ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into appropriate methods to compensate carriers for exchange of traffic subject to Section 251 of the Telecommunications Act of 1996.	))))	Docket No. 000075-TP

DIRECT TESTIMONY OF

HOWARD LEE JONES

ON BEHALF OF

VERIZON FLORIDA INCORPORATED

DECEMBER 1, 2000

DIRECT TESTIMONY OF HOWARD LEE JONES

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Howard Lee Jones and my business address is 600 Hidden Ridge, Irving, Texas 75038.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Verizon Corporation as Group Marketing Manager – Wholesale Network Services.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.

A. I graduated from Ripon College in Ripon, Wisconsin with a B.A. in Economics in 1973. I also obtained an M.B.A. from the University of Wisconsin - Whitewater in 1978.

I began my career with GTE (now Verizon) in March 1979 as a Forecast Analyst in Marketing Services and continued through various assignments in Information Systems and Economic Analysis/Pricing until 1989. At that time, I became Product Manager - Special Access /Data Services, and have since proceeded through various promotions to my current position of Senior Group Marketing Manager for the Internet Service Provider Market Segment.

Q. HAVE YOU TESTIFIED PREVIOUSLY?

A. Yes. I have testified before the California, Florida, Michigan, Missouri, Texas, Wisconsin, Washington, Oregon and Tennessee public utility commissions on various matters, and in private contract arbitrations in Pennsylvania and North Carolina. I have also been active in many federal access charge proceedings since 1989.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS SENIOR GROUP MARKETING MANAGER - DATA INFRASTRUCTURE.

A. With regard to reciprocal compensation for ISP-bound traffic, my duties are to coordinate the testimony and case preparation on behalf of the Company's Wholesale Markets department in both Federal and State proceedings. I am also a member of several Verizon internal working committees on intercarrier compensation and participate in industry forums and standards bodies on the issue of future technological network designs.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will address two issues in this docket that require a technical and functional perspective. These are: issue 6, concerning what factors the Commission should consider in setting the compensation mechanisms for delivery of ISP-bound traffic; and issue 7, which asks if compensation for ISP-bound traffic should be limited to circuit-switched technologies. Policy and economic matters are addressed by the other Verizon witness, Dr. Beauvais.

Q. SHOULD THE COMMISSION SET A RATE FOR ISP BOUND TRAFFIC?

A. No, for the reasons stated in Dr. Beauvais' testimony. However, if the Commission makes a contrary decision it should be aware that there are major cost differences between ILEC and CLEC networks that would make the CLEC cost much lower.

Q. WHY ARE THE COSTS LOWER?

A. The stunning growth in Internet usage in the past five years or so has produced extraordinary volumes of unidirectional traffic aggregated at discrete locations, as well as extended call holding times. The public switched telephone network was not designed to handle this unprecedented traffic load. The Commission should keep in mind that such traffic causes changes to the load patterns in the network, thus necessitating design modifications to the network to handle this traffic.

Q. WHY DOES NETWORK DESIGN MATTER IN THE DISCUSSION OF ISP-BOUND TRAFFIC COSTS?

A. The costs for the exchange of local traffic were based on a network design that is not strictly applicable to ISP-bound traffic. Voice traffic is typically widely dispersed across the local calling area, requiring equivalent infrastructure at both the originating and terminating points. In contrast, ISP traffic tends to be convergent (i.e., concentrated terminating points) with widely dispersed points of origination. Additionally, the sheer volumes of convergent traffic, coupled with an

aggregation modem functional requirement for telephony switch trunk-type termination of ISP-bound calls make the typical termination design for ISP traffic different than the line-side termination of voice traffic. Since the infrastructure required to handle this traffic is different, the cost determination needs to recognize these different network designs.

Q. HOW COULD THE COMMISSION RECOGNIZE NETWORK DESIGN?

A. First of all, the Commission should recognize that ISP traffic is not the same as standard two-way local voice traffic. Dr. Beauvais discusses the differences between these two types of traffic in his Direct Testimony. There are a number of ways the Commission could recognize these differences. One way is to separate ISP-bound traffic from voice traffic and devise a separate metric for each type. However, the process of separating the traffic types may be difficult given that the enhanced service provider (ESP) exemption has resulted in mingled traffic facility over the years.

Q. DOES THE COST OF AN INTERNET CALL VARY DEPENDING UPON WHICH CARRIER HANDLES THE ORIGINATING AND/OR TERMINATING PORTIONS OF THE CALL?

A. Yes, there are several reasons why the cost of an Internet call can vary depending on whether the carrier is originating or terminating the call.

First, the cost can vary because the network of an originating carrier must necessarily be constructed to handle significant volumes of both voice and Internet calls. This is due to the dual use of the originator lines, as well as the geographic economies of scale of serving both kinds of traffic with a common network design. Generally, the cost of originating an Internet call would not be expected to vary between CLECs and ILECs, as long as both networks were constructed to collect originating traffic from numerous originating end users. However, the terminating cost can vary significantly by carrier, according to whether the terminating carrier has constructed a ubiquitously terminating network to mirror the originating side, or has constructed a convergent network that terminates to a significantly smaller number of end points than originating points. Historically, as well as currently, ILEC networks would be mirrored for originating and terminating calls. This characteristic reflects the bi-directional use of the ILEC network. On the other hand, CLECs have the choice of becoming majority originating or majority terminating carriers. Since the efficiencies of convergent networks, i.e., fewer points to collect from or terminate to, are realized only when a CLEC builds a majority terminating network for Internet dial access, the result is that CLECs would generally have less costly networks than ILECs.

Second, after an end user originates a call on a line switched basis, most carriers switch Internet-destined calls in trunk-to-trunk, or

tandem-like, configurations simply because it is more efficient with the call volume and holding time involved. Trunk-to-trunk handling is also driven by the fact that 56K modems will only deliver 33.6 Kbps maximum speed if switched any other way. Under trunk-to-trunk switching, there are several scenarios that might occur. A diagram showing a CLEC trunk-to-trunk switching scenario is attached as Exhibit HLJ-1. When some carriers receive Internet calls, they directly interconnect the calls to modem pool equipment rather than telephony switching equipment. When other carriers receive Internet calls, they may switch the calls for routing purposes to subscriber ISPs who have different telephone directory number service. In other words, the CLEC may be the sole owner of the destination telephone number (NNX-XXXX) and all the CLEC does is route that traffic to unrelated trunks of the ISP(s). In many cases, numerous ISP retail suppliers are "switched" by the carrier to the same wholesale ISP trunk group and the traffic is divided between ISPs by the security servers of the wholesaler. The Internet traffic may or may not be mingled with the voice traffic because some carriers deal only with ISP traffic, and some carriers trunk the ISP traffic separately even if they handle both voice and Internet traffic. Since the network design for ISP bound traffic is different than for standard voice traffic, an inter-company cost study should recognize this difference.

Q. IF INTERCARRIER COMPENSATION FOR DELIVERY OF ISP-BOUND TRAFFIC IS ORDERED, SHOULD IT BE LIMITED TO

CARRIER AND ISP ARRANGEMENTS INVOLVING CIRCUIT SWITCHED TECHNOLOGIES?

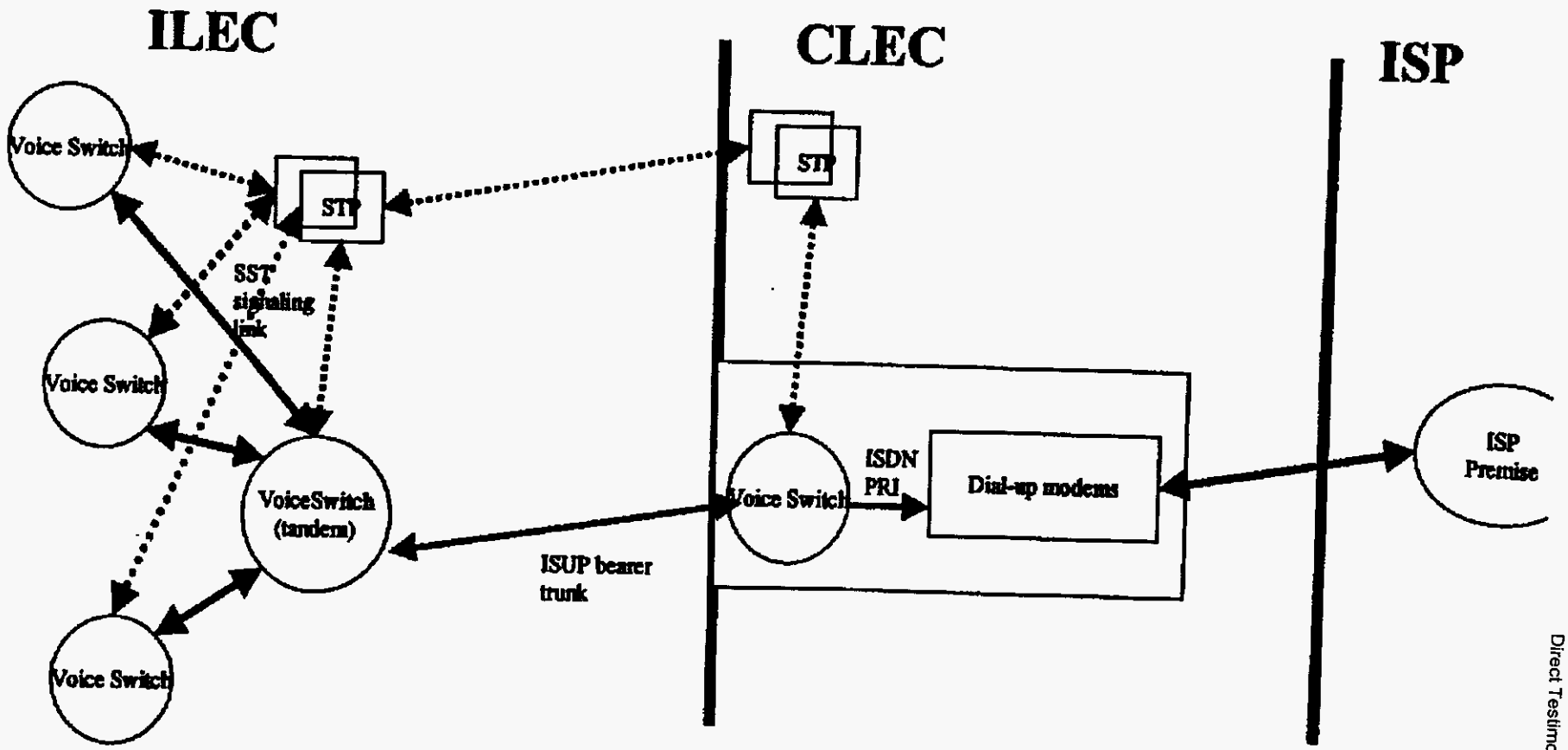
A. Yes. The intent of reciprocal compensation is to provide a compensation mechanism for the joint function of call handling, which is a function of telephony class 5 and, if applicable, telephony class 4 switching equipment – i.e., fully line side capable Lucent 5ESS and Nortel DMS series circuit switch equipment. These devices have a core switching cost in the $2-10 Million range. Internet SS7 signaling gateways alleviate the presence of Class 5 and class 4 devices altogether and cost between 100 and 300 thousand dollars to serve as many trunks as 30-40 Class 5 devices. If a carrier is a subtending carrier of another--in other words, a receiving entity--it can interconnect Internet traffic without using a telephony circuit switch at all. Technology has been available for two years that allows the direct intercarrier interconnection of full SS7 trunks to modem pools. This technology is called the Internet call gateway, or SS7 signaling gateway, technology. A diagram showing industry configurations of the SS7 model are attached as Exhibit HLJ-2. This technology is highly advertised by vendors to both CLECs and ILECs, but only CLECs can take advantage of the cost savings in most instances, because a carrier must be a subtending receiver of ubiquitous exchange traffic to architecturally qualify for benefits. These benefits are realized as cost savings even before reciprocal compensation payments are considered.

Due to the fact that this SS7 signaling gateway and call control function does not bear or carry any circuit switched traffic, there should be no intercarrier compensation for this non-circuit switched function. All that an SS7 signaling gateway does is facilitate call set-up to a modem that would otherwise be behind a CLEC Class 5 device.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

CLEC PRI Model



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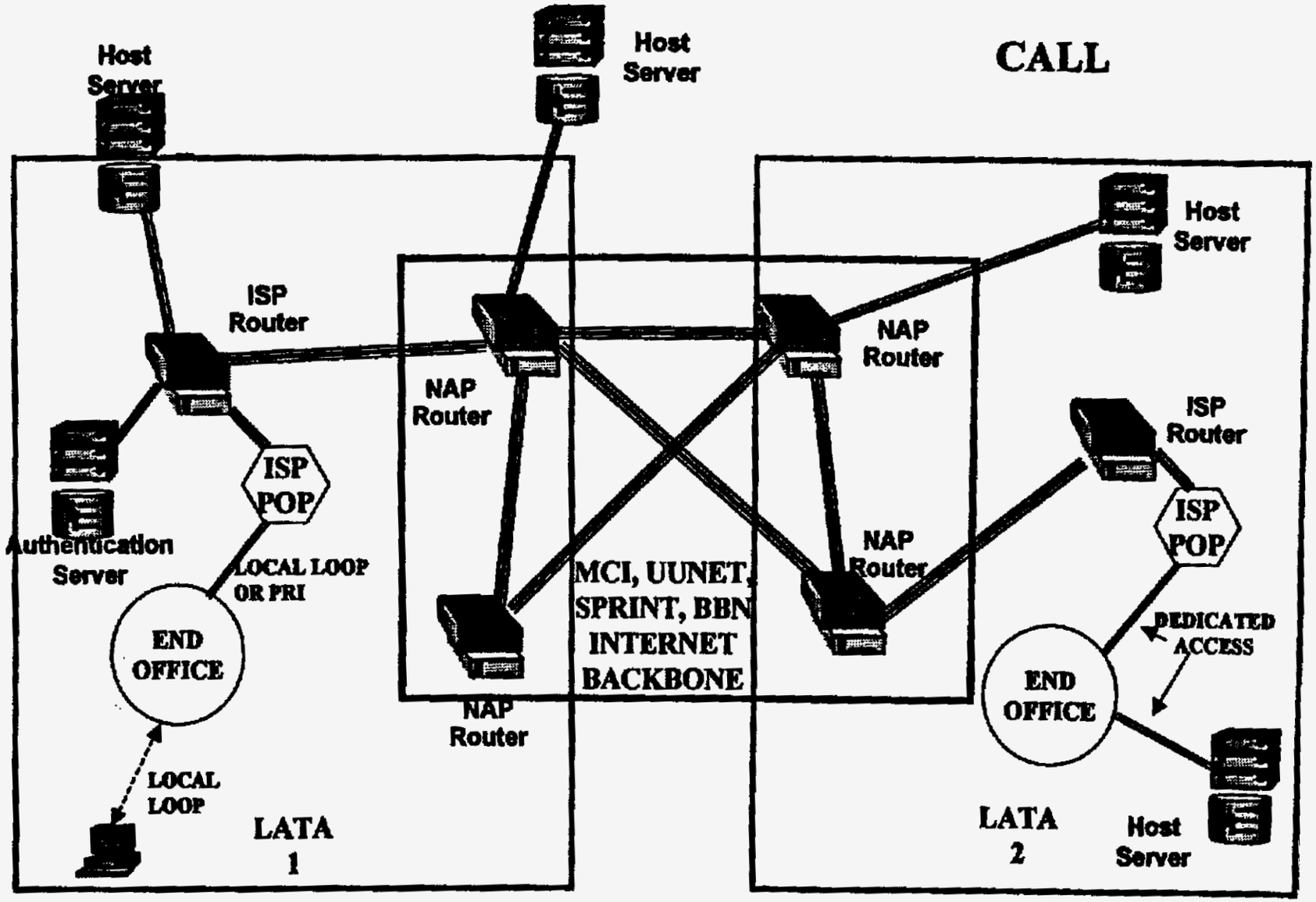
TYPICAL INTERNET CALL



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