]

[2] Mr. Hunt discusses the ESP exemption in his testimony. See also the FCC's ISP Order at paragraph 20. In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; **Declaratory Ruling in CC Docket no. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68;** Released: February 26, 1999 ("*ISP Declaratory Ruling"*).

[3] SBC Reply Comments at page 8, In the Matter of IP Enabled Services, WC Docket No. 04-36

Yet, in this proceeding, SBC is advocating that the Arbitrator impose regulations on this traffic in direct contravention of the FCC jurisdiction. Such treatment is in no way economically justified and would hamstring this emerging technology and developing competition. Indeed the intrusive regulation proposed by SBC would ultimately make IP-enabled services more expensive, make business applications less efficient, reduce jobs and make the Internet less valuable.[4] Therefore, the Arbitrator should not adopt SBC's position.

Issue 5 – (DPL Issues IC 1, 4, 6, 7, 9, 14, 19, 20, and 21) -- Reciprocal Compensation.

This issue concerns whether this interconnection agreement will specify the intercarrier compensation for certain VoIP traffic that is exchanged between SBC and Level 3 and whether, if this agreement does specify the intercarrier compensation, such traffic is to be exchanged pursuant to reciprocal compensation mechanisms or subject to access charges. The traffic in dispute here is traffic that is originated on the PSTN and terminated on an IP network, or vice versa.

Level 3 and SBC both agree that when a provider offers a service that enables customers to send or receive communications in IP format, as Level 3's wholesale customers do when they offer IP-enabled services, that service is properly classified as interstate "information services" traffic.[5] In fact, SBC has acknowledged that it is

[4] See Comments of the VON Coalition in CC Docket No. 01-92, WC Dockets No. 02-361, 03-211, 03-266, 04-36; filed August 19, 2004 at page 1.

[5] See 47 C.F.R. Section 64.702(a) for a listing of enhanced services characteristics.

appropriate for the FCC to have exclusive jurisdiction over this issue.[6] Level 3 and SBC disagree, however, as to whether such interstate information service traffic may be exchanged under reciprocal compensation arrangements (Level 3's view). Level 3 proposes that the Arbitrator not even set a rate of compensation for IP-Enabled traffic, and instead defer that issue to the FCC. SBC promotes the imposition of above cost, high profit access charges on such traffic, contrary to their position expressed in the Intercarrier Compensation Reform plan recently endorsed by SBC.

Relevance of the Geographic End Points of Callers –

SBC proposes to rate and distinguish circuit switched traffic based on the actual physical location of customers. As SBC has itself admitted, internet calls are characterized by their inherent geographic indeterminacy and portable nature.[7] SBC's proposal in this proceeding is not consistent with the current manner in which calls have been rated since the establishment of the public switched telephone network ("PSTN"). In the circuit switch environment, calls have been rated and routed based upon a comparison of the NPA/NXX of the called and calling numbers. The reason for this is simple – the current system works for all industry participants and no other efficient, viable economic system exists to rate and route calls. Further, the use of numbering resources (NXX codes) in the manner currently employed by Level 3, other CLECs and SBC itself, allows consumers efficient, and non-discriminatory and competitive access to Internet Service Providers ("ISPs") that

[6] SBC Reply Comments at page 8, In the Matter of IP Enabled Services, WC Docket No. 04-36

[7] SBC Reply Comments at page 8, In the Matter of IP Enabled Services, WC Docket No. 04-36

would otherwise be impossible if such calls were treated as toll calls or anything other than local. SBC's proposal to not pay reciprocal compensation on calls to customers who are not "physically located" in the same local exchange or require toll treatment for such calls, would give SBC yet another artificial competitive advantage over CLECs. SBC's proposal would improperly benefit its own affiliated ISPs (i.e., SBC Yahoo! Dial), increase the cost of Internet access and reduce competition to the detriment of consumers and the economy.[8] SBC's proposal would put in jeopardy any competition for ISP dial-up services, thereby depriving consumers of choice in what has become an indispensable information, education and economic tool. The Arbitrator should deny SBC's attempt to establish these barriers by evading payment of reciprocal compensation on local calls for purposes of long-standing NPA/NXX rating conventions.

Q. BEFORE YOU ADDRESS THESE SPECIFIC ISSUES, PLEASE PROVIDE A GENERAL OVERVIEW OF THE ECONOMIC RATIONALE FOR INTERCONNECTION PURSUANT TO THE ACT.

A. The FCC and state commissions have recognized that the various subsections of section 251 impose escalating obligations on carriers depending upon their classifications (*i.e.*, telecommunications carrier, LEC, or ILEC). These classifications are based upon their market power and economic position (e.g. monopoly) and attendant public obligations (e.g., common carrier obligations).

[8] Level 3 has not yet received SBC's discovery responses in this proceeding, but according to SBC's recent response to Level 3 discovery in the Illinois arbitration, "SBC Illinois states that it has an affiliated ISP that offers Internet services in Illinois." SBC Response to Level 3 Request No. 10.

Section 251(a) of the Act requires all telecommunications carriers to "interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers."[9] Section 251(b) imposes additional duties on local exchange carriers ("LECs") and section 251(c) imposes further obligations and specific interconnection duties on ILECs, such as SBC, including the duty to negotiate in good faith.[10] The obligations identified in section 251 are necessary to support the nation's goal of developing competition for the benefit of consumers and the economy.[11] These duties and obligations are all focused on affording CLECs equal, non-discriminatory access to ILEC network facilities. This access is to be on a cost-based, efficient basis that inhibits the ILEC's use of market power in anti-competitive ways to erect barriers to the establishment of an effectively competitive market.

Q. IN PROVIDING AN ECONOMIC PERSPECTIVE OF THE REMAINING ISSUES BEFORE THE ARBITRATOR IN THIS ARBITRATION, HAVE YOU IDENTIFIED A COMMON THEME?

A. Yes. In performing my review of these issues I found that, in many instances, the contract language advocated by SBC would force Level 3 to operate its network in an inefficient manner, given Level 3's state-of-the-art network. Of course, if SBC can require Level 3 to operate at efficiency levels below optimum capability, Level 3's costs will be increased, and Level 3's effectiveness as a competitor will be

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9 47 USC § 251(a)(1).

10 My reference to negotiating in good faith should not be read to suggest that the parties have negotiated in bad faith.

11 *Total Telecommunications Services, Inc and Atlas Telephone Company, Inc v. AT&T Corp*, Memorandum Opinion Order, FCC 01-84, ¶ 25 (rel. Mar. 13, 2001).

diminished and consumer benefits reduced. SBC's motivation is, therefore, understandable, even if it is anti-competitive and harmful to the public interest. A second result of the inefficient operation that SBC's proposals would impose on Level 3 is that Level 3's cost of providing service would be higher than it otherwise might be. These increased operating costs will limit Level 3's ability to reduce rates for consumers in Missouri. It is clear that forcing Level 3 to operate in such a manner is harmful for Level 3 and for Missouri telecommunications consumers, but beneficial for SBC.

As disturbing as this finding is, my review has brought an even more disturbing revelation to light. SBC is apparently willing to operate its own existing network in a less efficient manner in order to foist further inefficiencies upon Level 3. In other words, SBC's proposal would result in SBC incurring higher network costs than those incurred under Level 3's proposals.[12] Because SBC recovers its operating costs from ratepayers including CLECs, the obvious consequence of SBC's proposed contract language would result in a direct negative impact on Missouri ratepayers - in the form of upward pressure on Missouri retail rates.

Q. ARE THE RESULTS – INCREASED COSTS FOR LEVEL 3, SBC AND CONSUMERS – WHAT YOU WOULD EXPECT IN A COMPETITIVE MARKET?

[12] The economic literature contemplates the possibility that an incumbent with market power may find it profitable to tolerate an increase in its own cost in order to discipline or discourage competitors by imposing higher costs on them. See Salop, S. and D. Scheffman, "Raising Rivals' Costs," American Economic Review 73 (1983), 267 - 271

A. No. I find these results to be diametrically opposed to the results that are produced in a competitive market. The language proposed by SBC would prevent both SBC and Level 3 from using resources in the most efficient and cost effective manner (as should be expected in a competitive market), and would prevent retail prices from being driven towards costs (a result that is expected in a competitive market). SBC's motivation to constrain competition is so great that it is willing to absorb inefficient operating costs on its own network; SBC is also willing to sacrifice (to the detriment of its Missouri customers) the lower retail rates that should result from a healthy, competitive market.

Q. ARE MARKET DYNAMICS INCONSISTENT WITH THOSE EXPECTED IN A COMPETITIVE MARKETPLACE IN THE PUBLIC INTEREST?

A. This Commission defines the public interest, but I do not believe that allowing inefficient operations because the incumbent benefits from the resulting barrier to competition is consistent with furthering the public interest. When artificial constraints that prohibit the results of a naturally developing competitive market are introduced, consumers may suffer from prices that are unnecessarily high, as well as reduced service choices and service quality. In addition to these well-established benefits of competition being withheld from the consuming public, large business customers – when faced with unnecessarily high prices – will pass higher costs on to their customers and may even reduce work forces or go out of business. The point is that such uneconomic behavior has ripple effects that may impact not only individual consumers, but the general economic health of the State. Clearly, the public interest

would not be protected by allowing SBC to impose contract language on Level 3 that would trigger negative impacts such as these. The contract language proposed by Level 3, however, does promote competitive market outcomes, and, therefore, is entirely consistent with the Commission's goal to promote the public interest. I will address this language, on an issue-by-issue basis, in the next section of my testimony.

TIER 1 ARBITRATION ISSUES

Issue 1 – Efficient Use of Interconnection Trunks for All Traffic.[13]

Q. PLEASE SUMMARIZE THE POSITIONS OF THE PARTIES ON THIS ISSUE.

A. Level 3, like other carriers including SBC, has a mix of traffic that its customers originate and terminate that must be connected to SBC's network for call completion. Further, SBC customers originate various types of traffic directed to Level 3 customers. In order to serve these customers, Level 3 must establish trunking facilities to carry its calls. SBC has proposed language that would require Level 3 to purchase separate interconnection trunks that would be used exclusively for either local and intraLATA, and separate interLATA traffic, transit trunks and VoIP trunks regardless of the discrete volumes of such traffic. Such language would interfere

[13] See: Network Interconnection Methods, Sections 1.1and 2.7; Interconnection Trunking Requirements, Sections 1.2, 3.3, 3.6, 4.2, 5.2, 5.2.1 – 5.2.9, 5.3, 5.3.1.1, 5.3.3.1, 5.4.1, 5.4.3, 5.4.1-5.4.4, 8.8.1, 12.1, and 13.1; Out of Exchange, Sections 4.1, 4.2, 4.3, 9.0-9.1, and 9.2; Intercarrier Compensation, Sections 3.1 and 10.1. DPL Issues NIM 4, 6; OET 5, 6, 7, 11, 12; ITR 1-4, 10-14, 17, 18; NIM 6; IC 1, 17.

with Level 3's ability to operate its network in an efficient manner by optimizing trunk utilization and would, therefore, place Level 3 at a significant and artificial economic disadvantage by forcing it to incur the costs of more trunks than the traffic volumes warrant. These restrictions sought by SBC should not be adopted in this arbitration.

Q. HOW WOULD LEVEL 3 BE DISADVANTAGED BY THE LANGUAGE PROPOSED BY SBC?

A. Let me provide an example. Suppose an engineer is asked to design an efficient road system to get a certain amount of traffic into St. Louis from the suburbs within a fixed budget. The engineer designs an efficient multi-lane highway to handle, cars, trucks, motorcycles and buses traveling to downtown St. Louis. Then suppose a competitor requires the engineer to design, build and maintain a separate road for cars, a separate road for trucks, a separate road for motorcycles and a separate road for buses. While it is possible to design four separate road systems, the costs have now increased dramatically and the separate roads will be underutilized or not take advantage of economies of scale.

Much like the example above, if SBC prevails on this issue, Level 3 would be forced to provide service to its customers in an extremely inefficient manner, and in a manner that differs from how SBC uses its own network. Mr. Wilson provides detailed testimony regarding the network inefficiencies which would be thrust upon Level 3 if SBC were to prevail on this issue. Distilling Mr. Wilson's testimony to the most salient point – from an economic perspective – SBC's proposed language would

require Level 3 to deploy the facilities required to efficiently interconnect with SBC and then, to duplicate those facilities, perhaps several times over, unnecessarily increasing Level 3's cost of providing service to its customers.

Q. ARE THERE OPERATIONAL PROBLEMS ASSOCIATED WITH LEVEL 3 USING TRUNKS TO CARRY BOTH LOCAL AND TOLL TRAFFIC?

A. No. Mr. Wilson will address the technical concerns that have been raised by ILECs in the past in his testimony. I will add to Mr. Wilson's testimony only by noting that the actual practices of these carriers refute such arguments. This is because there is solid proof that the problems historically raised by ILECs can be overcome, and in fact, have been overcome.

Q. WHAT EVIDENCE SHOULD THE ARBITRATOR CONSIDER IF SBC RAISES CONCERNS WITH RESPECT TO COMBINING TRAFFIC ON TRUNKS?

A. SBC's concerns (with respect to Feature Group D calling, billing problems, traffic identification, etc.) may have been concerns at one time, however, those concerns have been largely resolved by using traffic allocators for billing. The Arbitrator need look no further than to SBC's own practices in which it combines multi-jurisdictional traffic on individual trunks or trunk groups to conclude that concerns have been resolved. Level 3 has not received SBC's discovery responses in this proceeding, but in response to Level 3 Request No. 19 in the Illinois arbitration, SBC Illinois states that "…in all of SBC 13 states where combined tandems are located, SBC's local and toll (IntraLATA and InterLATA) traffic is combine (sic) on a single trunk group."

SBC and others have utilized trunking facilities in this manner – combining traffic -- in order to achieve optimum network efficiency.[14] Obviously, the ability to combine traffic in this manner represents a far more efficient use of capacity than building separate facilities for different traffic types. To require Level 3 to operate in an inefficient manner by precluding them from taking advantage of fundamental trunking efficiencies constitutes an economic barrier to Level 3. This observation is born out by the Michigan Public Service Commission finding in a Sprint/Ameritech arbitration proceeding that:

> It appears to the Commission that economic entry into the market requires that Sprint by permitted to use its existing trunks for *all* traffic whenever feasible.[15] (emphasis added) In Texas, the Commission there ordered Verizon to allow Sprint to carry local, intrastate intraLATA and intrastate interLATA traffic on the same trunks.[16] Other states, such as Indiana, have required the use of PLUs (percentage local usage) or other allocators (e.g., PIUs – percent interstate usage) to reflect the jurisdiction of traffic on such trunks for billing purposes.[17]

Q. OTHER THAN THE RESOLVABLE ISSUES ASSOCIATED WITH BILLING, IS THERE ANY OTHER OPERATIONAL JUSTIFICATION FOR SBC TO

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[14] As noted at paragraph 679 of the FCC's *Local Competition Order*, the CLECs are to be able to reap the benefits of the ILEC economies of scale and scope. Trunking efficiencies represent those economies and should not be withheld from CLECs.

[15] *In the Matter of the Application of Sprint Communications Company, L.P. for Arbitration to Establish an Interconnection Agreement with Ameritech Michigan*, MPSC Case No. U-11203, Order Approving Arbitration Agreement with Modifications, Jan 15, 1997.

[16] Texas Public Utility Commission; *In the Matter of the Petition of Sprint for Arbitration with Verizon*; Docket No. 24306; Final Order Modifying Arbitration Award and Approving Interconnection Agreement; dated February 17, 2004.

[17] Indiana Utility Regulatory Commission; In the Matter of AT&T Petition for Arbitration with Indiana Bell Telephone Company; Cause No. 40571-INT-03; November 20, 2000. Further, in its Revised Response to Level 3 Request No. 22 in the Illinois arbitration, SBC Illinois stated, "SBC Illinois uses a PLU methodology to distinguish local versus intraLATA toll in cases where the CLEC does not provide calling party number (CPN) information."

REQUIRE SEPARATE TRUNKING ARRANGEMENTS FOR DIFFERENT TYPES OF TRAFFIC?

A. No, in fact, from an operational perspective, SBC would be disadvantaging itself by requiring CLECs to separate traffic of different types onto multiple trunk groups rather than carrying multi-jurisdictional traffic on a single trunk group. To put it simply, not only is it most efficient for Level 3 to carry multi-jurisdictional traffic on a single trunk group, it is efficient from SBC's perspective as well.

Q. YOU HAVE DISCUSSED THE INEFFICIENCIES OF SEPARATE TRUNKING FOR LEVEL 3. WOULD SUCH A TRUNKING ARRANGEMENT REQUIRE SBC TO INCUR ADDITIONAL COSTS AS WELL?

A. Yes. If Level 3, and any other interconnecting CLEC, is required to unnecessarily duplicate facilities, SBC would be required to duplicate facilities on its network. In other words, rather than interconnecting with each CLEC using a single trunk group (at a single point), SBC would be required to interconnect with each CLEC using multiple trunk groups.

Building multiple individual trunk groups within a switch, with each trunk group having differing characteristics, is a more complex task than the installation and maintenance of a singular multipurpose trunk group. Additionally, multiple trunk groups create a greater potential for service failures. Single trunk groups, on the

other hand, allow for the quick efficient rerouting of traffic across the network should the need arise. Also, multiple groups, with individual trunk groups meeting differing traffic requirements, are much more difficult to manage in unusual traffic scenarios. For SBC, dealing with these and perhaps additional issues would result in an obvious decrease in network efficiency, and would result in added costs.

Q. WHY WOULD SBC INSIST ON CONTRACT LANGUAGE THAT WOULD BE DISADVANTAGEOUS TO ITSELF?

A. I cannot answer for SBC, but it would appear that such a strategy would be consistent with the strategy I discussed previously - that SBC is willing to absorb costs in the short term in order to disadvantage competitors from the marketplace. [18]

Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING THIS ISSUE?

A. I recommend that the Arbitrator adopt Level 3's position and allow it to carry different types of traffic on single trunks or trunk groups. SBC's proposed language would result in the inefficient use of the network, additional costs to all carriers, and give an unfair competitive advantage to SBC.

Issue 2 – Transit Traffic[19]

[18] Given the fragile nature of the CLEC industry, it would take very little to eliminate competition. As such, any decision that disadvantages CLECs as compared to SBC will further diminish the chances for effective competition.

[19] Interconnection Trunking Requirements, Sections 4.3 and 4.3.1 – 4.3.4; Out of Exchange, 6.1, 6.2, and 6.3. DPL Issues ITR 5-9; OET 10.

Q. PLEASE SUMMARIZE THE POSITIONS OF THE PARTIES ON THIS ISSUE.

A. SBC currently provides a transiting function, and should continue to do so. The current transiting arrangement between the parties provides for the most efficient use of resources, and for an economically sound utilization of the existing network.

Currently, SBC transits traffic for Level 3 and other CLECs, which allows, for example, a Level 3 customer to complete a call to a customer of another CLEC or IXC.[20] It has been SBC's position in this arbitration that it is no longer required to provide this function pursuant to the requirements of Section 251(c)(2); this is in spite of the fact that SBC has carried transit traffic destined for Level 3's network for as long as the parties have been interconnected.

Q. IS SBC'S REFUSAL TO SUBMIT TO THE COMMISSION'S JURISDICTION OVER TRANSIT, PURSUANT TO SECTION 251(c)(2), CONSISTENT WITH THE ACT?

A. No. This refusal by the incumbent carrier to provide transiting services pursuant to its interconnection obligations is clearly at odds with the intent of the Act and completely unworkable. Sound public policy dictates that SBC, as the incumbent provider and the only provider with ubiquitous facilities in its serving territory, should be required to provide the transiting service as it has been doing. The ubiquity of the facilities that make SBC the natural provider of transit services is a vestige of

[20] SBC Illinois admits in its Response to Level 3 Request No. 24 in the Illinois arbitration that "SBC Illinois is currently providing transiting services to CLECs in all 13 states."

its once legally-protected monopoly status. Now that competition has been introduced, SBC continues to maintain the only ubiquitous presence in SBC's operating territory, in which competitive carriers must continue to rely on other carriers for the transmission and routing of much of their telephone exchange and exchange access traffic. Transiting efficiently serves that function and, as such, permitting interconnection with SBC to be used for transiting is an integral part of the incumbent's obligations under Section 251(c)(2) of the Act. After all, the facilities are in place and SBC is compensated for the service provided. The only possible reason for SBC to refuse to handle this traffic is a desire to disadvantage its competitors that are not the direct beneficiaries of SBC's historical monopoly status.

Q. WHY DO YOU SAY THAT SBC PROVIDING TRANSIT TRAFFIC TO CLECS IS AN EFFICIENT USE OF RESOURCES?

A. Because if SBC is allowed to stop transiting traffic from CLECs, carriers like Level 3 will be forced to construct facilities that essentially duplicate facilities which SBC already has in place and that are already entirely suited to carrying CLEC traffic. There is just no operational or economic justification for forcing Level 3 and other CLECs to duplicate facilities that are already in place, or to build additional interconnection facilities that would not be efficiently used. Because SBC will fully recover its costs for providing transit, SBC is in no way financially harmed, and the unnecessary duplication of facilities that would be necessary if SBC prevailed on this issue constitutes an extremely inefficient use of society's scarce resources. Something else that the Arbitrator must keep in mind as it deliberates on this issue is

that there is no viable economic alternative. SBC is the only LEC interconnected with all surrounding LECs, independent LECs and CLECs alike. It would be extremely costly and inefficient to require each CLEC to duplicate the existing SBC facilities. Only one carrier benefits from such an arrangement – SBC. In addition, as Mr. Wilson describes in his testimony, SBC's advocacy would result in greater potential for customer disruption and would create significant operational problems. In short, both economic efficiency and operational stability support the maintenance of the status quo with respect to this issue

Q. IF SBC WOULD NOT BE HARMED FINANCIALLY AS A RESULT OF THE ARBITRATOR MAINTAINING THE STATUS QUO WITH RESPECT TO THIS ISSUE, WHY WOULD SBC SEEK TO STOP TRANSITING TRAFFIC?

A. I cannot speak for SBC. However, a flash cut away from SBC transiting traffic would significantly and negatively impact Level 3's operations and ability to offer services to customers. It would also make it difficult if not impossible to compete with SBC. Thus, not only would SBC not experience any financial damage itself, withholding this service would be so disruptive to CLECs that it is entirely consistent with what the FCC recognized to be ILEC incentives and ability to provide CLECs with less favorable terms and conditions for interconnection than it provides itself.

Q. HAVE OTHER COMMISSIONS ADDRESSED THIS ISSUE PREVIOUSLY?

A. Yes. Ameritech Michigan (which is now an SBC company) argued in Case No. U-11203 that there was nothing in the Act requiring it to continue to transit CLEC

traffic and that if Congress had intended to require ILECs to provide this function, it could have explicitly stated so in the Act, but did not.[21]

Q. HOW DID THE MICHIGAN COMMISSION RESPOND TO AMERITECH MICHIGAN'S ARGUMENTS IN CASE NO. U-11203?

A. The Michigan Commission rejected Ameritech Michigan's arguments, noting if Ameritech Michigan did not transit CLEC traffic, CLECs would face significant barriers to entry due to their inability to simultaneously interconnect with every other LEC. That Commission further noted that the Act was intended to encourage the development of competition in local exchange markets, and was not persuaded by Ameritech Michigan that the Act should be interpreted in such a way that would allow Ameritech Michigan to refuse to provide transit. Finally, the Michigan Commission concluded that Ameritech Michigan's proposed language to stop providing transit created a barrier to competition. Level 3 completely agrees with the Michigan Commission's past ruling and the underlying rationale supporting that ruling. Truly, absent the ability to rely on SBC to perform the transiting function, Level 3 and other CLECs would face significant economic barriers to competition.

Q. HAS THERE BEEN ANY COURT REVIEW OF THIS MICHIGAN POSITION?

A. Yes. Michigan Bell (SBC Michigan) appealed another more recent MPSC arbitration decision which addressed, *inter alia*, transiting responsibilities. SBC made the same

[21] *In the Matter of the Application of Sprint Communications Company, L.P. for Arbitration to Establish an Interconnection Agreement with Ameritech Michigan*, MPSC Case No. U-11203, Order Approving Arbitration Agreement with Modifications, Jan 15, 1997.

arguments in that case that it is making in this proceeding. Not surprisingly in 2001 the MPSC ruled in the same fashion as it had in previous cases, requiring Ameritech to provide transiting services. The United States District Court for the Eastern District of Michigan, Southern Division in 2002, affirmed the MPSC decision "…that the FCC's shared transport definition and the Third Order on Reconsideration do not preclude mandatory transiting." That Court also found that "Since federal law does not preclude mandatory transiting, under the FTA's savings clause, the MPSC is allowed to impose additional pro-competitive requirements under state law."[22] The United States Court of Appeals for the Sixth Circuit affirmed the District Court ruling mentioned above on March 23, 2004.[23]

The Arbitrator should reject SBC's attempt to withdraw its transiting services or to establish separate commercially negotiated agreements for transit outside the purview of this agency's oversight. The Act requires interconnection for purposes of transmission and routing of telephone exchange and exchange access services. Even if it did not, the courts have decided that nothing prohibits states from requiring transiting under state law. SBC's position results in a barrier to entry, the only possible reason for which is to disadvantage SBC's competitors. Instead, SBC should be required to continue to provide transit services to CLECs.

[22] 222 F. Supp. 2d 905; 2002 U.S. Dist. Lexis 15269. August 12, 2002, Decided.

[23] 93 Fed. Appx. 799; 2004 U.S. App. Lexis 5985; March 23, 2004, Filed.

Q. ARE THERE OTHER REASONS THAT THE ARBITRATOR SHOULD REFRAIN FROM DIVERGING FROM THE STATUS QUO WITH RESPECT TO THIS ISSUE?

A. Yes. Level 3's business, to a certain extent, was built and developed based upon reasonable expectations and understandings with respect to the availability of services from SBC. The same is true of other CLECs. If SBC is able to prevail on this issue, the current efficient operation of the network would be disrupted, and would not be reflective of the circumstances present in Missouri when Level 3 and other CLECs made the crucial investment decisions associated with entering the market. Having to duplicate SBC's network and establish contractual relationships with each and every potential carrier, irrespective of network efficiency, would require such massive investment by Level 3 and other CLECs that, if those costs were known at the time investment decisions were made, Level 3 and other CLECs may not have elected to enter the market. By maintaining the status quo, the Arbitrator would avoid this disruption, provide for the continued efficient utilization of this portion of the network, and, in doing so, would not harm SBC.

Q. YOU HAVE DISCUSSED SBC'S WILLINGNESS TO ABSORB ADDITIONAL COSTS ITSELF IN ORDER TO ENSURE THAT LEVEL 3 IS PREVENTED FROM OPERATING ITS NETWORK IN THE MOST EFFICIENT MANNER POSSIBLE. DOES THIS ISSUE FALL UNDER THAT CATEGORY AS WELL?

A. Yes. SBC's proposed language would require Level 3 to modify the facilities that currently and efficiently accommodate the transit needs of the carriers. If Level 3 is required to duplicate facilities in order to continue to transit traffic with surrounding independent LECs, Level 3 will be required to unnecessarily redesign its network at significant additional cost. Likewise, SBC will be required to resize its trunk groups to meet the demands of changed traffic volumes; for example, routes and switch routing tables would need to be adjusted accordingly. These network decisions will have to be revisited every time SBC enters an interconnection with a carrier entering the market. The net effect on SBC will be a new higher level of inactive or spare interconnecting capacity on SBC switches which previously provided transit traffic functions for CLECs.

As discussed previously, the cost of duplicating SBC's network in the absence of SBC as a transit provider, is entirely inconsistent with the expected results of a healthy competitive marketplace, and would ultimately result in higher retail customer rates. The worst part of SBC's proposal is that these costs are totally avoidable as SBC currently performs this transiting function. And as I've testified previously, SBC is fairly compensated by Level 3 for this transiting function.

Q. HOW SHOULD THE ARBITRATOR RESOLVE THIS ISSUE?

A. The Arbitrator should adopt Level 3's proposed Interconnection terms and require that SBC transit Level 3's traffic to other carriers in the same manner, and under the same terms and conditions that it has provided in the past. SBC should not be allowed to use the leverage of a threat to refuse to transit traffic bound for a third

party. All carriers involved in providing local exchange traffic are required as part of their common carriage responsibilities to carry traffic delivered to them to either the ultimate end-user or to another carrier for termination. SBC has provided this transiting function in the past and should continue to do so going forward as part of the interconnection agreement. Such a decision would avoid the negative economic impacts discussed above.

The Relevance of Geographic End Points of Calling and Called Parties.

Q. PLEASE SUMMARIZE THE POSITIONS OF THE PARTIES ON THIS ISSUE.

A. Level 3 asks the Arbitrator to maintain the status quo with respect to this issue. SBC has proposed language in this arbitration that would depart from the Parties' current interconnection agreement. The current agreement requires that the rating of a call for purposes of defining the appropriate intercarrier compensation for circuit switched traffic (no IP-Enabled traffic, which is discussed below) is determined based on the NPA-NXX of the calling and called parties. This departure is inconsistent with current industry standards, would place Level 3 at an unwarranted competitive disadvantage, would undoubtedly be used by SBC in an attempt to avoid paying reciprocal compensation which it is legally obligated to pay, and for all intents and purposes, would be unworkable from an operational standpoint. Level 3's position is consistent with the arrangement to which the Parties' agreed in the previous interconnection agreement. That arrangement recognizes the industry standard of routing and rating calls based upon the NPA-NXX of the calling and called parties.

This manner of routing calls is consistent with industry standards, FCC rules and Orders and avoids the competitive inequities that would result from adopting SBC's language.

Q. HAS THE FCC RECOGNIZED THAT RATING AND ROUTING CALLS BASED ON GEOGRAPHIC ENDPOINTS IS NOT WORKABLE?

A. Yes. The FCC Wireline Bureau's *Virginia Arbitration Order* established that the geographical endpoints of calls has no bearing on how the call should be rated. The Order noted that rating calls by their geographical starting and ending points raises billing and technical issues that have no concrete, workable solutions at this time.[24] Instead, calls are rated based upon the NPA/NXX of the calling and called parties. This process should be maintained, as there is no reason to change the status quo and no workable alternative.

Q. YOU ALSO MENTIONED THAT SBC'S PROPOSAL TO RATE CALLS BASED ON THE GEOGRAPHIC LOCATION OF THE CALLING AND CALLED PARTIES WOULD DISADVANTAGE LEVEL 3. CAN YOU EXPLAIN HOW LEVEL 3 WOULD BE DISADVANTAGED?

A. Yes. SBC seeks, through the interconnection agreement terms, to implement standards that would apply to Level 3 but not to itself. SBC's FX service allows customers to appear to have a local presence when in fact their geographic location is not actually in the same local calling area. Further, it is clear, based on my

[24] *In the Matter of Petition of WorldCom, Inc, Cox Virginia Telcom, Inc, and AT&T Communications of Virginia, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expanded Arbitrations*, DA 02-1731, Released: July 17, 2002. ¶ 301.

experience throughout the country that ILECs have never made an attempt to determine the physical location of their customers for purposes of rating or routing a call, regardless of the type of service offered.

While Level 3's circuit switched traffic services may or may not include longer transport in its service than in traditional ILEC FX service (the cost of which is borne entirely by Level 3 and its customer), the fact is that what is offered from a functional perspective – a telephone number in a rate center where the customer is not present – is the same. In fact, CLECs offering the kinds of services provided by Level 3 here are doing so for the very same reasons that drove ILECs to offer FX services in the first instance – efficiency and customer demand. CLECs can just offer these services over greater distances because of the broader scope and efficiency of their networks. By contrast, the Bell Operating Companies such as SBC developed their networks when transport was relatively more expensive, and they were prohibited from offering anything other than intraLATA service by the MFJ.[25]

Q. ARE THERE OTHER WAYS IN WHICH SBC'S PROPOSED METHOD OF RATING CALLS COULD DISADVANTAGE LEVEL 3?

A. Yes. The language proposed by SBC would allow it to avoid paying reciprocal compensation that it is legally obligated to pay. There is absolutely no cost justification for this departure from the status quo. SBC's costs associated with an FX call to a Level 3 customer are identical to the costs associated with any local call

[25] Modification of Final Judgment or MFJ – *United States v Western Electric Co*, 552 F. Supp 131 (DDC 1982).

to a Level 3 customer. SBC's costs are limited to the cost of getting the calls to and from the POI, and remain the same regardless of the distance the traffic is carried beyond the POI.

Q. HAS LEVEL 3 OBTAINED COST INFORMATION FROM SBC MISSOURI TO PROVE THIS POINT?

A. Again, Level 3 has not received SBC's discovery responses in this proceeding, but it has sought this information in the Illinois arbitration. What follows is Level 3's Request No. 26 and SBC Illinois' response:

Request No. 26:

Please state whether it is SBC's position that its costs of originating a call to a Level 3 customer differ based upon the physical location of the Level 3 customer. For purposes of this question, please assume that the same point of interconnection is used to exchange all traffic with Level 3. If your response to the above question is anything other than an unequivocal "No," please provide all cost studies and other documentation in your possession supporting your position and/or relating to an analysis of SBC's purported costs.

SBC Illinois' Objections and Response:

SBC Illinois objects to this request on the grounds that it is overbroad and unduly burdensome. SBC Illinois further objects to this request on the grounds that it is premature and seeks information protected by the attorney-client, work product and/or other applicable privilege. SBC Illinois further objects on the ground that this request is vague and ambiguous. SBC Illinois further objects to this request on the ground that it seeks information that is not relevant to the subject matter of this proceeding nor reasonably likely to lead to the discovery of admissible evidence.

Although SBC Illinois refused to answer this simple question, I have never seen an ILEC response to this question that suggested that the costs differed based on the physical location of the called Level 3 customer. The reason that ILECs respond

in this manner is that if the POI location does not change, then the cost of getting a call to the POI is the same, regardless of the location of the customer.

Q. ARE YOU SUGGESTING THAT THE CALLING SCOPE OF THE FX SERVICE IS NOT AN IMPORTANT DISTINCTION FROM A COST OR POLICY PERSPECTIVE?

A. Yes. The point is that even though the manner in which Level 3 is offering this service may be "wider" in scope than traditional FX service, that is just because Level 3 and other CLECs have not faced the same historical limitations – either imposed upon or internally determined – as the ILECs. The Bell Operating Companies had technical, geographical and line of business restrictions in place for many years after divestiture. For instance, Level 3 has already learned from its discovery in the Illinois arbitration that SBC Illinois' FX services are intraLATA only services.[26] Those restrictions have largely been lifted now. The CLECs, which were not subject to the MFJ restrictions, expanded their networks based upon best in class technology and true cost drivers per their internal business plans – not artificial regulatory constraints.

Q. CAN YOU CONCEIVE OF ANY CIRCUMSTANCES WHERE THE PUBLIC INTEREST WOULD BE HARMED BY ALLOWING LEVEL 3 TO OFFER ITS SERVICE?

[26] See SBC Illinois Response to Level 3 Request No. 36.

A. Certainly not. During the past few years Level 3 has spent in excess of $13 billion on the deployment of its network without any support from captive monopoly ratepayers or an "allowed" rate of return. All of Level 3's customers were the result of its own marketing efforts, network deployment, and network management. Perhaps more importantly, if Level 3 fails in its market entry strategy in Missouri, Level 3's stockholders, and not consumers, will bear the burden of that failure. Consumers, however, will be negatively impacted because of the lack of competition. As such, consumers and the State have only an upside opportunity associated with Level 3's participation in the market. All Level 3 is asking is to be allowed to offer a service to compete with the services that SBC is already offering today.[27] It is consumers who should decide whether Level 3's services are providing benefits. Consumer choice should not be precluded by preventing competitive entry or by artificially increasing a competitor's costs.

Issue 4 – Using Interconnection Trunks for Internet Enabled Traffic[28]

Q. PLEASE INTRODUCE THIS ISSUE AND THE DISPUTE BETWEEN LEVEL 3 AND SBC.

A. IP-Enabled services, such as VoIP services, are becoming more common as they offer significant efficiencies from both an economic and network operations perspective.

[27] In response to Level 3 Request No. 27 in the Illinois arbitration, SBC Illinois stated, "There are three offering (sic) of FX service: Foreign District Service, Foreign Exchange Service, Foreign Central Office Service."

[28] Interconnection Trunking Requirements Appendix, Section 13.1; Intercarrier Compensation, Sections 3.1, 4.2, 4.5, 4.7-4.7.2.1, 7.1and 7.2. DPL Issues ITR 19 and IC 1, 8, 9 and 14.

SBC and Level 3 disagree on the proper regulatory treatment of these services. Level 3 urges the Arbitrator take the same "hands-off" approach to regulating these services, noting that this approach has been successful on an interim basis at the federal level. In contrast, SBC encourages the Arbitrator to impose access charges on this traffic.

Q. WHAT IS VOICE OVER INTERNET PROTOCOL OR "VOIP"?

A. The universe of IP-based or IP-Enabled services that include a voice capability are frequently referred to using the acronym of VoIP. VoIP technology allows voice communications to travel over the same network that carries Internet traffic and permits the voice communications to become integrated with numerous other capabilities and functionalities. Because voice data packets can be dispersed between other e-mail and web page traffic on the Internet, the process doesn't use as much bandwidth and makes phone calls essentially as cheap to transmit as e-mail.[29] Indeed, VoIP is a good example of the convergence of computers, telephones and television into a single and more efficient integrated information environment.

Q. HAVE SOME STATES RECOGNIZED THE POTENTIAL EFFICIENCIES AND SAVINGS THAT VOIP MIGHT PROVIDE?

A. Yes. A recently released California Performance Review noted that "Moving to VoIP could reduce the state's phone bill by between $20 million and $75 million a year."[30]

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[29] See Comments of VON Coalition in CC Docket No. 01-92, WC Dockets No. 02-361, 03-211, 03-266, 04-36; filed August 19, 2004, at page 2.

[30] "The ultimate goal of the California Performance Review is to restructure, reorganize and reform state government to make it more responsive to the needs of its citizens and business community. Only by demonstrating through concrete action the responsiveness of state government can the public's trust

An article on the review also referred to findings that "VoIP technology has competitive features that would benefit the state. Internet-based phone calling has built-in benefits such as integrated caller ID, flexibility and network management tools that provide real-time monitoring of bandwidth."[31]

Q. PLEASE DESCRIBE THE FUNDAMENTAL DIFFERENCES BETWEEN VOIP CALLS AND TYPICAL PSTN CALLS.

A. In the simplest of terms, VoIP is an information service application that uses the Internet backbone and discrete data packets to deliver real-time voice communications. Rather than voice information being transmitted across the traditional circuits of the PSTN, VoIP calls are made using Internet protocol, and the Internet backbone, or some other private IP network. This transmission of discrete data packets over the Internet rather than the transmission of normal analog or digital signals over the PSTN is one difference between VoIP and telecommunications services, but focusing on this difference in transmission would be an over simplification. It should be noted, however, that there is no single or standard VoIP service. VoIP calling, being IP-enabled, facilitates the introduction and integration all sorts of potential capabilities not present with PSTN circuit switched calls.[32] From

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and confidence be regained." http://cpr.ca.gov/about/#cpr. The entire report can be found on the Internet at http://www.report.cpr.ca.gov/. The quotation in the text above is from the fourth volume of that report, at SO15, Voice Over Internet Protocol Statewide Network Infrastructure.

31 See, "California Urged to Use Open Source, VoIP", c|net News.Com; August 13, 2004.

32 For instance, when you have a missed call on Vonage service, you get an email detailing the call information (time, calling number, etc.). The features and capabilities of VoIP services are many and expanding.

a regulatory perspective the IP-based capabilities distinguish VoIP – an information service -- from basic telecommunications services.

ILECs and CLECs alike are offering IP-Enabled services. For instance, SBC offers SBC PremierSERV Hosted IP Communication Service ("HIPCS") which is a fully hosted VoIP solution.[33] SBC would require Level 3 to create separate interconnection facilities solely for the purpose of exchanging IP-Enabled traffic with SBC. SBC seeks to do this so that it may easily collect non-cost-based access charges for IP-Enabled traffic. The Arbitrator should reject this approach, and adopt Level 3's proposed terms for interconnection, and maintain the status quo to prohibit SBC from collecting access charges on IP-Enabled traffic. When you examine the traffic, however, it is clear that access charges would not apply to such traffic. Access charges apply when a LEC local exchange customer completes a 1+ dialed toll call using a presubscribed long-distance carrier. The long distance carrier receives the revenue from the originating caller, and pays an "access charge" to the originating LEC for the costs incurred by the LEC in bringing that traffic to the long distance carrier. A VoIP call is completely different. In that circumstance, the originating LEC customer places a call to a Level 3 customer (or the customer of a Level 3 customer). There is no long distance carrier in the transaction, and Level 3 certainly does not collect money from the LEC's originating customer. Therefore, no access charges apply to that scenario.

[33] *See*, SBC's website for a complete description of HIPCS and other VoIP services.

CLECs, including Level 3, point to the emerging nature of this new technology and encourage the FCC and the state commissions to forbear from regulating these offerings. A detailed description of the differences between VoIP calls and PSTN calls is contained in Mr. Wilson's testimony.

Q. IS THERE ANY ECONOMIC JUSTIFICATION FOR TREATING LEVEL 3'S SERVICES FOR ESPs THAT PROVIDE VOIP APPLICATIONS LIKE TYPICAL TELEPHONE SERVICES?

A. No. These services do not impose any additional costs on the ILECs or their network. As such, treating these services as if they were traditional long distance telecommunications services, and imposing their associated access charges, would, inasmuch as ILECs already fully recover the costs of their networks, allow ILECs to over-recover such costs. Such a result would not only constitute a windfall for ILECs, but it would impede the natural efficiency of the market by unnecessarily burdening the development of new services and hindering their deployment. There is simply no economic justification for treating IP-Enabled services as if they are traditional services.

Q. HAS THE FCC STATED ANY POSITIONS REGARDING THE ECONOMIC IMPACT OF REGULATION OF VOIP?

A. Yes. FCC Chairman Powell maintained this support for leaving IP-Enabled services unregulated at the FCC Forum on Voice over Internet Protocol in Washington, where he was quoted as saying, "As one who believes unflinchingly in maintaining an Internet free from government regulation, I believe that IP-based services such as

VoIP should evolve in a regulation-free zone". Chairman Powell went on to caution regulators with respect to IP-Enabled services' regulation, saying "No regulator, either federal or state, should tread into this area without an absolutely compelling justification for doing so."[34] Chairman Powell's statements were part of a daylong forum to address business, technical, service feature and policy issues. More recently, Chairman Powell stated,

> The burden should be placed squarely on government to demonstrate why regulation is needed, rather than on innovators to explain why it is not."[35]

Q. CAN YOU DISCUSS FURTHER WHY THE "HANDS-OFF" APPROACH BY THE FCC HAS BEEN SO SUCCESSFUL?

A. Yes. By refraining from regulating technology, the FCC has eliminated the uncertainty that regulation sometimes imposes on the industry. This has allowed the capital markets and industry players to develop business plans and to invest capital to meet consumer demand.

It is very difficult for companies to develop products and technology when faced with a patchwork of regulatory requirements. The Balkanization of the regulatory landscape increases not only the costs of compliance – if what constitutes compliance can even be determined – but also embeds an unacceptable level of inefficiency resulting from an inability to achieve economies of scale – economies of

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[34] Opening Remarks of FCC Chairman Michael K. Powell at the FCC Forum on Voice over Internet Protocol (VoIP) December 1, 2003 – Washington, D.C.

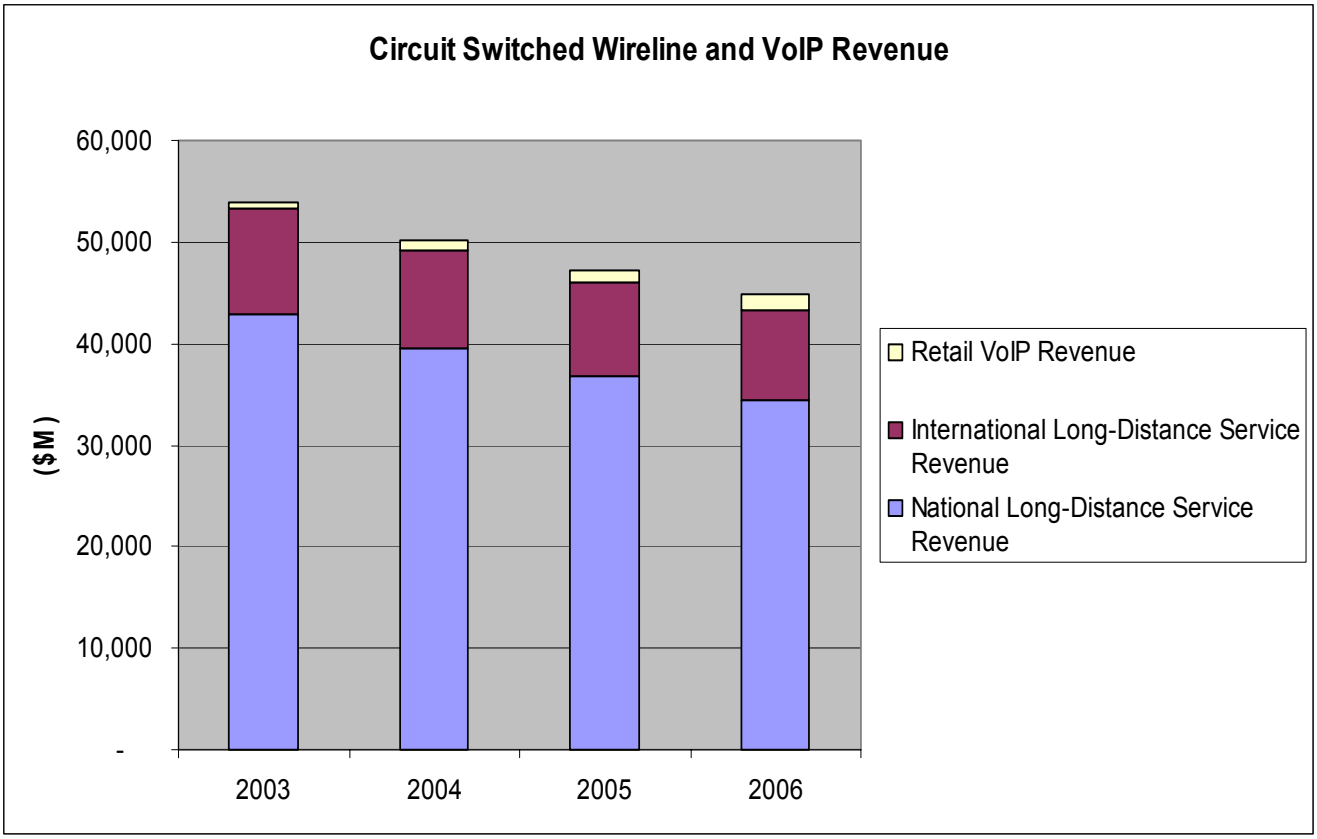
[35] *See*, US News & World Report, "Courting Calls – Telecom and Cable Firms Scramble to Offer Internet Calls"; by Mary Kathleen Flynn; Feb 2, 2004.

scale that the ILECs have enjoyed throughout their life cycle by virtue of their monopoly hold on the market. In other words, there should be one unified regulatory approach to VoIP services and technology, not a 50-state patchwork of regulation. The Federal approach has been very successful, so the states should seriously consider what benefits would derive from imposing multiple and perhaps wildly varying regulatory paradigms of their own. The impact to economic growth and jobs, as companies assess where to locate, shut down facilities and eliminate jobs, by adhering to the intransigent regime of the past as opposed to the flexibility afforded by Internet based applications such as VoIP, will be considerable. The Arbitrator should maintain Missouri's current policy of not applying access charges on IP-Enabled traffic until the FCC completes its investigations in the NPRMs (*Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92 and *IP-Enabled Services*, WC Docket No. 04-36, FCC 04-28).

Q. IS IP-ENABLED TRAFFIC A SIGNIFICANT PART OF THE TOTAL TRAFFIC IN THE UNITED STATES?

A. No. The chart below provides a forecast of revenue for various traffic types over the next few years, and as you can see, IP-enabled voice revenues are not a significant portion of the total. [36] Today, revenues from such traffic represents less than 5 percent of the combined total of interexchange telecommunications revenue and VoIP revenue.

[36] Gartner Group: *United States: Fixed Public Network Services*; April 2003.



So, while IP-Enabled traffic is getting significant attention today, the volumes and revenues associated with that traffic are not yet significant. Internet Protocol technologies are in their infancy from a market-penetration standpoint, and although they hold much promise, their market impact will be negligible in the foreseeable future.

Q. HOW MUCH VOIP TRAFFIC DOES SBC MISSOURI CARRY IN MISSOURI?

A. Level 3 has not yet obtained this information in discovery in this arbitration, but in its Revised Response to Level 3 Request No. 14 in the Illinois arbitration, SBC Illinois states, "SBC Illinois states that it has originated zero VoIP traffic minutes in both

2002 and 2003. SBC Illinois further states that it does not know the number of VoIP traffic minutes it terminated in 2002 or 2003." As such, despite SBC's public announcements regarding its intent to offer VoIP services throughout the country, including Chicago, it evidently has no such traffic in Illinois.[37] This is yet another confirmation that VoIP traffic and services, despite their exciting prospects, are not yet an important or significant part of the total traffic.

Q. WON'T ILECS BE HARMED BY NOT RECEIVING ACCESS CHARGES ON IP-ENABLED TRAFFIC?

A. No. First of all, as discussed above, the traffic to date is *de minimis*. Second, neither the ILECs' dire predictions of reduced local revenue (as market share shifts to VoIP providers), nor their dire predictions of all long distance traffic moving to VoIP to avoid access charges, even if they were correct, would justify common carrier regulation of IP-Enabled services. Moreover, as Verizon's Chief Executive Officer Seidenberg has stated: "Our view is to let cannibalization occur."[38] Seidenberg has said that while VoIP probably would reduce Verizon's local phone market share from 90% to 60%, Verizon plans to participate in VoIP both as a backbone provider and as an ISP, "meaning more revenue per customer."[39]

One ILEC, Qwest, recently supported the FCC's position against regulation of voice communications over the Internet. In an article dated December 5, 2003,

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37 It may be that SBC Illinois has not provided any VoIP traffic, but that its ISP affiliate – SBC IP Communications, Inc. – has. Perhaps more comprehensive discovery would have uncovered that fact.

38 Communications Daily, (June 20, 2001).

39 *Id.*

Qwest's CEO said, "…it would be inconsistent for the commission to regulate what's known as "voice over Internet protocol" (VoIP) service when similar services, such as telephone via cable connection and wireless phones, are not regulated." He went on to note that Qwest was launching its VoIP service in Minnesota and that VoIP could be more profitable to the company than traditional phone service, because it does not have the added costs of regulation.[40]

Q. HAVE ILECS ARGUED IN THE PAST THAT IN THE ABSENCE OF ACCESS CHARGE REVENUES RATEPAYERS WOULD BE NEGATIVELY IMPACTED?

A. Yes. The faulty premise of the previous RBOC argument has been that the impact of VoIP would negatively impact RBOC margins, resulting in the need for RBOCs to increase local rates. Today, however, the RBOCs are rapidly deploying VoIP services and embracing the new technology. Indeed, the RBOCs are supporting the FCC decision to not regulate these services, in part because of their offerings. Qwest and Verizon have announced development of a new network using VoIP. AT&T has rolled out an aggressive VoIP initiative. Time Warner Cable has said that it is teaming with MCI and Sprint to offer VoIP services nationally. As such, this is not just a niche market, but one that all providers – ILECs, CLECs, cable providers, etc. – are rushing to participate in. As the U. S. News and World Report article concluded, "The bottom line: Consumers and businesses stand to benefit from lower prices and a

[40] "Qwest Chief Backs Up FCC on Voice Over Internet"; Denver Post, Dec 5, 2003.

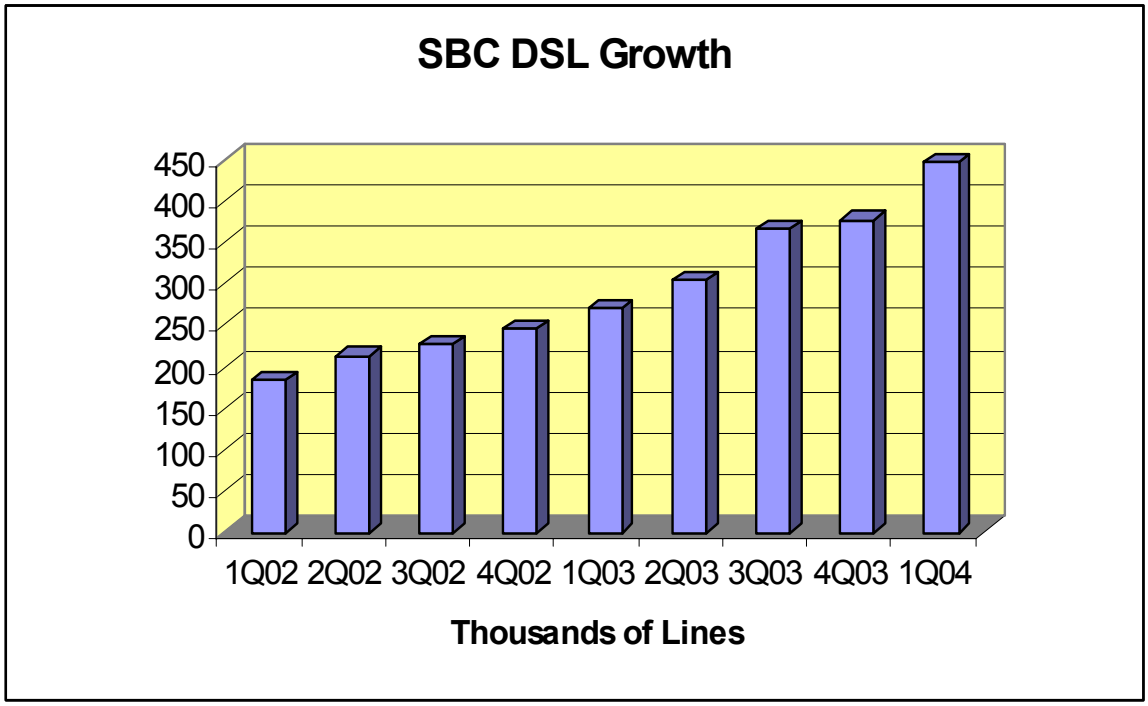
wide range of sophisticated features."[41] What is really occurring is SBC's attempt at maintaining its sinecure of unwarranted access revenue as a prop as it migrates itself to the IP platforms – the end result being a continuation of its predominant market position and the lack of competition.

Q. HOW IS IT POSSIBLE FOR VOIP TO CONTINUE TO DEVELOP, AND THRIVE WITHOUT CRIPPLING UNIVERSAL SERVICE?

A. Over the last few years, RBOCs have been the beneficiaries of gaining, for the first time, access to markets and associated revenues that have experienced tremendous growth. For example, as the graph below indicates SBC has experienced tremendous growth in DSL revenues achieving an increase of 446,000 DSL lines in the first quarter of this year, and a 60 percent increase over the previous 4 quarters.[42]

[41] *See*, US News & World Report, "Courting Calls – Telecom and Cable Firms Scramble to Offer Internet Calls"; by Mary Kathleen Flynn; Feb 2, 2004.

[42] SBC *Investor Briefing* Apr 20, 2004.
http://www.sbc.com/Investor/Financial/Earning_Info/docs/1Q_04_IB_FINAL.pdf.



In the most recent quarter, SBC reported a net increase of 402,000 DSL lines, its second highest quarterly increase ever. SBC ended the third quarter with 4.7 million total DSL lines in service.[43] SBC has also gained significant revenues in the wireless and long distance markets, adding nearly *10 million* new long distance lines over the past year to reach a total of 19.8 million long distance lines in service. Finally, RBOCs have seen the development of a significant wholesale market that was not present in the past with the entry of CLECs into the market that rely upon unbundled network elements in order to provide retail service to their customers. These markets represent new revenue streams to the RBOCs, which were heretofore not available to

[43] SBC Communications, Inc., 3rd Quarter Investor Briefing; October 21, 2004.

them.[44] Past RBOC arguments that "the sky would fall" without access charge revenues are therefore even less applicable today than they were in the past. Secondly, all of the preceding growth was based upon the ILEC's superior market position, subsidized and cemented by access revenues. Finally, as I have noted, VoIP, at least at this point in time, represents a miniscule portion of the market.

Q. EVEN THOUGH VOIP CURRENTLY REPRESENTS A SMALL PORTION OF THE MARKET, HAS SBC BENEFITED FROM GROWTH IN THIS AREA?

A. Absolutely; according to SBC's third quarter *Investor Briefing*, SBC's continued expansion of its portfolio of data solutions, (which include IP-enabled services such as VoIP), have achieved solid growth recently, growing 6.1 percent to $2.733 Billion and *representing nearly 30 percent of SBC's total wireline revenues* in the third quarter of 2004.[45] In fact, SBC has announced its role in the design and implementation of one of the nation's largest deployments of IP telephony for Ford Motor Company.[46] Not only is SBC experiencing increased revenues from new market opportunities, IP-enabled offerings are playing a significant role in contributing to those revenues.

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44 UNEs are providing a new revenue stream, but an often overlooked source of revenues comes from collocation. In the past the unused space in central offices was simply an expense. Today, however, collocation is a large revenue stream for the ILECs, with little or no accompanying cost. This revenue stream may increase in the future as UNE-P is phased out and carriers move to a UNE-loop environment.

45 SBC *Investor Briefing* October 21, 2004.

46 Id.

Q. IS THERE ANY REASON WHY VOIP AND OTHER IP-ENABLED OFFERINGS SHOULD NOT BE GIVEN THE FREEDOM TO DEVELOP?

A. No. The Internet, VoIP applications, wireless, fixed wireless and other developing technologies only increase the value local phone service. Today we are seeing significant investments in newer technologies (3G wireless, IP networks, IP CPE, PDAs, cable plant upgrades, automation and robotics, etc.) instead of continuing investment in the traditional circuit switched network.[47] These new investments and technologies are resulting in more efficient provisioning of service, new features and mobility, and flexibility in managing services and features. In fact, IP-Enabled services, with their integrated voice and data features, will make business and personal use of communications much more efficient. This new trend is adding value to the economy and consumers (residential and business alike) are enjoying new services and flexibility.

Q. WHY ARE VOIP, WIRELESS AND OTHER TECHNOLOGIES SO INTRIGUING TO CONSUMERS?

A. There are several reasons why consumers are attracted to these new offerings. These new services offer flexibility that a fixed wireline cannot offer and, as such, provide an important complement to wireline services. Wireless and VoIP services are portable so you can in effect take your service with you. In certain environments this is a significant benefit to consumers. Efficiency, which always entails a cost

[47] I am not suggesting that investment in the traditional PSTN has stopped. Investments continue to be made, including maintenance on existing plant in service; the new investments, however, are focusing on new technologies.

advantage, is also a consumer issue. Further, companies will enjoy savings and efficiencies through virtual call centers, reduced commuting costs as employees work more efficiently from home and the obvious savings that competition will bring.

Q. PLEASE SUMMARIZE YOUR TESTIMONY REGARDING THE REGULATION OF IP-ENABLED SERVICES.

A. The Arbitrator should adopt the same "hands off" policy that has been so successful in encouraging the development of Internet and other IP-based applications, including VoIP. Concurrently, the Arbitrator should reaffirm its commitment to competitors, especially competitors that serve the VoIP application community, that non-discriminatory, cost based, pro-competitive access to the network infrastructure of the ILECs will be vigorously promoted and enforced. Unless there is some specific need to regulate such offerings, they should be allowed to thrive or fail based on the market dynamics they face and create.

Issue 5 – Intercarrier (Reciprocal) Compensation[48]

Q. PLEASE SUMMARIZE THE DISPUTE BETWEEN THE PARTIES ON THIS ISSUE.

A. Once again, Level 3 asks that the Arbitrator resolve this issue by maintaining the status quo. For IP-Enabled traffic, Level 3 has proposed language that would defer to the FCC the decision on what is the appropriate compensation for IP-Enabled traffic. SBC has proposed language to be included in the interconnection agreement that

[48] Intercarrier Compensation, Sections 3.1, 3.6, 3.7, 4.7- 4.7.2.1, 7.1, 7.2, 12.1-12.6, 12.9, 14.1, 15.1 and 15.2. DPL Issues IC 1, 4, 6, 7, 9, 14, 19, 20, and 21.

would allow it to avoid its obligation under law to provide compensation to Level 3 for terminating local traffic originating with an SBC retail customer, while preserving SBC's ability to receive compensation from Level 3 for terminating local traffic originating with a Level 3 customer. Level 3's position is consistent with the provisions of the Act, in that section 251 (b)(5) of the Act imposes on each local exchange carrier the duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.

Q. WHAT ARE THE ECONOMIC RAMIFICATIONS OF SBC'S PROPOSED LANGUAGE?

A. The adoption of SBC's proposed language would be financially devastating to Level 3. As discussed previously, Level 3 has made significant investment decisions in the past based on a certain set of expectations. SBC's determination to change circumstances once these decisions have been made would jeopardize Level 3's ability to continue to operate in Missouri, and would therefore jeopardize Level 3's ability to even recover its costs. SBC's legal obligations are in place in order to prevent such occurrences which would devastate the competitive telecommunications market.

TIER 2 ARBITRATION ISSUES

Q. BEFORE ADDRESSING THE TIER 2 ISSUES, PLEASE DISCUSS THEM IN GENERAL.

A. These issues are red herrings. SBC, in its proposals regarding these issues, is not seeking to accomplish anything other than to create an environment that is unappealing to its competitors in order to maintain its monopoly dominance. For each of these issues, Level 3's language is fair and reasonable to both Parties in that Level 3 is willing to agree to reasonable language with respect to each of these issues that would protect SBC as well as Level 3. SBC, however, insists on interconnection agreement language that would allow SBC to unilaterally impose penalties or conditions upon Level 3 that are unreasonable, which would expose Level 3 to unnecessary risk and avoidable uncertainty, and would disrupt service to Missouri's consumers. I will briefly discuss each of these issues in more detail below.

Issue No. CHC 1 - Coordinated Hot Cuts

Q. WHAT IS THE PROPOSED LANGUAGE IN DISPUTE CONCERNING ISSUE CHC 1?

A. The language in dispute is the following, where SBC's language is shown in bold, italic and Level 3's language bold, underlined.

> **3. CHC PRICING**
>
> 3.1CHC is a time sensitive labor operation. Total charges are **TELRIC rates approved by the Commission and appended hereto.** ***determined by a number of factors including the volume of lines, day of the week, and the time of day requested for the cut over.***
>
> 3.2 When **LEVEL 3** orders CHC service, **SBC-13STATE** shall charge and **LEVEL 3** agrees to pay for CHC service **the TELRIC rates established by the relevant Commission.** ***at the "additional***

labor" or "Time and Material" rates set forth in the following applicable Tariffs or Appendix Pricing, Schedule of Prices:

3.2.1 SBC MIDWEST REGION 5-STATE - FCC No. 2 Access Services Tariff, Section 13.2.6 (c)

3.2.2 SBC NEVADA – PUCN, Section C13A, 13.2.6(c)

3.2.3 SBC CALIFORNIA – Access Tariff 175-T, Section 13.2.6(c)

3.2.4 SBC SOUTHWEST REGION 5-STATE – Appendix Pricing, Schedule of Prices, "Time and Materials Charges"
3.2.5 SBC CONNECTICUT – Connecticut Access Service Tariff, Section 18.1(3)

FN: **SBC-13STATE** will not charge the additional labor rate in a particular state in the **SBC MIDWEST 5-STATE** region until the effective non-recurring dockets: IL - 98-0396, IN - Cause 40611-S1, MI - U-11831, OH - 96-922-TP-UNC, and WI - 6720-TI-120, are superceded by that state's commission order approving new non-recurring UNE rates.

Q. WHAT IS A COORDINATED HOT CUT?

A. A coordinated hot cut ("CHC") is used when a CLEC needs to cut a customer to another loop within a very specific timeframe. For instance, if Level 3 wanted to use a SBC UNE-loop to serve a particular customer, then Level 3 and SBC would schedule a CHC to move the customer from its current provider to Level 3. A CHC is different from a batch hot cut in that the cut occurs at a specific time on a specific day to minimize the time that the customer might be out of service.

Q. PLEASE EXPLAIN LEVEL 3'S POSITION REGARDING ISSUE NO. CHC 1.

A. CHC services should be priced at the Commission-approved, TELRIC rates of the associated services. SBC's proposal would have the Arbitrator adopt language describing some nebulous, quasi-formula that could result in inconsistent charges varying by day, carrier and lines, rather than merely adopting prices approved by the Commission.

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF SBC'S POSITION WITH RESPECT TO ISSUE NO. CHC 1.

A. In the Joint DPL, SBC states that its costs of performing a hot cut are "covered by TELRIC-based rates as required for the provision of UNE elements." That said, SBC claims that it "allows CLECs to request that SBC provide *optional* coordination of the hot cut activity" that is not part of the actual provisioning of the CHC UNE. (See, SBC Position/Support, CHC DPL). Rates for this "optional" service are based on a time sensitive basis.

Q. HAS SBC PROVIDED COST INFORMATION RELATIVE TO ITS HOT CUT PROPOSAL?

A. No. From SBC's proposed language in Section 3 and the corresponding rates sheets, it is unclear as to SBC's rational for its rates. From the language offered in Section 3, it appears that SBC's rates for the "optional" service are <u>not</u> forward-looking, or TELRIC-based, but based on several time-sensitive variables. As such, Level 3 cannot fully assess SBC's proposal and corresponding rates, since SBC did not provide any justification for those rates.

Q. SINCE LEVEL 3 CANNOT FULLY ASSESS SBC'S PROPOSAL, PLEASE EXPLAIN WHY LEVEL 3 BELIEVES CHC SERVICES SHOULD BE BASED ON FORWARD-LOOKING, OR TELRIC, PRINCIPLES.

A. The Arbitrator should hold SBC to a strict interpretation of the FCC's TELRIC rules in setting hot cut prices for its processes. The Arbitrator must ensure that SBC's underlying TELRIC costs, and its resultant rates, comply with the FCC's forward looking, most efficient technology standards. In doing so, the Arbitrator should ignore the significant amounts of manual intervention typically inherent in SBC's processes, for which SBC will undoubtedly claim it must recover its costs. Instead, the Arbitrator must set rates based upon efficient systems and processes built around existing technologies capable of providing a more efficient, least cost hot cut process.

Q. WHEN THE FCC REFERENCES ITS "PRICING RULES FOR UNBUNDLED NETWORK ELEMENTS" IS IT REFERRING TO ITS TOTAL ELEMENT LONG RUN INCREMENTAL COST ("TELRIC") RULES?

A. Yes. The FCC is referencing Subpart F of its rules at Part 51 – *Interconnection* (specifically §51.505 - §51.511). These are the TELRIC rules which govern the proper manner by which costs should be estimated for unbundled network elements, and subsequently, how rates should be applied.

Q. DOES SBC'S RATE PROPOSAL COMPLY WITH THE FCC'S TELRIC STANDARD? PLEASE EXPLAIN.

A. No. From SBC's statements in the Joint DPL, SBC's rates are based on several, time-sensitive variables, which it claims do not have to be TELRIC compliant.

Q. HOW SHOULD THE ARBITRATOR RESOLVE ISSUE NO. CHC 1?

A. For the reasons outlined above, the Arbitrator should adopt Level 3's proposed language and reject SBC's proposed language in Section 3 of the CHC Appendix.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY

A. Yes. I reserve the right, however, to modify or supplement my testimony, as may be appropriate.

END OF TESTIMONY