BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Core Communications, Inc. for Arbitration of Interconnection Rates, Terms And Conditions with The United Telephone Company of Pennsylvania d/b/a Embarq Pennsylvania pursuant to 47 U.S.C. §252(b)	:	Docket No. A-310922F7002

DIRECT TESTIMONY OF EDWARD B. FOX EQ PA STATEMENT. 1.0

ON BEHALF OF
THE UNITED TELEPHONE COMPANY OF PENNSYLVANIA
D/B/A EMBARQ PENNSYLVANIA

Prefiled: April 27, 2007

Exhibit 21

DIRECT TESTIMONY
OF
EDWARD B. FOX
EQ PA STATEMENT NO. 1

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, business address, employer and position.

A. My name is Edward B. Fox. My business address is 5454 W. 110th St., Overland Park, Kansas 66211. I am employed by Embarq Management Company, which provides management services to The United Telephone Company of Pennsylvania d/b/a Embarq Pennsylvania ("United PA" or "Embarq PA"). I am employed in the Regulatory Policy department.

Q. Please describe your educational background and work experience.

A. I received a Masters of Business Administration from Ashland University in 1989 and a Bachelor of Science degree in History from Taylor University. In my current position, I am responsible for developing for Embarq state and federal regulatory policy and legislative policy regarding network interconnection and collocation issues. I am responsible for coordinating this policy across our multiple business units, i.e. business, consumer, wholesale, and Embarq's Competitive Local Exchange Carrier ("CLEC") operations. I have been in this position since January 2001. For the four years prior, I served as the Network Policy Manager for the local telecommunications division.

Between 1977 and 1996, I held positions in sales, marketing, competitive analysis, and product management within Embarq's local telecommunications division.

Q. Have you testified previously before any state regulatory commissions?

A. Yes. I have provided expert testimony on various interconnection issues before state regulatory commissions in Maryland, Pennsylvania, Massachusetts, Florida, Nevada, Texas, and Ohio. I have also participated in mediation sessions before the Pennsylvania Public Utility Commission, North Carolina Public Utilities Commission, and the Nevada Public Utilities Commission, and at the United States Court of Appeals for the Ninth Circuit involving interconnection matters. I have filed written testimony in Missouri and the District of Columbia.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your Direct Testimony?

A. My Direct Testimony will address each of the 10 issues denoted on the Issues Matrix that was filed with the Commission on March 6, 2007. My Direct Testimony will address the 10 issues *seriatim*. Embarq PA witness Ted Hart has also prepared Direct Testimony analyzing Core's traffic patterns relative to Core's request for intercarrier compensation and interconnection. Embarq PA witness Mike Maples will address Issue 8 related to VoIP and number porting. Embarq PA witness Kent Dickerson

will address the pricing of Entrance Facilities as associated with Issue 10.

Q. What exhibits accompany this Direct Testimony?

A. My Direct Testimony contains the following Exhibits:

- Exhibit EBF-1: Direct interconnection to Embarq PA from Pittsburgh.
- Exhibit EBF-2: Direct interconnection to Embarq PA from Core network within Embarq PA exchange territory.
- Exhibit EBF-3: Generic indirect interconnection diagram.
- Exhibit EBF-4: Diagram of Core's indirect routing of traffic to Embarq PA.

Q. Do you have any general observations to make regarding this proceeding and the nature of the issues in dispute?

A. Yes, I do. The Federal Communications Commission ("FCC") has categorized Core as the "poster boy of reciprocal compensation gamesmanship."[1] Embarq PA is experiencing Core's full-court-press of such gamesmanship with each position Core has raised in this proceeding. The FCC issued the *ISP Remand Order*[2] solely to correct the arbitrage and market distortions caused by carriers with business plans like Core's. Throughout

[1] *In the Matter of Petition of Core Communications, Inc. for Forbearance under 47 U.S.C. §160(c) From Rate Regulation Pursuant to §251(g) And for Forbearance from the Rate Averaging and Integration Regulation Pursuant to §254(g).* WC Docket No. 06-100. at 14.

[2] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, 16 FCC Rcd 9151, (2001) *("ISP Remand Order").*

the *ISP Remand Order,* the FCC describes situations where dial-up Internet usage has created market distortions and that the intent of the *ISP Remand Order* is to address and correct such distortions.[3] Core's positions characteristically signify arbitrage with respect to both intercarrier compensation and interconnection (*i.e.* transport obligations). Essentially, Core's positions in this case have the effect of advancing these market distortions rather than following the law and general industry standards that as have been established in the areas of intercarrier compensation and interconnection. To be clear, Embarq PA is not opposed to paying fair compensation and incurring fair expenses as required by federal law. However, Embarq PA simply cannot accept Core's baseless regulatory and legal claims that it be paid terminating compensation for VNXX-enabled services that are clearly NOT eligible for terminating compensation. Generally, Embarq PA has no issue with the dial-up service that Core and other CLECs provide, in conjunction with their ISP customers. However, Embarq PA does have serious objection to any CLEC, such as Core, desiring to fund and subsidize their ISP business through inappropriate intercarrier compensation structures and network architecture arrangements.

[3] *See*, for example, *ISP Remand Order*, ¶¶ 4, 5, 7, 21, 29, 52, 66, 71, 77.

Core explains at its web ste: "CoreTel is a CLEC dedicated to ISP services. We know the ISP market. In business since 1997, our telephone network is designed to answer ISP calls to save costs. We do not sell to end users directly, only to ISPs."[4] Therefore, it is not surprising that Core's arguments in this arbitration are designed to benefit its ISP-centric business and its ISP customers at the expense of the wireline provider of last resort, Embarq PA. When Core takes that business model and proposes to garner intercarrier compensation and impose costs on Embarq PA associated with Core's interconnection proposals, then I fully understand why the FCC has refered to Core as the "poster boy of reciprocal compensation gamesmanship."

Issue 1 – Definition: "Local Traffic" versus "Section 251(b)(5) Traffic"

Q. Please describe the issue.

A. At the heart of this issue is how traffic eligible for reciprocal compensation shall be defined. This definition is used in the interconnection agreement to qualify the traffic that would be subject to reciprocal compensation. The terminology of "Local Traffic" or "Section 251(b)(5) Traffic" is not as relevant and important as to how the term is defined. Whether the term "251(b)(5) Traffic" or "Local Traffic" is utilized in the agreement, it is imperative that the term is defined as "any traffic that physically originates

[4] http://www.coretel.net/service_managed-modem.html.

and terminates within Embarq PA's local calling area, including mandatory EAS, excluding VNXX traffic". In other words, the term ultimately used in the interconnection agreement for determining the traffic subject to reciprocal compensation cannot include any traffic that physically originates and terminates outside of Embarq PA's local calling area, such as VNXX-enabled traffic. Embarq PA is amenable to using the term "251(b)(5) Traffic" instead of "Local Traffic" so long as the definition requires "traffic that physically originates and terminates within Embarq PA's local calling area, including mandatory EAS" and explicitly excludes VNXX-enabled traffic.

Q. Please explain the impact of the FCC's ISP Remand Order with respect intercarrier compensation?

A. When discussing intercarrier compensation issues regarding 251(b)(5) traffic and ISP-bound traffic, it is important to understand the FCC's *ISP Remand Order*. Upon release of the *ISP Remand Order*, the FCC in that order clearly recognized that the then-current intercarrier compensation regime was creating distorted economic incentives for CLECs to target ISPs as customers simply for the reciprocal compensation revenue. The FCC's purpose in releasing the *ISP Remand Order* was to curb or eliminate those arbitrage incentives. In the *ISP Remand Order*, the FCC found that Section 251(b)(5) imposes a duty on all LECs to establish reciprocal compensation arrangements for the transport and termination of telecommunications. However, it also recognized that Section 251(g) serves as a limitation on the

scope of "telecommunications" under 251(b)(5) and excludes certain access services (including ISP-bound) from reciprocal compensation requirements found in 251(b). Ultimately, in an effort to reduce the arbitrage opportunities associated with compensating highly out-of-balance traffic, the FCC found that ISP-bound traffic is predominantly interstate traffic under the jurisdiction of the FCC subject to Section 201, essentially establishing as the FCC's duty to create the appropriate cost recovery mechanism for this ISP traffic.

Q. Please explain the how the FCC's ISP Remand Order establishes a relationship between 251(b)(5) traffic and ISP-bound traffic?

A. When the FCC established a phase-down rate for ISP-bound traffic, it also created a "mirroring rule" that essentially requires ILECs who choose to opt into the FCC's ISP intercarrier compensation regime, on a state by state basis, to also offer the lower compensation rate, currently $.0007, for all 251(b)(5) (non-VNXX-enabled) traffic exchanged with other carriers. In other words, to the extent a CLEC, such as Core, accepts Embarq PA's opt-in offer, the $.0007 rate would not only apply to non-VNXX-enabled ISP-bound traffic that Embarq sends to Core, it also applies to voice traffic that originates and terminates within Embarq PA's local calling area. Therefore, the same compensation rate can apply to both 251(b)(5) traffic and local ISP-bound traffic as a result of the mirroring rule.

Q. ***Why is Core's definition inappropriate?***

A. In a desire to generate large volumes of terminating compensation revenue, Core broadly includes all "telecommunications traffic exchanged" between Embarq PA and Core (with limited exceptions), but that definition does not further distinguish traffic subject to reciprocal compensation based upon the origination and termination points of such traffic. By crafting such a broad and non-specific term, Core's proposed definition of 251(b)(5) traffic sweeps in VNXX-enabled ISP-bound traffic and thus remains contrary to the FCC's *ISP Remand Order*.

For example, Core claims its customers include ITSPs, ISPs, IVR providers, interconnect vendors, PBX installers, and fax bureaus. Futhermore, Core claims they have put much effort and resources into product development and into its network and expects to widely deploy VoIP technology in the future.[5] With the possible expansion of Core's product line and network, this underscores the need for clarity regarding what traffic types are eligible for reciprocal compensation. As Embarq PA witness Ted Hart describes in his Direct Testimony, Core uses VNXXs to serve ISP aggregators. When the definition sought by Core is applied to Core's VNXX-enabled traffic, Core's proposed definition would inaccurately shift intercarrier compensation

[5] *Application of Core Communications, Inc. for authority to amend its existing Certificate of Public Convenience and necessity and to expand Core's Pennsylvania operations to include the provision of competitive residential and business local exchange telecommunications services throughout the Commonwealth of Pennsylvania.* A-310922F0002, AmA. Mingo Direct Testimony p. 3 (lines 1-11).

obligation to Embarq PA, advancing the arbitrage scheme that the FCC's *ISP Remand Order* intended to eliminate.

Q. Is Embarq PA's proposed definition consistent with Pennsylvania law?

A. Yes. In Pennsylvania, traffic types are defined by the geographical end points of the calling and called parties. For example, while I am not an attorney, I review Act 183 and note that it defines "local exchange telecommunications service" as the transmission of messages or communications that "originate and termination within a prescribed local calling area." 66 Pa.C.S. §3012. Similarly, interexchange services are defined in Act 183, which was enacted in November 2004, as the transmission of interLATA or intraLATA toll messages and data "outside the local calling area." 66 Pa.C.S. §3012. Embarq PA's definition of "Local Traffic" includes only traffic that both physically originates and physically terminates within the same Embarq PA mandatory local calling area. Embarq PA's definition, therefore, specifically excludes VNXX-enabled ISP-bound traffic. Simply put, at issue is whether Embarq PA should pay Core $.0007/MOU for non-local VNXX-enabled ISP-bound traffic or whether Core should pay Embarq PA originating access when Core utilizes VNXXs to provision and terminate non-local ISP-bound traffic.

Embarq PA's proposed definition very closely parallels both the 1st Circuit Court (as addressed below in Issue 9) and Act 183 (as quoted above).

Embarq PA's proposed language reads:

> "251(b)(5) Traffic" for the purposes of this Agreement the Parties shall agree that "251(b)(5) Traffic" means traffic (excluding Commercial Mobile Radio Service "CMRS" traffic) that is originated and terminated within Embarq's local calling area, or mandatory extended area service (EAS) area, as defined by the Commission or, if not defined by the Commission, then as defined in existing Embarq Tariffs. For this purpose, Local Traffic does not include any VNXX-enabled ISP-Bound Traffic.

Issue 2 – Dual POI

Q. Please describe the issue.

A. In succinct terms, this issue is about: (a) where the parties' networks interconnect for the exchange of 251(b)(5) traffic; (b) which party is financially responsible for the transport facility that connects the networks; and (c) whether transport costs are improperly shifted from one contracting party to another.

Q. Please provide Embarq PA's position regarding this issue.

A. 251(c)(2) of the 1996 Telecom Act states that the ILEC has the "duty to provide for the facilities and equipment of any requesting telecommunications carrier … for interconnection with the local exchange carrier's network … for the transmission and routing of telephone exchange service and exchange access … at any technically feasible point within the

carrier's network." (emphasis added). Implementation of Section 251(c)(2) generally means competitive carriers such as CLECs and CMRS carriers will provision transport to directly connect its network to the ILEC's network at any technically feasible point. This point of interconnection ("POI") is where traffic is physically exchanged and is typically at the ILEC's central office. In addition to the location where traffic is physically exchanged, the POI, also establishes the technical interface, the test point, and the operational responsibility hand-off between a CLEC and an ILEC for the local interconnection of their networks.

In order to establish efficient network arrangements, Embarq PA proposes that Core establish one POI per LATA on Embarq PA's network. There are four tandems and three LATAs in Embarq PA's territory. The most efficient network architecture arrangements dictate that Core establish a POI at each of the four tandems. (There is one LATA, namely Carlisle/Chambersburg (LATA 226), with two tandems. Core would need to establish a POI on each tandem. See Embarq PA proposed §54.2.1.1.

Once the POIs are established, each party has financial responsibility for the facilities and equipment on its side of the POI. For example, Core may desire to connect to Embarq PA at Butler from its Pittsburgh network location. This transport facility will terminate in Embarq PA's Butler central office trunk ports. I have included an attachment that illustrates this

direct connection between the networks. (See attached Exhibit EBF-1.) In the event that Core installs network equipment within the Embarq PA exchange where Core wishes to directly interconnect, then the connection would be accomplished by Core's Entrance Facility which is illustrated in attached Exhibit EBF-2.

Finally, it is very important to recognize that Embarq PA's willingness to assume the costs of transmission facilities on its side of the POI only apply to Local Traffic/251(b)(5) traffic, including local ISP-traffic. In other words, any traffic that Embarq PA sends to Core which is VNXX-enabled, is subject to originating access rates. Therefore, the originating access rates paid to Embarq PA by Core for this VNXX-enabled traffic will compensate Embarq PA for the transmission facilities that carry Core's VNXX-enabled traffic to the POI.

Q. How do you reconcile Core's porting of numbers out of rate centers, as Embarq PA witness Maples testified, with your recommendation for Core to establish a POI per tandem on Embarq PA's network?

A. Core has ported numbers out of the rate center, as discussed by Embarq PA witness Mike Maples. If the Pennsylvania Commission adopts Embarq PA's position and proposed ICA (i.e., all of §54) as address at Issue 2 then Core's porting of numbers out of the rate centers becomes a moot issue from my view.

Q. What has Core proposed regarding network architecture arrangements?

A. Instead of establishing a POI at each Embarq PA tandem, Core has proposed a dual-POI scenario with the ultimate goal of shifting the cost of the facility connecting the two networks onto Embarq PA. Under Core's dual-POI approach, each party is responsible for transporting its originated traffic to a POI(s) located on the terminating carrier's network. For example, based on the current balance of traffic, Core's proposal would force Embarq PA to shoulder all transport costs to deliver the one-way ISP-bound traffic to Core's network that are physically located outside of Embarq PA's serving territory. Given that Core is not in the business of originating traffic, it is not surprising that Core would advocate this dual-POI proposal in an effort to avoid financial responsibility for any transport.

As long as Core continues to generate its VNXX-enabled ISP-bound traffic within a dual-POI environment it will *never* spend a cent on transport. In other words, as long as Core continues to never originate traffic, under its proposal it will never need to establish a POI on any carrier's network!

Q. Why is Core's dual POI proposal unsustainable?

A. From a regulatory policy standpoint, its proposal is unsustainable. First, Core's switches are located at Verizon (the incumbent local exchange carrier) tandems.[6] Because Core serves ISPs and terminates infinitely out-of-balance

[6] See, Core Response to Embarq PA Set I-1 "Core states that each Core switch in Pennsylvania subtends the closest Verizon access tandem (which in each case is located within a few miles from

ISP-bound traffic, Core's proposal, if approved, would force Embarq PA to bear all costs of hauling its information access, VNXX-enabled traffic to a distant point beyond Embarq PA's franchised territory. The Telecom Act requires ILECs to provide interconnection at any technically feasible point within the ILEC's network. 47 U.S.C §251(c). Obviously, Section 251(c) requires some effort and investment by the CLEC to provision transport *to the ILEC's network.* Essentially, Core's dual-POI proposal foists all transport costs onto Embarq PA and would create extremely burdensome and unnecessary costs for Embarq PA – particularly in light of the fact that other carriers can opt-in to Embarq PA's resulting agreement with Core. This is yet another example of Core establishing itself as the "poster boy of reciprocal compensation gamesmanship". Specifically, this is a form of regulatory arbitrage where Core "games" the Act's network architecture requirements which are designed for the "mutual exchange of traffic," in an effort to shift 100% of the transport costs onto Embarq PA.

Core's position also runs afoul of precedent. Both Pennsylvania Commission and federal law (including case law) that I have reviewed support the POI being physically located on the ILEC's network. While a CLEC gets to choose the location of a POI (subject to technical feasibility), the CLEC is not permitted to designate a POI that is not on the ILEC's network.[7] The

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Core's switch)."

[7] *Petition of US LEC of Pennsylvania, Inc. for Arbitration with Verizon Pennsylvania Inc. Pursuant*

originating carrier's obligation to transport traffic to the terminating carrier ends at the POI located on the ILEC network. The other undeniable fact is that Core's dual POI proposal would have Embarq PA haul Core's arbitrage-creating VNXX-enabled information access (see, *ISP Remand Order* ¶44) traffic to a distant switching point located in Verizon's service territory. As further addressed in Issue 8 below, Core's traffic is simply non-compensable under the *ISP Remand Order*.

Q. Please estimate the financial impact to Embarq PA of Core's dual POI proposal?

A. Embarq PA would be required to lease a very substantial amount of bandwidth between its tandems and Core's network. The cost to Embarq PA for these connections is estimated to be well over $800,000 annually. If Core's dual-POI proposal is approved by the Commission, the consequences would be financially dire given the tremendous volumes of ISP-bound traffic that Core continues to terminate, as well as the fact that other carriers can require Embarq PA to provision its network in the same fashion.

Q. Why should Embarq PA's language be adopted by the Commission?

A. Embarq PA's POI proposal – that requires a POI at each Embarq PA tandem

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to Section 252(b) of the Telecommunications Act of 1996, Docket No. A-310814F7000, Opinion and Order entered April 18, 2003; *Petition of US LEC of Pennsylvania, Inc. for Arbitration with Verizon Pennsylvania Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996,* Docket No. A-310814F7000, Opinion and Order entered October 7, 2003. *See also, Petition of US LEC of Pennsylvania, Inc. for Arbitration with Verizon Pennsylvania Inc. pursuant to Section 252(b) of the Telecommunications Act of 1996,* Docket No. A-310814F7000, Opinion and Order entered January 18, 2006.

in the LATA in conjunction with its receipt of originating access compensation for VNXX-enabled traffic – ensures that Embarq PA is not financially penalized and essentially subsidizing Core operations and focus on serving ISP customers. Embarq PA's proposal is not only consistent from a public policy perspective, but is also consistent with state decisions and relevant court decisions regarding ISP-bound traffic. As this Commission recently concluded,

> While parties are not prohibited from mutually agreeing to locating a POI outside the ILEC's network, the Commission reiterated that "the FCC's binding regulation at 47 C.F.R. § 51.305(a)(2) specifies that the POI must be 'within the incumbent LEC's network.'."[8]

Issue 3 – Interconnection Methods

Q. Please describe the issue.

A. This issue stems from Core's dual POI position in Issue 2. Core deleted two sections (§54.2.1.5 and §54.2.1.6) of Embarq PA's proposed contract language without proposing any alternate language, and added new language in §54.4. Embarq PA and Core subsequently negotiated agreeable language to §54.2.1.6 and that section is not disputed. However, because Core has advanced that both parties should be responsible for establishing

[8] *See, Petition of US LEC of Pennsylvania, Inc. for Arbitration with Verizon Pennsylvania, Inc. Pursuant to Section 252 of the Telecommunications Act of 1996,* Docket No. A-310814F7000, Order entered January 18, 2006.

their own POI on the other party's network (Issue 2), Core opposes §54.2.1.5 as it contains language of only one POI between the parties located on the ILEC's network. Core proposed a lengthy description in §54.4 of the various interconnection methods that either party could use to deliver its traffic to the other party's network is simply consistent with Core's views on Issue 2.

Q. Do you agree with Core's proposed language changes?

A. No. As I addressed in discussing Core's dual POI proposal (Issue 2), Core is attempting to force Embarq PA to pay the transport associated with Core's traffic all the way to Core's network that is outside of our territory. Core's various "interconnection methods" are the means by which Core's dual POI concept is implemented. And, as I stated above in Issue 2, the interconnection methods proposed are nothing more than cost shifting to Embarq PA. Core's proposed deletion of §54.2.1.5 would relieve Core of the requirement to comport with the FCC's rules requiring interconnection to occur within the ILEC's network. Similarly, Core's proposed language in §54.4 would subject Embarq PA to terms and conditions that go beyond the requirements of the FCC's interconnection rules. *See e.g.* 47 CFR 51.305(a)(2) "An incumbent LEC shall provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the incumbent LEC's network: (1) For the transmission and routing of telephone exchange traffic, exchange access traffic, or both; (2) At any technically feasible point within the incumbent LEC's network"

Q. What is Embarq PA's proposed language?

A. Embarq PA §54.2.1.5 reads, "If third party (*i.e.,* Competitive Access Provider or "CAP") leased facilities are used for interconnection, the POI will be defined as the Embarq [Embarq PA] office in which the third party's leased circuit terminates." This language is consistent with the requirement that the POI is on the ILEC's network.

Q. Are you recommending that the presiding Judge and the Commission reject Core's proposed language changes on Issue 3?

A. Yes. In addition to the reasons set forth in Issue 2 above, as incorporated here, the general concept of interconnection/collocation in various ways as Core proposes in §54.4 is already found in the agreement and has never been disputed by Core. Specifically, Core's proposed interconnection methods is duplicative of: (i) collocation – at Part L (Collocation); (ii) shared collocation at 79.3; and (iii) Entrance Facility use, as found in the recently agreed-upon language at 1.51 (definitions) and the corresponding language at found in §54.2.1.6. However, the existing language that I have just referenced only addresses interconnection/collocation by Core on Embarq PA's network, which is consistent with the FCC's interconnection rules. In contrast, Core's proposed language in §54.4 requires Embarq PA to pick any of the same interconnection options described in (i) (ii) (iii) above, except Embarq PA would be required to collocate at a Core central office or have the option of leasing an entrance transport facility from Core. This third

option, of course, depends upon Core actually owning some transport assets. All these options would be at rates found in the pricing attachment in this agreement. All of these options are related solely to Core's proposed dual POI argument, which is completely inconsistent with the FCC's interconnection requirements. Consequently, just as the Commission should reject Core's dual POI language and should accept Embarq PA's proposed language under Issue 2, Core's proposed language for Issue 3 should be rejected and Embarq PA's proposed language should be adopted.

Issue 4 - Loop Interconnection

Q. Please describe the issue.

A. In the event that Core has its network equipment located within the Embarq PA exchange where it desires to exchange traffic, based upon Core's proposed language and the Joint Issue matrix, Core apparently believes it is entitled to interconnection at a "retail" or "loop" location, i.e. an outside plant location. Meanwhile, Core maintains its dual POI position in this request by suggesting that Core's POI is wherever its equipment is located and that Embarq PA still has the obligation to connect to them. Core proposes that if (i) its switch is at a physical location in our territory and (ii) where Embarq PA is already serving retail customers and (iii) if we have network capacity that meets Core's interconnection requirements, then Embarq PA must guarantee a 30 day activation interval. And, if inadequate

facilities exist at said location, then Embarq PA must guarantee a 60 day activation interval.

Q. ***Why is Core's proposal unsustainable from a regulatory policy perspective?***

A. First, Embarq PA has demonstrated in Issue 2 that Core must build its network to our tandem switches in order to exchange traffic. Second, the FCC has found that transmission links "that simply connect a competing carrier's network to the ILEC's network are not inherently a part of the ILEC's local network. Rather, they are transmission facilities that exist outside the ILEC's local network."[9] Core's request that it is "interconnected" at an outside plant location does not meet these requirements.

[9] TRO ¶366, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*; Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17145, para. 278 (2003) (Triennial Review Order), corrected by Errata, 18 FCC Rcd 19020 (2003) (Triennial Review Order Errata), vacated and remanded in part, affirmed in part, *United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (USTA II) cert. denied, 125 S.Ct. 313, 316, 345 (2004).

Q. Is Core's language necessary or appropriate?

A. No, it is not. First, the parties have already agreed in §54.2.1.6 and in the definitions at §1.51 that when Core has a physical network presence within Embarq PA's territory within each LATA, and when Core desires to establish a direct interconnection on Embarq PA's network, then Core may order an Entrance Facility. Second, Embarq PA has a parity obligation for provisioning service for all requesting CLECs. Each CLEC is unique in its network location, design, and technical requirements and unique in its business requirements. Accordingly, each interconnection request is evaluated on its own merits and cannot be subject to the rigid timelines proposed by Core. As part the interconnection implementation process, Embarq PA communicates closely with each CLEC about factors that affect installation intervals, such as existing network capacity, future expansion plans, interface requirements for a particular request, etc. Embarq PA has the obligation to treat each CLEC at parity to the extent it is reasonably possible. Consequently, it would be unreasonable and unworkable for Embarq PA to be subject to specific installation intervals for one CLEC when all other CLECs have appropriately flexible intervals for interconnection.

Q: How should the Commission decide Issue 4?

A: The Commission should reject Core's proposed "Loop Interconnection" language in §54.4.

Issue 5 -- Geographic Comparable Serving Areas and Symmetrical Rates for Tandem v. End Office Rates for Transport and Termination.

Q. Please explain the issue.

A. This issue is about differences in language within §51.1.1.2 and §51.1.1.3. The FCC rules establish that a CLEC is entitled to tandem switching rates for call completion if its switch serves a geographically comparable area to Embarq PA's tandem. *See, e.g.*, 47 C.F.R 51.711(a)(3). Embarq PA's proposed language required Core to be connected at the tandem in order for the tandem rate to apply. Core posits that, as long as its switch serves a geographically comparable area to our tandem, it may be interconnected at either the tandem or at a subtending end office and still receive the tandem rate for call completion.

Q. Please succinctly describe the scope and magnitude of this issue.

A. Embarq PA has opted-into the FCC's *ISP Remand Order*. Given that, it is important to point out that this issue only applies to traffic not subject to the *ISP Remand Order's* $.0007/MOU rate. Therefore, if Core accepts Embarq PA's opt-in offer, all local voice and non-VNXX-enabled ISP-bound traffic

exchanged by the carriers will be subject to the FCC's $.0007/MOU rate. This tandem switching rate issue then becomes a moot issue. At most, to the extent Core rejects Embarq PA's offer, the only traffic that this issue even applies to is any Embarq PA-originated local voice traffic that falls below the 3:1 ratio. It is also important to recognize that there will never be any volume of minutes below a 3:1 ratio until Core start originating some traffic.

Q. Does Embarq PA propose a solution for this issue?

A. Yes. Because of the insignificant financial impact of issue, Embarq PA will concede, to the extent Core rejects Embarq PA's opt-in offer **and** to extent there is any non-ISP-bound traffic below a 3:1 ratio, Core may be interconnected at either our tandem or our end office in order to receive the tandem switching rate for call completion provided Core's switch serves a comparable geographic area.

Q. How should the resulting ICA language read for Issue 5?

A. The ICA language in §51.1.1.2 and §51.1.1.3 is set forth as follows:

> 51.1.1.2 When the POI is at the Embarq Tandem Switch, CLEC shall pay a charge for Tandem Switching, common transport to the end office and end-office termination.
>
> 55.1.1.3 Charges billed to Embarq by CLEC for the transport and termination of Section 251(b)(5) Traffic will be equal to those that Embarq assesses the CLEC for the same services. Where the CLEC switch serves a geographical area greater than or equal to the area

served by the Embarq tandem, Embarq shall pay CLEC for Tandem Switching, common transport, and end-office termination. If the CLEC switch serves a geographical area less than the area served by the Embarq tandem, Embarq shall pay CLEC end-office termination.

Issue 6 – Reciprocal Compensation for "Section 251(b)(5) Traffic" and

Issue 7 – Intercarrier compensation for ISP-bound traffic

Q. Please explain the basis for these disputed issues.

A. In a nutshell, Embarq PA and Core have radically different interpretations and applications of the FCC's *ISP Remand Order*. For example, Embarq PA and Core have differing viewpoints regarding the appropriate implementation of the FCC's mirroring rule, which ultimately have implications to both Issue 6 and Issue 7. Because Embarq PA believes that Issue 6 and Issue 7 are correlated due to the FCC's *ISP Remand Order*, Embarq PA addresses both issues directly below.

Q. Please describe Embarq PA's interpretation of the FCC's mirroring rule.

A. As discussed in Issue 1, the FCC created a "mirroring rule" in the *ISP Remand Order*. The FCC's mirroring rule impacts the rates applicable to Local/251(b)(5) traffic to the extent a carrier, such as Core, accepts Embarq PA's opt-in offer to exchange all Local/251(b)(5) traffic at the FCC rate ($.0007/MOU). In other words, to the extent Core accepts Embarq PA's opt-

in offer, the $.0007 rate (as opposed to the reciprocal compensation rates found in the pricing attachment) would not only apply to any non-VNXX-enabled ISP-bound traffic that Embarq PA sends to Core, it also would apply to any other Local/251(b)(5) traffic (voice traffic) that originates and terminates within Embarq PA's local calling area. Therefore, the same compensation rate can apply to both 251(b)(5) traffic and local ISP-bound traffic as a result of the mirroring rule and there is no need to distinguish local voice traffic from local ISP-bound traffic.

Q. What rates apply if Core rejects Embarq PA's offer to exchange all 251(b)(5) Traffic and local ISP-bound traffic at the FCC rate?

A. To the extent Core rejects Embarq PA's opt-in offer, not all 251(b)(5) Traffic and local ISP-bound traffic are exchanged at the $.0007 rate. Instead, it becomes necessary to determine the volume of ISP-bound minutes and the volume of local voice minutes exchanged. The ISP-bound minutes will still be compensated at the $.0007 rate, but the local voice minutes are subject to the reciprocal compensation rates in the pricing attachment to the ICA.

Q. How does Embarq PA determine what portion of traffic is Local Traffic/251(b)(5) Traffic versus local ISP-bound traffic?

A. Embarq PA may perform either a detailed traffic analysis, which it has done and is described in detail in Embarq PA witness Ted Hart's Direct

Testimony, or calculate the ISP-bound traffic using the a 3:1 ratio set forth by the FCC in the *ISP Remand Order*. Specifically, any local traffic Embarq PA sends to Core that exceeds three times the volume of local minutes that Core sends to Embarq PA is presumed to be ISP-bound.

Q. Please describe Core's interpretation and application, as you understand it, of the FCC's mirroring rule.

A. In an effort to maximize its revenue stream associated with VNXX-enabled ISP-bound traffic, Core appears to have interpreted the FCC's mirroring rule in an outlandish and completely self-serving manner. It is Embarq PA's understanding that Core views the FCC's mirroring rule to enable two mutually exclusive compensation plans may be in effect at the same time, with one plan applying to Embarq PA, and the other plan applying to Core. Under the plan applicable to Core, Core would be able to charge the higher reciprocal compensation rate (nearly $.01 per MOU) to Embarq PA for all traffic that Core terminates and Embarq PA would charge Core a rate of $.0007 for terminating Core's traffic. Core's position appears to be that even though Embarq PA has opted into the FCC compensation scheme, Core has the option to choose to be compensated at higher reciprocal compensation rates. This interpretation is nothing short of unbelievable and ridiculous.

Q. What language did Core propose that, in your view, provides some indication of Core's interpretation of the FCC's mirroring rule?

A. While it is best to see how Core explains its position in its Direct Testimony, Core's proposed ICA language does offer some indication of Core's position with regard to how reciprocal compensation rates are to be applied per the FCC's mirroring rule. Core applies its interpretation and methodology in the language it proposed for the "Reciprocal Compensation for Section 251(b)(5) Traffic" (Issue 6) and in the language proposed for "Intercarrier Compensation for ISP-Bound Traffic" (Issue 7). Core states that if Embarq PA opts-in to the *ISP Remand Order*, compensation for ISP-bound traffic and local/251(b)(5) traffic that Embarq PA charges for traffic termination shall be capped at the .0007 rate. Core then states, "However, the rates Core charges for termination of Section 251(b)(5) Traffic shall **not** (emphasis added) be so capped." Core's proposed language further states that if the *ISP Remand Order* is overturned, found to be inapplicable, or Embarq PA does not elect to exchange all traffic at the *ISP Remand Order* rates, then ISP-Bound Traffic shall be treated the same as 251(b)(5) Traffic.

There is no language in the *ISP Remand Order* or in the FCC's Order concerning Core's Petition for Forbearance from the *ISP Remand Order* to support Core's position that the FCC's rates apply only to ILECs, but that CLECs get to choose the rates CLECs can apply to the ILEC for reciprocal compensation. By denying Core's request for forbearance from both the rate

caps and the mirroring rule, the result was that the rate caps and mirroring rule apply to Core as well as the ILEC. In fact, the FCC's Order for the Petition of Core Communications, Inc. for Forbearance Under 47 U.S.C. §160(c) from Application of the *ISP Remand Order*, at page 8, paragraph 18 states, "[t]hese caps, which apply to all (emphasis added) carriers, were designed to send more accurate price signals and substantially reduce market distortions." Core's attempt to manipulate the reciprocal compensation rules in this proceeding is in blatant end-run around the FCC's Order denying Core's request for forbearance from the rate caps and the mirroring rules in the *ISP Remand Order*. The same reciprocal compensation rates are to be applied to Core as are applied to an ILEC, hence the term 'reciprocal'.

Q. Should the parties decide on a remedy if the ISP Remand Order is overturned or otherwise found to be inapplicable?

A. No. Situations like these should be resolved in the change of law provision of the resulting agreement. A change of law provision is intended to deal with exactly the kind of event that Core's language is trying to anticipate. Rather than ask the Pennsylvania Public Utility Commission to decide a *potential* dispute that is *not yet ripe* and is certainly *hypothetical* in the extreme, the Commission should find that the FCC's *ISP Remand Order* is still in place (vacated but not stayed and thus the *ISP Remand Order's* rate scheme remains in effect) and that, if the *ISP Remand Order* and rules are ever completely vacated/overturned, then that should enable parties to pursue

available remedies under the change of law provision of this resulting ICA. Because the parties have reached agreement on change of law language, there should be no problem with either party invoking that language if the event Core is *speculating* about ever comes to pass.

Q. Is Core's language harmful to Embarq PA?

A. Yes. At the current usage levels, Core's distorted interpretation of the FCC *ISP Remand Order* would force Embarq PA to Core pay millions of dollars annually and thereby to subsidize Core's toll-free ISP access service. This is the arbitrage practice the FCC intended to stop with its release of the *ISP Remand Order* in 2001. Clearly, Core's position results in shifting an excessively large expense to Embarq PA.

Q. Does Core's language in §55.3 reflect the FCC's rules for symmetrical reciprocal compensation?

A. No, it does not. Core's seems to ignore them altogether. Section 51.711 (47 C.F.R 51.711) of the FCC's rules in pertinent part reads as follows:

> (a) Rates for transport and termination of telecommunications traffic shall be symmetrical, except as provided in paragraphs (b) and (c) of this section. (1) For purposes of this subpart, symmetrical rates are rates that a carrier other than an incumbent LEC assesses upon an incumbent LEC for transport and termination of telecommunications traffic equal to those that the incumbent LEC assesses upon the other carrier for the same services… (b) A state commission may establish asymmetrical rates for transport and termination of telecommunications traffic only if the carrier other than the

> incumbent LEC ... proves to the state commission on the basis of a cost study using the forward-looking economic cost based pricing methodology ... that the forward-looking costs for a network efficiently configured and operated by the carrier other than the incumbent LEC (or the smaller of two incumbent LECs), exceed the costs incurred by the incumbent LEC ... and, consequently, that such that a higher rate is justified.

Core did not present such a cost study in negotiations, nor did Core ever indicate that it intended to provide a cost justification for the higher reciprocal compensation rate it seeks to charge Embarq PA for local voice traffic. Core should not be allowed to charge asymmetrical rates.

Moreover, as I addressed above, Core's position is simply unsupportable. The purpose of the *ISP Remand Order* was to stop the arbitration of ISP-bound traffic. CLECs will frequently reference those portions of the *ISP Remand Order* (¶ 89) and point out that it is the ILECs' superior bargaining power that is tempered through mirroring the same rate for outgoing ISP-bound traffic as for incoming voice traffic. This section of the *ISP Remand Order* does not explicitly state that CLECs must also follow the mirroring principle. It does not have to! The context within which these mirroring comments and indeed the entire *ISP Remand Order* addressed the very abuses that Core is seeking relief from this Commission. If this Commission approves Core's language, it is merely throwing gasoline on the fire of Core's reciprocal compensation gamesmanship.

Q. How should the Pennsylvania Commission decide this issue?

A. The Commission should adopt Embarq PA's interpretation of the FCC's mirroring rule and reject Core's proposed language in §55.3. The Commission should require that if Core agrees to accept Embarq PA's opt-in offer, then all eligible traffic (non-VNXX-enabled) will be compensated at $.0007/MOU. If Core does not want to accept the opt-in offer, then 251(b)(5) traffic originated by both carriers will be compensated at reciprocal compensation rates contained in the pricing attachment to the ICA. The Commission should find that Embarq PA's position on this issue is consistent with the FCC rules on symmetrical reciprocal compensation.

Issue 8 – VNXX traffic and other rating issues.

Q. What is the scope of your Direct Testimony as to Issue 8?

A. Issue 8 includes several sub-issues, two of which are closely related. The first issue deals with establishing the appropriate compensation arrangement for VNXX-enabled ISP-bound traffic which I will address. The second is how to deal with VoIP traffic which will be addressed by Embarq PA witness Mr. Mike Maples. The third issue regards local number portability (LNP) which both Mr. Maples and I address. As to a fourth issue, the Carrier Identification Codes ("CIC") codes, I will address this in my Direct Testimony.

Q. Please explain the first issue?

A. Embarq PA and Core have opposing viewpoints with respect to intercarrier compensation associated with the interexchange long-distance ISP-bound calls that Core terminates on its network. These long distance calls to Core are enabled by use of VNXX service. The Second Circuit Court of Appeals defined VNXX service as:

> Virtual NXX, or VNXX, refers to telephone numbers assigned to a customer in a local calling area different from the one where the customer is physically located in circumstances where the telephone company assigning the number is not using facilities of its own to transport the call from the calling area associated with the telephone number to the area where the customer is actually located.[10]

In accordance with this definition, Core provides it ISPs a toll-free service so that Embarq PA's end users may dial a local number that Core has assigned to an ISP physically located in outside of Embarq PA's local calling area (including mandatory EAS calling areas). Core directs all of this ISP-bound VNXX traffic over Embarq PA's and Verizon's network at no cost to Core and with no compensation to Embarq PA or Verizon for use if their networks. The disputed issue is that Core wants Embarq PA to compensate Core for this inordinately high amount traffic that is not local in nature, traffic that Embarq PA routes to Core. And, Core wants to continue

[10] *Global NAPS, Inc. v. Verizon New England, Inc. et al*, No. 04-4685-cv (2nd Circuit July 5, 2006).

receiving free transport service from Embarq PA through its dual-POI position that is described in Issue 2.

Embarq PA witness Ted Hart's Direct Testimony shows that all or nearly all of Core's traffic is VNXX-enabled, ISP-bound traffic. As he explains, VNXX service is simply a toll substitute for the calls Embarq PA's end users make to their ISPs through Core's network. Embarq PA submits that it is due originating access from Core for this non-251(b)(5) traffic. Core believes that the calls should be deemed 251(b)(5) traffic simply because Embarq PA's originating end user dials a local number. Embarq PA contends that the end point of the call is what determines the applicable intercarrier compensation, not the numbers assigned to the originating and terminating end users.

Tangential to the VNXX issue it how VoIP traffic should be compensated. The parties' disputes over VNXX and VoIP traffic involve §55.4 and §55.5, respectively, of the interconnection agreement. In both instances, Core proposes to delete Embarq PA's proposed language. In the case of VNXX traffic, Embarq PA's language establishes that such traffic is rated for intercarrier compensation purposes on the basis of the physical end points of the calling and called parties. In contrast, Core proposes language that ties compensation to the dialed telephone number of the call.

Q. Should VNXX-enabled traffic be rated as 251(b)(5) traffic?

A. No. Core's VNXX-enabled traffic originates and terminates in different Embarq PA local calling areas and is, therefore, subject to originating access.

Q. Please describe how the United States Courts of Appeal for the First Circuit and Second Circuit have decided this issue?

A. This identical issue was recently decided by both the United States Courts of Appeal for the First Circuit[11] and for the Second Circuit.[12] These rulings establish that VNXX-enabled ISP-bound traffic is not local traffic (251(b)(5) traffic) and that the ILEC is entitled to originating access charges.

Q. Have you read the Global NAPS decision out of the First Circuit Court of Appeals?

A. Yes, I have read the Global NAPS decision out of the First Circuit Court of Appeals.[13]

Q. Please describe the outcome of the First Circuit Court's decision as it pertains to your Direct Testimony.

A. The decision provides highly relevant quotes (and thereby direction) from an FCC brief that was filed in that proceeding. According to the FCC, its *ISP Remand Order* does not provide a clear answer to the question of whether the

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[11] *Global NAPS, Inc. v. Verizon New England, Inc. et al*, No. 05-2657 (1st Cir. April 11, 2006);

[12] *Global NAPS, Inc. v. Verizon New England, Inc. et al*, No. 04-4685-cv (2nd Circuit July 5, 2006).

[13] *Global NAPS, Inc. v. Verizon New England, Inc., et al.*, 444 F.3d 59 (1st Cir. 2006) ("GNAPS").

ISP Remand Order was intended to preempt states from establishing intercarrier compensation for non-local ISP bound VNXX calls. Discussing the FCC's brief, the Court stated:

> [t]he ISP Remand Order does not provide a clear answer to [the] question" of whether the order "was intended to preempt states from establishing" a requirement of intercarrier compensation for interexchange VNXX ISP-bound calls.
>
> . . .
>
> . . . "in establishing the new compensation scheme for ISP-bound calls, the Commission was considering only calls placed to ISPs located in the same local calling area as the caller." According to the FCC, "[t]he Commission itself has not addressed application of the ISP Remand Order to ISP-bound calls outside a local calling area" or "decided the implications of using VNXX numbers for intercarrier compensation more generally."[14]

Accordingly, there is no federal preemption prohibiting state commissions from finding that ISP-bound VNXX traffic is not local in nature, and that such traffic is not subject to the compensation scheme for ISP-bound traffic set forth in the *ISP Remand Order*. In other words, the Pennsylvania Commission can require Core to pay originating access for VNXX traffic.

Q. How should the Commission rule on this issue?

A. The Commission should deny Core's request that it is entitled **any**

[14] GNAPS at 74.

terminating compensation (neither $.0007 nor reciprocal compensation) for its VNXX-enabled traffic. Embarq PA has demonstrated that this is long distance traffic and, thus, not eligible for terminating compensation. Instead, the Commission should find that Core is responsible for paying Embarq PA originating access for any VNXX-enabled traffic terminated by Core. Based upon the advice of counsel, I also note that Act 183 provides that "traffic access charges are applicable for interexchange service provided by a local exchange telecommunications company." 66 Pa.C.S. §3017(b).

Thus, Embarq PA's primary position is that it should receive originating access for VNXX traffic. Embarq PA is amenable to consideration of a bill and keep compensation arrangement for all Core's VNXX traffic if the Commission adopts Embarq PA's position and proposed ICA (i.e., all of §54) as addressed at Issue 2 above.

Q. Core previously expressed concern as to CIC Codes. Please explain.

A. Embarq PA's proposed §55.3 of the ICA is also disputed. Core deleted a portion of this section that deals with Carrier Identification Codes ("CIC"). Embarq PA requires the separate CICs so that CLEC traffic and IXC traffic may be properly billed. If a carrier acts as both an IXC and a CLEC in the same state and LATA, our billing system will not accept call records if they have the same CIC. Embarq PA's language simply reflects its current billing system limitations and is the only means at this time to accommodate the

limitations.

Q. You previously mentioned Core's porting of numbers out of rate centers. What impact does Core's LNP rate center presence have on your recommendation at Issue 8?

A. To be compliant with the LNP rules, Core is required to have a physical presence in each rate center where it is providing LNP and the concomitant VNXX service. This connection is necessary so that Core will be able to transport the traffic that is originated by Core's ISPs customers. If the Pennsylvania Commission adopts Embarq PA's position and proposed ICA (i.e., all of §54) as addressed at Issue 2 above then Core's porting of numbers out of the rate centers becomes a moot issue from my view.

Issue 9 -- Indirect Traffic – Volume Limit

Q. Please explain the issue.

A. This issue relates to Issue 8 and Issue 2. Core is currently enjoying unlimited free transport on Embarq PA's and Verizon's networks. This unlimited free transport is only possible because Core has not established direct connections on Embarq PA's network and has not to date compensated Embarq PA for originating access associated with Core's non-Local/251(b)(5) traffic. In an effort to avoid any responsibility for transmission facilities carrying this non-local traffic, Core has given Embarq PA no choice but to route this traffic

over the connections between Embarq PA and Verizon's network. Embarq PA does not support this form of indirect interconnection and firmly believes the volumes of indirect traffic must be kept to minimal levels. FCC rules only contemplate traffic being exchanged at a point of interconnection ("POI") on the Incumbent Local Exchange Carrier's ("ILEC's) network. There are no FCC rules allowing Core to establish a POI at another ILEC's tandem to exchange traffic with Embarq PA. The law does require Core to establish direct connections on Embarq PA's network to exchange traffic.

Q. What is indirect interconnection?

A. Indirect interconnection traffic is that traffic which originates or terminates at an Embarq PA end office that subtends a non-Embarq PA tandem where the CLEC also has a direct interconnection at that same tandem. See diagram at Exhibit EBF-3.

Q. Please describe Embarq PA's position regarding indirect interconnection.

A. Generally, Embarq PA does not support indirect interconnection and believes it should never incur transit charges as a result of a competitive carrier's decision to not establish the appropriate direct connections to Embarq PA's network. However, in this case, in an effort to compromise, Embarq PA offered Core very CLEC-friendly language which allows it to exchange traffic indirectly for traffic up to a DS1 level. Embarq PA believes this to be an extremely gracious offer given that nearly all traffic that Embarq PA

would be forced to deliver outside its serving territory is VNXX-enabled ISP-bound traffic. Given the extremely large traffic volumes routed to Core today, Embarq PA could incur significant transit charges from the tandem transit provider, as well as continue to incur the network costs for the connection between Embarq PA's end office and the ILEC tandem. However, in an effort to compromise, Embarq PA is willing to continue routing very small volumes of traffic (*i.e.,* DS1 volume) to Core through a foreign ILEC tandem.

Q. Please describe the language proposed by Embarq PA.

A. Embarq PA's proposed language in §61.1.5 of the ICA limits the indirect traffic volumes to a DS1 level and once this trigger is met, Core has 60 days to establish a direct connection with that Embarq PA end office. Core's language reflects its dual-POI position, which results in exonerating itself from the responsibility of establishing any connection on Embarq PA's network. Instead, Core apparently has taken the position that a DS1 limit is meaningless since it is Embarq PA's need and responsibility to establish the connection from its end office to Core's network.

Q. Please comment on Core's insistence that indirect interconnection continue without volume limitations.

A. At present, by undertaking indirect interconnection without limits, Core does not experience the normal cost signals that would impose discipline on Core's "network choices" and lead to efficient interconnection for the "mutual exchange" of traffic. Until Core begins originating some traffic, it will never incur the transit charges that are associated with indirect interconnection that typically govern network architecture decisions. Embarq PA's compromise position apparently is not acceptable to Core. Core refuses to agree to a volume threshold (DS1) for triggering direct interconnection with Embarq PA. Given that Core largely terminates one-way ISP-bound traffic, this is no surprise to Embarq PA. Simply put, given the one-way nature of this traffic, Core has no incentive to undertake direct interconnection. Of course Core supports requiring Embarq PA to shoulder the transport costs associated with this arbitrage traffic, including transport costs outside of Embarq PA's territory. According to Core, "Using a third party tandem can be just as efficient – if not more so—than establishing new, direct interconnection facilities." From Core's perspective, of course, it is more efficient for Embarq PA to haul traffic in an indirect manner to a point outside Embarq PA's territory and incur transit charges. Perhaps Core's proposal is "efficient" for Core, but the lack of a volume threshold to trigger direct interconnection is neither efficient nor economical for Embarq PA – its shareholders, its network, and its customers. Core's proposal is

nothing more than an effort to ensure that all expenses associated with the transport of Core's VNXX-enabled ISP-bound traffic are borne by Embarq PA. Consequently, the parties' interconnection agreement must have language that imposes some discipline on Core.

Q. Do you have any other comments as to the need for limitations on indirect traffic arrangements?

A. Yes. As addressed above, all of the traffic between Core and Embarq PA is "exchanged" indirectly. The traffic levels are extremely heavy and equal over several dozen DS1's worth of traffic. There is no network "ownership" of the indirect connections between Core and Embarq PA today. If Core had direct connections to each of Embarq PA's tandems, it could manage its network. For example, if Core desires to ensure a certain level of call completion for its VNXX-enabled ISP-bound traffic, it would have the ability to add more trunks to its network. Today, Core has no control of the network over which its traffic travels because it primarily flows over the toll network that is jointly provisioned by Embarq PA and Verizon, through Verizon's tandem, and onto Core's POI, and eventually to Core's network. With a direct connection, the traffic would be handed off to Core's network at Embarq PA's tandem switch port and Core would not be dependent upon the capacity of the toll network and of Verizon's tandem switch for receiving its traffic.

Q. What connection and compensation standards in this case have Core and Embarq PA agreed upon for indirect interconnections?

A. In the course of this proceeding, Core and Embarq PA have agreed upon certain network and business criteria for exchanging traffic on an indirect basis, as contained in §61 of the draft proposed ICA agreement. Excerpts of several of the relevant sections are included here:

- "There is no physical or direct point of interconnection between the parties…" (§61.1.2);
- "Indirect interconnection with Embarq PA shall only be allowed to the extent CLEC is interconnected at the [non-Embarq PA] tandem switch which Embarq's end office subtends." (§61.1.3);
- "For Indirect Traffic terminating on CLEC's network, CLEC will bill Embarq the same rates as Embarq charges CLEC for Indirect Local Traffic terminating on Embarq's network in accordance with Section 55." (§61.3.2.4).

Q. Please describe how Core is interconnected with Embarq PA today and if that interconnection comports with §61.1.3?

A. Today, 100% of the traffic passes to Core via a form of indirect interconnection. See Exhibit EBF-4. However, approximately 1% of Core's traffic is in compliance with §61.1.3. Core's business model is such that it forces Embarq PA to transport its traffic (which is all VNXX-enabled, ISP-bound traffic) from an Embarq PA end office to Embarq PA's

tandem to Verizon's network where it is transited through Verizon's tandem, then through the Verizon-Core POI and onto Core's network. This double tandem routing does not meet the requirements of §61.1.3 because Embarq PA's end offices do not subtend the Verizon tandems that Core is directly interconnected with. Furthermore, this is an extremely inefficient routing scheme for what Core contends should be treated as "local" traffic. The extremely high volume of one-way traffic to Core accounts for a significant amount of utilization on Embarq PA's network (for which Embarq PA receives no compensation) and to a lesser degree on certain Embarq PA and Verizon EAS routes.

Finally, the dual-tandem configuration is problematic because there are other carriers connected to Embarq PA's tandem that currently send traffic to Core. Because this traffic is also routed through Verizon's network prior to terminating with Core, it creates a double tandem transit scenario, as briefly noted above. Aside from being inefficient from a network perspective, this type of traffic routing increases the probability of unidentified "phantom traffic", creating billing issues for all carriers involved. In addition, Embarq PA must eliminate all opportunities for Core to bill Embarq PA for traffic that actually originated on another carrier's network. This gives further weight to the need of a threshold for indirect and for direct connections to each of Embarq PA's tandems. By limiting the amount of indirect traffic to a DS1 level, Embarq PA's position maintains

network integrity, reduces problems associated with phantom traffic, reduces the burden on the third-party's tandem, and decreases Embarq PA's exposure to the arbitrage created by Core's refusal to invest in network facilities which thereby forces Embarq PA to pay potential transit expenses to the tandem owner.

Q. Has the Commission to your knowledge imposed thresholds for indirect traffic?

A. Yes. The Commission has required that parties to an interconnection agreement establish a direct interconnection facility when the capacity of the indirect traffic reaches a DS1 level. Opinion and Order, *Petition of Cellco Partnership d/b/a Verizon Wireless For Arbitration... With ALLTEL Pennsylvania, Inc.*, Docket No. A-310489F7004 (Order entered December 1, 2005), at 7. In fact, the final Commission approved agreement included a two (2) T1 level of indirect traffic before the requesting carrier was required to establish a direct connection to the ILEC's end office.

Q. Please summarize your recommendation regarding Issue 9.

A. Embarq PA recommends that the Commission reaffirm its precedent and accept Embarq PA's language in §61.1.5. Embarq PA's language at §61.1.5 reasonably requires direct interconnection on Embarq PA's network once Core's traffic levels reach a DS1 level. As addressed above, Core has little financial incentive today to establish timely direct connections with Embarq

PA.

In addition to the language at §61.1.5, I recommend that the following language be adopted to address transit charges. Specifically, Embarq PA proposes the following additional language:

> After Indirect traffic exceeds a DS1, if Core has not established direct end office trunking sixty days after reaching a DS1 level, Core will reimburse Embarq PA for any transit charges billed by an intermediary carrier for Local Traffic or ISP-bound Traffic originated by Embarq PA.

Q. Why should the above-quoted language been included in the resulting ICA with Core?

A. This arbitration has been pending for a year. Core originally filed in April, 2006. During the course of the delay in litigation of this case, the potential for imposition of charges for transit traffic has become more of an issue. Transit traffic occurs when a carrier, like Embarq PA, sends traffic through a third-party tandem (Verizon) and terminates with another carrier (Core). The tandem owner may impose charges (i.e., transit charges) for Embarq PA's transited traffic through the Verizon tandems. Transit charges billed by an intermediary like Verizon can cause significant adverse financial consequences (estimated at approximately one million dollars per year) to an ILEC like Embarq PA. Plus, since Core's filing and since resuming litigation following a stay of this case, Embarq PA has had reason to analyze Core's traffic flows and volumes. As a result of this analysis, Embarq PA is now aware of the magnitude of the technical and financial

impact that Core's indirect traffic has on the company. Thus, Core's failure to establish a timely direct interconnection on Embarq PA's network after traffic exceeds a DS-1 threshold level raises the risk that such transit charges could be borne by Embarq PA during the life of the resulting ICA. The term of the proposed ICA with Core is approximately two years from the effective date of an ICA approved by the Commission. In order to complete the language at §61.1.5 and render the DS-1 threshold limitation meaningful given the potential for transit charges, I recommend that the ICA explicitly include language addressing transit charges. Embarq PA's language is consistent with Embarq PA's overall position on Issue 9 that limitations on indirect traffic routing is necessary to encourage Core to promptly undertake direct interconnection with Embarq PA.

Issue 10 -- Pricing

Q. Please describe the issue.

A. This issue concerns the type of interconnection facility that Core will order to exchange traffic with Embarq PA, and is related to Issue 2. The interconnection facility that Core requests is determined by whether Core's network equipment (e.g. a switch or transmission equipment) is inside or outside Embarq PA's exchange area. I will describe these different interconnection facility options and appropriate ICA language. Embarq PA witness Mr. Kent Dickerson will address the pricing issue associated with Entrance Facilities.

Q. What if Core's network equipment is maintained by Core outside Embarq PA's exchange area?

A. Currently Core's network equipment is situated behind Verizon's tandems. If Core decides to retain its equipment at these same locations, it has several options for establishing interconnection on Embarq PA's network. Core may physically provision its own facility, may lease transmission capacity from a competitive access provider, or may lease a meet-point transport facility arrangement jointly provisioned by Verizon and Embarq PA. A meet-point transport facility is an intrastate interexchange facility ordered from Verizon's and Embarq PA's access tariff. See, Exhibit EBF-1. The pricing and terms and conditions of the meet-point transport facility are controlled by Verizon and Embarq PA access tariffs and not by the Core/Embarq PA resulting interconnection agreement. Simply stated, if Core seeks interconnection with Embarq PA from Verizon's territory, then this arrangement is not an Entrance Facility and cost-based pricing does not apply. Access tariff rates apply.

Q. If Core locates its network equipment inside Embarq PA's operating area, then does Core need an "Entrance Facility" arrangement?

A. Yes. This is the type of connection done via an Entrance Facility. See Exhibit EBF-2. Entrance Facilities may be self-provisioned by Core, or may be leased from a third party provider, or purchased from the ILEC. Entrance Facilities if purchased from Embarq PA are at cost based rates.

Q. How do you define Entrance Facilities?

A. This definition has been agreed upon by Core and Embarq PA.

> Entrance Facility - An inter-network facility (i) between an ILEC Wire Center and a CLEC switch or other CLEC equipment, (ii) which is wholly within the ILEC's local serving area, and (iii) is used for carrying 251(c)(2) Interconnection traffic or 251(c)(3) UNE traffic. In offering Entrance Facility service to Core, Embarq does not waive its right to argue that the FCC has determined (1) that carriers are not impaired without access to ILEC provisioned Entrance Facilities in any instance, and (2) that such facilities may be provisioned in a variety of ways, including without limitation, self-provisioning by the CLEC, a third party or by Embarq. An Entrance Facility is considered part of the CLEC's network.

Q. Has the FCC ruled as to how Entrance Facilities should be priced?

A. Yes. The FCC has determined that an Entrance Facility in not a UNE and therefore is not priced at TELRIC rates. 47 CFR 51.319(e)(2)(i) "*Entrance Facilities.* An incumbent LEC is not obligated to provide a requesting carrier with unbundled access to dedicated transport that does not connect a pair of incumbent LEC wire centers." In the FCC's TRRO order, the FCC found that CLECs have multiple options for providers of Entrance Facilities:

> [R]equesting carriers are not impaired without unbundled access to entrance facilities....we now conduct an impairment analysis with respect to entrance facilities and find that the economic characteristics of entrance facilities that we discussed in the Triennial Review Order support a national finding of non-impairment. Specifically, entrance facilities are less costly to build, are more widely available from alternative providers, and

have greater revenue potential than dedicated transport between incumbent LEC central offices.[15]

Q. Has the PA Commission ruled on pricing standards for Entrance Facilities?

A. Yes. In the Opinion and Order from P-00042092 (July 20, 2006), the Commission found: "At this time, we are not persuaded by the Petitioners' arguments that, with respect to entrance facilities, "cost based rates" pursuant to TA-96 Section 251(c)(2) should be TELRIC-based. As we explained in our February 21, 2006 Order on page 101, Section 251(c)(2) is not a UNE leasing scheme and TELRIC pricing should not apply to entrance facilities."

Q. Is there any contract language in dispute on this issue?

A. There is one provision in dispute. First, let me explain that Embarq PA proposes at §54.2.1.6 as follows. It is Embarq PA's understanding that Core does not oppose the following language:

> CLEC may order interconnection facilities from Sprint [Embarq] that are wholly within Sprint's [Embarq's] serving territory from Sprint's [Embarq's] price sheet.

However, §54.2.1.8 is in dispute. This provision provides as follows:

> If CLEC chooses to interconnect with Embarq using a meet-point arrangement (*i.e.*, facilities jointly provisioned by Embarq and another LEC), CLEC will ~~*(consistent with section 52.1.4)*~~

[15] *In the Matter of Unbundled Access to Network Element Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers.* Order on Remand, Released February 4, 2005. 20FCC Rcd2533 (2005), at ¶¶ 137, 138.

order those facilities that are wholly within Embarq's serving territory from Embarq's access tariff.

Core had added the parenthetical "consistent with section 52.1.4" (which was incorrectly referenced by Core and should read: 54.2.1.4). Embarq PA seeks to delete this Core-inserted parenthetical.

Q. Why does Embarq PA propose deletion?

A. Embarq PA recommends that Core's reference to §54.2.1.4 should be deleted. This section requires Embarq PA to provide mid-span meet arrangements. Thus, Core's insertion and reference would obligate Embarq PA to provision a portion of the mid-span meet. Core's proposed language, therefore, improperly shifts costs onto Embarq PA.

Q. What is a mid-span meet?

A. Not to be confused with meet-point transport, a mid-span meet arrangement is an Entrance Facility configuration where the facilities based CLEC constructs its fiber facility and meets the ILEC fiber facilities at a designated "meet-point" outside the ILEC's central office. A mid-span meet is not applicable when a CLEC is interconnected via a meet-point transport facility for the following reasons. First, a mid-span meet is only applicable to an Entrance Facility and not part of a meet-point transport connection. Second, as I stated above, the meet-point transport facility's ordering, provisioning and pricing is controlled by the tariff and not by the interconnections agreement. Third, a mid-span meet is a self-provisioned, customer-owned, facility-based connection. This means that Core must physically deploy its own fiber facility from its network location

within Embarq PA's exchange area and meet Embarq PA's fiber facility at some point between our two networks. Even if Core did have its own fiber facility and if it would be pertinent to a meet-point access tariff service it would not qualify for this last reason. Fourth, the above points notwithstanding, the language in 54.2.1.4 precludes Core from qualifying for a mid-span meet. It is only applicable when the traffic is roughly balanced, which instantly disqualifies Core because of the gross imbalance of traffic.

Q. How should the Commission decide this issue?

A. The Commission should accept Embarq PA's language as proposed

Q. Does this conclude your Direct Testimony?

A. Yes.