

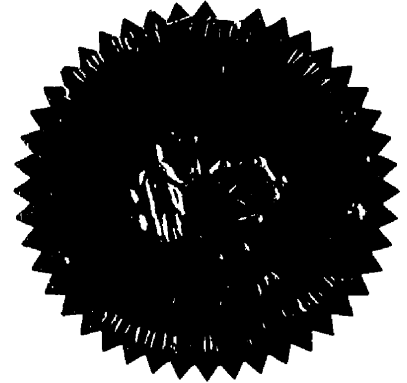
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**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

DOCKET NO. 000075-TP

In the Matter of

**INVESTIGATION INTO APPROPRIATE
METHODS TO COMPENSATE
CARRIERS FOR EXCHANGE OF
TRAFFIC SUBJECT TO SECTION
251 OF THE TELECOMMUNI-
CATIONS ACT OF 1996.**



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AND DO NOT INCLUDE PREFILED TESTIMONY.**

**VOLUME 4
PAGES 446 THROUGH 579-A**

PROCEEDINGS: HEARING

**BEFORE: CHAIRMAN E. LEON JACOBS, JR.
COMMISSIONER J. TERRY DEASON
COMMISSIONER LILA A. JABER
COMMISSIONER BRAULIO L. BAEZ
COMMISSIONER MICHAEL A. PALECKI**

DATE: Thursday, March 8, 2001

**TIME: Commenced at 9:00 a.m.
Concluded at 6:05 p.m.**

**PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida**

**REPORTED BY: JANE FAUROT, RPR
FPSC Division of Records & Reporting
Chief, Bureau of Reporting**

DOCUMENT NO.
03696-01
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EXHIBITS

NUMBER:		ID.	ADMTD.
21	ECB-1 (Direct) and ECB-1 (Rebuttal)	507	535
22	HLJ-2	579	

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PROCEEDINGS

(Transcript follows in sequence from Volume 4.)

CHAIRMAN JACOBS: Good morning. We will go back on the record. And we will take -- our next witness, I believe, is Mr. Beauvais.

MS. CASWELL: Yes.

EDWARD C. BEAUVAIS

was called as a witness on behalf of VERIZON FLORIDA, INC., and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. CASWELL:

Q Would you please state your name and address for the record?

A Yes. My name is Edward C. Beauvais. My address is 600 Hidden Ridge, Irving, Texas 75038.

Q And by whom are you employed and in what capacity?

A I am employed by Verizon as Director of Economic and Public Policy.

Q Did you prefile direct testimony in this proceeding?

A Yes, ma'am.

Q And does that testimony include one exhibit labeled ECB-1?

1 **A That is correct.**

2 **Q Do you have any changes or additions to that**
3 **direct testimony?**

4 **A Yes, I have two or three minor changes. On**
5 **Page 14, Line 1, where you see -- does everybody have it?**
6 **There is a confidence interval that says 39.38 minutes of**
7 **use to 44.62. The 39.38 should read 39.95. The 44.62**
8 **should read 44.75.**

9 **On Page 18, Line 22, in front of the U.S.**
10 **population, insert the word adult US population.**

11 **CHAIRMAN JACOBS: Excuse me, Mr. Beauvais.**
12 **Could I get you to put that microphone a little bit closer**
13 **to you. We are having trouble hearing you over here.**

14 **THE WITNESS: Actually, no, I don't think you**
15 **can. Is that better?**

16 **CHAIRMAN JACOBS: Yes.**

17 **THE WITNESS: Sorry. The 25 percent on Line 3**
18 **should be updated to the current number, which seems to be**
19 **56 percent according to Pugh Internet and American Life**
20 **Project (phonetic). Those are the only two changes.**

21 **BY MS. CASWELL:**

22 **Q So that if I were to ask you those questions**
23 **today, would your answers remain the same?**

24 **A Yes, ma'am.**

25 **Q Did you also file rebuttal testimony in this**

1 proceeding?

2 A I did.

3 Q Does that rebuttal testimony include two
4 exhibits labelled ECB-1 and ECB-2?

5 A Yes.

6 Q And do you have any changes or additions to that
7 testimony?

8 A No, ma'am.

9 Q So that if I were to ask you those same
10 questions today, would your answers remain the same?

11 A Yes, they would.

12 MS. CASWELL: Mr. Chairman, I would like to ask
13 that Mr. Beauvais' testimony be inserted into the record
14 as though read, both the rebuttal and the direct.

15 CHAIRMAN JACOBS: Without objection show the
16 testimony -- was it rebuttal and direct or just direct?

17 MS. CASWELL: Direct and rebuttal.

18 CHAIRMAN JACOBS: Direct and rebuttal entered
19 into the record as though read.

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DIRECT TESTIMONY

OF

EDWARD C. BEAUVAIS, PH.D.

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Edward C. Beauvais. My business address is 600 Hidden Ridge, Irving, Texas, 75038. I am employed by Verizon Services Group as Director - Economic & Regulatory Policy.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I received my undergraduate degree in economics from the Virginia Polytechnic Institute in 1971. I continued my education, taking courses in finance, math and computer science at Virginia Commonwealth University from 1972 to 1973 while I was employed by the Virginia Electric and Power Company, where I was responsible for forecasting loads and electricity sales, as well as having pricing responsibility for natural gas and electricity. I hold both a Masters and a Doctor of Philosophy in Economics from the Center for the Study of Public Choice at the Virginia Polytechnic Institute and have taken postgraduate courses at the Massachusetts Institute of Technology. I have served as a Professor of Economics at the University of Alabama, the University of Connecticut and the University of Kansas. For the past twenty-four years, I have been with GTE, now Verizon.

1 At GTE/Verizon, I have held numerous positions dealing with costing,
2 pricing, demand analysis, forecasting and public policy issues. As
3 part of my job duties, I have provided expert witness testimony before
4 the Federal Power Commission (now FERC), the Federal
5 Communications Commission (FCC), and numerous state utilities
6 commissions, including the following: Alabama, California, Florida,
7 Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Michigan,
8 Minnesota, Nevada, New Mexico, North Carolina, Ohio, Oklahoma,
9 Oregon, Pennsylvania, South Carolina, Texas, Virginia, Washington,
10 West Virginia and Wisconsin. In addition to testifying before state and
11 federal regulatory bodies, I have presented legislative testimony
12 before the Indiana House Commerce Committee, the Illinois Public
13 Utilities Committee, the Florida House of Representatives and the
14 Virginia General Assembly.

15

16 Finally, I have written numerous articles for academic and
17 professional journals in the areas of public finance, public choice and
18 the economics of the electric and telecommunications industries, as
19 well as articles and presentations to industry organizations and
20 publications. A more complete statement of my qualifications is set
21 forth in my curriculum vitae, a copy of which is attached as Exhibit
22 ECB-1.

23

24 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
25 **DOCKET?**

1 **A.** The purpose of my testimony is to provide economic and public policy
2 analysis regarding the payment of intercompany or reciprocal
3 compensation, as well as the correct rate structure for such
4 compensation in a competitive marketplace. My testimony will
5 address the following issues identified for resolution in this docket:
6 (3) What actions should the Commission take, if any, with respect to
7 establishing an appropriate compensation mechanism for ISP-bound
8 traffic in light of current decisions and activities of the courts and the
9 FCC?;
10 (4) What policy considerations should inform the Commission's
11 decision in this docket?;
12 (8) Should ISP-bound traffic be separated from non-ISP-bound traffic
13 for purposes of assessing any reciprocal compensation payments?
14 If so, how?;
15 (9) Should the Commission establish compensation mechanisms for
16 delivery of ISP-bound traffic to be used in the absence of the parties
17 reaching an agreement or negotiating a compensation mechanism?
18 If so, what should be the mechanism?
19
20 My economic and policy discussion will also touch on the legal issues
21 concerning the Commission's authority to adopt a compensation
22 mechanism for the delivery of ISP-bound traffic. I am not a lawyer,
23 however, so the legal issues (*i.e.*, issues 1, 2 and 5) involved in this
24 docket will be principally addressed in Verizon's post-hearing
25 statement.

1

2

My colleague, Mr. Howard Lee Jones, will address issues 6 and 7 in his testimony.

3

4

5 Q.

SHOULD THE COMMISSION ESTABLISH A RECIPROCAL COMPENSATION SCHEME IN THIS DOCKET, CONSIDERING FCC ACTIVITIES IN THIS AREA?

6

7

8 A.

No. Verizon will argue in its post-hearing brief that the Commission lacks the authority to establish a generic reciprocal compensation mechanism for the ISP-bound traffic at issue. The FCC has determined that ISP-bound traffic is primarily jurisdictionally interstate, and has purported to allow states to devise inter-carrier compensation mechanisms only until it can complete its pending rulemaking in this area. (*Implementation of the Local Competition Provisions in the Telecomm. Act of 1996; Inter-Carrier Compensation for ISP-Bound Traffic*, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68 (Declaratory Ruling) (Feb. 26, 1999).) The agency has been under considerable Congressional pressure to conclude this process, and Chairman Kennard has committed to resolving the reciprocal compensation “dilemma” by the end of this year.

19

20

21

22

23

Because it appears the FCC will determine the appropriate intercarrier compensation methodology in just a month or so, the Commission should put this proceeding on hold until the FCC has made its

24

25

1 decision. At that time, the Commission could determine what, if
2 anything there is left for it to consider and could reshape this
3 proceeding accordingly.

4

5 **Q. ACCORDING TO THE FCC, WHAT IS THE EXTENT OF THE STATE**
6 **COMMISSIONS' AUTHORITY TO IMPOSE INTER-CARRIER**
7 **COMPENSATION FOR INTERSTATE, ISP-BOUND TRAFFIC?**

8 **A.** While I am not an attorney, as I read its 1999 Declaratory Ruling, the
9 FCC purported to grant the state commissions interim authority to
10 impose intercarrier compensation for ISP-bound traffic *only* when 1)
11 construing interconnection agreements negotiated pursuant to
12 Section 251; or 2) arbitrating interconnection agreements pursuant to
13 Section 252.

14

15 **Q. SHOULD THE COMMISSION ESTABLISH COMPENSATION**
16 **MECHANISMS FOR DELIVERY OF ISP-BOUND TRAFFIC TO BE**
17 **USED IN THE ABSENCE OF THE PARTIES REACHING AN**
18 **AGREEMENT OR NEGOTIATING A COMPENSATION**
19 **MECHANISM?**

20 **A.** No. As I noted, Verizon does not believe the Commission has the
21 authority to establish an intercarrier compensation mechanism for
22 interstate, ISP-bound traffic. Even if it did have some measure of
23 authority to do so on an interim basis under the FCC's Declaratory
24 Ruling, this Commission should not undertake this effort when a
25 decision by the FCC is pending. The FCC's ruling is expected to

1 clarify the procedures to be used when companies cannot agree on
2 an intercarrier compensation mechanism for ISP-bound traffic.
3 However, for purposes of this docket, I will assume that this
4 Commission will move forward with its deliberations. Accordingly, for
5 discussion purposes, I will examine the economic and public policy
6 consequences if the Commission believes the ISP-bound traffic to be
7 local and subject to its jurisdiction.

8

9 **Q. IF THE COMMISSION MOVES FORWARD, WHAT ARE THE**
10 **OVERARCHING POLICY THEMES FOR THIS DOCKET?**

11 **A.** The principal issue that must be addressed is that of compensation
12 between carriers for quantities of usage that have not been previously
13 observed in the history of telecommunications. As I will show, the
14 quantity of usage directed to internet service providers (ISPs) is easily
15 three to ten times greater than has historically been observed in
16 voice-only traffic. However, the issue of compensation between
17 carriers is simply a special case of pricing, so it cannot be divorced
18 from a discussion of efficient pricing of other telecommunications
19 services.

20

21 **Q. WHAT IS RECIPROCAL COMPENSATION?**

22 **A.** The matter of reciprocal compensation arose when
23 telecommunications carriers first began to negotiate local
24 interconnection agreements. Reciprocal compensation is a
25 mechanism for local exchange companies to compensate one

1 another for terminating each other's local traffic.

2

3 **Q. WHAT IS VERIZON'S POSITION WITH RESPECT TO PAYMENT**
4 **OF RECIPROCAL COMPENSATION FOR ISP-BOUND TRAFFIC?**

5 **A.** Reciprocal compensation does not apply to ISP-bound traffic because
6 it is not local traffic. In 1983, the FCC exempted enhanced service
7 providers (ESPs) from the per-minute access charges that long-
8 distance companies pay to local telephone companies because the
9 FCC deemed ESPs to be part of an infant industry. ISPs are one
10 subset of ESPs. The ESP exemption has continued since then
11 through various FCC proceedings.

12

13 The fact that the FCC exempted ISPs from the payment of access
14 charges is consistent with the position that ISP-bound traffic is
15 interstate—*not local*. If such traffic had not been interstate, then there
16 would have been no need for the FCC to exempt it from access
17 charges—which only apply to interstate calls—in the first place.
18 Further, if the traffic were not interstate in nature, the FCC would have
19 had no authority to act. Based on the ESP exemption, Verizon has
20 always considered ISP-bound traffic to be interstate and therefore not
21 subject to reciprocal compensation under Section 251(b)(5) of the
22 Federal Telecommunications Act ("FTA"). As noted above, the FCC
23 confirmed in its Declaratory Ruling last year that ISP-bound traffic is
24 largely interstate.

25

1 **Q. PLEASE EXPLAIN HOW RECIPROCAL COMPENSATION RATES**
2 **HAVE HISTORICALLY BEEN DERIVED.**

3 **A.** Historically, the costs for terminating a voice-grade local call was
4 priced based on a 3-5 minute hold time.

5

6 **Q. DO RECIPROCAL COMPENSATION RATES, AS THEY**
7 **CURRENTLY EXIST, CONTEMPLATE THE TRANSPORTATION OF**
8 **ISP-BOUND TRAFFIC?**

9 **A.** No. The call hold times (the length of time that the call lasts) for the
10 typical internet user appear to range between 25 and 45 minutes per
11 call, with just under three calls per day from a typical dial-up
12 connection. If one were to multiply the reciprocal compensation rate
13 for the exchange of local traffic by only 60 minutes per day, Verizon
14 would have to pay out 40% to 50% of the price it receives for the
15 provision of basic local service from its residential end-users to
16 CLECs serving ISPs. Clearly, the reciprocal compensation prices for
17 the exchange of "local" traffic relative to the price paid by the end user
18 for that traffic never envisioned the volumes that would be
19 engendered by ISP-bound usage.

20

21 **Q. ARE CALLS BETWEEN AN END USER AND AN ISP LOCAL**
22 **CALLS OR INTERSTATE CALLS?**

23 **A.** As I explained above, the FCC has determined such calls to be
24 interstate. This regulatory classification comports with our common
25 sense understanding of the Internet. It is called the World Wide Web

1 for a reason.

2

3 If this Commission considers ISP-bound traffic to be "local," however,
4 there must be an effort to bring end user rates charged for the
5 origination of such local traffic into line with the reciprocal
6 compensation rate structure and level for transporting such traffic or
7 vice versa; bring the reciprocal compensation structure and level into
8 line with existing end user rates. However, because of statutory
9 constraints requiring a flat-rate pricing option for basic local service
10 (Fla. Stat. ch. 364.051(2)(c)), the Commission cannot freely adjust
11 end user rate structures to assure consistency with any reciprocal
12 compensation scheme. In Verizon's service areas in Florida, the
13 overwhelming majority of its residential customers – the customers
14 making the vast majority of ISP-bound calls on a dial-up basis --
15 subscribe to local service on a flat-rated basis. Should the
16 Commission elect to establish a reciprocal compensation mechanism,
17 it should use a non-traffic sensitive method of intercompany
18 compensation, consistent with the current flat-rated pricing structure
19 for local end-user service.

20

21 **Q. IN THE SHORT-RUN, CAN DIAL-UP ISP TRAFFIC BE**
22 **DISTINGUISHED FROM OTHER TRAFFIC FOR INTERCOMPANY**
23 **COMPENSATION PURPOSES?**

24 **A.** Certainly this is a policy option that the Commission can pursue.
25 There are methods by which dial-up traffic can be measured, albeit

1 with less than exact precision. The most obvious method is to
2 establish separate trunks for the delivery of such dial-up traffic to
3 ISPs. This, of course, would require the identification of ISP numbers
4 in some sort of centralized database(s) on a real time basis, and
5 would likely require the Commission to order all CLECs and ILECs (or
6 other carriers) to provide a list of ISP names and numbers to a
7 centralized authority for such purposes.

8
9 A second option would be to use call holding times to distinguish
10 voice traffic and ISP-bound traffic. That is, we know that the
11 traditional voice mean holding times for local calls from residential
12 customers can be expected to be between three and six minutes.
13 ISP-bound traffic can be expected to exhibit a substantially greater
14 mean value -- on the order of 25 to 45 minutes to an hour per call with
15 substantially greater variation than experienced with voice traffic.
16 Thus, even if voice and ISP-bound traffic travel on a shared trunk
17 between the CLEC and the ILEC, it is possible to estimate the
18 proportion of traffic that is voice and the proportion of traffic that is
19 ISP-bound. I would note, however, that this method does not identify
20 calls or minutes on an individual basis. It only estimates the
21 percentage of total "local" traffic which can be classified as "ISP-
22 bound" and that which can be classified as "traditional voice" traffic.

23
24 **Q. WOULD YOU RECOMMEND THAT THE COMMISSION PURSUE A**
25 **COMPENSATION SOLUTION REQUIRING SEGREGATION OF**

1 **ISP-BOUND TRAFFIC FROM OTHER TRAFFIC?**

2 **A.** No, I would not. While it is possible to measure dial-up traffic based
3 on either of the methods I have identified above, I think the preferable
4 solution is to bring the relative prices for intercompany compensation
5 and for end user traffic into alignment. This implies that the traffic
6 should not be segregated for rate-making purposes, but that the traffic
7 should be treated the same. Given the overwhelming subscription to
8 flat-rated local exchange service in Florida, with its marginal price of
9 zero per minute of use, the intercompany compensation mechanism
10 for both voice and ISP-bound traffic should also have a marginal price
11 of zero per minute of use. That is, until the Commission can address
12 the rebalancing of prices as a result of the traffic generated by ISP-
13 bound usage, the short-run solution is a bill and keep approach to
14 reciprocal compensation for all "local" traffic.

15

16 **Q.** **DR. BEAUVAIS, YOU MENTIONED ABOVE THAT ISP-BOUND**
17 **TRAFFIC HAS MUCH LONGER HOLDING TIMES THAN DOES**
18 **VOICE TRAFFIC. IS THERE ANY EVIDENCE AVAILABLE TO**
19 **SUPPORT THIS OBSERVATION?**

20 **A.** Yes. It is very well established that typical call duration for ISP-bound
21 traffic is vastly longer than the typical call duration for local voice
22 traffic. This disparity has been demonstrated in the publicly available
23 literature and is consistent with Verizon's own observations with
24 respect to traffic that travels on its local telephone network.

25

1 To examine voice holding times, it is desirable to go back to before
2 the commercial introduction of the Internet. By going back to a point
3 prior to the widespread commercial availability of the Internet, we can
4 eliminate any bias from the observed holding time by ensuring that no
5 internet-related holding times are mixed together with the voice traffic
6 data. Fortunately, such a study is readily available.

7
8 In a comprehensive study of the relationship between demographics
9 and usage patterns of the telephone network using Illinois data,
10 Belinda Brandon examined the distribution of holding times for "local"
11 calls. (Belinda B. Brandon, The Effect of the Demographics of
12 Individual Households on Their Telephone Usage, Cambridge,
13 Massachusetts: Ballinger Publishing Company, 1981.) The results of
14 that study indicate a 99% confidence interval into which the mean of
15 the voice traffic can be expected to occur:

16 99% Confidence Interval: $3.6 \text{ MOU} \leq X \leq 6.2 \text{ MOU}$.

17 In other words, the typical voice call tends to last for about three to six
18 MOUs, or minutes of use.

19
20 This 1981 data is generally consistent with more recent data relating
21 to Verizon California's residential customers that take measured
22 service. The average hold time for these customers in 1999 was
23 approximately 4.8 minutes per call, a figure that falls squarely within
24 the 99% confidence interval established in the Brandon study.

25

1 It is, of course, possible that this recent figure is not entirely free of
2 ISP-bound traffic since the customers included can, at least
3 theoretically, use their service to dial up to the Internet. However,
4 because ISP-bound calls tend to be much longer in duration (as
5 demonstrated below), it is reasonable to assume that customers that
6 intend to use their lines to access the Internet do not generally
7 subscribe to measured service. Thus, the California data provides at
8 least some measure of confirmation as to the continued accuracy of
9 the Brandon study.

10

11 In stark contrast to the mean holding time for traditional voice traffic,
12 the observed and estimated mean holding time for ISP-bound traffic
13 is substantially greater. Both published data and Verizon's own
14 observations demonstrate that the average holding times for ISP-
15 bound traffic exceed those of voice traffic by up to 10 times.

16

17 In the fourth quarter of 1999, Verizon analyzed data provided by a
18 CLEC in Michigan named Coast-To-Coast. Since 100% of the traffic
19 that Verizon customers sent to Coast-to-Coast was ISP-bound
20 (incidentally, none of Coast-to-Coast customers originated any calls
21 to any GTE customers during the period reviewed), these data
22 provide a useful sample of the holding times for ISP-bound traffic that
23 is unbiased by any voice traffic. Using the Michigan data, it is
24 possible to construct the following 99% confidence interval for the
25 mean holding time of ISP-bound traffic:

1 comparison once again confirms that the usage pattern of ISP-bound
2 traffic is different from traditional voice traffic.

3

4 The rather large coefficient of variation for ISP-bound traffic in the
5 Michigan sample suggests that it would not be surprising to see
6 variations in the mean holding times for ISP-bound traffic when one
7 compares anecdotal data across the U.S., or even across companies.

8 The limited data points that Verizon has collected in California, for
9 example, include hold times for ISP-bound traffic that are generally
10 between 20 to 30 minutes. In one study performed by Hewlett-
11 Packard entitled "GTE Internet Service Provider Characterization,"
12 dated October, 1997, the author found that the average hold time for
13 ISP-bound calls for a small sample of customers in Malibu, Santa
14 Monica, Del Rey, and Thousand Oaks on a given day was
15 approximately 23 minutes. In another small sample of more recent
16 traffic over three GTE California trunk groups that carry only ISP-
17 bound traffic, the average minutes of use for certain busy hours
18 ranged from 22 to 32 minutes.

19

20 These California data are also generally consistent with statistics
21 produced by the Nielsen//Net Ratings of Average Web Usage for
22 April, 2000, which show an average ISP-bound holding time of 30.27
23 minutes. The Nielsen//Net Ratings also indicate an average of 19
24 Internet sessions per week, or 2.7 calls per day, to the customer's
25 ISP.

1

2 Although there is, as expected, some variation across the available
3 data points, in all circumstances, the data show hold times that are
4 much longer for ISP-bound traffic than for voice traffic.

5

6 **Q. YOU STATED PREVIOUSLY THAT THERE ARE HIGHER**
7 **VOLUMES OF ISP-BOUND TRAFFIC COMPARED TO**
8 **TRADITIONAL VOICE TRAFFIC FROM RESIDENTIAL**
9 **CUSTOMERS. DO YOU HAVE EVIDENCE TO SUPPORT THIS**
10 **OBSERVATION?**

11 **A.** Yes. The publicly available data concerning aggregate usage
12 demonstrate that, on a per end-user basis, ISP-bound calls constitute
13 vastly more minutes of use per month (or per day) than do traditional
14 voice calls. Numerous studies from pre-Internet usage periods
15 suggest that the volume of originating local usage demanded on a
16 monthly basis by residential and business one-party customers can
17 be expected to be in the range of 300 to 600 minutes of use per
18 month, or an average of approximately 10 to 20 minutes per day.
19 (See, for example, Edward C. Beauvais, "Metering Costs and
20 Measured Service: An Evaluation of Efficiency Gains from Usage
21 Sensitive Pricing of Telephone Service," Changing Patterns in
22 Regulation, Markets, and Technology: The Effect on Public Utility
23 Pricing, edited by Patrick C. Mann and Harry M. Trebing, Michigan
24 State University, 1984; pp. 223 –267.)

25

1 With respect to the demand for ISP-bound traffic, there are several
2 sources that can be used to provide the Commission with estimates.

3 For example, on June 1, 1999, USA Today reported the results of a
4 Harris Poll indicating that the typical consumer is on the Internet
5 approximately 60 minutes per day, or 1800 minutes per month.

6
7 Likewise Telecom AM reported on November 15, 1999, an estimate
8 prepared by the investment bankers Veronis, Suhler & Associates
9 ("VSA") indicating that Internet usage is forecasted to increase to 192
10 hours per capita per year within three years. Keep in mind that the
11 VSA estimates are *per capita* and so must be adjusted to account for
12 the number of individuals in the household. This figure is
13 approximately three individuals per household, yielding a projection
14 of ISP-bound traffic of approximately 2,880 minutes of use per month
15 per residential line, or more than 90 minutes per day.

16
17 The Georgia Institute of Technology also performs a broad survey of
18 World Wide Web users on a periodic basis. The most recent survey
19 results, which are set forth in the October 1998 Gvu 10th WWW
20 Survey (found at www.ec.gatech.edu/gvu;user_.../survey-1998-10/graphs/use/q02.htm) indicate a mean web usage of 3,990 minutes
21 per month or more than 2 hours per day! Consistent with this finding,
22 the President of a California ISP told the U.S. Congress that the
23 "average user load" on his company is 53 hours (or 3180 minutes) per
24 month. (Statement of Peter Engdahl, appended to Testimony of
25

1 Robert Taylor on H.R. 4445, before the U.S. H.R. Subcomm. on
2 Telecomm., Trade and Consumer Protection.

3
4 The Nielsen//Net Ratings statistics referenced above yield similar
5 results. When the average hold time of 30 minutes and 27 seconds
6 is multiplied by the 2.7 figure for average daily calls, the result is an
7 average amount of ISP-bound traffic of more than 82 minutes per day
8 or 2,400 minutes per month.

9
10 To summarize, both the individual call duration and the aggregate
11 minutes of traffic per customer per month are vastly higher for ISP-
12 bound traffic than for traditional voice traffic. Even a cursory
13 examination of the data I've cited clearly demonstrates that the
14 commercial availability of the internet through dial-up connections has
15 caused ISP-bound telephone usage, with its volumes of three to ten
16 times voice call volumes, to dwarf the voice traffic that had been
17 experienced historically on the public switched network.

18

19 **Q. HOW MANY PEOPLE ARE USING THE INTERNET CURRENTLY?**

20

21 **A.** While I do not have an estimate readily available specifically for
22 Florida, "current" estimates of the ^{adult} U.S. population using the Internet
23 are in the range of 25%. (A.C. Nielsen NetWatch (Dec. 22, 1999).)

24 I place the term "current" in quotations, for as we are all aware,
25 internet usage is growing at astonishing rates, both in terms of

1 customers and in terms of minutes of use. In the VSA study I
2 referenced earlier, they predict an annual growth rate in excess of
3 23% for the Internet. What may be approximately a 25% penetration
4 today in Florida could easily be 50% in three years at such growth
5 rates. Indeed, some estimates already place the penetration rates in
6 the 50% range for US households. I would certainly not be surprised
7 to see the penetration rate of internet-connected customers far higher
8 in and around Tallahassee, for example, than in other parts of Florida,
9 given the university and state government presence here.

10

11 **Q. ARE THERE OTHER IMPLICATIONS THAT MIGHT BE DRAWN**
12 **FROM OBSERVATION OF THE CALLING CHARACTERISTICS**
13 **YOU HAVE CITED?**

14 **A.** Yes. As I have stated previously to this Commission, while there is
15 significant competition for ILEC-provided services from new entrants
16 in some markets (primarily business markets), there is little evidence
17 that CLECs are signing up large numbers of residential customers in
18 Florida. CLECs are, however, signing up a relatively large number of
19 ISP customers, and these customers almost exclusively receive,
20 rather than originate, traffic. This gives rise to a marked asymmetry
21 in the costs each carrier might be expected to incur in the provision
22 of basic local exchange service, if such service also includes ISP-
23 bound usage. These costs, in relation to the prices currently in effect,
24 in turn give rise to additional disincentives to enter the local exchange
25 market for residential customers who might be expected to utilize the

1 Internet on a dial-up basis in Florida.

2

3 The effects of this asymmetry on market entry are confirmed by an
4 examination of the holding times of the traffic flow between CLECs
5 and ILECs. Based on data from its experiences in North Carolina,
6 California, and Michigan, Verizon has observed a holding time of
7 traffic passed from a CLEC to Verizon of three to six minutes. Such
8 estimates are consistent with the observation that CLECs are, quite
9 understandably, concentrating their efforts on obtaining profitable
10 business customers, as the traffic pattern is consistent with traditional
11 voice grade traffic. At the same time, Verizon's data shows that the
12 traffic passing from Verizon to the CLEC exhibits holding times
13 ranging from 15 to 45 minutes. The 15 minute holding time is largely
14 traffic to a single so-called "chat line" served by a CLEC and the 45
15 minute holding time is exclusively ISP-bound traffic. In both cases,
16 however, the CLEC has signed up customers that largely terminate
17 traffic. I cite this simply as an observation that economic signals in
18 terms of prices and costs do matter in making entry and exit decisions
19 in a market. The current scheme of reciprocal compensation on a per
20 minute of use basis provides incentives to carriers with the ability to
21 target parties that terminate a large volume of traffic to do so. At the
22 same time, there is no incentive to sign up customers likely to
23 originate large volumes of traffic on a dial-up basis, and thus oblige
24 the serving carrier to make large reciprocal compensation payments.

25

1 Q. HOW SHOULD THE COMMISSION CONSIDER THE ECONOMIC
2 EFFECTS OF LOCAL COMPETITION IN DETERMINING ANY
3 RECIPROCAL COMPENSATION METHODOLOGY?

4 A. In general, there are benefits to be derived from the development of
5 more competitive markets, including local exchange markets in
6 Florida and elsewhere. It is widely recognized that the production
7 function, and therefore the cost function, of a modern, efficient
8 telecommunications network are characterized by the presence of
9 economies of both scope and scale. These economies can be
10 defined with respect to both an individual customer and the overall
11 network. To the extent that new entrants are successful, some of the
12 economies of scope and scale will be lost to the incumbent firm. In
13 a more competitive market, society will have to dedicate more
14 resources to the telecommunications sector than would otherwise be
15 the case with only a single firm providing service. The result is that
16 the total cost of providing a given level of service increases. In other
17 words, there are costs involved in providing customers a diversity of
18 service providers.

19
20 There is another implication to be drawn from the presence of
21 economies of scope and scale--the necessity to depart from strict
22 incremental cost pricing, even in a competitive market. Under current
23 pricing arrangements, a disproportionate share of the ILEC's common
24 and overhead costs is derived from multi-line business customers and
25 users of toll and advanced services. However, new entrants are

1 targeting these same end-user customers because the spread
2 between incremental cost and price is the greatest. This is only a
3 statement of how competitive entry should be anticipated to occur. If
4 the incumbent LEC is to have an opportunity to recover its costs
5 (including eliminating a portion of them where feasible), then local
6 exchange competition requires more rational retail pricing.

7

8 One of the additional costs brought about by the introduction of local
9 exchange competition is the payment of reciprocal compensation
10 between carriers, particularly for calls bound to an internet service
11 provider. Bill and keep arrangements do not make any contribution
12 to the common costs of the firm, since the implicit price is zero. This
13 is one of the principal reasons why I recommend a usage-based
14 reciprocal compensation plan between carriers, provided that a
15 usage-sensitive pricing structure is also adopted for end user
16 customers. Notice, however, that there is a critical caveat
17 incorporated into that recommendation: *If a flat-rated structure is to be*
18 *the predominant standard for end users, then a usage-based system*
19 *for compensation for traffic exchanges among rival local carriers is*
20 *inefficient in the first order, since it automatically results in prices for*
21 *local usage set at a level below the incremental cost of providing the*
22 *end-to-end call.* Accordingly, a usage-based compensation approach
23 should not be approved and adopted in this docket, given the existing
24 statutory constraints on the Commission's ability to order widespread
25 measured-rate pricing for basic service.

1
2 I would like to be very clear on this point, as there is an inherent
3 conflict between the flat-rated end user charges most prevalent in
4 local service today and intercompany compensation on a measured
5 basis. If a measured rate structure were in place, then a bill and keep
6 proposal would provide no incentive for the encouragement of
7 dynamic efficiency in the marketplace and its implicit zero marginal
8 price would lead to overconsumption of access services. Rather than
9 adopting a bill and keep approach to intercompany compensation, I
10 would then recommend a usage-based system of switched usage
11 charges. However, because the vast majority of Florida end users
12 pay a flat rate for basic local service, the appropriate system for
13 intercompany compensation should be bill and keep for the time
14 being. If some form of intercompany compensation payment must be
15 made, then it should be on a basis consistent with the current flat-rate
16 end-user pricing structure.

17

18 **Q. IN THE LONGER TERM, WHAT CONDITIONS SHOULD BE**
19 **APPLIED TO RECIPROCAL COMPENSATION PAYMENTS**
20 **BETWEEN CARRIERS?**

21 **A.** The first condition is that the payment of terminating access charges
22 by an ILEC must be considered a legitimate component of the
23 incremental costs of completing a call on an ongoing basis. Second,
24 the ILEC must have a customer to bill for that cost, so that measured
25 services must be available and in effect for end user customers in a

1 particular area for reciprocal compensation issues to be properly
2 addressed. This is particularly important where a CLEC has signed
3 up customers that terminate a disproportionate amount of traffic, as
4 is most definitely the case with ISPs. In such a situation, the marginal
5 price to the customer originating a call is zero in a flat-rate structure,
6 yet the cost of providing that call is composed of the production costs
7 (both originating and terminating) plus the compensation costs. This
8 scenario automatically results in prices being set below the
9 incremental costs. This in turn leads to efficiency losses to the
10 economy as a whole, to financial losses to the company providing the
11 originating calls under a flat rate system, and to substantial gaming
12 opportunities for a company receiving the terminating compensation.
13 The use of a measured alternative for end users ameliorates these
14 possibilities.

15
16 That said, I understand that local measured service is not in place in
17 Florida today for residential customers on a wide-spread basis, and
18 that will not likely change in the near term. So I would simply make
19 the observation again that since the end user service is flat-rated,
20 then the compensation between carriers should also be flat-rated. In
21 the short run, this includes the bill and keep option.

22

23 **Q. YOU PREVIOUSLY INDICATED THAT COMPETITIVE INCENTIVES**
24 **EXIST OR WOULD BE CREATED BASED ON INTERCOMPANY**
25 **COMPENSATION PRICES RELATIVE TO OTHER PRICES IN**

1 **EFFECT. WOULD YOU PLEASE EXPLAIN THIS STATEMENT?**

2 **A.** Certainly. Intercompany compensation costs, whether associated with
3 ISP-bound traffic or otherwise, are legitimate costs of doing business
4 in a multi-provider market. These costs, in relation to the prices
5 currently in effect for end users, give rise to incentives to enter or not
6 to enter the market for residential customers in Florida. To quantify
7 these incentives, it is possible to make some simple calculations
8 based on the estimates I have provided above.

9
10 For example, assume that a Verizon residential customer makes the
11 estimated 2.7 mean calls per day to an ISP, and the holding time for
12 each call is 30 minutes. That daily call rate is toward the lower end
13 of the estimates I presented earlier and would result in monthly usage
14 of 2430 minutes for traffic to an ISP. Further assume the ISP serving
15 the residential customer is connected through a CLEC.

16
17 To provide the call set-up and to maintain the duration in the switch
18 serving the customer originating the call, assume that the originating
19 carrier, Verizon, incurs a cost of approximately \$0.004 per minute of
20 use. For purposes of this example, I will refer to this cost as the
21 production cost of the customer's call to the ISP. For that customer's
22 2430 minutes of use, the production cost amounts to an incremental
23 \$9.72 per month, representing only the calls to the ISP. Verizon will
24 incur these originating costs regardless of the presence or absence
25 of an interconnecting carrier. However, if the compensation costs to

1 be paid to another carrier for use of that carrier's network are set at
2 a level over and above the production costs, as they quite frequently
3 are, the compensation costs must also be taken into account in
4 determining the complete costs of these minutes bound for the ISP.

5

6 As an example, one of Verizon's interconnection agreements in
7 Florida calls for an intercompany compensation rate of about \$0.0043
8 per minute of use. Using that rate in the example above, at 2430
9 minutes of use, the CLEC serving the ISP that our residential
10 customer called would be paid \$10.45, just for the ISP-bound traffic.

11 It is this \$10.45 that I refer to as the compensation cost.

12

13 While the ILEC may benefit from some long-run cost savings by virtue
14 of the CLEC performing some of the switching functions,
15 fundamentally the ILEC will incur the incremental cost of production
16 plus the incremental compensation costs to provide this service to the
17 residential customer. In our example, the incremental cost of the ISP-
18 bound traffic alone is approximately \$20.17 per month. To be a bit
19 more conservative, assume further that the long run avoided costs
20 can be approximated by the trunk-to-trunk type of high volume
21 switching as described by Mr. Jones in his testimony. That is, if the
22 ILEC were to configure its switches to accommodate the type of
23 customers which the CLECs are signing up, it would realize a much
24 lower cost per minute of use, since the traffic would largely be
25 handled over a trunk-to-trunk arrangement. The best estimate of this

1 type of switching cost which Verizon currently has available is the
2 tandem switching cost of \$0.0009 per minute of use. This would
3 reduce the incremental cost of handling the 2430 incremental minutes
4 of ISP-bound traffic by \$2.19 per month, resulting in a total
5 incremental cost of \$17.98 per month taking into account the best
6 estimate available of anticipated cost savings in the long run.

7
8 To examine the consequences on the incentives to enter the
9 marketplace for residential customers, one must simultaneously
10 consider the retail prices those customers are seeing in the
11 marketplace. The majority of Verizon's residential customers in
12 Florida take service on a flat-rate basis. That rate in Florida is
13 between \$13.86 and \$16.16 per month after taking into account the
14 federal SLC. However, even considering the SLC as part of the
15 incremental price received by Verizon, going back to our example, the
16 incremental cost of providing that customer with the ISP usage
17 demanded is greater than the incremental revenue received by as
18 much as \$ 4.12 per line per month or as small as \$1.82 per line per
19 month! Accordingly, if there is an expectation on the part of any
20 entrant that a potential residential customer will be an Internet user on
21 a dial-up basis and that customer is likely to take ISP service from the
22 third party, then there is an absolute economic disincentive to sign up
23 that customer, everything else equal. While a bill and keep
24 arrangement can not eliminate all of this upward pressure on costs,
25 it can relieve a substantial portion of the disincentive to serve such

1 customers.

2

3 **Q. WHAT DO YOU RECOMMEND THAT THE COMMISSION DO AT**
4 **THIS TIME FOR THE EXCHANGE OF TRAFFIC?**

5 **A.** Assuming (contrary to Verizon's view) that the Commission finds it has
6 the authority to adopt an intercarrier compensation mechanism for
7 ISP-bound calls, then in the short run, I recommend that the
8 Commission adopt an approach to intercompany compensation that
9 follows the price structure in place for end users for that type of call.
10 That is, if the Commission is to treat the call to the ISP as local, then
11 so long as the end users are billed on a flat-rate basis for their local
12 service, then the intercompany exchange of traffic should also be
13 billed on a non-traffic sensitive basis. A bill-and-keep approach meets
14 this criterion, and will avoid the potentially serious economic
15 distortions in the price of local service that would result from end user
16 prices being set below the level of incremental costs, including
17 compensation costs.

18

19 **Q. DR. BEAUVAIS, CAN YOU BRIEFLY SUMMARIZE YOUR**
20 **TESTIMONY?**

21 **A.** The briefest summary I can provide to the Commission in terms of
22 public policy guidance is quite simple: if the Commission is
23 determined to establish an intercompany compensation structure,
24 then that structure should match the rate structure faced by the end
25 user customers. The optimal long run solution would be an

1 originating responsibility plan; a sound short-run plan, given
2 circumstances in Florida, is a bill and keep plan.

3

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

5 **A. Yes.**

6

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1 **REBUTTAL TESTIMONY OF EDWARD C. BEAUVAIS, PH.D.**

2

3 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TITLE.**

4 A. My name is Edward C. Beauvais. My business address is 600 Hidden
5 Ridge Drive, Irving, Texas, 75038. I am employed by Verizon Services
6 Group as Director - Economic and Public Policy in the Regulatory and
7 Governmental Affairs Department and am representing Verizon Florida
8 Inc. ("Verizon") in this proceeding.

9

10 **Q. ARE YOU THE SAME PARTY SUBMITTING TESTIMONY EARLIER IN**
11 **THIS PROCEEDING?**

12 A. Yes. I prepared and filed direct testimony on behalf of Verizon Florida
13 previously in this proceeding.

14

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PHASE OF**
16 **THE DOCKET?**

17 A. I primarily respond to the testimony submitted by AT&T and a number of
18 alternative local exchange carriers (ALECs) by Lee Selwyn, as it is
19 representative of the testimony of ALECs in general. In addition, I
20 address the notion advanced by Staff's witness, Gregory Fogleman, in
21 favor of adopting a set-up and duration rate structure for intercompany
22 compensation. That rate structure is also supported by Sprint witness
23 Michael Hunsucker, so my comments will apply to his direct testimony as
24 well.

25

1 Q. IN YOUR DIRECT TESTIMONY YOU ASSUMED THAT THE
2 COMMISSION WOULD TREAT INTERNET-BOUND TRAFFIC AS IF IT
3 WERE LOCAL. DO YOU CONTINUE WITH THAT ASSUMPTION IN
4 THIS REBUTTAL TESTIMONY?

5 A. Yes. Although the FCC has ruled that ISP-bound traffic is predominately
6 jurisdictionally interstate, this Commission apparently intends to continue
7 to treat this traffic as it were local for purposes of reciprocal
8 compensation. (Fogleman Direct Testimony (DT) at 7, 12-13.) Verizon
9 disagrees with that conclusion, but, consistent with the Commission's
10 statements, I assume that the Internet-bound calling is "local" for
11 purposes of this docket and simply examine the consequences of that
12 assumption.

13

14 Q. BEGINNING ON PAGE 10 OF HIS DIRECT TESTIMONY, DR. SELWYN
15 ARGUES FOR A "SENT-PAID" FRAMEWORK IN THE ANALYSIS OF
16 RECIPROCAL COMPENSATION. DO YOU AGREE WITH THAT
17 POSITION?

18 A. Yes, I believe that most consumers understand that when they take local
19 exchange service on a flat rate basis, then they are purchasing both the
20 ability to originate and terminate calls within the local exchange area
21 without additional charges being applicable. Since the vast majority of
22 consumers in the United States and certainly in Verizon's service areas
23 in Florida do take local service under a monthly flat rate, I am not sure the
24 public policy debate relative to what is included in the local monthly
25 charges has ever really been held, especially since until relatively

1 recently there was only a single local exchange carrier in any one area.

2

3 We can get a handle on the issue by looking to other situations. Certainly
4 the "sent-paid" framework has been in place as the fundamental basis
5 underlying toll rates. The calling party pays for that call, typically on a
6 usage sensitive basis, unless the calling party (or other third party) has
7 expressed a willingness to pay for that call. Likewise, in local measured
8 service arrangements, the calling party is responsible for paying for a
9 given call unless another party has expressed a willingness to pay for
10 that call. In the case of both toll and local measured service, then, a
11 sent-paid framework is indeed the norm for commercial purposes.

12

13 I would agree that there is a sound economic argument for a sent-paid
14 framework being adopted where there is an explicit price per call and/or
15 per minute. That is, assuming rational behavior on the part of the
16 consumer, we can be relatively confident that the person originating the
17 call expects to receive benefits at least as great as the price he will have
18 to pay; otherwise the call would not have been made. At the same time,
19 we can not be so confident that the recipient of that call expects to
20 receive any benefits whatsoever. So on a choice-theoretic basis under
21 a measured tariff, a sent-paid framework is definitely indicated and I
22 would agree with that approach.

23

24 The flat-rated call, with its implicit marginal price of zero, is a bit more
25 problematic, since a call could be made even if no net benefit were

1 anticipated, as the incremental cost beyond the caller's time is zero.
2 However, one aspect is very clear: even under a flat-rated scenario, for
3 a sent-paid framework to be adopted, then the price paid by consumers
4 for the expected calling must at least reflect the volume of local calls
5 anticipated. That is, it has to be paid before it can be sent. With the
6 mean volume of usage being sent on the Internet so very much greater
7 than ever experienced by residential customers in traditional uses of the
8 network, it is fairly clear to me that the current local exchange rate levels
9 were not established with such volumes in mind. Indeed, when the rate
10 levels were set for Verizon in Florida, the Internet did not even exist
11 commercially. Thus, given the current monthly recurring flat rates for
12 Verizon's residential customers, Verizon is not receiving any incremental
13 compensation with which it can compensate a carrier involved in serving
14 an ISP.

15

16 **Q. ON PAGE 15, DR. SELWYN SEEMS TO CLAIM THAT WHAT YOU**
17 **REFERRED TO IN YOUR DIRECT TESTIMONY AS "COMPENSATION**
18 **COSTS" ARE NOT COSTS AT ALL. RATHER SUCH MONIES ARE**
19 **"REMITTANCES." DO YOU HAVE ANY COMMENT?**

20 **A.** Yes. And the landing fee at Logan on that airplane flying Dr. Selwyn back
21 to Boston is not really a "cost" for Delta, but is simply a remittance to the
22 City of Boston for allowing the plane to complete its flight. To Dr. Selwyn,
23 the payment made by Delta to Logan for traffic handed-off to the airport
24 is simply a remittance of monies collected from the Delta customer for a
25 total end-to-end service, a portion of which is furnished by the airport

1 rather than by Delta itself. I do not agree with such "logic."

2

3 Dr. Selwyn is playing a word game here. There is obviously some degree
4 of cost involved in handling the switching of a call. If there is not, as Dr.
5 Selwyn seems to be suggesting, then there is no reason for any of us to
6 be here, as no compensation would be necessary at all. In those
7 situations where the ILEC does pass the call off to another local carrier
8 to carry the call and the ILEC is obligated to make a payment to that
9 carrier under an explicit reciprocal compensation agreement, the ILEC
10 has decidedly incurred a cost, just as an IXC incurs when it hands a call
11 off to a ILEC to complete. Yet AT&T does not allege that the price it pays
12 is simply a "remittance" to the ILEC under these circumstances. To some
13 degree, that explicit compensation cost may be offset by some costs that
14 the ILEC itself can avoid in the long run by not having to place the
15 additional switching capacity, but that does not mean that the cost has
16 been eliminated.

17

18 Further, there is the assumption by Dr. Selwyn that the ILEC, or more
19 generally, the originating carrier, has been compensated for carrying that
20 call in order to make a remittance. Under a flat rate structure, the
21 incremental price received by the originating carrier is zero, while the
22 incremental compensation cost (and production cost) is positive in an
23 explicit reciprocal compensation mode. Unless the expected incremental
24 compensation (and production) costs have been built into the flat rates
25 paid by customers, then again, there is not a sent-paid framework in

1 place and there is no basis for any remittance to be paid.

2

3 **Q. ALSO BEGINNING ON PAGE 15 OF HIS TESTIMONY AND**
4 **CONTINUING ON PAGE 16, DR. SELWYN BRIEFLY ADDRESSES**
5 **THE ISSUE OF RATE CHANGES WHICH MIGHT BE NECESSARY IN**
6 **LIGHT OF RECIPROCAL COMPENSATION PAYMENTS RESULTING**
7 **FROM INTERNET-BOUND TRAFFIC. DO YOU HAVE ANY**
8 **COMMENTS?**

9 A. Yes. Dr. Selwyn suggests that if an ILEC's local service revenues from
10 end users are insufficient to generate adequate revenues to cover the
11 usage costs associated with that customer's dial-up ISP calls, the ILEC
12 should adjust its local exchange rate structure. So far as this statement
13 goes, I am very much in agreement with Dr. Selwyn. As I have
14 repeatedly pointed out, the issue of reciprocal compensation is very much
15 one of relative price levels and relative rate structures, not simply the
16 matter of the level of the intercompany compensation rate. This is one
17 of the reasons that I have suggested the principle in my direct testimony
18 that the rate structure and rate level for intercompany compensation
19 should be aligned with the retail rate structure and rate level seen by the
20 majority of end users in Verizon's service areas in Florida.

21

22 As the Commission is very aware, the issue of local rate levels is a
23 somewhat sensitive matter. Under Chapter 364, the Commission has
24 only limited ability to revise local residential rates. Increasing the price of
25 end user service, whether undertaken at the Legislature or at the

1 Commission, is likely to be very controversial, taking a considerable
2 amount of time and effort to resolve. Further, it is obviously the case that
3 not all customers are utilizing the Internet on a dial-up basis. As I
4 suggested in my direct testimony, an estimate would be somewhere
5 between 25% and 50% of the residential end users are users of the
6 Internet. Since the flat rate is the most widely available service in Florida,
7 increasing the flat rate has distributional consequences on customers
8 who are not responsible for the incremental production and compensation
9 costs being generated by the Internet-bound traffic. Of course, this is a
10 result of the averaging inherent in any flat-rate structure. However, given
11 these distributional and political considerations, it is simply not an
12 accurate statement for Dr. Selwyn to allege that Verizon is attempting to
13 "escape" its obligations to pay reciprocal compensation. If the end user
14 rates cannot be adjusted in a timely manner taking into account the
15 distributional impacts, or if there is a desire to avoid the upward pressure
16 on local rates to the extent possible, then modifying the intercompany
17 compensation structure can be a sound public policy alternative.

18
19 Further, I want to be clear that it is the relative prices for local exchange
20 service and intercompany compensation for the termination of "local"
21 calling which need to be brought into alignment. That is, some ALECs
22 have argued elsewhere (to their credit, I do not read such an argument
23 explicitly stated in the testimony of the ALECs in this case) that when one
24 considers all sources of revenues received by an ILEC, such as vertical
25 services, the ILEC generates more than enough revenues to pay

1 reciprocal compensation costs. Clearly, that is simply an argument for
2 cross-subsidization of ISP-bound usage (and other local usage) by other
3 services offered by the originating carrier. It is not even clear that those
4 customers buying such additional services are the same customers
5 utilizing the Internet, again giving rise to the distributional concerns about
6 price impacts. In any event, this is why I focus on the price of the basic
7 local exchange service in relation to the intercompany compensation rate
8 in my direct testimony. The ILEC or any originating carrier should not
9 have to rely on selling other services and potentially selling those
10 services to another customer set to generate sufficient revenues to pay
11 for usage related costs of ISP-bound traffic.

12

13 **Q. IN HIS CHART ON PAGE 17, DR. SELWYN SUGGESTS THAT THE**
14 **DEMAND FOR SECOND LINES HAS GROWN SUBSTANTIALLY**
15 **OVER THE PAST DECADE. DO YOU AGREE?**

16 **A.** Certainly, Verizon and no doubt BellSouth and other ILECs have sold
17 additional lines to residence customers, as Dr. Selwyn points out. This
18 surely results in the companies generating additional revenues, as he
19 states on line 4 of page 17. It also results in the companies generating
20 additional costs, which he does not state. However, it is certainly not the
21 case that all such second line growth is attributable to the Internet. A
22 simple examination of Selwyn Figure 1 shows that a substantial portion
23 of the line growth was well underway prior to the widespread commercial
24 availability of the Internet in the '96 timeframe.

25

1 Q. DR. SELWYN CONTENDS THAT THE FCC REPORTS THAT THE
2 INTERNET HAS NOT RESULTED IN INCREASED USAGE PER LINE.
3 DO YOU AGREE?

4 A. No. The FCC's own characterization of the data that Dr. Selywn relies
5 upon indicated that "(i)n recent years [*local calling*] *has begun to surge*
6 due to the introduction of facsimile machines, computer modems, and
7 other devices that use telephone lines." (FCC Reports, Trends in
8 Telephone Service, March 2000, emphasis added.) So while Dr. Selwyn
9 finds that there is no evidence of such an effect at page 16, line 16, the
10 FCC's own words in the report suggest that local usage is increasing
11 substantially.

12
13 In addition, on page 23 of his direct testimony, Dr. Selwyn reports that he
14 believes that the average dial-up Internet user spends 1500 minutes per
15 month on the Internet. While I find this estimate to be a bit conservative
16 based on the studies I provided in my direct testimony, it is absolutely
17 clear that this is an amount of usage substantially greater than the
18 roughly 400 minutes that residential customers generated prior to the
19 Internet.

20
21 It should also be pointed out that the FCC figures are based upon data
22 that includes not only residential customers, but also includes the largest
23 multi-line business customers. The latter group tend to originate more
24 voice traffic over their network connections than do residential customers.
25 This results in a higher average per line usage for voice than would exist

1 if only residential data were used to establish the baseline amount of
2 traffic. While there is nothing incorrect about this data sample per se,
3 when ISP-bound usage is added to the mix post-1995, the inclusion of
4 large business traffic in the original sample tends to make the additional
5 usage look less dramatic. Indeed, if only residential usage data were
6 included in the pre-1995 calculation, the percentage increase due to ISP-
7 bound traffic would likely be far more dramatic. This is important because
8 residential customers are much more likely than business customers to
9 use dial-up Internet access arrangements.

10

11 **Q. ON PAGE 18, DR. SELWYN ARGUES AGAINST THE APPLICATION**
12 **OF ACCESS CHARGES TO ISP-BOUND TRAFFIC. DO YOU**
13 **SUPPORT SUCH CHARGES?**

14 **A.** No. I never have. I have testified before this Commission, as well as
15 others, that the application of switched access charges, as they currently
16 are structured, are not suitable for a locally competitive market. So if Dr.
17 Selwyn is suggesting that Verizon Florida is one of the ILECS supporting
18 the application of access charges to ISP-bound traffic, he is incorrect.

19

20 As an aside, however, by adopting a reverse billing of appropriate usage
21 sensitive or monthly recurring charges to the ISPs, one could circumvent
22 the distributional difficulties I briefly discussed earlier. That is, it is clear
23 that the ISPs do have a demand to be called by end users. In fact,
24 without such a demand, there is not much point in their existence.
25 Further, the ISPs know which of their end users are generating the

1 usage. Thus, by billing any charges on a reverse basis to the ISPs, and
2 allowing the ISPs to pass those charges on to their end users if they
3 desire, much as is done in an access charge structure by IXCs, the
4 problem of billing all residential end users for the traffic generated by only
5 some of them is avoided. Even if this type of billing arrangement were to
6 be adopted, the \$0.00476 figure used in Dr. Selwyn's testimony in Table
7 1, page 24, would be too high a price. Yet approximately that same
8 figure -- \$0.0043 -- is what is called for in some of Verizon's
9 interconnection agreements, if Internet-bound traffic is considered local.

10

11 Even a representative of the ALECs has acknowledged that current
12 reciprocal compensation rates are "probably too high." John
13 Windhausen, Jr., President of the Association for Local
14 Telecommunications Services ("ALTS"), was quoted as reported by
15 Telecommunications Reports, January 3, 2001, in response to the FCC's
16 pending decision on the reciprocal compensation issue. This clearly
17 suggests that the current rates more than cover the costs the ALECs
18 anticipate. Not only are current switched access charge levels too high
19 to apply to local exchange traffic, but current reciprocal compensation
20 prices are too high as well.

21

22 **Q. ON PAGE 28, DR. SELWYN CONTENDS THAT "ILECS HAVE**
23 **ARGUED THAT THE ISP, NOT THE END USER, IS THE 'COST-**
24 **CAUSER' IN THE CASE OF ISP-BOUND CALLS." IS THAT AN**
25 **ACCURATE STATEMENT?**

1 A. No, I have not made that argument on behalf of Verizon Florida with
2 respect to the usage sensitive costs. As I have pointed out briefly above,
3 it is absolutely clear that ISPs do want to be called by their end users; if
4 they did not, they have no *raison d'etre*. It is clear, however, that the
5 ISPs do have some element of cost causality associated with their
6 existence. That is, the ISP, whether connected to an ALEC or an ILEC,
7 is causally responsible for the costs of its connection to the network.
8 That would include the loop facilities as well as the port on the switch of
9 the carrier serving the ISP. With respect to the traffic sensitive costs, if
10 a sent-paid framework is adopted and the end user rates are adjusted to
11 accommodate such a framework, then it is the end user with the demand
12 for such calling responsible for the usage sensitive costs. If the sent-paid
13 framework is not adopted, which includes the alignment of end user and
14 intercompany compensation rate levels, then the carrier signing up an
15 ISP must recognize, clearly as ALECs did when they signed up ISPs, that
16 such carriers will terminate large volumes of traffic and must plan
17 accordingly. In either event, it is clear that both the end user originating
18 the call and the ISP have causal responsibility for the costs incurred in
19 serving the ISP.

20
21 **Q. ON PAGE 29, DR. SELWYN STATES THAT VERIZON IS SEEKING**
22 **INSULATION FROM COMPETITIVE LOSSES. ARE YOU?**

23 A. Absolutely not. I have stated on numerous occasions that the ALECs are
24 simply responding to the incentives that are created by the combination
25 of retail prices and prices for reciprocal compensation they face in the

1 marketplace. As to Dr. Selwyn's characterization that we mis-assessed
2 the market, I would very much differ. As an initial matter, Verizon has
3 never considered ISP-bound traffic to be local in nature, so there would
4 have been no reason for it to "assess the market" in the terms the ALECs
5 apparently did—that is, to draw up business plans based on the
6 assumption of reciprocal compensation windfalls. In any event, as I
7 stated at the time the original debates were occurring on this topic, if one
8 goes down the route of reciprocal compensation on a usage sensitive
9 basis, then the end user rate levels and possibly rate structures would
10 have to be modified as well.

11

12 Likewise, I have never sought protection from competitive inroads by
13 ALECs. I have argued, both then and now, for getting the relative prices
14 in alignment. That can either be in the form of end user rate adjustments
15 or adjustments to the intercompany compensation rates. Arguing for
16 aligned price structures and rate levels is not the same as asking for
17 protection from competitive losses. On the contrary, it is procompetitive,
18 since it would move in the direction of making residential customers a
19 more attractive target for new entrants relative to their positioning in the
20 market today, and it would assure that market success is due to superior
21 marketing skills and/or to service quality preferred by the customers.

22

23 **Q. ON PAGE 32, DR. SELWYN STATES THAT BELL SOUTH HAS**
24 **GENERALLY OPPOSED BILL AND KEEP, ARGUING IN FAVOR OF**
25 **RECIPROCAL COMPENSATION. HAVE YOU TAKEN THE SAME**

1 **POSITION?**

2 A. Yes, I have, but always with the endorsements as to the changes
3 required to the end user rates. That is, if the intercompany compensation
4 structure is to be on a usage sensitive basis, then the rates to the end
5 user should also be on that basis. At the very least, on a flat rate basis,
6 the end user rates would have to reflect the increased costs brought
7 about by the increased usage for both the production costs and the
8 compensation costs. If those changes cannot be made in the short
9 term, then an intercompany compensation plan consistent with the end
10 user rate structure seen by the majority of the customers is the most
11 appropriate path to undertake. That has been my position on the topic
12 of intercompany compensation since the beginning of the debates and
13 it has not changed. What has changed most dramatically is the level of
14 usage being generated and the growth rate of such usage. Steadily
15 increasing usage would imply that under flat rated end user structures,
16 periodic changes will be required to reflect the increasing level of usage
17 and likely increase in compensation costs.

18

19 **Q. BEGINNING ON PAGE 46, DR. SELWYN ARGUES THAT THERE ARE**
20 **NO PRACTICAL MEANS AVAILABLE FOR RELIABLY**
21 **DISTINGUISHING BETWEEN "ORDINARY" CALLS AND THOSE**
22 **THAT ARE BOUND TO THE INTERNET VIA AN ISP. DO YOU**
23 **AGREE?**

24 A. First, I have not recommended that such a segregation of traffic should
25 take place. To the contrary, if ISP-bound traffic is to be considered "local",

1 then it should be treated as other local traffic is treated. Technical
2 differences aside in how traffic is handled, as I have pointed out in my
3 direct testimony, the distribution of "ordinary" traffic is quite different from
4 "ISP-bound" traffic. The dramatic difference between the mean calling
5 rate makes it possible, if the Commission wishes to do so, to obtain a
6 useful estimate of the amount of ISP-bound traffic being exchanged
7 between carriers. This is useful for aggregate purposes, but does not
8 identify any given call as "ISP-bound" or "ordinary" voice type traffic. All
9 of Dr. Selwyn's observations, such as calls over 60 minutes, etc., being
10 Internet, were never the purpose of any estimation technique I have
11 suggested, for I never suggested that individual calls be identified in that
12 manner. What was suggested was an aggregate proportional estimator,
13 since we have an estimate of the mean holding time of "ordinary" traffic
14 and we have available an estimate of the mean holding time of "ISP-
15 bound" traffic, along with an observed mean holding time coming off an
16 interconnection trunk, making it possible to estimate what portion of each
17 type of call is present in order for the observed mean of the mix of traffic
18 to be realized. That is, let x = the % of traffic which is ISP-bound; let H_i
19 be the estimated mean holding time of ISP-bound traffic; let H_v be the
20 mean holding time of voice traffic and finally let H_o be the observed mean
21 holding time on an interconnection trunk between two carriers where both
22 types of traffic are being carried. Then,

$$23 \quad H_i \cdot x + H_v \cdot (1-x) = H_o.$$

24 Since we have estimates of the mean holding times for both Internet-
25 bound traffic and for ordinary voice traffic and we also have an

1 observation of the calculated mean holding time for the traffic coming off
2 the interconnected trunk, it is possible to calculate the value of x -- the
3 percentage of traffic that is bound to the Internet.

4
5 Note that in estimating the mean holding time, no assumption is made
6 that all calls over any given minutes are ISP-bound or that all calls under
7 any given duration are ordinary voice calls. That would be an absolutely
8 wrong assumption to make and I do not make any such assumption. The
9 holding time for each is the mean of all such calls in each sample. As an
10 example, in the Michigan ISP-bound calls sampled by Coast to Coast,
11 that sample would include calls of as little as six seconds and as long as
12 21 days!! Likewise, the ordinary voice calls would include ten-second
13 calls and conferences calls lasting hours. I am not trying to exclude or
14 separate long calls from short calls, as has been claimed by some critics.

15
16 Again, however, it not my intention to try to classify any individual call
17 with such an approach. It simply is a useful reasonable approximation,
18 should the Commission be interested, of the relative amount of traffic that
19 is ISP-bound vs. ordinary voice traffic.

20
21 In any event, the standard that Dr. Selwyn sets forth that "any workable
22 system would have to ensure that individual calls....were in all cases
23 correctly identified as ISP-bound or not" is a statistical impossibility, as he
24 is well aware. Any statistical classification scheme can only be accurate
25 up to some level of probability. Dr. Selwyn's standard demands 100%

1 perfection for all individual calls and in all cases. Yet he finds
2 "reasonable approximations" satisfactory in terms of ALEC cost estimates
3 when he states on page 65 that "Section 252(d)(2)(ii) does not require
4 precise identification of each carrier's call termination costs, but instead
5 a reasonable approximation" and in the usage statistics he cites in Figure
6 2 of his testimony. Approximations do work and do not demand
7 unachievable perfection, which Dr. Selwyn apparently seeks for at least
8 some purposes. However, keep in mind that Verizon is not asking that
9 such traffic be differentiated for compensation purposes.

10

11 **Q. DOES THAT SUGGEST THAT IF THE COMMISSION WERE TO**
12 **ADOPT A BILL AND KEEP APPROACH CONSISTENT WITH THE**
13 **FLAT-RATED END USER RATE STRUCTURE THAT ALL "LOCAL"**
14 **TRAFFIC WOULD BE EXCHANGED ON SUCH A BASIS?**

15 A. Yes. That suggests that the current traffic flows from which Verizon
16 receives reciprocal compensation payments, such as AT&T Wireless or
17 Sprint PCS for the termination of cellular and other wireless minutes of
18 use, would be ended. Likewise, any payments from the ALECs for
19 ordinary voice traffic would cease as well.

20

21 **Q. HAVE ANY OTHER PARTIES SUGGESTED THIS TYPE OF**
22 **APPROACH?**

23 A. Yes. Essentially this is the original ALEC position for bill and keep for all
24 local exchange traffic. In addition, since the direct testimony was
25 prepared, the FCC's Office of Plans and Policy has issued two working

1 papers strongly suggesting a movement to such a regime for
2 interconnection purposes. These are "Bill and Keep at the Central Office
3 As the Efficient Interconnection Regime," by Patrick DeGraba, December
4 2000; and "A Competitively Neutral Approach to Network
5 Interconnection," by Jay M. Atkinson and Christopher C. Barnekov, also
6 dated December, 2000. These are OPP Working Paper Series, numbers
7 33 and 34, respectively. These papers are available at the FCC website
8 and I have attached copies as exhibits to this testimony. While both
9 papers go beyond the limited scope of this hearing, it is clear that other
10 parties concerned with the development of public policy are considering
11 an end to the inefficiencies created by the mismatch between end user
12 rate structures and rate levels and those set for reciprocal compensation.
13 While certainly not the views of the FCC officially, the Florida
14 Commission may well wish to review these articles in reaching a decision
15 in this case as to the potential direction that the FCC may be moving.
16 These studies would be in addition to those cited by Mr. Fogleman in his
17 testimony concerning the findings of other commissions and the FCC.

18

19 **Q. IN THE TESTIMONY OF MR. FOGLEMAN ON BEHALF OF THE**
20 **COMMISSION STAFF, HE POINTS TO A HOLDING TIME OF 20**
21 **MINUTES FOR ISP-BOUND TRAFFIC AS COMPARED TO THREE**
22 **MINUTES TO FOUR MINUTES FOR VOICE TRAFFIC. DO YOU**
23 **AGREE WITH THOSE ESTIMATES?**

24 **A.** The estimated holding time for ISP-bound traffic cited by Mr. Fogleman
25 appears to be on the low side. Dr. Selwyn indicates a holding time of

1 about 30 minutes in his testimony. As I pointed out in my direct
2 testimony, the holding times for ISP-bound traffic appear to somewhat
3 higher than the 20 minutes previously adopted by the Commission. Of
4 course, the studies that Mr. Fogleman relies upon for his estimates are
5 somewhat outdated now for Internet traffic, dating from 1996 and 1997,
6 as he indicates on page 5 of his testimony. So while I certainly agree that
7 the holding times for ISP bound traffic are far greater than for voice calls,
8 the twenty minutes figure Mr. Fogleman cites is too low, based on more
9 recent information.

10

11 **Q. BOTH MR. FOGLEMAN, FOR STAFF, AND MR. HUNSUCKER, FOR**
12 **SPRINT, BASE THEIR RECOMMENDATION FOR AN ALTERNATIVE**
13 **RATE STRUCTURE FOR INTERCOMPANY COMPENSATION IN PART**
14 **ON THE LONGER HOLDING TIME OF INTERNET-BOUND CALLS.**
15 **DO YOU AGREE WITH THEIR RECOMMENDATION TO ADOPT A**
16 **SET-UP AND DURATION CHARGE?**

17 **A.** To the extent that the Commission insists on a usage-based
18 compensation system between companies for local traffic, I certainly
19 agree that a rate structure containing both separate set-up and duration
20 rate elements is a preferable approach to a rate structure solely based on
21 minute of use structure, largely for the reasons set forth that both
22 witnesses identified. However, while adopting a set-up and duration rate
23 structure is indeed more consistent with the likely usage sensitive cost
24 characteristics, as Mr. Fogleman points out on pages 17 and 18, the
25 same can also be said as to how the costs are incurred by the end user

1 placing the call. While adopting the two-part rate structure helps the
2 problem associated with the longer holding times of ISP-bound calls *vis*
3 a *vis* voice calls, it does not address the mismatch between end user rate
4 structures and levels seen by end users relative to the rate structure and
5 levels for intercompany compensation. Again, I would urge the
6 Commission to keep in mind that reciprocal compensation is an issue
7 involving relative prices, not simply the prices for intercompany
8 compensation.

9
10 In establishing any intercompany compensation plans, the Commission
11 should make an effort to match the intercompany compensation rate
12 structure and rate levels with that seen by the majority of the end users.

13 For Florida customers that would imply a rate structure which is not
14 based on usage (i.e., bill and keep). If the Commission does adopt a
15 usage sensitive rate structure for intercompany compensation, then at
16 least the Commission must allow the originating carriers the opportunity
17 to reflect any increased costs in the rate levels seen by the end users as
18 Internet and other local usage continues to increase at a dramatic pace.

19

20 **Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

21 **A.** Yes.

22

23

24

25

1 **BY MS. CASWELL:**

2 **Q Do you have a summary of your testimony, Mr.**
3 **Beauvais?**

4 **A Yes, I do.**

5 **Q Would you give that now, please.**

6 **A Good morning, Commissioners. Well, it was good**
7 **morning yesterday, and then changed to good afternoon, and**
8 **then it went to good evening, and now we are back to good**
9 **morning so -- the topic we are talking about both today**
10 **and yesterday, I actually find a fairly interesting one,**
11 **going well beyond some of the jurisdictional squabbles**
12 **usually associated with this topic.**

13 **Since I'm not a lawyer, much to the relief of**
14 **probably all the lawyers in the room as well as myself, I**
15 **don't -- I feel no overwhelming urge to get into the legal**
16 **disputes. I suppose we could talk about it if you want,**
17 **but then you will get my opinion as an economist as**
18 **opposed to a lawyer.**

19 **The origins of the debate today show up in the**
20 **advent of local exchange competition and clearly with the**
21 **explosive growth of Internet usage on a dial-up basis. So**
22 **even if the former did not exist as local exchange**
23 **competition, the growth in Internet usage on a dial-up**
24 **basis still would have implications for the price levels**
25 **of telephone service.**

1 **I mean, over the past four years or so, and it**
2 **has been only that short that the Internet has been around**
3 **on a commercial basis, we have seen usage on the Internet**
4 **grow from essentially zero for ISP-bound traffic to**
5 **something on the order of 1,800 to 2,000 minutes of use**
6 **per month per customer on average, with some estimates**
7 **going much higher than that. Contrast that to the**
8 **traditional usage of the typical or mean residential**
9 **customer of only about 400 minutes of use. So the**
10 **combined usage for a residential customer can now be**
11 **expected to be in the range of 2,000 to 4,000 -- or 2,000**
12 **to 2,400 minutes of use for an R-1 customer if he is also**
13 **an Internet customer.**

14 **At the same time we have seen users expand on**
15 **the Internet from about 25 percent of the customers a year**
16 **ago to about 50 percent today for adults and an even**
17 **larger percentage of teenagers and youngsters, which means**
18 **it has essentially doubled in the past year.**

19 **Now, in response to the price incentives facing**
20 **them in the form typically of usage-sensitive**
21 **compensation, many ALECs and rationally and successfully**
22 **so, have marketed their services to the ISP community**
23 **concentrating on obtaining customers likely to receive**
24 **large volumes of traffic.**

25 **At the same time the lack of correspondence**

1 between the intercompany structure as a reciprocal
2 compensation and the rate structure and rate level seen by
3 the end user actually using the service provides and
4 additional disincentive for ALECs to sign up the majority
5 of residential users who are likely to be candidates for
6 Internet customers on a dial-up basis.

7 Thus what we see is the result today that the
8 ILECs disproportionately serves the end user making the
9 calls to the Internet while ALECs disproportionately
10 receive those calls passing them onto the ISPs. In this
11 way the ALECs generate large amounts of reciprocal
12 compensation obligations, yet their customers generate
13 relatively little compensation obligations to the ILECs.

14 Now, I don't mean that as a criticism of the
15 ALECs. I mean, I think they are doing absolutely the
16 rational thing given the prices that they see in the
17 marketplace. But it is readily possible that when you
18 take into account the costs associated with the
19 Internet-bound traffic, those costs can consume more of
20 the residential customers generated basic local exchange
21 service charges given the current level of prices.

22 Now, I want to be very clear about this, and
23 that is that the issue of reciprocal compensation here is
24 a matter of relative prices, not simply the price set for
25 the compensation between companies. You were often told

1 back in the debates about imputation and toll prices and
2 access arrangements, especially by the IXCs, that ILEC
3 toll prices had to account for the level of ILEC access
4 charges. Indeed those toll prices should do so. But by
5 the same token, ILEC retail local service prices should
6 account for the costs that are being paid for both
7 reciprocal compensation and for the incremental cost for
8 production if this Commission, in fact, considers such
9 traffic to be local.

10 So what we are looking at should be a
11 simultaneous adjustment of both local and reciprocal
12 compensation rates for Internet-bound traffic. And they
13 should both be adjusted in the long run to account for
14 each other.

15 If circumstances do not allow for the relative
16 price adjustments to take place, especially with respect
17 to local service prices, and we can certainly understand
18 why you might not like to see that occur, then the
19 preferred policy option is to adopt a nonusage-based
20 option for Internet bound calls, typically known as bill
21 and keep.

22 Indeed that is the basis of my public policy
23 recommendation that I have made to this Commission and
24 many others around the country that the Commission should
25 match the structure and level of intercompany compensation

1 policy to the rate structure and rate level seen by the
2 majority of the end users in the state.

3 **Clearly in Florida the overwhelming majority of**
4 **customers take local service on a flat-rated basis with an**
5 **incremental usage price of zero. It doesn't cost you any**
6 **more to make an additional call. That is true for**
7 **residential and business customers. I don't have the**
8 **precise numbers on the top of my head, but if I had to**
9 **guess I would tell you that the percentage of customers**
10 **taking measured service in Florida is probably less than**
11 **one percent. I can't --**

12 **COMMISSIONER DEASON: Excuse me just a second.**
13 **We had a little bit of debate about that yesterday. So it**
14 **is, just so I am clear, business rates in Florida are**
15 **flat-rated, at least for 99 percent of the customers of --**

16 **THE WITNESS: 99 percent would be my guess, 98**
17 **percent. It is clearly overwhelmingly flat-rated business**
18 **as well as flat-rated residence; yes, sir. And I**
19 **concentrate on the residential customers since they are**
20 **the customers much more likely than business customers to**
21 **use dial-up arrangements to access the Internet. Business**
22 **customers, relatively speaking, are much more likely to**
23 **use dedicated means.**

24 **By adopting a zero priced or usage priced**
25 **reciprocal compensation mechanism you can certainly reduce**

1 some of the upward pressure on residential local rates as
2 well as reduce the current disincentive toward serving
3 such customers inherent in the current mechanism.

4 MS. CASWELL: Mr. Beauvais is available for cost
5 examination.

6 CHAIRMAN JACOBS: Very well. Now, I would go to
7 this side to see if there is cross here. Any cross?

8 MR. MEZA: We have no questions.

9 CHAIRMAN JACOBS: Ms. Masterton, I am just going
10 to have to go with you every time and see how you feel.

11 MS. MASTERTON: I do have a couple of questions
12 for the witness.

13 CROSS EXAMINATION

14 BY MS. MASTERTON:

15 Q Mr. Beauvais, hasn't Verizon been ordered to
16 implement a bifurcated rate structure similar to the one
17 proposed by Sprint in other states?

18 A The call set-up and duration structure?

19 Q Yes.

20 A I believe Wisconsin and Texas have a generic
21 order out for all LECs in the state to adopt the
22 bifurcated structure. There is no -- I do not recall the
23 time frame for it. And currently I am not aware that
24 Verizon could actually implement such a structure in the
25 short run. Clearly it can be done over time, but I don't

1 know that we have the capability today. But you're right,
2 I know Wisconsin has done it, Texas has issued such an
3 order, as well.

4 Q And so the same modifications that Verizon is
5 going to be making to your systems in those states could
6 be implemented in Florida if the Commission were to order
7 that same kind of bifurcated rate structure here, is that
8 correct?

9 A We certainly obey lawful orders of Commissions,
10 yes, ma'am.

11 MS. MASTERTON: Thank you.

12 CHAIRMAN JACOBS: Before we move on,
13 Ms. Caswell, I want -- we had a couple of exhibits for Mr.
14 Beauvais I don't think we marked.

15 MS. CASWELL: Yes. We have ECB-1 attached to
16 his direct testimony and then there was ECB-1 and 2
17 attached to his rebuttal testimony.

18 CHAIRMAN JACOBS: We will mark those as
19 Composite Exhibit 21.

20 (Exhibit 21 marked for identification.)

21 MS. CASWELL: I'm sorry, did you say 20 and 21?

22 CHAIRMAN JACOBS: No, just 21, I'm sorry.

23 MS. CASWELL: Thank you.

24 CHAIRMAN JACOBS: Very well.

25 MS. CASWELL: Sorry about that.

1 **CHAIRMAN JACOBS: Mr. Hoffman.**

2 **MR. HOFFMAN: No questions.**

3 **CHAIRMAN JACOBS: Ms. Kaufman.**

4 **MS. KAUFMAN: No questions.**

5 **MR. HORTON: No questions.**

6 **MS. McNULTY: No questions.**

7 **CHAIRMAN JACOBS: Mr. Moyle, you're not going to**
8 **spoil that?**

9 **MR. MOYLE: I can't let that record go. Just a**
10 **couple of quick questions.**

11 **CHAIRMAN JACOBS: Go ahead.**

12 **CROSS EXAMINATION**

13 **BY MR. MOYLE:**

14 **Q You had testified in response to a question from**
15 **Commissioner Deason that you believed there was a 99**
16 **percent flat rate for businesses in Florida, is that**
17 **correct?**

18 **A I said off the top of my head I would guess the**
19 **number is something like 99 percent. Clearly the**
20 **overwhelming majority of business local customers are**
21 **flat-rated.**

22 **Q And what, if anything, did you review to**
23 **determine that?**

24 **A I called up the people in Florida and got me**
25 **operations and asked.**

1 Q Who did you call?

2 A I couldn't tell you the name off the top of my
3 head. I can go back and get you a name.

4 Q And was that question only in response to
5 Verizon, as to what Verizon's percentage was?

6 A Oh, that is a Verizon number. I would venture,
7 if you would really like speculation, that BellSouth has
8 the same kind of number.

9 Q No, I don't think it's appropriate to decide
10 things on speculation. You had mentioned it was a guess,
11 but you are comfortable that that is the number of
12 Verizon?

13 A I am overwhelmingly comfortable that the number
14 is very small.

15 Q Okay. Let me refer to your testimony on Page 4
16 of your direct testimony. If I understand your testimony,
17 part of the reason you are saying that the Commission
18 should not act in this area is because the FCC is poised
19 to act, is that correct?

20 A The FCC seems to be poised to act for long
21 periods of time lately, yes.

22 Q Do you know when they may act in this case?

23 A As well as anybody else does. No. I would have
24 told you two years ago that they were ready to act, and I
25 told you last December they were ready to act. I can tell

1 you today they are ready to act. No, I don't know that
2 they are ready to act. The rumor is anytime now, but that
3 has been the rumor for two years.

4 Q And if for two years people have been thinking
5 that their actions are imminent, and I note in your
6 prefiled testimony you said that you expected them to act
7 to resolve the dilemma by the end of the year. I presume
8 that was the end of 2000, correct?

9 A Another prognostication gone awry. It's clear
10 that they did not act.

11 Q And you testified on some public policy issues.
12 You don't think it would be good public policy for this
13 Commission to not act premised on some type of speculation
14 as to when the FCC may or may not act, do you?

15 A The Commission can decide to go forward on this.
16 They obviously have the authority to do so. Other states
17 have acted on these issues, as well. You know, I would
18 like to say wait for the FCC to act, but in good
19 conscience, I would have to state the Commission, given
20 the FCC keeps delaying, they should go ahead and consider
21 this. Then they can reach whatever decision they would
22 like.

23 MR. MOYLE: Thank you. I have nothing further.

24 CHAIRMAN JACOBS: Mr. Beauvais, you indicated in
25 your testimony that contrary to testimony yesterday that

1 it is very possible to segregate ISP traffic from the
2 rest.

3 **THE WITNESS:** Yes, sir, I believe you can do so.
4 There are ways to get estimates of the percentage of
5 traffic that are Internet-bound versus traditional voice
6 traffic. You can have a separate debate about whether you
7 should do so, but I believe it can be done.

8 **CHAIRMAN JACOBS:** Also there was testimony
9 regarding the blended rate issue. Are you familiar with
10 that, were you here for that testimony?

11 **THE WITNESS:** The blended rate about taking the
12 call set-up and duration?

13 **CHAIRMAN JACOBS:** Right.

14 **THE WITNESS:** Yes, sir.

15 **CHAIRMAN JACOBS:** And what you argue, I believe,
16 on Page 12, is that until -- and being on Page 12,
17 basically is that we should apply basically a zero rate to
18 these ISP calls because we can't essentially
19 distinguish -- let me make sure I have it correct here.
20 Yes. On Page 11, I'm sorry. And your answer beginning at
21 the top of the page. I want to explore that a little bit.
22 I want to understand just exactly what it is you are
23 recommending there. Could you walk me through that?

24 **THE WITNESS:** Yes, sir.

25 **CHAIRMAN JACOBS:** Your answer beginning on

1 Page 11, Line 2.

2 THE WITNESS: As I tried to say in my summary, I
3 think if it were possible I would recommend that you
4 adjust the rate the end user sees either on a flat rate or
5 a measured rate basis to account for the additional cost
6 associated with producing these new 2,000 minutes of use
7 to being directed to Internet providers. That cost would
8 include the cost of actually producing the minutes, the
9 local switching of them, and any compensation costs that
10 would be paid to ALECs if they were to serve those
11 carriers. That is the reciprocal compensation part.

12 In the event that public policy or legislation
13 says no, you cannot adjust the R-1 rate, the people who
14 were actually making the calls, then the corresponding
15 solution would be well, if I can't adjust those, then I
16 need to adjust the reciprocal compensation rate to
17 essentially match the local end user rate which doesn't
18 account for those costs. That is the bill and keep
19 solution.

20 CHAIRMAN JACOBS: And so you feel that you
21 can -- first of all, you argue that there are additional
22 costs because of longer hold times.

23 THE WITNESS: There are additional costs from
24 the longer holding times. But more to the point it is the
25 total amount of minutes of use that are being generated on

1 **ISP-bound traffic on a dial-up basis that we have never**
2 **seen before.**

3 **CHAIRMAN JACOBS: And then, secondarily,**
4 **existing mechanisms, in your mind, don't recover those**
5 **costs?**

6 **THE WITNESS: To the end user they do not**
7 **recover the cost in basic local service rates, that is**
8 **correct.**

9 **CHAIRMAN JACOBS: Very well. Staff.**

10 **CROSS EXAMINATION**

11 **BY MS. KEATING:**

12 **Q Good morning, Mr. Beauvais.**

13 **A Good morning.**

14 **Q I would like to apologize up front to you and**
15 **the court reporter, I'm a little raspy today. So if you**
16 **have any problems hearing me, just stop me.**

17 **First, I would like to follow up on a question**
18 **that Mr. Moyle was asking you about the delay in the FCC's**
19 **order. Have you changed your position, do you now think**
20 **that this Commission should now go ahead and rule?**

21 **A What I said was I think the Commission can**
22 **certainly go ahead and consider the matter. I have no**
23 **objection to hearings. You know, let's take the**
24 **information, then the Commission can decide for itself,**
25 **you know, whether it should rule, or by the time the**

1 information is considered the FCC could very well issue an
2 order.

3 Q Are you aware of any states that have declined
4 to rule?

5 A Declined to rule?

6 Q Declined to rule on this particular issue.

7 A Over what time period? I believe, you know,
8 states have certainly adopted bill and keep in the last
9 year. Some states have done it before that. I'm not sure
10 that any of them have said -- well, let's see. Did
11 Virginia decline to rule on some matters in this? I think
12 they did.

13 Q You just read my mind. That is my next
14 question.

15 A I think Virginia did decline to rule, but we
16 think it is interstate and we will wait for the FCC to
17 act.

18 Q So you are familiar with the Starpower case,
19 which is the Virginia?

20 A Well, I seem to remember reading something about
21 it. Familiar would be a stretch.

22 Q If I could, I would like to hand you a copy of
23 that case.

24 COMMISSIONER JABER: Mr. Beauvais, while they
25 are doing that, for those states that have determined that

1 **bill and keep is the appropriate mechanism for reciprocal**
2 **compensation, did they make a finding that traffic was**
3 **local or interstate?**

4 **THE WITNESS: I'm not sure, Commissioner. I**
5 **believe some of them said it is local, it's bill and keep,**
6 **and others said it is interstate. You know, following the**
7 **FCC's declaratory ruling last year.**

8 **COMMISSIONER PALECKI: So the ones where they**
9 **were determined to be interstate, the Commissions found**
10 **that the traffic was roughly balanced, is that how that**
11 **worked?**

12 **THE WITNESS: No, they found it to be**
13 **interstate, and, therefore, not subject to reciprocal**
14 **compensation obligations one way or the other.**

15 **COMMISSIONER PALECKI: But they still felt they**
16 **had the jurisdiction to rule on it.**

17 **THE WITNESS: They did feel -- I think they did**
18 **feel -- well I can't say how they felt. I can speculate.**
19 **They believe that they do have the authority to rule,**
20 **since the FCC had not done so. Because if you looked at**
21 **the First Report and Order where all the stuff came from,**
22 **that was in '96 when the Internet was just barely**
23 **developing. You know, it largely I would argue referred**
24 **to voice traffic at the time which likely would be in**
25 **balance. It is the Internet that upsets the balance of**

1 traffic.

2 **So I'm not sure that they said the traffic is in**
3 **balance, because it strikes me as, you know, nobody is**
4 **rationally going to argue today that traffic flows are in**
5 **balance, per se, in the sense that they are 50/50. Most**
6 **agreements have some range of options in there being plus**
7 **or minus 20 percent. So balance in the sense we refer to**
8 **whatever the parties agree to what in balance means in**
9 **private negotiations. I don't think any state commissions**
10 **have argued that the traffic is, quote, in balance for**
11 **Internet traffic is the basis of the decisions.**

12 **COMMISSIONER JABER: What prevents parties from**
13 **agreeing to bill and keep in their negotiations?**

14 **THE WITNESS: Nothing. Most of our agreements,**
15 **in fact, the initial one signed had bill and keep as a**
16 **default if traffic were in balance by roughly 20 percent,**
17 **plus or minus. I guess there is nothing that says that**
18 **couldn't be 30 percent, 40 percent, whatever number you**
19 **want. But that is how most agreements were initially**
20 **written.**

21 **BY MS. KEATING:**

22 **Q Just to follow up on the Commissioners'**
23 **questions, do you recall any of the states that you are**
24 **referring to that you believe have ruled?**

25 **A Have ruled?**

1 Q Uh-huh.

2 A Let's see, Iowa, I believe, has always been bill
3 and keep. Colorado switched from reciprocal compensation
4 to bill and keep. Massachusetts did, as well. I think
5 New Jersey did. I believe Louisiana did, you know, in the
6 past year or two.

7 Q Thank you. If I could now get you to take a
8 look at that Starpower case. And just to refresh your
9 memory a little bit, this is a case where reciprocal
10 compensation was an issue before the Virginia Commission.

11 How familiar are you with this case, Mr.
12 Beauvais?

13 A I have never seen the order before.

14 Q Okay.

15 A Which probably tells you I'm not real familiar
16 with it.

17 Q Well, would you accept, subject to check, that
18 in this case the Virginia Commission declined to rule on
19 the issue of reciprocal compensation for traffic to ISPs?

20 A Yes, ma'am.

21 Q And could I get you to turn to Paragraph 7 of
22 that order. Would you mind just reading that paragraph
23 for me, please?

24 A Out loud or just read it?

25 Q Just read it out loud, please.

1 **A Paragraph 7. Let's see, "We must next consider**
2 **whether the Virginia Commission has, 'failed to act'**
3 **within the meaning of Section 252(e)(5). In this case the**
4 **Virginia Commission expressly declined to resolve the**
5 **petitions before it in and interpret and enforce**
6 **Starpower's interconnection agreement with GTE and Bell**
7 **Atlantic. Specifically, the Virginia Commission stated in**
8 **the Starpower/GTE decision, 'We believe the only practical**
9 **action is for this Commission to decline jurisdiction and**
10 **allow the parties to present their cases to the FCC.' We**
11 **first note that we are sympathetic to the concerns of the**
12 **Virginia Commission with regard to the status of the law**
13 **governing intercarrier compensation for ISP-bound traffic.**
14 **Because the decisions explicitly declined to take any**
15 **action with respect to Starpower's petition, however, we**
16 **are compelled to conclude that the Virginia Commission**
17 **failed to act to carry out its responsibility under**
18 **Section 252. Accordingly, the Act requires us in these**
19 **unique circumstances to assume the jurisdiction of the**
20 **Virginia Commission and resolve the outstanding**
21 **interconnection disputes."**

22 **Q Okay. Thank you. Now, Mr. Beauvais, I**
23 **understand you are not all that familiar with the order,**
24 **but I would like to get your impressions of that**
25 **paragraph. Does it indicate to you that the FCC believes**

1 states can't act with regard to the issue of reciprocal
2 compensation for traffic to ISPs?

3 A I'm sorry, was that a negative, the states
4 cannot act?

5 Q A negative, cannot act.

6 A This seems to suggest that the FCC will act
7 since it believed the Virginia Corporation Commission did
8 not act.

9 Q I guess what I'm going for, though, is do you
10 think the FCC has indicated here that state commissions
11 cannot act?

12 A Well, they expressed sympathy with the concerns
13 and say that since Virginia didn't act, they would. That
14 would suggest that Virginia at least had some limited
15 authority to take some kind of action.

16 Q Okay.

17 COMMISSIONER DEASON: Let me ask a question on
18 that. The very last sentence, there is a phrase in there
19 that says -- the FCC speaking says that they will assume
20 the jurisdiction of the Virginia Commission. I imply from
21 that, then, that the FCC feels like that Virginia, and I
22 guess all states, have jurisdiction in this matter.

23 THE WITNESS: And I would agree with you,
24 Commissioner. How extensive that is, that is how I would
25 read this one act.

1 **COMMISSIONER DEASON: Did they -- anywhere in**
2 **here did they define what they consider that jurisdiction**
3 **to be?**

4 **THE WITNESS: In this order?**

5 **COMMISSIONER DEASON: Yes.**

6 **THE WITNESS: I have no idea, I have never seen**
7 **it before.**

8 **COMMISSIONER DEASON: So it seems -- you know,**
9 **it appears -- I will express an opinion, tell me if you**
10 **think it is right or wrong. It appears that the FCC is**
11 **saying to the states, you have got jurisdiction and if you**
12 **don't act, well, then you are in violation; but then if**
13 **you do act and we don't like what you did, well, then you**
14 **are still in violation.**

15 **THE WITNESS: Being charitable to the FCC, that**
16 **is indeed what it seems to say.**

17 **COMMISSIONER JABER: Where does it say that if**
18 **we don't like what you did we will assert jurisdiction?**

19 **THE WITNESS: Well, it seems to me they have**
20 **declined to say that the -- Virginia said you have**
21 **declared this thing to be interstate, therefore, we**
22 **decline to act. The FCC says, well, the act says that you**
23 **have to act, and we don't like your decision in this case**
24 **not to act, so we are going to take it for you.**

25 **COMMISSIONER JABER: Where does it say that the**

1 **Virginia Commission found the traffic to be interstate?**

2 **THE WITNESS: In this?**

3 **COMMISSIONER JABER: Yes. We're talking about**
4 **this order.**

5 **THE WITNESS: I believe that was the basis, as I**
6 **recall, that Virginia had said the FCC says -- has**
7 **declared this traffic to be interstate in jurisdiction,**
8 **therefore we refuse to -- you know, we decline to act**
9 **under this, in this case. I don't know that that says**
10 **that in this order or not. As I said before, I have never**
11 **seen this document.**

12 **COMMISSIONER JABER: Are you familiar with**
13 **Section 252 of the Act?**

14 **THE WITNESS: I haven't memorized it but, yes,**
15 **ma'am, I have read it.**

16 **COMMISSIONER JABER: Isn't it Section 252 of the**
17 **Act that makes states rule over interconnection**
18 **arbitrations?**

19 **THE WITNESS: When there is a dispute between**
20 **two parties who have tried to reach an agreement and could**
21 **not, yes, ma'am.**

22 **COMMISSIONER JABER: And isn't it 252 of the Act**
23 **that says if a state commission fails to act the FCC can**
24 **assume jurisdiction?**

25 **THE WITNESS: And that's what they have done.**

1 **COMMISSIONER JABER: Who created the Act, was**
2 **that Congress?**

3 **THE WITNESS: Yes.**

4 **COMMISSIONER JABER: Who is charged with**
5 **implementing the Act?**

6 **THE WITNESS: I would guess the FCC and the**
7 **courts.**

8 **COMMISSIONER JABER: And?**

9 **THE WITNESS: And, of course, the state**
10 **commissions, as well.**

11 **CHAIRMAN JACOBS: I think you raised in your**
12 **testimony -- I think you accede that this Commission may**
13 **have the authority to look at this issue, but only in the**
14 **context of a pending arbitration agreement.**

15 **THE WITNESS: That is my understanding from the**
16 **advice of my attorneys. Again, I am not an attorney.**

17 **CHAIRMAN JACOBS: Okay. I don't want to take**
18 **you too far out on that limb. That is probably more of a**
19 **legal question. I may ask for us to at the close, I think**
20 **we want to brief that particular issue. And there was**
21 **another one that we wanted to brief, but we will leave it**
22 **for that rather than pushing you further.**

23 **THE WITNESS: Thank you, sir.**

24 **BY MS. KEATING:**

25 **Q Mr. Beauvais, if I could just follow up on a**

1 question that Commissioner Deason was asking. Could I get
2 you to look at Page 2 of the Starpower order?

3 A Page 2?

4 Q Yes, sir. Footnote 7. Could I get you to read
5 the first half of that footnote up to the citation of
6 petition of Starpower Communications?

7 A Let's see. Footnote 7, "The Virginia Commission
8 stated this Commission's 'failure to act on either
9 intercarrier compensation or separations reform for ISP
10 traffic has created great regulatory uncertainty' and
11 that, in the absence of any Commission rules on
12 intercarrier compensation, 'any interpretation of the
13 instant agreements we might reach may well be inconsistent
14 with the FCC's final order in its rulemaking.'"

15 Q Thank you. Are you aware of whether the FCC has
16 taken any action on the Starpower case since it took
17 jurisdiction of the case?

18 A No, ma'am, I am not.

19 Q Okay. I've got a few questions now about
20 separating ISP traffic out from local traffic.

21 COMMISSIONER DEASON: Excuse me just a second.
22 I want to get something clear in my mind. Mr. Beauvais,
23 we are asking you these questions about this order and you
24 have already admitted that you are not that familiar with
25 it, but you are our vehicle to talk about this. So, I'm

1 looking at the first page of this, and it says it was
2 adopted June 14th, year 2000.

3 And from what I take from counsel's questions to
4 you and your responses is that the FCC determined that
5 Virginia failed to act and, therefore, whatever
6 jurisdiction they had was taken away from them. And it
7 was taken by the FCC, and they determined to do that on
8 June 14th, year 2000, and they have yet to do anything
9 with that jurisdiction they took away from the Virginia
10 Commission. Is that -- am I interpreting that correctly?

11 THE WITNESS: Aside from the question that they
12 had yet to act, I don't know if they have or not. I'm not
13 aware of what they have done subsequent to this in this
14 case. But if they haven't, then clearly they haven't done
15 anything since June 14th, and you would be correct in
16 this.

17 COMMISSIONER DEASON: So if that is the factual
18 case, and I guess we will read this entire thing and we
19 can determine that, but for purposes of my question, just
20 assume that the FCC has taken jurisdiction and has failed
21 to do anything since June the 14th which has been, what,
22 eight months?

23 THE WITNESS: Yes, sir.

24 COMMISSIONER DEASON: Or so, maybe nine. Close
25 to nine. If that it is the factual situation, does that

1 call -- in your opinion, does that call then for the
2 states to go ahead and exercise their jurisdiction because
3 the FCC apparently is not fulfilling their jurisdiction?

4 THE WITNESS: It would seem to me, as I have
5 tried to state before, that while the FCC may be on the
6 verge of acting, we really don't know, and that this
7 Commission may go ahead and certainly consider its
8 options, you know, take the responsibility and proceed.

9 BY MS. KEATING:

10 Q Now, Mr. Beauvais, I want to move to another
11 subject which has to do with differentiating between ISP
12 traffic and local traffic. And I would like to clarify,
13 is it your position that this Commission should establish
14 a bill and keep mechanism for all traffic?

15 A I believe it is my position if, in fact, the
16 Commission considers the traffic to be local and under its
17 jurisdiction, then you probably should treat it like all
18 other local traffic and that would imply that all local
19 traffic would be exchanged on a bill and keep basis.

20 Q And is the reason that you are advocating this
21 position is that end use service in Florida is typically
22 flat-rated?

23 A Yes, ma'am. Because otherwise you have all this
24 increased usage growth going between carriers where you
25 have a positive price being paid, yet the incremental

1 revenues received by the carrier for that is zero from the
2 end user generating that traffic.

3 Q Well, if increased usage is the problem, why not
4 just separate out ISP traffic?

5 A That is certainly an option that is available to
6 the Commission if they care to pursue that option. What
7 we cannot do right now, at least using the method that I
8 have suggested, it does not identify individual calls and
9 individual minutes as ISP-bound versus any other type. To
10 do that you would have to actually go out and start
11 looking at detailed usage studies, probably on an end user
12 basis or at least have some ability to identify where
13 those calls are going to. By putting a number basis out
14 there, it can be done.

15 Obviously the coast-to-coast data that was
16 provided does, in fact, do that. The coast-to-coast,
17 which was the CLEC in Michigan that I referred to in the
18 testimony provided Verizon, or GTE at the time, a list of
19 here are all the calls made to the ISPs we served call by
20 call. It can be done.

21 COMMISSIONER PALECKI: Would imposition of a
22 bill and keep plan across-the-board require ALECs to
23 completely change their marketing strategy?

24 THE WITNESS: It may very well. If the ALEC has
25 guided to concentrate solely on those customers generating

1 or receiving large volumes of traffic, I would think that
2 eliminating that source of revenues to them would cause a
3 shift in the marketing plan to the extent that -- and not
4 all ALECs have done that.

5 COMMISSIONER PALECKI: Couldn't it actually put
6 some of the ALECs out of business to make that transition
7 immediate?

8 THE WITNESS: Well, I don't know if it would put
9 them out of business, it would certainly cause them to
10 change their marketing plans.

11 COMMISSIONER PALECKI: In order to be fair,
12 wouldn't -- if the Commission decided that bill and keep
13 was advisable because of the administrative simplicity,
14 wouldn't we want a transition between a cost-based
15 reciprocal compensation and bill and keep in order to give
16 the ALECs an opportunity to make changes that they see
17 appropriate?

18 THE WITNESS: Well, certainly transition is
19 indeed possible. I think the speculation for sometime has
20 been, and as we heard yesterday even Mr. Falvey said the
21 amounts of -- the prices in reciprocal compensation
22 agreements have been declining anyway. Certainly
23 nationwide that has been the case. So in one sense a
24 transition has been going on for sometime now. One could
25 adopt a transition mechanism, a phase down or immediately

1 go to the bill and keep.

2 COMMISSIONER PALECKI: But don't you agree that
3 this Commission needs to be concerned that it may do
4 irrevocable damage to the ALECs if they were -- if a bill
5 and keep mechanism were imposed immediately for all
6 traffic across the board?

7 THE WITNESS: Well, certainly the Commission has
8 an obligation to all parties it regulates. If it is the
9 Commission's belief that some kind of irrevocable damage
10 will be done, then you have the authority to take action
11 to mitigate those damages to some extent to allow some
12 time for a transition. I don't question the Commission's
13 authority to do that.

14 COMMISSIONER PALECKI: Thank you.

15 CHAIRMAN JACOBS: We are -- I think there was
16 testimony, I think it was in opening arguments that there
17 is substantial reciprocal compensation that is flowing now
18 for traffic other than ISP, there is some for ISP, but
19 mostly for other traffic. Do I hear you to say that you
20 would impose a bill and keep for all reciprocal comp?

21 THE WITNESS: Certainly I like money coming into
22 my company. It is a wonderful plan and we ought to have
23 more of it. But I believe if you are going to treat all
24 local traffic alike as a public policy decision, you know,
25 a lot of that wireless traffic which, in fact, generates

1 more compensation payments to Verizon as a wire line
2 company than flows out for us, if that is to be treated
3 local, then all traffic is treated the same, that would
4 say, yes, we would put that on bill and keep, as well.

5 CHAIRMAN JACOBS: Thank you.

6 BY MS. KEATING:

7 Q Mr. Beauvais, correct me if I'm wrong, but it
8 sounds to me almost like you are advocating rate
9 rebalancing, is that correct?

10 A Yes, ma'am. I think that would be the long-run
11 preferred option would be rate rebalancing to take both
12 into account. And if the political, or social, or other
13 consequences, or legislative mandates don't allow that
14 rate rebalancing to occur, then that leads me to the bill
15 and keep option.

16 Q Okay. Verizon seemed to indicate in its
17 testimony -- discovery responses actually, that if ISP
18 traffic were going to be separated out, it might be useful
19 to use a factor such as the PIU factor?

20 A Yes, ma'am.

21 Q Could you just describe for me a little bit
22 exactly what a PIU factor is?

23 A Well, the initial PIU factor was percent
24 interstate usage. As it was -- the receiving carrier did
25 not necessarily know in an access charge world where calls

1 originated from. All we saw was traffic coming from an
2 IXC. At the time, and I guess it still is the case in
3 many states, the rates for interstate calls are different
4 than the rates for intrastate calls. Even though the
5 functions the LEC is performing is essentially the same,
6 nevertheless the prices are different.

7 So in order to apply the correct rate, one had
8 to get some estimate of what percentage of the traffic was
9 interstate, what percentage of the traffic was intrastate.
10 The IXC would make its estimate of what traffic was
11 interstate and provide that to the ILEC and that is the
12 percentage of interstate usage. You took the minutes of
13 use and multiplied by the factors, multiplied by the
14 appropriate rate, that's the bill that went out.

15 Q So how would you use a factor like that to track
16 ISP traffic?

17 A Well, one could do the same thing. One could
18 develop an estimate of the percentage of traffic that is
19 bound to the Internet or to the ISP of the total traffic
20 coming off the trunk connecting two carriers together that
21 is between the ILEC and a given ALEC. We can observe the
22 mean holding times coming off that trunk. I mean, that is
23 readily observable. If you have some idea of what the
24 holding -- the mean holding time is for an ISP-bound call,
25 as well as an estimate of the mean holding time for other

1 calls, the typical voice call, but, in fact, you can get
2 an estimate of what amount of -- what mix of traffic
3 between Internet-bound traffic and other local traffic
4 would be necessary to produce this observed holding time
5 you see coming off the trunk. That would be essentially a
6 percent Internet usage traffic.

7 You could then take up the total minutes of use,
8 multiply by that percentage, poof, there is your percent
9 Internet factor. I mean, it can be done. Again, it
10 doesn't identify an individual call, it will identify an
11 aggregate number of the percent of the traffic that is
12 bound to the Internet.

13 Q But wouldn't you say that the use of factors to
14 estimate traffic is a fairly common practice in the
15 telecommunications industry?

16 A I think they are used all the time, yes, ma'am.

17 Q Okay. Well, if the factor were going to be used
18 to separate out ISP traffic, would Verizon advocate a
19 carrier-specific factor?

20 A I think it is clear that not all ALECs are
21 following the same marketing strategy, and one could
22 observe different holding times between them. Therefore,
23 even if you took the percentage -- the mean holding time
24 of a voice call and the mean holding time of an Internet
25 call would be the same across all carriers, you would get

1 different percentages between different carrier pairs. So
2 in that sense, yes, you would have to use different
3 numbers for different carrier pairs.

4 Q Do you have any thoughts on how those factors
5 would be developed?

6 A Well, yes. One could do a sample, you know, on
7 a periodic basis, you know, every three months, every six
8 months, do the usage studies. You know, look and see what
9 is out there and update the numbers as applicable. And
10 then use them for the next three months, much like we do
11 percent interstate factor, PIU factors.

12 MS. KEATING: Thank you, Mr. Beauvais.

13 THE WITNESS: Yes, ma'am.

14 CHAIRMAN JACOBS: Commissioners, any questions?

15 Redirect.

16 REDIRECT EXAMINATION

17 BY MS. CASWELL:

18 Q I just have a couple of questions, Mr. Beauvais.
19 I know you haven't seen the Starpower decision before, but
20 does it look to you like this is a dispute about an
21 existing agreement?

22 A From what I was just reading here since the
23 State Corporation Commission in Virginia declined, it was
24 an interconnection dispute on an existing agreement
25 between Starpower and apparently GTE.

1 **Q** Is there anything in the Act that requires or
2 even contemplates that a state commission will undertake a
3 generic proceeding to determine a reciprocal compensation
4 mechanism to your knowledge?

5 **A** I believe the Act calls for bilateral
6 negotiation between interconnecting parties.

7 **Q** Does the prevailing usage-based reciprocal
8 compensation structure in Florida promote real or
9 efficient competition for telecommunications consumers in
10 Florida?

11 **A** Well, it certainly promotes rivalry for
12 customers receiving large volumes of information. I think
13 it probably discourages, as I have said in the summary and
14 in my testimony, competition for customers that are likely
15 to generate those large volumes given the existing rate
16 structure. So it certainly generates some degree of
17 rivalry. I think from a public policy point of view it
18 probably discourages more than it generates.

19 **MS. CASWELL:** Thank you, Mr. Beauvais.

20 **CHAIRMAN JACOBS:** There was a question that I
21 had. I'm sorry, Ms. Caswell, it came to mind just now.
22 If we buy your argument, first of all, that these costs
23 are essentially interstate -- these calls, rather, are
24 essentially interstate, and therefore the costs associated
25 with these calls are essentially interstate, aren't there

1 much -- aren't there some profound implications of that
2 policy given what you say to be the -- what they impose on
3 the network?

4 **THE WITNESS: I believe the answer is yes,**
5 **Commissioner, there are. You know, whether they are**
6 **interstate -- first of all, there is nothing magic about**
7 **jurisdictional separations or interstate. The costs are**
8 **the costs wherever they are. It's a matter of where we**
9 **put them on the books somewhere. Given the amount of**
10 **usage that we are seeing generated -- just to make**
11 **calculations easier, let's say 2,000 minutes a month**
12 **additional minutes that are going to the Internet. And**
13 **the number I used in the testimony was 4/10ths of a cent,**
14 **and we can argue what the exact cost figure is. You know,**
15 **but at 4/10ths of a cent and 2,000 minutes a month**
16 **additional, that is \$8 per month, per customer additional**
17 **costs that we have never seen before.**

18 **So if the cost studies are going to mean**
19 **anything, they need to be taken account of somewhere, and**
20 **not just reciprocal compensation, but the end user side.**
21 **But all of a sudden, you know, this amounts to serious**
22 **quantities of money and the implications for public policy**
23 **of where that gets collected from. I think it's one of**
24 **the reasons the FCC has been relatively reluctant to act**
25 **on this, because they can do the basic arithmetic as well.**

1 **So, yes, there are serious implications to the**
2 **pricing and that's why my summary says if you want to**
3 **reduce some of this upward pressure, it wouldn't eliminate**
4 **all of it, but at least you can eliminate some of it by**
5 **going to a bill and keep on end user rates.**

6 **CHAIRMAN JACOBS: Any further redirect?**

7 **MS. CASWELL: No, thank you.**

8 **CHAIRMAN JACOBS: Exhibits.**

9 **MS. CASWELL: I would like to move Exhibit 21**
10 **into the record, please.**

11 **CHAIRMAN JACOBS: Show Composite Exhibit 21 is**
12 **admitted. You are excused, Mr. Beauvais.**

13 **THE WITNESS: Thank you, sir.**

14 **(Composite Exhibit 21 admitted into the record.)**

15 **CHAIRMAN JACOBS: Next witness. You can go**
16 **right ahead.**

17 **MS. CASWELL: If you are ready, Verizon calls**
18 **Mr. Howard Lee Jones to the stand, please.**

19 **-----**

20 **HOWARD LEE JONES**

21 **was called as a witness on behalf of VERIZON FLORIDA,**
22 **INCORPORATED and, having been duly sworn, testified as follows:**

23 **DIRECT EXAMINATION**

24

25 **BY MS. CASWELL:**

1 **Q** **Mr. Jones, please state your name and address**
2 **for the record?**

3 **A** **Howard Lee Jones, 600 Hidden Ridge, Irving,**
4 **Texas 75038.**

5 **Q** **By whom are you employed and in what capacity?**

6 **CHAIRMAN JACOBS: We have a game here called**
7 **make the red light go out.**

8 **THE WITNESS: Is this better?**

9 **CHAIRMAN JACOBS: That microphone seems to be**
10 **just low totally. Would it hurt a lot -- I know that has**
11 **a bearing on the relative angle of necks on this end, but**
12 **it may help us if you would use the other microphone.**

13 **THE WITNESS: This one?**

14 **CHAIRMAN JACOBS: Yes. (Pause.)**

15 **THE WITNESS: Is that better?**

16 **CHAIRMAN JACOBS: Much better. Thank you.**

17 **BY MS. CASWELL:**

18 **Q** **I think I had just asked about your employer and**
19 **your job there?**

20 **A** **Yes. I am employed by Verizon as a group**
21 **marketing manager, data infrastructure.**

22 **Q** **Did you prefile direct testimony in this**
23 **proceeding?**

24 **A** **Yes, I did.**

25 **Q** **Did that testimony contain two exhibits, HLJ-1**

1 and HLJ-2?

2 A Yes, it did.

3 Q Do you have any changes or additions to that
4 direct testimony?

5 A No, I do not.

6 Q Did you also file rebuttal testimony in this
7 proceeding?

8 A Yes.

9 Q And do you have any changes to that testimony?

10 A Yes, I have just one. On Page 2, Line 1, the
11 first word which presently reads know, as in I know,
12 should be known with an N at the end.

13 Q If I were to ask you the same questions in your
14 rebuttal and direct testimony today, would your answers
15 remain the same?

16 A Yes, they would.

17 MS. CASWELL: Mr. Chairman, can I have Mr. Lee's
18 (sic) Exhibits HLJ-1 and 2 marked for identification,
19 please?

20 CHAIRMAN JACOBS: Very well, show HLJ-1 and 2
21 marked as Composite Exhibit 22.

22 (Exhibit 22 marked for identification.)

23 MS. CASWELL: At this time I would like to ask
24 that Mr. Jones' direct and rebuttal testimony be inserted
25 into the recovered as though read.

1 CHAIRMAN JACOBS: Without objection show his
2 direct and rebuttal entered into the record as though
3 read.

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1 **DIRECT TESTIMONY OF HOWARD LEE JONES**

2

3 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

6

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

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

10

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

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

16

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

24

25 **Q. HAVE YOU TESTIFIED PREVIOUSLY?**

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

6

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

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

16

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

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

25

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

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

7

8 **Q. WHY ARE THE COSTS LOWER?**

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

16

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

19 **A.** The costs for the exchange of local traffic were based on a network
20 design that is not strictly applicable to ISP-bound traffic. Voice traffic
21 is typically widely dispersed across the local calling area, requiring
22 equivalent infrastructure at both the originating and terminating points.

23 In contrast, ISP traffic tends to be convergent (i.e., concentrated
24 terminating points) with widely dispersed points of origination.
25 Additionally, the sheer volumes of convergent traffic, coupled with an

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

7

8 **Q. HOW COULD THE COMMISSION RECOGNIZE NETWORK**
9 **DESIGN?**

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

19

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

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

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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

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

23

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

Revised December 13, 2000

1 **CARRIER AND ISP ARRANGEMENTS INVOLVING CIRCUIT**
2 **SWITCHED TECHNOLOGIES?**

3 **A.** Yes. The intent of reciprocal compensation is to provide a
4 compensation mechanism for the joint function of call handling, which
5 is a function of telephony class 5 and, if applicable, telephony class
6 4 switching equipment – i.e., fully line side capable Lucent 5ESS and
7 Nortel DMS series circuit switch equipment. These devices have a
8 core switching cost in the \$2-10 Million dollar range. Internet SS7
9 signaling gateways alleviate the presence of Class 5 and class 4
10 devices altogether and cost between 100 and 300 thousand dollars
11 to serve as many trunks as 30-40 Class 5 devices. If a carrier is a
12 subtending carrier of another—in other words, a receiving entity—it can
13 interconnect Internet traffic without using a telephony circuit switch at
14 all. Technology has been available for two years that allows the direct
15 intercarrier interconnection of full SS7 trunks to modem pools. This
16 technology is called the Internet call gateway, or SS7 signaling
17 gateway, technology. A diagram showing a typical CLEC
18 configuration of the SS7 model is attached as corrected Exhibit HLJ-
19 2. This technology is highly advertised by vendors to both CLECs and
20 ILECs, but only CLECs can take advantage of the cost savings in
21 most instances, because a carrier must be a subtending receiver of
22 ubiquitous exchange traffic to architecturally qualify for benefits.
23 These benefits are realized as cost savings even before reciprocal
24 compensation payments are considered.

25

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

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

9 **A. Yes it does.**

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1 **REBUTTAL TESTIMONY OF HOWARD LEE JONES**

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3 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

6

7 **Q. ARE YOU THE SAME HOWARD JONES WHO SUBMITTED DIRECT**
8 **TESTIMONY FOR VERIZON IN THIS PROCEEDING?**

9 A. Yes.

10

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

12 A. I will address, from a technical perspective, certain statements made by
13 witness Selwyn, testifying on behalf of a number of alternative local
14 exchange carriers (ALECs); witness Hunsucker, testifying for Sprint
15 Corporation; and witness Falvey, testifying for e.spire Communications,
16 Inc. (e.spire).

17

18 **Q. DR. SELWYN CLAIMS THAT THE “REMOTE ACCESS SERVER”/ISP**
19 **CPE PERFORMS A TERMINATING/ SWITCHING FUNCTION ON ISP-**
20 **BOUND CALLS. (SELWYN DT AT 25-26.) DO YOU AGREE?**

21 A. No. Based on my extensive experience in this area, I know that the sole
22 function of a Remote Access Server (RAS) is to translate the digital
23 signal format of the end user’s dial-up call and convert the transmission
24 into a packet format for Internet access. Until April 2000, I was Verizon’s
25 manager in charge of a product called CyberPOP, which is commonly

1 ^{Known}
know in the Internet Industry as a Remote Access Server. I have
2 managed the deployment of approximately 400,000 modems in 270
3 locations across the US in the past five years, and I am very familiar with
4 the variety of devices offered by vendors. None of the RAS equipment
5 had switching capabilities; it merely performed transmission pass-through
6 functions.

7
8 This detail is important for the Commission to understand for the reason
9 that many ALECs have direct interfaces from the ILEC switch into RAS
10 devices at their interconnection facility; nevertheless, they are attempting
11 to bill ILECs for reciprocal compensation (which assumes some switching
12 function) when only the translation function, as I described above, is
13 being performed by the RAS.

14
15 **Q. WITNESSES SELWYN, FALVEY, AND HUNSUCKER MAINTAIN THAT**
16 **INTER-CARRIER COMPENSATION FOR ISP TRAFFIC SHOULD NOT**
17 **BE LIMITED TO CIRCUIT-SWITCHED TECHNOLOGIES. (SELWYN DT**
18 **AT 52-53; FALVEY DT AT 11-12; HUNSUCKER DT AT 17-18.) DO YOU**
19 **AGREE?**

20 **A.** No. Messrs. Falvey and Hunsucker, at least, advance the notion that
21 ALECs using non-circuit-switched technologies will somehow be
22 “penalized” if they do not receive reciprocal compensation for the non-
23 circuit-switched traffic they deliver. Mr. Falvey goes so far as to state that
24 competitive carriers “would have little or no financial incentive” to provide
25 service using advanced, non-circuit-switched technologies if

1 compensation applies only to circuit-switched traffic. (Falvey DT at 12.)

2

3 The lack of reciprocal compensation for non-circuit-switched traffic has
4 not stopped e.spire or the numerous other ALECs here in Florida and
5 around the country from offering non-circuit-switched services, such as
6 xDSL, on a widespread basis. The ALECs have invested significant
7 resources in an effort to dominate the advanced services market. For
8 example, the Association for Local Telecommunications Services
9 (“ALTS”), an ALEC trade association, has claimed that ALECs have
10 surpassed ILECs in providing advanced services over ILEC loops and
11 that ALECs are “driving the deployment of cutting-edge technology.”
12 (Press Release, ALTS’ Fall Education Seminar Proves Success of
13 Telecom Act in Stimulating Broadband Data and Competitive Providers
14 (Sept. 18, 1998).)

15

16 The contention that ALECs using advanced, non-switched technologies
17 will be “penalized” if they do not receive reciprocal compensation makes
18 no sense in terms of technology or the costs associated with that
19 technology. The switching functions that have been the foundation for
20 reciprocal compensation are not present in a non-circuit-switched
21 environment. To this end, I would vigorously dispute Mr. Falvey’s
22 contention that there is any identity of costs between carriers using
23 circuit-switched technologies to deliver traffic and those using non-circuit-
24 switched technologies. (Falvey DT at 12.) The packet routers or
25 ethernet hubs used by data ALECs have nothing whatsoever to do with

1 circuit switching. There is simply no need to compensate a carrier for
2 traffic that never hits a switch. The ALECs' argument that they are being
3 penalized by not receiving reciprocal compensation for non-switched
4 traffic seems simply to be an attempt to receive an unwarranted subsidy
5 from the ILEC—and to share in the reciprocal compensation windfall that
6 other ALECs have received for handling traffic on a switched basis.

7

8 Although Dr. Selwyn also argues that there is no need to limit inter-carrier
9 compensation to circuit-switched traffic, his position seems to be less
10 extreme than that of Messrs. Hunsucker and Falvey. He at least
11 acknowledges that assessing reciprocal compensation for non-circuit-
12 switched traffic is not squarely within the reciprocal compensation
13 requirements of the Act. ("The interconnection requirements of Section
14 251 of the Telecommunications Act of 1996, and the corresponding
15 reciprocal compensation obligations set forth therein and in Section 252,
16 apply to the 'transmission and routing of telephone exchange service and
17 exchange access,' which traditionally has been achieved through circuit-
18 switched technologies." Selwyn DT at 52.) He also admits that "to the
19 extent that ISP-bound traffic is handled via non-circuit-switched
20 arrangements, these arrangements have not generally been of the sort
21 that would call for inter-carrier compensation." (Selwyn DT at 53.) Dr.
22 Selwyn concludes that, under the circumstances, there is no reason for
23 the Commission to take action in this area at this time. (Id.) I agree. But
24 I believe the Commission can and should conclude in this proceeding that
25 from a technical perspective (as well as from policy and legal

1 perspectives), there is no need for inter-carrier compensation for non-
2 circuit-switched traffic.

3

4 **Q. ON PAGES 54 THROUGH 63 OF HIS DIRECT TESTIMONY, DR.**
5 **SELWYN DESCRIBES TYPICAL ILEC NETWORKS, THE NETWORK**
6 **DESIGN TRADE-OFF BETWEEN TRANSPORT AND SWITCHING,**
7 **AND GENERALLY DISCUSSES WHY THE COSTS OF ALEC**
8 **NETWORKS MIGHT DIFFER OR EXCEED ILEC COSTS. DO YOU**
9 **AGREE THAT ALEC COSTS COULD DIFFER FROM THE ILECS'**
10 **COSTS?**

11 **A.** Yes, their costs might differ in certain respects, but I'm not sure what this
12 point is supposed to imply for the Commission's policy decisions in this
13 docket. If the point of Dr. Selwyn's cost discussion is that the ALECs'
14 costs are higher than the ILECs' (thus perhaps implying that ALECs
15 should be compensated on the basis of their costs), I would observe that
16 the most direct way for the ALECs to demonstrate their costs is through
17 a cost study, rather than a discussion about the historical architecture of
18 telephone networks. The ALECs have submitted no such studies here or,
19 to my knowledge, in any other reciprocal compensation proceeding
20 elsewhere.

21

22 In addition, I would take issue with Dr. Selwyn's expectation that "ALEC
23 local usage costs will exhibit proportionately greater duration-sensitivity
24 and proportionately less set-up sensitivity than do ILEC usage costs."
25 (Selwyn DT at 63.) Since ALECs maintain relatively few switch locations

1 in a calling area, it is the ILEC which bears the vast majority of the
2 transport costs. Once the ISP-bound traffic arrives at the ALEC location,
3 it is highly concentrated and can easily be compressed by modems for
4 1/6 the transport capacity or shipped to distant modems on high capacity
5 private lines with very little per unit of duration costs. The fact is that
6 most ISPs will "pick up" their traffic at the switching sites, so the ALEC will
7 have no cost for ISP transport other than the interconnection to the ILEC
8 facility.

9

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

11 **A.** Yes it does.

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1 **BY MS. CASWELL:**

2 **Q Mr. Jones, could you please give us a summary of**
3 **your testimony?**

4 **A Yes. Good morning to the Commissioners, the**
5 **staff and the parties. Thank you for having my testimony**
6 **submitted in this proceeding. I am a network design and**
7 **technical expert witness for Verizon. My scope today**
8 **focuses on network design for ISP versus voice traffic and**
9 **associated cost effects or differences.**

10 **The reason I bring this subject to the**
11 **Commission is not to recommend or discuss legal, policy,**
12 **or exact cost impacts, but to advise that whatever action**
13 **the Commission undertakes the appropriate differences in**
14 **network design and costs should be known and understood**
15 **rather than assumed as equal or unknown.**

16 **The purpose of my testimony today is to address**
17 **Issue 6 regarding the technical factors the Commission**
18 **should consider in setting reciprocal compensation**
19 **mechanisms, and Issue 7, which asks if reciprocal**
20 **compensation for ISP traffic should be limited to circuit**
21 **switch technologies.**

22 **On Issue 6, my testimony first recognizes the**
23 **stunning growth of dial-up Internet usage and the**
24 **resultant design modifications to telephone networks. ISP**
25 **traffic is one directional and convergent. ISP traffic is**

1 delivered to the ISP premise on trunk-type facilities
2 unlike the line-type facilities used for the wide majority
3 of voice traffic. The Commission should recognize that
4 these factors can be expected to result in different costs
5 for ISP traffic delivery, that is, termination, than the
6 voice traffic.

7 **On Issue 7, my testimony describes dial-up**
8 **noncircuit switched delivered ISP traffic. And by the**
9 **way, that is not ADSL traffic, that is dialed up traffic**
10 **that is noncircuit switched at some point in its path to**
11 **the ISP modem and explains why that noncircuit delivered**
12 **traffic should not receive reciprocal compensation.**
13 **Existing reciprocal compensation rates are based on the**
14 **premise that traffic is switched. If that traffic is not**
15 **switched, then those -- then there is no need for the**
16 **carrier who does not switch it to receive switching costs**
17 **as compensation. That's all I have.**

18 **MS. CASWELL: Mr. Jones is available for cross**
19 **examination.**

20 **CHAIRMAN JACOBS: Any cross?**

21 **MR. MEZA: We have no cross.**

22 **MS. MASTERTON: We have no cross.**

23 **CHAIRMAN JACOBS: Mr. Hoffman.**

24 **MR. HOFFMAN: No questions.**

25 **MS. KAUFMAN: No questions.**

1 MR. HORTON: No questions.

2 Ms. McNULTY: No questions.

3 MR. MOYLE: Just one, I think.

4 CHAIRMAN JACOBS: We are going to bypass you
5 next time, Mr. Moyle.

6 CROSS EXAMINATION

7 BY MR. MOYLE:

8 Q In your summary you said that reciprocal
9 compensation, I think I wrote it down correctly, was based
10 on the premise that traffic is switched, is that correct?

11 A Yes.

12 Q Okay. Is there an FCC rule that you can point
13 me to that establishes that premise or anything else that
14 establishes that premise?

15 A The best I can do for you is basically talk
16 about TELRIC as a cost study, and that that TELRIC cost
17 study subsequently gets to the reciprocal compensation
18 switching element is a switching cost study.

19 Q And we have had a lot of talk about FCC rules
20 and the Commissioners have asked for cites and whatnot. I
21 was just looking to see if you had a cite for me with
22 respect to that premise?

23 A No, sir, I don't have a cite.

24 MR. MOYLE: Thank you.

25 COMMISSIONER PALECKI: Could you tell me what

1 are some of the technologies that allow noncircuit switch
2 connections?

3 **THE WITNESS: Yes. It is called, or there are a**
4 **few names for it, but generally my best description, best**
5 **descriptive name is called an SS7, Signaling System 7**
6 **gateway, or an SS7 gateway. What this device does, and I**
7 **was involved in the specifications for this device, is it**
8 **enables a distant, or at least a nonserving switch,**
9 **per se, to set up a call between an end office or a tandem**
10 **and a modem pool directly without having switched, in this**
11 **instance, at the terminating carrier's location. I**
12 **believe that is Exhibit HLJ-2 of my direct.**

13 **This particular exhibit -- there it is -- shows**
14 **that SS7, Signaling System 7 gateway at the top of the**
15 **CLEC side of the -- or the middle portion I should say of**
16 **the diagram, the dial-up modems, it does not show a**
17 **central office switch.**

18 **The other names that these devices go by is**
19 **Internet call router, some of them are called ACRs, I**
20 **think they are alternate call routers. And to a certain**
21 **extent, although the whole subject of soft switches is**
22 **very lengthy and somewhat more attuned to switching voice**
23 **traffic, in other words, traffic that would not go to ISP**
24 **dial-up modems, a lot of people generically lump this**
25 **particular kind of function into soft switch as a term.**

1 **COMMISSIONER PALECKI: Does Verizon employ any**
2 **of these technologies?**

3 **THE WITNESS: No, sir, not at the present. We**
4 **have been experimenting and putting these kinds of things**
5 **in laboratories for quite some time. But there are two**
6 **issues with that, and the first is what is called five 9s,**
7 **which is 99.999 percent reliability and completion. Well,**
8 **completion really is 99.0 percent. But to our testing to**
9 **date, the soft switch technology has not achieved a**
10 **reliability sufficient for Verizon's network.**

11 **Secondly, and its a little bit of a longer more**
12 **complicated story, when you have a multiple switching -- a**
13 **multiple switch entity network, such as Verizon's Tampa**
14 **exchange or service area, the purpose of this device, in**
15 **essence, is to make direct hits or home runs from Internet**
16 **service provider destined calls that are originated in one**
17 **point to avoid intermediate switching and then hit another**
18 **point.**

19 **Because we have multiple switches, we are able**
20 **to go into those switches and program one switch to**
21 **translate the Internet dialed up calls in existing**
22 **software and existing switch capabilities and send it to**
23 **our own other switch. Which, of course, also has to be**
24 **configured to do that. Given that we have, I think there**
25 **are some just barely less than 100 switches in the Tampa**

1 **LATA, we can easily go into that network and cause traffic**
2 **to be routed on direct routes between switches and,**
3 **therefore, avoid tandems and intermediate routing and get**
4 **there in the most efficient way.**

5 **That is somewhat the function of an SS7**
6 **signaling gateway. And since we already have that**
7 **capability, because we have more than one, in fact, we**
8 **have close to 100 switches, we don't need to take**
9 **advantage of it. We don't need to spend the money to buy**
10 **it.**

11 **COMMISSIONER PALECKI: Are you familiar with the**
12 **Global NAPS technology that there was a press release that**
13 **was not introduced but was discussed yesterday during the**
14 **hearing, technology delivering four times the capacity and**
15 **1/10th the space at 1/10th the cost. You know the article**
16 **that I am referring to, do you not?**

17 **THE WITNESS: Yes.**

18 **COMMISSIONER PALECKI: Are you familiar with**
19 **that technology? And let me tell you what I'm getting at.**
20 **Shouldn't the companies, ILECs and ALECs, be encouraged to**
21 **implement these newer cost-cutting technologies? And**
22 **isn't one way of encouraging this by allowing the ALECs**
23 **and the ILECs to continue to collect revenues based on the**
24 **older technology which would allow greater profits and**
25 **ultimately enhanced service for all customers?**

1 **THE WITNESS:** First, I would say that the
2 constant evaluation and, you know, striving for more
3 efficient less costly ways to do things is an undertaking
4 that Verizon has been doing for 100 -- well, 50 years
5 anyway. Twenty years that I have been there.

6 So I would assure you that to whatever extent
7 this new technology is available that we have activities
8 that would go into assessing, you know, when and where to
9 put that technology in. So we have, in effect, those very
10 incentives.

11 I'm not so sure that reciprocal compensation for
12 ISP traffic is, you know, by and of itself really, you
13 know, any particular factor in our continuous assessment
14 of these cost-saving measures. The only affect that it
15 has to, you know, assess these things is to get others,
16 ALECs to also pursue those kinds of technical assessments.
17 And in their case when they have a single switch and when
18 they want to avoid using that switch they can take
19 advantage of an actually older and simpler thing called
20 the SS7 signaling gateway, which has been around for about
21 three years.

22 **COMMISSIONER PALECKI:** But it would be arguable,
23 would it not, that if every time we see a new technology
24 come into play we reduce the revenues that can be made by
25 either an ILEC or an ALEC that we might be discouraging

1 this sort of competition and this sort of implementation
2 of newer technologies. If it's not profitable to
3 introduce them, profits remain the same, why would anybody
4 introduce a new technology and make those capital
5 expenditures?

6 THE WITNESS: I might have to refer to Doctor
7 Beauvais, but basically any time any businessman can
8 reduce his costs, you know, his condition is --

9 COMMISSIONER PALECKI: And maximize his profits.

10 THE WITNESS: Yes. So it's not some kind of,
11 you know, disincentive on your part to reduce reciprocal
12 compensation to ALECs, that basically doesn't have a
13 change to the underlying and basic drive to reduce costs.

14 COMMISSIONER PALECKI: Thank you.

15 COMMISSIONER JABER: But just to add to that, on
16 Page 5 of your testimony it seems that -- I read your
17 testimony to acknowledge exactly what Commissioner Palecki
18 was asking you about. You seem to indicate that the fact
19 that there isn't a common network design and the same use
20 of technology, that actually creates more costs.

21 THE WITNESS: Could you refer me to -- is it all
22 of page --

23 COMMISSIONER JABER: It's Page 5 from Lines 2
24 through 16.

25 THE WITNESS: I'm not so sure that in regard to

1 the last discussion that this is exactly the same
2 presentation. This particular section of this testimony
3 is, in fact, referring to the difference between a
4 one-directional convergent delivery terminating type
5 network and a bidirectional basically ubiquitously
6 originating, ubiquitously terminating network and the
7 different costs. So this particular testimony doesn't
8 have to do, unless I am remembering wrong, with questions
9 about incentives to deploy lesser cost technology.

10 COMMISSIONER JABER: Okay. Then explain to me
11 in your own words what you want us to retain from Page 5
12 of your testimony, Lines 2 through 16.

13 THE WITNESS: In my own words what I'm trying to
14 describe here is a comparative simile or metaphor that if
15 I was a terminating-only carrier of ISP convergent
16 traffic, which is high volume traffic, what I would have
17 would be more like the thin end of a funnel. I would have
18 a very -- in terms of basically network investment and
19 network diversity, or whatever you want to call it, I
20 would have huge volumes of traffic going to relatively few
21 delivery points or terminating points.

22 If I compared that to a more bidirectional
23 Verizon-like multi-switch environment, what I would have
24 would be more like a wide pipe that was equivalent on both
25 ends. In other words, unlike a funnel. And it would have

1 reflective or mirrored investments on both ends, the end
2 to terminate and the end to originate. In fact, both
3 ends, both originate and terminate. So that I have a more
4 robust network and investment on both ends of the path of
5 the call.

6 COMMISSIONER JABER: And Verizon does have that?

7 THE WITNESS: Yes, it does.

8 COMMISSIONER JABER: Has it been your experience
9 that ALECs do not do that?

10 THE WITNESS: I would -- my experience is with
11 ISPs more than ALECs, particularly, but I would say that
12 given the network demands placed upon them, and the
13 percentages and the ratios of in to out traffic and their
14 testimony as much as I can recall here that they do. I
15 think Mr. Selwyn talks about seeking or concentrating on
16 ISP customers, that they would have more of the funnel
17 type of network.

18 COMMISSIONER JABER: Okay. And is that point
19 important with respect to the costs varying? Depending on
20 the network, is that point important in advocating a bill
21 and keep methodology, or are you advocating separate
22 pricing for ISP traffic?

23 THE WITNESS: As I said in my opening summary, I
24 am advocating that whatever action the Commission
25 undertakes, bill and keep being one of those options, that

1 it should be aware that there is this difference and this
2 disparity and should not ignore it. That is the purpose
3 of my presentation.

4 **COMMISSIONER JABER:** All right. Now, if it can
5 be shown that the ALEC providing the traffic making the
6 termination to the ISP can be more efficient in its common
7 network design, then doesn't bill and keep actually result
8 in a punitive action by this Commission?

9 **THE WITNESS:** No. I think it results in an
10 action that, in fact, recognizes that the alternative,
11 that is, a price based upon the different network design
12 with the pipe and the diverse investment on both ends is
13 not appropriate. And that bill and keep is one option
14 that recognizes to the presence, if you will, of an
15 entirely incremental set of usage on the telephone network
16 as we know it, both the telephone network of the ILECs and
17 the ALECs. That is the traffic described by Doctor
18 Beauvais as ISP usage traffic that wasn't there four years
19 ago.

20 **COMMISSIONER JABER:** If the ALEC can terminate
21 calls more efficiently than the ILEC can because of the
22 system design, and I may not be using the right
23 terminology, so I apologize for that. But if the ALEC can
24 terminate the call at less cost because it has more
25 efficient technology, but the ILEC is using their old ILEC

1 systems and it just -- the ILEC has to incur more costs
2 because of its system, then doesn't bill and keep punish
3 the newer company who is using more efficient technology?

4 THE WITNESS: I guess it's a question of whether
5 on the one hand you overcompensate and give people
6 windfalls, and on the other hand whether you punish them
7 given the whole nature of the mass alteration in telephone
8 traffic that has taken place in the last four years.

9 It is kind of what edge of the sword do you want
10 to cut with. Because it's not -- it's not quite a
11 punishment, if you want to look at it that way, as much as
12 it is a closer estimation of the proper number than the
13 current ILEC cost.

14 COMMISSIONER JABER: Okay. And tying it to
15 Commissioner Palecki's question, it is also not an
16 incentive to promote the use of efficient technology to
17 adopt a bill and keep mechanism in a situation like that.

18 THE WITNESS: In the same sense as I answered
19 Mr. Palecki's question, the incentive to introduce
20 efficient technology is a basic inherent incentive and
21 shouldn't have anything to do, per se, with reciprocal
22 compensation.

23 COMMISSIONER JABER: Okay. On Page 4 your
24 testimony, Lines 14 through 18, you talk about devising a
25 separate metric for the type of traffic. To your

1 knowledge has that been done in any other state? And if
2 so, how?

3 **THE WITNESS:** The closest that I can think that
4 this particular kind of objective has been accomplished or
5 this suggested method of dealing with it has been
6 accomplished is in, I believe it is New York state, which
7 has ratios of X to 1, at which point the rate for the
8 traffic goes to a lesser tier or price. That is one
9 avenue to design a different metric. And actually
10 designing a different metric is sort of a wide open
11 suggestion on my part.

12 **COMMISSIONER JABER:** New York and --

13 **THE WITNESS:** New York is the only one that
14 comes to mind right now.

15 **COMMISSIONER JABER:** Thank you.

16 **BY MR. MOYLE:**

17 **Q** I was just going to follow up on a couple of
18 questions that were asked and ask you this in a different
19 context. You are an expert, so I'm going to ask you a
20 couple of hypotheticals, okay?

21 **A** Sure.

22 **Q** We are not going to talk about telephones and
23 reciprocal comp, we are just going to talk about widgets
24 for right now. And I want to paint this hypo for you. If
25 I make widgets and I'm locked into a price, a payment of

1 **\$10 for every widget that I make, and my cost is \$8, then**
2 **I have a \$2 profit, right?**

3 **A Is the \$10 your cost or your price?**

4 **Q That is my price that I am receiving.**

5 **A Yes.**

6 **Q And my cost is \$8.**

7 **A Okay.**

8 **Q So that is a \$2 profit, correct?**

9 **A Yes.**

10 **Q Or 20 percent profit?**

11 **A It's a 20 percent margin.**

12 **Q Okay. If all of a sudden a new technology came**
13 **along, and I was able to reduce my cost down to \$2, but I**
14 **could still get that \$10 payment, in your opinion would I**
15 **want to employ that new technology?**

16 **A Yes.**

17 **Q Because I would be now making \$8 profit on every**
18 **widget, correct?**

19 **A Right.**

20 **Q Now, assume if I was limited to, say, a 20**
21 **percent margin, and I brought my cost down to \$2 but was**
22 **limited to only being able to make 20 percent on my cost,**
23 **then I would get \$2.20 per widget, correct?**

24 **A Close to that.**

25 **Q And that wouldn't be an incentive for me to**

1 employ the new technology, would it, the fact that I would
2 be making 20 cents with this new efficiency as compared to
3 making \$2 with the old efficiency?

4 A Well, I guess as a hypothetical, the real
5 situation is that there would be somebody else,
6 hypothetically certainly who would see that same result
7 and would implement that new technology faster than you.
8 So you won't be able to maintain your \$10 price in the
9 marketplace.

10 Q Okay. But from a market standpoint that would
11 probably be a good thing, because you would be having more
12 efficiencies and you would be getting a better product,
13 would you agree to that?

14 A Yes.

15 MR. MOYLE: Nothing further.

16 CROSS EXAMINATION

17 BY MS. KEATING:

18 Q Mr. Jones, not to beat a dead horse, but I'm
19 really trying to get this clear in my head. If an ALEC
20 has employed a newer more efficient technology and the
21 ILEC still has the current technology, which company's
22 cost would be greater for terminating traffic on their own
23 system?

24 A Basically, since the direction of new technology
25 would always be to be lesser cost, then in your example

1 the ALEC would have a lesser cost.

2 Q Okay. So under bill and keep who would have to
3 absorb the greater cost under that same scenario?

4 A The ILEC.

5 Q Okay. Following up, too, on something, your
6 discussion about the newer technologies in some of the
7 switches, I think you referred to an SS7 signaling system?

8 A Yes.

9 Q Does that actually carry traffic?

10 A Not at all. It is a call routing and call
11 set-up system that has been implemented since the mid-'80s
12 that basically takes the place of what was called
13 multi-frequency signaling. In band signaling, where
14 basically tones were sent through the whole telephone
15 network. Now, that is done out of band with a separate
16 data network in effect that transmits call set-up and call
17 routing messages.

18 Q Is IP a noncircuit switched technology that is
19 used to usually carry traffic?

20 A It is in some instances. Most of the IP traffic
21 is ISP traffic presently, and it is being experimented
22 with and also used for a minor small percentage of voice
23 traffic.

24 Q Okay. Can you maybe explain to me when it is
25 used to carry traffic and when it is not used to carry

1 traffic? I guess I'm just not clear on that.

2 **A** **Okay. Let's talk about the more common use than**
3 **voice, let's talk about IP, Internet Protocol, it is the**
4 **protocol of the Internet. When the caller reaches**
5 **irregardless of ILECs, or CLECs, or anything else, an ISP**
6 **dial-up modem, what that modem is going to do is it is**
7 **going to packetize that data and put it in Internet**
8 **Protocol format, which is an incapsulation format, wraps**
9 **the data in commonly readable headers and trailers so that**
10 **other computer systems can read it without being the same**
11 **brand.**

12 **Q** **Okay. I believe in response to Commissioner**
13 **Palecki you were describing some other noncircuit switch**
14 **technologies. Could you tell me which of those can carry**
15 **both voice and data traffic?**

16 **A** **In the discussion -- and remember, the Signaling**
17 **System 7 gateway doesn't carry traffic.**

18 **Q** **Right.**

19 **A** **On the other hand, these are primarily more**
20 **common in backbone applications. In other words, New York**
21 **to Chicago applications rather than local exchange**
22 **applications. Soft switches, which have devices called**
23 **gatekeepers, you know, gatekeepers are above and beyond**
24 **gateways, okay. Gatekeepers can sort traffic. Sometimes**
25 **they are called call control devices. And what these do**

1 is sit on top of the SS7, Signaling System 7, network as
2 well as the IP router network, and they actually direct
3 calls across multi-carrier networks, or other
4 combinations, or single entity networks. Those particular
5 kind of devices, of which some -- mostly interexchange
6 carriers are implemented, can convert a fair amount of
7 voice as well as IP traffic, IP traffic being already IP,
8 into packets. And basically the purpose of doing all of
9 that is to concentrate that traffic at a 6-to-1 ratio.
10 Because of the silence on voice calls, there is a lot more
11 band width used up by a voice call than an IP packet
12 transmission path.

13 Q Okay. I will have to admit I'm not the world's
14 greatest technology expert, but is what you are saying
15 that all of these can carry both, it's just a matter of
16 converting one to the other?

17 A Basically, yes.

18 Q Well, if a carrier wanted to primarily carry
19 just voice traffic, is there any one particular technology
20 that would be more advantageous for them to deploy?

21 A Well, the whole assumption is that there will be
22 both kinds of traffic. But the next generation network
23 initiative, if you will, is to carry voice traffic by and
24 in and of itself at a lesser cost than the current
25 technology. So, I guess it's not a matter of, quote,

1 choice in the view of the future, per se. It is what will
2 happen. We will be talking and doing all other forms of
3 telecommunications on IP networks, you know, in the
4 future.

5 Q I understand that, but what I'm asking, though,
6 is if a carrier really wanted to focus on voice, which of
7 these technologies would be best for their system?

8 A If a carrier really wanted to focus on voice and
9 was starting out from scratch, he would be best off to
10 focus on IP at this point in time.

11 Q Okay. What about ISP traffic, is there a
12 particular technology --

13 A Well, that is already IP traffic once it hits
14 the modem.

15 Q Okay. Is it possible for a carrier like Verizon
16 to use one type of technology to originate a call while
17 the carrier that is terminating the call uses a different
18 kind of technology, is there any problem there?

19 A Well, the thing of it is if you are talking
20 about ILEC-to-ALEC interconnections --

21 Q Correct.

22 A -- and even ILEC-to-carrier interconnections,
23 when you hand somebody circuit switched traffic they have
24 to convert it in order to handle it in a different manner.
25 And so basically the only avenue that I'm aware of besides

1 the discussion of the stuff that we have already talked
2 about to handle voice communication, voice circuit
3 switched traffic that is handed to you, whether it is ISP
4 or voice is to either take it to a switch if it is voice
5 traffic or a gateway if it is -- or, excuse me, a modem
6 pool if it is IP traffic, or actually you can take either
7 one to the switch, but you can really efficiently only
8 take the ISP traffic directly to a modem pool.

9 If you were to want to take voice directly to IP
10 type modem like aggregation devices, you have to get a
11 different device called a codec (phonetic) and put that in
12 the chassis or the router frame of that device and you can
13 do voice, as well. But it is -- how do you want to put
14 it, not nearly as tried and tested in the networks.

15 Q And could I assume it would also be more costly?

16 A It may be more costly, it may be approximately
17 equal cost right at the moment.

18 Q Well, is it your position that this Commission
19 should not require reciprocal compensation for traffic
20 that is terminated on noncircuit switched networks?

21 A Yes, it is.

22 Q And do you also believe that it would be
23 difficult to separate out the different traffic types?

24 A Yes, I wanted to clarify that. Basically, it is
25 from the perspective that the traffic is mingled on the

1 same interconnection trunk group, which is not absolutely
2 necessary once we are able to identify the terminating
3 numbers of the ISPs, it is difficult for the carrier who
4 hands off the ISP traffic to tell how much of the traffic
5 was mingled, if you will, on the interconnection trunk.

6 On the other hand, to whatever extent the
7 carrier terminates that traffic, has the ownership of the
8 ISP customer and telephone number that he is using and all
9 of that kind of stuff as part of his process of providing
10 him service, if you were serving the ISP it would be
11 easier than trying to -- easier to assist in breaking up
12 the traffic over the trunk group than if you did not serve
13 the ISP.

14 Q So you are saying that if you really wanted to
15 try to separate out that traffic, it would have to be up
16 to the ALEC or the one serving the ISP to be responsible?

17 A It would be very helpful, yes.

18 Q Okay. Well, when Verizon hands off a call to a
19 carrier that uses a different technology than Verizon
20 does, does Verizon know what kind of technology that
21 network is using?

22 A No.

23 Q So wouldn't it be difficult to separate out
24 noncircuit switched terminated calls from those that are
25 terminated on a circuit switched network?

1 **A** **Yes. This gets to the kind of recommendation**
2 **that I have made that the Commission really should pursue,**
3 **if that is the proper word, that the ALECs would come**
4 **forward and identify the network schematics or designs**
5 **that they are using to terminate traffic when they expect**
6 **reciprocal compensation for that traffic. Because it is**
7 **not going to be a simple matter for the ILEC to in some**
8 **way, shape, or form investigate how that traffic is**
9 **handled by somebody else's network.**

10 **Q** **So what you're saying is that if you are going**
11 **to separate out this traffic and you are going to provide**
12 **reciprocal compensation for it, then the ALECs should be**
13 **responsible for letting Verizon know or this Commission**
14 **know what their network is based upon. And, in addition**
15 **to that, track calls to ISPs?**

16 **A** **Well, in the more simple view of the world, if a**
17 **ruling were made or whatever that only circuit switched**
18 **traffic should be compensated, then people -- ILECs or**
19 **ALECs who send bills to people for reciprocal compensation**
20 **for minutes that are not circuit switched compensated**
21 **should be subject to, you know, whatever you want to call**
22 **it, some kind of correction of that situation.**

23 **Q** **Is it true that less costly switches can be**
24 **deployed for ISP-bound traffic, if you are just doing --**
25 **terminating ISP traffic?**

1 **A** **Are you talking about real Class 5 circuit**
2 **switches now?**

3 **Q** **Noncircuit switch and circuit, either one?**

4 **A** **Well, the situation is quite a bit different,**
5 **but if -- so let's take them apart. Yes, if you -- and I**
6 **have just recently experienced this, if you wanted to be a**
7 **terminating ISP long holding time convergent to very few**
8 **terminating points type switching device, you can buy a**
9 **Lucent, I think it's a VCDX version of the 5 ESS switch**
10 **which can handle the volumes of traffic, but it can't**
11 **handle the volumes of line traffic like a full-sized**
12 **Lucent switch. Now that is the real circuit switch**
13 **example.**

14 **If you have just modems, and an SS 7 signaling**
15 **gateway I think it is in my testimony you are looking at a**
16 **cost of 100 or \$200,000 for that device, which is really**
17 **kind of a ballpark number from sometime ago, almost a year**
18 **and a half ago now, and some investment even in a small**
19 **Lucent type switch of 2 million or so.**

20 **Q** **Well, do you believe that most ALECs currently**
21 **have a lower cost to terminate traffic than Verizon does?**

22 **A** **That depends on whether that traffic is ISP in**
23 **majority or not, because if it is ISP in majority, I would**
24 **expect, and maybe that's just a selection that they have**
25 **made that might cause it to be otherwise, but I would**

1 expect that the opportunity to have lesser cost structures
2 would be there for the ALEC.

3 Q Okay. But for regular voice traffic, are you
4 saying it is approximately the same?

5 A As long as that regular voice traffic network is
6 mirrored on the ALEC side and isn't convergent or
7 terminates to so very few points and such high volume that
8 it doesn't have the same characteristics as the ILEC
9 network. In other words, if it mirrors the ILEC network,
10 it would mirror the ILEC cost in terms of ubiquity.

11 MS. KEATING: Thank you, Mr. Jones. I believe
12 those are all the questions we have.

13 CHAIRMAN JACOBS: Any further questions,
14 Commissioners?

15 MR. HOFFMAN: Mr. Chairman, may I follow up with
16 two questions based on staff's questions?

17 CHAIRMAN JACOBS: Very briefly, yes. Go ahead.

18 MR. HOFFMAN: Just two questions.

19 CROSS EXAMINATION

20 BY MR. HOFFMAN:

21 Q Mr. Jones, when an ALEC uses noncircuit switched
22 technology, does the ALEC incur costs to transport and
23 terminate those calls to an ISP?

24 A To transport -- I'm not so sure exactly what you
25 mean by terminate. But if you terminate to a modem, then

1 theoretically the, quote, cost is in the modem and the
2 modem is, in effect, not a portion, if you will, of
3 anything to do with anything but being an ISP, per se. In
4 other words, it is a part of another business other than
5 telecommunications, per se.

6 Q Generally speaking, without quibbling about
7 where the costs may be incurred and so forth, you would
8 agree that when an ALEC uses noncircuit switched
9 technology, the ALEC incurs costs to receive that call
10 from the originating ILEC and bring it to the ISP model
11 modem, you would agree with that?

12 A Transport costs are the only costs that I can
13 think of.

14 Q Okay. And your position is that the ALEC should
15 not recover reciprocal compensation from the ILEC to
16 recover those costs, correct?

17 A My position is, as I try to repeat the summary
18 again, is that the difference in the relative costs should
19 be recognized by this Commission when they go to make a
20 rule.

21 Now, it is also, I think, a little bit
22 different. When you talk about transport compensation
23 which has not been largely the subject that we have been
24 discussing here, you have the various interconnection
25 agreement ways to handle that. So I'm not so certain that

1 everything to do with bill and keep has a whole lot to do
2 with transport.

3 Q I thought that you testified that your position
4 was that an ALEC should not receive reciprocal
5 compensation from an ILEC when an ALEC employs noncircuit
6 switched technology, is that your position?

7 A Yes, it is.

8 MR. HOFFMAN: Okay. Thank you.

9 CHAIRMAN JACOBS: Redirect.

10 MS. CASWELL: Just one question.

11 REDIRECT EXAMINATION

12 BY MS. CASWELL:

13 Q Mr. Jones, does a bill and keep methodology mean
14 that carriers don't recover their costs at all?

15 A Oh, no. If the bill and keep methodology were
16 in place, then the place to recover the cost would be from
17 the customers who that ILEC or ALEC serves.

18 MS. CASWELL: Thank you. That's all I have.

19 CHAIRMAN JACOBS: Exhibits.

20 MS. CASWELL: I would like to move Exhibit 22
21 into the record, please.

22 CHAIRMAN JACOBS: Without objection show Exhibit
23 22 is admitted. Thank you, Mr. Jones, you are excused.

24 We will take a break for ten minutes.

25 (Exhibit 22 admitted into the record.)

1 (Recess).

2 (Transcript continues in sequence with

3 Volume 5.)

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