```
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
    In Re: Petition by ITC^DeltaCom
    Communications, Inc., d/b/a
                                            : DOCKET NO 99750-TP
    ITC^DeltaCom for arbitration of
    certain unresolved issues in
    interconnection negotiations
    between ITC^DeltaCom and
    BellSouth Telecommunications,
    Inc.
 8
 9
                   SECOND DAY -- EVENING SESSION
                             VOLUME 7
10
11
                      Pages 978 through 1064
12
    PROCEEDINGS:
                                   ARBITRATION
13
    BEFORE:
                                   COMMISSIONER SUSAN F. CLARK
                                   COMMISSIONER E. LEON JACOBS
14
    DATE:
                                   Thursday, October 28, 1999
15
    TIME:
                                   Commenced at 9:30 a.m.
16
    PLACE:
                                   Betty Easley Conference
17
                                   Center, Room 152
                                   4705 Esplanade Way
18
    REPORTED BY:
                                   CATHY H. WEBSTER, RPR
19
                                   COURT REPORTER
                                   POST OFFICE BOX 3093
20
                                   TALLAHASSEE, FLORIDA
21
    APPEARANCES:
22
         (As heretofore noted.)
23
                          C & N REPORTERS
                REGISTERED PROFESSIONAL REPORTERS
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1	WITNESSES - VOLUME 7	
2	ЭМАИ	PAGE NO.
3	D. DAONNE CALDWELL	ļ
4	Direct Examination by Mr. Alexander Prefiled Direct Testimony Inserted	980 985
5		
6		1028
7		
8		1047
9		1049 1055
10		1059 1061
11		
12	EXHIBITS - VOLUME 7	
13	NUMBER ID.	ADMTD.
14	23 (Varner) AJV+1 - 8	984
15	24 (Taylor) WET-1, vita	983
16 17	25 (Caldwell) DDC-1 - 5, cost studies 983	1045
18	26 (Caldwell) DDC-6, BS's FCC 1000	1045
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20		
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23		
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PROCEEDINGS
              (Transcript follows in proper sequence from
   Volume 6.)
   WHEREUPON.
                      DORIS DAONNE CALDWELL
      was called as a witness on behalf of BellSouth and,
          having been duly sworn, testified as follows:
                       DIRECT EXAMINATION
   BY MR. ALEXANDER:
9
              Ms. Caldwell, would you state your full name
10
    and business address for the record, please?
11
              My full name is Doris Daonne Caldwell, 675 West
12
    Peachtree Street, Atlanta, Georgia.
13
14
              And, Ms, Caldwell, are you the same Daonne
    Caldwell that caused to be prefiled direct testimony on
15
    August 16th, 1999, consisting of 14 pages in this
16
17
   proceeding?
18
         Α
              And did you have attached to that direct
19
         0
    testimony I believe five exhibits?
20
21
         Α
              Correct.
22
              And at any time were those exhibits revised?
         0
23
              Yes.
         Α
              Which exhibits were revised and when?
24
         Q
              I believe Exhibits 2, 3 and 4, and they were
25
         Α
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revised on October the 18th.
             And, specifically, they're labeled Exhibit
   DDC-2 and was that entire exhibit revised?
3
        Α
             Yes.
             And Exhibit DDC-3, was that also entirely
         Q
   revised on October 18th?
        Α
             Yes.
             And with respect to Exhibit DDC-4, was that
9
   just partially revised, just certain pages?
              Just certain pages. It was Bate stamped and we
10
    just replaced the revised Bate-stamped pages.
11
              And those revised exhibits were filed with the
12
   Commission you said on October 18th?
13
14
         Α
              Correct.
         Q Are any of those exhibits proprietary?
15
             Yes. Exhibit DDC-1 and then Exhibit DDC-4.
         Α
16
              Ms. Caldwell, do you have any -- Excuse me.
17
         0
18
   Let me go back.
              You are employed by BellSouth. Can you please
19
    describe your position and what responsibilities you
20
21
   have?
                    I am employed by BellSouth
22
         Α
              Yes.
    Telecommunications. I am a Director in the Finance
23
24
    Department. My responsibilities are for cost
25
    methodology, cost study production, and filing with the
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```
commissions and also the cost witness.
              I was going to ask you is it fair to describe
   you as the cost witness in this case.
              Do you have any changes, corrections or
   additions to make to your prefiled direct testimony?
        Α
             Yes, I do; one change.
            And what is that?
              On page 12 lines 23 and 24, starting on 23,
         Α
   just place a period after "DDC-5," and take out "and the
10
   rates provided in Mr. Varner's testimony reflect these
11
   costs."
12
        Q
              That was page 12, lines 23 through 24?
13
        Α
             Correct.
             And you're putting a period -- I'm sorry; would
14
15
   you say the change again?
16
         Α
              After "DDC-5," you place a period to end the
17
   sentence, and take out the words "and the rates provided
18
   in Mr. Varner's testimony reflect these costs."
19
              Okay. Thank you. After the exhibits, the
20
   Exhibits DDC- -- excuse me -- DDC-2, -3, -4 were revised,
21
   do you have any changes to those exhibits?
22
        Α
              I do not.
23
              MR. ALEXANDER: At this time I would ask that
   Ms. Caldwell's -- Let me back up. I'm getting ahead of
24
25
   myself again.
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BY MR. ALEXANDER (Continuing):
             Ms. Caldwell, if I were to ask you the same
   questions that appear in your prefiled direct testimony,
   would your answers be the same today?
             Yes, they would.
              MR. ALEXANDER: At this time I would like to
   ask that Ms. Caldwell's direct testimony and her five
   exhibits attached thereto be admitted in this proceeding.
9
              COMMISSIONER CLARK: The prefiled testimony
   will be admitted in the record as though read.
10
              We will mark DDC 1 through 5 as revised as
11
12
   Exhibit 25.
13
              And we will also move into the record Exhibit
14
   24, which we neglected to do.
15
              (Exhibit 25 marked for identification.)
              (Exhibit 24 received into evidence.)
16
17
              MR. ALEXANDER: I was going to ask you also,
18
   Commissioner, if we can move I believe into admission
19
   Exhibit 23 from an earlier witness as well. I'm not sure
   I did that.
20
              COMMISSIONER CLARK: We didn't move it into the
21
22
   record.
             We were going to give Mr. Adelman an opportunity
23
   to understand that he had the correct copies of the
    exhibit. Has that been done?
24
25
              MR. ALEXANDER: And I provided him --
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MR. ADELMAN: And we did clear that up. So, I
   have no objection.
              COMMISSIONER CLARK: All right. Then Exhibit
    23 will be admitted in the record.
              (Exhibit 23 received into evidence.)
              MR. ALEXANDER: And you did 24 as well; is that
 6
    right?
              COMMISSIONER CLARK: Correct.
 8
 9
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1	BELLSOUTH TELECOMMUNICATIONS, INC.
2	DIRECT TESTIMONY OF D. DAONNE CALDWELL
3	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4	DOCKET NOS. 990750-TP
5	August 16, 1999
6	
7	
8	Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.
9	
10	A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
11	N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
12	Telecommunications, Inc. (hereinafter referred to as "BellSouth" or "the
13	Company"). My area of responsibility relates to economic costs.
14	
15	Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL
16	BACKGROUND AND WORK EXPERIENCE.
17	
18	A. I attended the University of Mississippi, graduating with a Master of Science
19	Degree in mathematics. I have attended numerous Bell Communications
20	Research, Inc. ("Bellcore") courses and outside seminars relating to service cost
21	studies and economic principles.
22	
23	My initial employment was with South Central Bell in 1976 in the Tupelo,
24	Mississippi, Engineering Department where I was responsible for Outside Plant
25	Planning. In 1983, I transferred to BellSouth Services, Inc. in Birmingham,

1		Alabama, and was responsible for the Centralized Results System Database. 1
2		moved to the Pricing and Economics Department in 1984 where I developed
3		methodology for service cost studies until 1986 when I accepted a rotational
4		assignment with Bellcore. While at Bellcore, I was responsible for development
5		and instruction of the Service Cost Studies Curriculum including courses such as
6		"Concepts of Service Cost Studies", "Network Service Costs", "Nonrecurring
7		Costs", and "Cost Studies for New Technologies". In 1990, I returned to
8		BellSouth and was appointed to a position in the cost organization, which is now a
9		part of the Finance Department, with the responsibility of managing the
10		development of cost studies for transport facilities, both loop and interoffice. My
11		current responsibilities encompass testifying in cost-related dockets, cost
12		methodology development, and the coordination of cost study filings.
13		
14	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
15		
16	A.	The purpose of my testimony is to respond to the cost aspects of the following
17		issues:
18		
19		Staff Issue 38 [ITC^DeltaCom Issue 6(a)] What charges, if any, should
20		BellSouth be permitted to impose on ITC^DeltaCom for BellSouth's OSS?
21		
22		Staff Issue 39 [ITC^DeltaCom Issue 6(b)] What are the appropriate recurring
23		and non-recurring rates and charges for:
24		(a) Two-wire ADSL/HDSL compatible loops,
25		(b) Four wire ADSL/HDSL compatible loops, or

l	(c) Two-wire SL1 loops?
2	
3	Staff Issue 40 [ITC^DeltaCom Issue 6(b)] (a) Should BellSouth be required
4	to provide:
5	1) two-wire SL2 loops or
5	2) two-wire SL2 loop Order Coordination for Specified Conversion Time?
7	(b) If so, what are the appropriate recurring and nonrecurring rates and
3	charges?
9	
)	In order to do so, I present the cost study results for the network capabilities
1	contained in the aforementioned issues. However, the cost studies are limited to
2	those elements for which the Florida Public Service Commission ("Commission")
3	has not already established rates. Additionally, I describe the underlying cost
4	methodology used in the studies. The studies are filed in paper form with this
5	testimony as Exhibits DDC-1, DDC-2, and DDC-3. Exhibit DDC-1 includes an
3	executive overview, a summary of results, element descriptions, factor
7	development, TELRIC Calculator® input and outputs, and investment
3	development work papers for Service Level (SL)1 and SL2 loops and associated
9	elements. Exhibit DDC-2 provides an executive overview including element
)	descriptions, and Exhibit DDC-3 contains the study results and the TELRIC
1	Calculator® input and outputs for Operations Support Systems (OSS). BellSouth
2	witness, Mr. Al Varner, addresses the rates BellSouth is proposing.
3	
4	

1		Exhibit DDC-1 is also provided on CD-ROM which is labeled Caldwell Exhibit
2		DDC-1, and the OSS cost study is provided on CD-ROM that is labeled Caldwell
3		Exhibit DDC-4. A paper copy of DDC-4 will be provided at a later date.
4		
5	Q.	HAS BELLSOUTH FILED COST STUDIES FOR ALL THE NETWORK
6		CAPABILITIES REQUESTED IN THE PETITION FOR ARBITRATION?
7		
8	A.	No. This Commission has already established rates for a number of elements
9		included in the petition. Issues 39 and 40 [ITC^DeltaCom Issue 6(b)] concern the
10		appropriate recurring and nonrecurring rates and charges for BellSouth
11		ADSL/HDSL, two-wire and four-wire ADSL/HDSL, two-wire SL1, two-wire
12		SL2, and two-wire SL2 Order Coordination for Specified Conversion Time. In its
13		Order No. PSC-98-0604-FOF-TP, this Commission established recurring and
14		nonrecurring rates for two-wire ADSL compatible loops, two-wire HDSL
15		compatible loops, and four-wire HDSL loops. Thus, there is no reason to revisit
16		the ADSL/HDSL costs upon which these rates were based. Therefore, BellSouth
17		is only presenting cost studies for the network capabilities for which rates have not
18		already been established, i.e., two-wire SL1 loops, two-wire SL2 loops, and two-
19		wire SL2 Order Coordination for Specified Conversion Time.
20		
21		Additionally, to address Issue 38 [ITC^DeltaCom Issue 6(a)] pertaining to the
22		charges BellSouth should be permitted to impose on ITC^DeltaCom for OSS,
23		BellSouth is submitting the cost study results for the development and
24		implementation of the OSS Electronic Interfaces which were previously filed on
25		December 3, 1998 in Docket No. 981052-TP.

2	Q.	PLEASE DESCRIBE SL1 AND SL2 LOOPS.
3		
4	A.	These cost elements represent the physical transmission facilities (or channel or
5		group of channels on such facilities) which extend from the main distributing
6		frame connection in the end office to a demarcation point at the customer's
7		premises (i.e., the network interface device or NID). The SL1 facility is provided
8		as a nondesigned circuit. The SL2 facility is provided as a designed circuit and
9		includes a test access point. While both service level loops can be used for the
10		provision of local exchange service, SL1 would equate more to "POTS like"
11		service and SL2 would equate more to the unbundled loop currently approved and
12		offered to Alternative Local Exchange Carriers ("ALECs") in Florida.
13		
14		The option "order coordination for specified conversion time" is offered only on
15		SL2 loop types. This option is explained in BellSouth witness, Mr. Varner's,
16		testimony.
17		
18	Q.	PLEASE PROVIDE A BRIEF DESCRIPTION OF THE OSS
19		ELECTRONIC INTERFACES AND ORDER PROCESSING COST
20		ELEMENTS.
21		
22	A.	The OSS Electronic Interfaces are the systems that BellSouth developed
23		specifically to provide ALECs with the ability to transmit a local service request
24		("LSR") electronically. These interfaces allow the ALEC to mechanically access
25		BellSouth's existing order processing systems. Both resale and unbundled

1	network element ("UNE") LSRs can be transmitted via the interface.
2	The OSS Electronic Interfaces – Development and Implementation cost element
3	includes the labor costs for the systems development and software costs.
4	
5	LSR processing falls into two categories, electronic and manual. The electronic
6	processing reflects the ongoing cost associated with the OSS Electronic Interfaces
7	and the Local Carrier Service Center ("LCSC") labor required to handle a LSR
8	which falls out, i.e., a LSR that does not pass through the electronic interfaces
9	completely. Manual order processing is the cost BellSouth incurs to handle a LSR
10	manually. In the manual process, a BellSouth LCSC service representative
11	interfaces with the ALEC directly, not using the OSS Electronic Interfaces.
12	
13	Q. WHAT TYPES OF COSTS ARE REFLECTED IN THE COST STUDIES?
14	
15	A. The cost studies reflect both recurring and nonrecurring costs. Recurring costs
	A. The cost studies reflect both recurring and nonrecurring costs. Recurring costs include both capital and non-capital costs. Capital costs are associated with the
15	
15 16	include both capital and non-capital costs. Capital costs are associated with the
15 16 17	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cos
15 16 17 18	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cos of money, and income tax. Non-capital recurring costs are expenses associated
15 16 17 18	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cos of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific
15 16 17 18 19	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cos of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific
15 16 17 18 19 20	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cost of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific expenses, such as maintenance, ad valorem taxes and gross receipts taxes.
15 16 17 18 19 20 21	include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cost of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific expenses, such as maintenance, ad valorem taxes and gross receipts taxes.  Nonrecurring costs are one-time expenses associated with provisioning, installing

ı		
2	Q.	WHAT COST METHODOLOGY IS USED IN THE COST STUDIES?
3		
4	A.	The cost studies are based on the cost study methodology accepted by this
5		Commission in Order No. PSC-98-0604-FOF-TP in Docket Nos. 960757-TP,
6		960833-TP, and 960846-TP dated April 29, 1998. This Order established rates for
7		numerous network capabilities, ranging from 2-Wire Analog Loop Distribution to
8		Physical Collocation. On page 12 of the Order, the Commission ordered rates that
9		"cover BellSouth's Total System [Service] Long-run Incremental Costs (TSLRIC)
10		and provide some contribution toward joint and common costs." 1
11		
12	Q.	PLEASE PROVIDE SOME BACKGROUND TO ORDER NUMBER PSC-
13		98-0604-FOF-TP.
14		
15	A.	On November 13, 1997, BellSouth filed cost studies to support prices that this
16		
17		<sup>1</sup> The Florida Public Service Commission initially set the foundation for cost methodology in its December 31, 1996 Order PSC-96-1579-FOF-TP. This Order
18		established Total Service Long Run Incremental Cost ("TSLRIC") as the
19		appropriate methodology for determining the costs associated with network capabilities. However, this Order also states that the Commission does not
20		"believe there is a substantial difference between the TSLRIC cost of a network element and the TELRIC [Total Element Long Run Incremental Cost] cost of a
21		network element." (Page 24) In fact, this Order further allows the consideration of
22		joint and common costs in setting rates. (Page 33) By the definitions outlined in Order PSC-96-1579-FOF-TP, the combination of TSLRIC plus shared (joint) and
23		common costs equates to the Federal Communication Commission's ("FCC") definition of economic costs (TELRIC plus a reasonable allocation of forward-
24		looking joint and common costs). BellSouth's cost study filed in this docket develops TSLRIC plus shared and common costs.
25		

1		Commission had previously established as interim rates. The studies were filed
2		electronically with complete documentation. With these studies, BellSouth
3		introduced a new cost model, the TELRIC Calculator®. The TELRIC Calculator®
4		converts material prices and labor work times to cost. The Commission accepted
5		the TELRIC Calculator® as a viable model to determine the TSLRIC plus shared
6		and common costs associated with network capabilities. However, the
7		Commission did make adjustments to the inputs filed by BellSouth.
8		
9	Q.	ARE THE ADJUSTMENTS TO BELLSOUTH'S INPUTS ORDERED BY
10		THE COMMISSION IN ORDER NO. PSC-98-0604-FOF-TP
11		INCORPORATED IN THE COST STUDIES FILED IN THIS
12		PROCEEDING?
13		
14	A.	Yes. Even though BellSouth does not necessarily agree with the input
15		adjustments, the relevant modifications to the cost elements in this proceeding are
16		included. The cost studies in Exhibit DDC-1 and Exhibit DDC-3 include the
17		Commission-ordered cost of money, depreciation lives, tax factors, and shared and
18		common factors. Additionally, Exhibit DDC-1 includes loop specific,
19		Commission-ordered adjustments, such as fill percentages and drop lengths.
20		
21	Q.	PLEASE ELABORATE ON THE MODIFICATIONS BELLSOUTH MADE
22		IN EXHIBITS DDC-1 AND DDC-3 TO FULFILL THE ADJUSTMENTS
23		MADE IN ORDER NO. PSC-98-0604-FOF-TP.
24		
25	A.	I will address each of the adjustments made in this filing and reference the

appropriate discussion from the Order. Exhibits DDC-1 and DDC-3 follow the 1 2 intent of each Commission adjustment. However, where appropriate, the input has 3 been updated to reflect the study period, 1998-2000. 4 Cost of Capital – On page 29, the Commission states that "BellSouth's overall 5 6 cost of capital is 9.90 percent. This number falls out from the capital structure of 7 60 percent equity and 40 percent debt, a forward-looking cost of debt of 6.7 8 percent and a cost of equity of 12.0 percent". The 9.9% overall cost of capital 9 was utilized in this filing. 10 11 **Depreciation** – BellSouth incorporated the Commission Approved Projection Lives outlined in Table III<sup>2</sup> and the net salvage values contained in Table IV<sup>3</sup> of 12 13 the Order. 14 Taxes – The Order stated that Florida-specific tax factors are to be applied when 15 they are available.<sup>4</sup> This filing included the following Florida-specific tax factors: a 16 combined state and federal income tax factor of 38.57%, a gross receipts factor of 17 18 1.37%, and an ad valorem factor of .85%. These values reflect an update to the 1998-2000 time frame. 19 20 21 Shared and Common Costs - The Commission established the wholesale common cost factor as 5.12%<sup>5</sup> and recalculated the shared cost factors, Table VII<sup>6</sup>. 22 23 <sup>2</sup>Order at pages 37 and 38. 24 <sup>3</sup> Order at pages 42 and 43. <sup>4</sup> Order at page 44. 25 <sup>5</sup> Order at page 45.

1	These factors were based on a reduction in the network operating expenses as
2	discussed on pages 59-60 of the Order. Additionally, the Commission felt it
3	appropriate to exclude the shared component from the labor rate and include it in
4	the recurring shared factors <sup>7</sup> . The adjustments ordered by the Commission are
5	reflected in this filing, both in the shared and common factors and in the labor
6	rates. BellSouth used the version of BellSouth's Shared and Common Model that
7	the Florida Staff adjusted in Order No. PSC-98-0604-FOF-TP.
8	
9	Disconnect Costs - With regard to disconnect charges, the Order states, "it is
10	more appropriate to assess those charges at the time the costs are in fact
11	incurred Parties should have the opportunity to negotiate the method by which
12	disconnect costs are calculated and recovered."8 Therefore, disconnect costs were
13	studied as separate rate elements and are included in this filing.
14	
15	Fill Factors – The Order states that BellSouth should increase the distribution fill
16	factor by 10%9 and the feeder fill factor by 5%.10 BellSouth has determined the fill
17	factors for end-of-year 1997 to be 41.28% and 66.0%, respectively. This study
18	reflects the ordered increases to 45.41% (41.28% * 1.1) and 69.3% (66.0% * 1.05).
19	
20	Network Interface Device – The Order mandates that protector investment should
21	
22	
23	<sup>6</sup> Order at pages 46 and 47.
24	<sup>7</sup> Order at page 63.  8 Order at page 69.
25	9 Order at page 84.
	<sup>10</sup> Order at page 100.

1	only reflect the actual number of lines per location." Exhibit DDC-1 compiles
2	with this mandate.
3	
4	Drop Lengths - The Order sets the drop lengths at 200' for aerial and 150' for
5	buried. <sup>12</sup> These values were used in Exhibit DDC-1.
6	
7	Service inquiry and service order time - With respect to the loop costs, the
8	Order states, "we find that BellSouth's LCSC costs are a component of its OSSs
9	and therefore they must be excluded from recovery in these proceedings. Indeed,
10	all ordering charges, manual or electronic, shall be excluded from the non-
11	recurring rates in these proceedings."13 Nonrecurring costs for SL1 and SL2 loops,
12	SL2 Order Coordination for Specified Conversion Time, and disconnects do not
13	include LCSC costs and other ordering costs. However, the costs for OSS include
14	LCSC, i.e., both manual and electronic ordering costs.
15	
16	Access Customer Advocacy Center ("ACAC") - Similarly, the Commission also
17	required removal of ACAC costs from Connect and Turn-Up Test. <sup>14</sup> Exhibit DDC-
18	1 excludes all ACAC work times from Connect and Test.
19	
20	It is important to remember that even though the Commission made a number of
21	input modifications; they accepted the TELRIC Calculator® as an appropriate
22	means of determining BellSouth's costs associated with making an investment and
23 _	11 Onder 14 mag 70
24	11 Order at page 70. 12 Order at page 87.
25	<ul><li>Order at page 165.</li><li>Order at page 90.</li></ul>

1		with provisioning a network capability. The TELRIC Calculator® has been
2		utilized in this filing.
3		
4	Q.	WHY SHOULD ACAC COSTS BE INCLUDED IN THE NONRECURRING
5		COSTS?
6		
7	A.	ACAC is responsible for order coordination during connect and test for SL1 and
8		SL2 loops. One of the characteristics of a SL2 loop is that it includes manual
9		order coordination performed by the ACAC. At the time the ALEC requests
10		provisioning, there are up to three separate activities which occur, Disconnect,
11		Connect, and Remote Call Forwarding. A service order is generated for each of
12		these three activities. In a purely mechanized environment these three orders can
13		get out of sequence. This creates a potential service outage time of one hour. The
14		only way to keep the orders in sequence is to manually coordinate them. This
15		activity is performed by the ACAC and reduces the service outage time to no more
16		than fifteen minutes. Since the ALEC ordering SL2 receives order coordination, i
17		is appropriate to include these costs.
18		
19		The cost studies in Exhibit DDC-1 have been performed in accordance with the
20		Commission's Order and all ACAC work times have been omitted. However
21		ACAC costs should be recognized and BellSouth should be allowed to recover
22		them. Without the ACAC, order coordination cannot be provided to the ALEC.
23		Therefore, ACAC costs have been calculated in Exhibit DDC-5, and the rates
24		provided in Mr. Varner's testimony reflect these costs.
25		

1	Q.	IN ORDER NO. PSC-98-0604-FOF-TP, DID THE COMMISSION MAKE
2		ANY CHANGES TO WORK TIMES IN ADDITION TO THOSE
3		MENTIONED ABOVE? IF SO, ARE THESE INCLUDED IN EXHIBITS
4		DDC-1 AND DDC-3?
5		
6	A.	The Commission adjusted the work times for the unbundled network elements
7		studied in Docket Nos. 960757-TP, 960833-TP, and 960849-TP in the November
8		17, 1997 filing. However, the elements studied in this arbitration proceeding
9		(Docket No. 990750-TP) were not addressed in that Order. The work times that
0		are included here reflect the work times BellSouth will experience in provisioning
1		these unbundled network elements filed in this proceeding.
2		
3	Q.	DID THE COMMISSION ACCEPT BELLSOUTH'S LOOP MODELING
4		TECHNIQUE IN ORDER NO. PSC-98-0604-FOF-TP?
5		
6	A.	Yes. BellSouth's loop cost is calculated by a process in which a sample of existing
7		loops are recast to forward-looking designs. The Commission accepted the
8		method used to determine the loop investment, a statistically valid sampling
9		technique. In fact, on page 75 of the Commission's Order it states: "We find,
20		therefore, that BellSouth's loop sample construction is appropriate." Further, the
21		Commission accepted BellSouth's method of recasting its loops to a forward-
22		looking design. <sup>15</sup> The loop sample modeling technique and sample data are
23		utilized in this filing.
24		
5		15 Order at page 101.

1		
2		It should be noted that the Commission also accepted the majority of inputs used
3		by BellSouth. These include the use of 26 gauge cable, the structure sharing
4		percentages, aerial and buried drop wire percentages, material costs, loading
5		factors, subscriber line testing costs, and the direct labor rates.
6		
7	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
8		
9	A.	The cost studies filed in this proceeding determine the total service long run
10		incremental costs plus shared and common costs specific to Florida for network
11		capabilities requested by ITC^DeltaCom. Elements that have previously been
12		presented to this Commission and for which permanent rates have been established
13		have not been restudied. The costs were developed using the basic study
14		methodology and approved input values previously authorized by this
15		Commission.
16		
17	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
18		
19	A.	Yes.
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BY MR. ALEXANDER (Continuing):
              Ms. Caldwell, did you also cause to be prefiled
    in this proceeding rebuttal testimony on September 13th
   of this year, consisting of nine pages?
              That is correct.
         Α
             And did you have one exhibit attached to that?
         Α
             Yes.
              And was that exhibit labeled DDC-6?
         0
 9
         Α
              Yes.
10
              Do you have any changes, corrections, or
11
   additions to make to either your direct, prefiled direct
12
    testimony or your Exhibit DDC-6?
13
         Α
              Rebuttal testimony? No.
14
              I'm sorry; did I recall it direct? Your
15
    rebuttal testimony.
16
         Α
              No, I do not.
17
              If I were to ask you the same questions as
18
    appear in your prefiled rebuttal testimony, would your
19
    answers be the same today?
20
         Α
              Yes, they would.
21
              MR. ALEXANDER: At this time I would ask for
   the admission of Ms. Caldwell's rebuttal testimony and
22
23
    the exhibit attached thereto into this proceeding.
24
              COMMISSIONER CLARK: We will insert the
25
    testimony in the record as though read.
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And we will mark for identification DDC-6 as
    Exhibit 26.
              (Exhibit 26 marked for identification).
              MR. ALEXANDER: Thank you.
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1	BELLSOUTH TELECOMMUNICATIONS, INC.
2	REBUTTAL TESTIMONY OF D. DAONNE CALDWELL
3	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4	DOCKET NO. 990750-TP
5	SEPTEMBER 13, 1999
6	
7	Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.
8	
9	A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
10	N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
11	Telecommunications, Inc. (hereinafter referred to as "BellSouth" or "the
12	Company"). My area of responsibility relates to economic costs.
13	
14	Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?
15	
16	A. Yes. I filed direct testimony on August 16, 1999.
17	
18	Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
19	
20	A. The purpose of my testimony is to respond to the assertions made by
21	ITC^DeltaCom witnesses, Mr. Thomas Hyde and Mr. Don Wood.
22	
23	COLLOCATION
24	Q. ON PAGE 20 OF HIS TESTIMONY, ITC^DELTACOM WITNESS, MR.
25	WOOD, OFFERS A METHOD FOR DEVELOPING A "SURROGATE"

1		RATE FOR CAGELESS COLLOCATION. FROM A COST
2		METHODOLOGY PERSPECTIVE, IS HIS METHODOLOGY SOUND?
3		
4	A.	No. Mr. Wood advocates utilizing the "existing rates for virtual collocation as a
5		reasonable proxy for physical cageless collocation rates." (Page 20 of Wood
6		Testimony) Mr. Wood claims that in a virtual collocation arrangement "BellSouth
7		owns the equipment and incurs the expense of maintaining it." (Page 21 of Wood
8		Testimony) He further explains his "cageless cost methodology" by suggesting that
9		BellSouth apply annual cost factors (minus maintenance) to some unspecified
10		investment to determine the "relevant costs."
11		
12		First, Mr. Wood's underlying assumption is wrong; BellSouth does not own the
13		equipment in a virtual collocation arrangement nor does it incur the expense of
14		maintaining such equipment. In Virtual Collocation, BellSouth leases the
15		equipment from the collocator and pays a nominal fee of \$1.00 as outlined in
16		BellSouth's FCC Tariff No. 1, Section 20. BellSouth maintains the equipment at
17		the collocator's expense, pursuant to the rates and charges in Section 13 of FCC
18		Tariff No. 1. The relevant pages of BellSouth's FCC Tariff No. 1 are attached as
19		Rebuttal Exhibit DDC-6. Second, Mr. Wood's purported methodology fails
20		because the collocator purchases the equipment; therefore, there is no investment
21		by BellSouth against which annual cost factors could reasonably be applied to
22		develop a cost for BellSouth. BellSouth witness, Mr. Varner, discussed the
23		appropriate rates and their application on page 68 of his direct testimony filed in
24		this docket.
25		

1	OPERATIONAL SUPPORT SYSTEMS
2	Q. MR. WOOD ALSO DISCUSSES OPERATIONAL SUPPORT SYSTEM
3	("OSS") COSTS. PLEASE PROVIDE A BRIEF DESCRIPTION OF THE
4	OSS ELECTRONIC INTERFACES COST ELEMENTS BELLSOUTH
5	FILED IN THIS DOCKET. FURTHER, PLEASE DISCUSS MR. WOOD'S
6	COMMENTS.
7	
8	A. As I describe in my direct testimony, the OSS Electronic Interfaces are the systems
9	that BellSouth developed specifically to provide Alternative Local Exchange
10	Carriers ("ALECs") with the ability to transmit a local service request ("LSR")
11	electronically. These interfaces allow the ALEC to mechanically access BellSouth's
12	existing order processing systems. Both resale and unbundled network element
13	("UNE") LSRs can be transmitted via the interfaces.
14	
15	The costs BellSouth submitted in this docket reflect only those costs associated
16	with these new interfaces. I agree with Mr. Wood's observation that the OSS costs
17	can be segmented into two classes; (1) costs incurred to develop the interfaces and
18	(2) costs resulting from the use of these interfaces. In fact, BellSouth's cost
19	summary reflects these classifications:
20	
21	(1) OSS Electronic Interfaces - Development and Implementation cost element,
22	includes the labor costs for the systems development and software costs.
23	
24	(2) OSS Electronic Interfaces - Ongoing Processing cost element, reflects the
25	ongoing costs of the hardware and the Local Carrier Service Center ("LCSC")

1	18001 required to handle a LSR which rans out.
2	
3	However, I disagree with his assertion that the development and implementation
4	costs are inappropriate. If these costs were perceived to be born solely by
5	BellSouth, what would deter an ALEC from requesting a "gold-plated" interface,
6	one that may or may not be utilized by the ALEC? This is a waste of valuable
7	resources. Furthermore, the ALECs caused these costs to be incurred and thus, the
8	ALECs should bear the costs. Finally, Mr. Wood's statement on page 15 of his
9	testimony is blatantly wrong; "the new OSS implemented by BellSouth will benefit
10	its own retail customers." BellSouth does not and will not use these interfaces to
11	serve its retail customers. They are provided solely for the use of ALECs. Thus,
12	there is no benefit to BellSouth's retail customer. BellSouth witness, Dr. Taylor,
13	expands on the appropriateness of BellSouth's OSS charges in his rebuttal
14	testimony.
15	
16	NONRECURRING COST DEVELOPMENT
17	Q. BELLSOUTH DEVELOPED NONRECURRING COSTS FOR
18	UNBUNDLED NETWORK ELEMENTS, BOTH IN THIS DOCKET AND
19	IN DOCKET NOS. 960757-TP, 960833-TP, AND 960846-TP. HOWEVER,
20	MR. HYDE (PAGE 13) AND MR. WOOD (PAGE 25) QUESTION THE
21	VALIDITY OF BELLSOUTH'S NONRECURRING COST
22	METHODOLOGY. PLEASE COMMENT.
23	
24	A. This Commission has previously reviewed BellSouth's nonrecurring costs for
25	unbundled network elements and the underlying methodology used to develop

those costs in Docket Nos.960757-TP, 960833-TP, and 960846-TP. On page 96 1 of Order No. PSC-98-0604 in those dockets, the Commission rejected cost models 2 proposed by other parties stating: "We characterize AT&T/MCI's view as 3 representing the 'best case' scenario, the most automated, least cost provisioning. 4 We do not believe that AT&T/MCI's view, which is optimistic, captures all of the 5 manual intervention that is actually required to provision UNEs." Thus, the main 6 flaw the Commission found with the intervenors' nonrecurring models was that 7 they developed costs virtually based on costs that a hypothetical local exchange 8 9 company would incur to provide service if it were to build an ideal network today 10 from scratch. 11 12 Mr. Wood advocates this same philosophy in this proceeding. On page 11 of his 13 testimony, Mr. Wood states that nonrecurring costs should reflect systems that "are 14 consistent with the Total Network Management ("TNM") guidelines". BellSouth's network is "consistent" with the TNM guidelines. However, the network is not 15 16 100% TNM compliant and never will be 100% compliant. Network management 17 refers to the equipment, procedures, and operations designed to keep a traffic 18 network operational. Total Network Management implies an integrated network 19 where each vendor's equipment communicates with other vendor supplied 20 equipment, operations are seamless, and procedures require no (or little) human 21 intervention. BellSouth's goal is to evolve toward this standard, but due to the 22 enormous investment BellSouth has in copper plant, total end-to-end compliance 23 will never materialize. The substantial capital outlay and labor required to make 24 Mr. Wood's world a reality are cost prohibitive requiring replacement of existing. 25 functional plant. Additionally, Mr. Wood ignores other attributes of nonrecurring

1	cost, in addition to network design, that impact the cost BellSouth will incur.
2	BellSouth has contractual obligations that mandate work activities such as testing.
3	Also, some orders require manual intervention due to their complex nature or input
4	error. Mr. Wood inappropriately relegates nonrecurring cost development to this
5	hypothetical world based on "the most efficient technology" regardless of its
6	deployment (or lack thereof) in BellSouth's network.
7	
8	There is no reason to re-examine the nonrecurring costs previously filed with this
9	Commission. Additionally, the new nonrecurring costs presented by BellSouth in
10	this docket also adhere to the same methodology approved by the Commission in
11	Docket Nos. 960757-TP, 960833-TP, and 960846-TP.
12	
13	Q. ON PAGES 26-27 OF HIS TESTIMONY, MR. WOOD DISCUSSES
14	DISCONNECT CHARGES. PLEASE COMMENT ON HIS STATEMENTS.
15	
15 16	A. Mr. Wood raises two issues with respect to disconnect costs. The first has to do
	A. Mr. Wood raises two issues with respect to disconnect costs. The first has to do with timing. Mr. Wood believes, "disconnect charges should not be assessed to
16	•
16 17	with timing. Mr. Wood believes, "disconnect charges should not be assessed to
16 17 18	with timing. Mr. Wood believes, "disconnect charges should not be assessed to CLECs until the customer actually leaves the system." (Wood Testimony at Page
16 17 18 19	with timing. Mr. Wood believes, "disconnect charges should not be assessed to CLECs until the customer actually leaves the system." (Wood Testimony at Page 26) This Commission has already made a decision on this aspect of disconnect
16 17 18 19 20	with timing. Mr. Wood believes, "disconnect charges should not be assessed to CLECs until the customer actually leaves the system." (Wood Testimony at Page 26) This Commission has already made a decision on this aspect of disconnect costs in Docket Nos. 960757-TP, 960833-TP, and 960846-TP where it stated; "it
16 17 18 19 20 21	with timing. Mr. Wood believes, "disconnect charges should not be assessed to CLECs until the customer actually leaves the system." (Wood Testimony at Page 26) This Commission has already made a decision on this aspect of disconnect costs in Docket Nos. 960757-TP, 960833-TP, and 960846-TP where it stated; "it is appropriate to assess those [disconnect] charges at the time the costs are in fact
16 17 18 19 20 21	with timing. Mr. Wood believes, "disconnect charges should not be assessed to CLECs until the customer actually leaves the system." (Wood Testimony at Page 26) This Commission has already made a decision on this aspect of disconnect costs in Docket Nos. 960757-TP, 960833-TP, and 960846-TP where it stated; "it is appropriate to assess those [disconnect] charges at the time the costs are in fact incurred." (Order PSC-98-0604-FOF-TP at Page 69) Thus, BellSouth presented

asserts that BellSouth does not physically disconnect the circuit and thus, no disconnect costs are incurred. This may be partially true when BellSouth is the end-to-end provider of service, but not when an ALEC utilizes unbundled network elements to provide service. (Record changes would still need to be processed even if physical disconnect does not take place.) When an ALEC no longer wants to purchase a UNE from BellSouth, i.e. at the time of disconnect, then BellSouth must physically perform certain tasks, e.g., disconnecting the unbundled loop from the cross-connects. These work activities are reflected in the costs that are appropriately presented by BellSouth in this docket for Service Level 1 and Service Level 2 loops. Mr. Wood states that if an end user decides to change service providers, the connect and disconnect activities are "a single activity." (Wood testimony Page 27) This is wrong. Yes, the activities may take place at the same time; but different transactions, potentially involving different work groups, occur and can be separately identified into connect and disconnect categories. To illustrate my point, assume the end user is an ITC^DeltaCom customer served via UNEs purchased from BellSouth, loop and cross-connects. If this customer decides to return to BellSouth and ITC^DeltaCom relinquishes the facilities, then record changes would need to be made and cross-connects to ITC^DeltaCom's collocation space would be removed. These activities are reflected in the disconnect cost ITC^DeltaCom would pay. Additional activities would then need to be done to re-establish service. e.g., connecting the customer to BellSouth's switch, testing and translations. These charges associated with re-establishing service are assessed against the end user, not ITC^DeltaCom. If ITC^DeltaCom wants, for some unknown reason, to retain

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7	the original loop then no disconnect charges would be assessed. However,
2	ITC^DeltaCom would still be responsible for the recurring charges associated with
3	that retained loop.
4	
5	In summary, disconnect charges only apply when the ALEC requests that a UNE
6	no longer be provided by BellSouth. This request causes BellSouth to incur costs
7	due to the physical activities required to implement the discontinuance of
8	"service". BellSouth presents disconnect costs separately from the installation
9	costs as required by this Commission.
10	
11	Q. ON PAGE 25 OF HIS TESTIMONY, MR. WOOD ALLEGES
12	BELLSOUTH'S COST MODEL CANNOT BE USED TO COMPLY WITH
13	THE FCC'S TELRIC STANDARD. DO YOU AGREE?
14	
15	A. No. BellSouth's cost methodology is compliant with the FCC's TELRIC standard
16	As I explained in my direct testimony, this Commission has devoted extensive time
17	and resources to evaluating cost methodology. In Order No. PSC-96-1579-FOF-
18	TP, the Commission recognized that the underlying Total Service Long Run
19	Incremental Cost ("TSLRIC") cost methodology and the FCC's Total Element
20	Long Run Incremental Cost ("TELRIC") cost methodology are virtually the same,
20	only the cost object has changed from a service to an element. On page 24 of the
21	
	Order, the Commission states: "Upon consideration, we do not believe there is a
21	Order, the Commission states: "Upon consideration, we do not believe there is a substantial difference between the TSLRIC cost of a network element and the
21 22	

1		appropriate because they approximate TSLRIC cost studies and reflect BellSouth
2		efficient forward-looking costs." Mr. Wood presents nothing new that should
3		cause this Commission to revisit this finding. Since this Commission equates
4		TSLRIC to TELRIC, and TELRIC is the current FCC cost methodology standard
5		BellSouth's studies necessarily comply with the FCC TELRIC rules as interpreted
6		by this Commission.
7		
8	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
9		
10	A.	The cost studies filed in this proceeding determine the total service long run
11		incremental costs plus shared and common costs specific to Florida. The costs
12		were developed using the basic study methodology and approved input values
13		previously authorized by this Commission.
14		
15	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
16		
17	A.	Yes.
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BY MR. ALEXANDER (Continuing): Ms. Caldwell, do you have a summary of your 3 testimony? Α Yes, I do. Would you give that now, please? Q Α Yes. First of all, I'd like to just talk about my 8 direct testimony. I discussed two issues. I discussed Issue 38 and -- well, really three issues, but they are 10 really two ideas. Issue 38 and then Issues 39 and 40. What Issue 38 deals with is the rates that will 11 12 be imposed on ITC^DeltaCom for Bellsouth's access to OSS. And what I did in that particular area is I 13l produced a cost study that's filed, that is Exhibits DDC-2, -3, and -4, that was attached to my direct 15 testimony. And in that particular testimony, I developed 16 the costs for access to the OSS. 17 I looked at all the development costs and 18 19 implementation costs of those electronic interfaces that 20 will be used solely by the ALECs to transmit their orders 21 from their location into Bellsouth's existing legacy, 22 operational support systems. 23 The cost for that basically is \$6.63. addition to that, I also -- And let me add one thing

there: I did look at the ongoing maintenance of those

25

systems as we pass through time.

I also developed a manual charge. And that would be, for instance, when an ALEC chose to fax the order rather than use the electronic interfaces and that's a separate rate element. It's based on the time to handle that particular order. And that would be \$20.08.

Now, on the next issues that dealt with the rates for some loops, in particular, ADSL, SL1, et cetera, I developed cost studies. The cost studies that I provided were for a two-wire SL1 loop, a two-wire SL2 loop, and a two-wire SL2 loop order coordination for specified conversion time.

In addition, ITC^DeltaCom had asked for the ADSL and HDSL compatible loops, but since the Commission had already looked at the cost studies for those loops and actually ordered rates in their April order, I did not restudy them at this time.

One comment about the studies I would like to make is that I used the TSLRIC plus shared and common methodology that this Commission has accepted basically associated with Dockets 960757, 960833, and 960846.

This methodology looks at the forward-looking long run and reflects least cost efficient technology.

Now, we call TSLRIC plus shared and common, but the only

real difference is this Commission has already found between TSLRIC plus shared and common and TELRIC is the object that you're studying. If I am going to study a network element and I look at a TSLRIC study, I'm going to pick up additional shared capacity because I'm studying an element. So, it is a true statement that TSLRIC plus shared and common when I am studying a network element is the same as a TELRIC, which matches the FCC's TELRIC definition for total element long-run incremental costs.

**i** 

One thing I do want to point out is that in my cost studies that I have filed here concerning these loops and the OSS, I recognize all the adjustments that the Commission had previously ordered in the April time frame. Just to list those, without going into detail, I adjusted the cost of capital, the depreciation, the common cost factor. I adjusted fill factors, drop links and the number of lines per network interface devices associated with the loops.

Additionally, the shared and common costs -- excuse me. The shared costs were eliminated from the labor rates and for the actual shared costs and common cost calculation. After the April order, the staff had provided to BellSouth their version of the shared and common with their adjustments. I just used

that same version to get the shared and common factors.

In addition to that, we use the Florida State specific tax factors. And we removed all service order and service inquiry costs from these cost calculations.

The last item to mention is associated with the disconnect costs, we consider those to be separate rate elements.

Now, that pretty much concludes what I talked about in terms of my direct testimony. That's basically the introduction of the costs.

Now, in my rebuttal, I just addressed a few issues that were raised concerning, first of all, collocation, access to OSS, nonrecurring cost, and the last one was does BellSouth cost studies conform to the FCC's TELRIC standard.

Let me just briefly take collocation. The issue that I responded to in the rebuttal was whether or not to use virtual collocation as a surrogate. That's really not necessary because you're not studying the same thing. It is a form of physical collocation. It just does not require a cage. And you're not talking about using the rate elements for building a cage. You're only using the rate elements that would be appropriate in a cageless environment. And that would be such things as the floor space. Granted, it may not be a hundred square

feet, which is what most cages were concerned with, but it is still some floor space that their equipment sits on. And we looked at -- And in that case, you would only 3 use the floor space rate element and the associated land. 4 5 Now, the rates were already established by this Commission in the April time frame for that particular 6 rate element. 7 8 In addition to that, one other thing I think to point out is there was a lot of discussion in the 9 testimony about maintenance and how we needed to take out 10 maintenance from the cost study. Well, if you're looking 11 at just the floor space, there is no maintenance cost. 12 Maintenance is always associated with the equipment. And 13 in both physical and virtual collocation, there are no 14 equipment costs because that's owned by the ALEC. 15 there is nothing to remove the maintenance from. 16 The next item is the OSS. I think I fairly 17 well covered access to OSS and what I --18 COMMISSIONER JACOBS: I'm sorry. Before 19 you -- There is a cost element for a per-square-foot 20 collocation? 21 WITNESS CALDWELL: Yes, for the floor space. 22 23 COMMISSIONER JACOBS: Seems like I thought from 24 earlier discussions that there was some confusion, but there is that? 25

WITNESS CALDWELL: Yes. COMMISSIONER JACOBS: Yes. WITNESS CALDWELL: Now, the next item is access 3 Let me just point out that I think the one issue 4 5 here that may be a little confusing is the discussion that it's not TELRIC. Well, it is TELRIC. These are new You have to develop them. So, I started from I developed systems. I looked at all the 8 scratch. development costs based on the OSS electronic interfaces 9 that BellSouth would be deploying for the ALECs. And the 10 only customers that are going to use those systems are 11 the ALECs when they send their orders through them. 12 therefore, I did divide by total demand. I followed the 13 14 TELRIC rules and divided by total demand that would use those systems. 15 So, I think that was the one issue there. 16 17 COMMISSIONER JACOBS: So, you disagree 18 with -- I'm sorry, I can't remember the name of the witness -- who says that some component of retail 19 customers would use those --20 WITNESS CALDWELL: 21 Yes. 22 COMMISSIONER JACOBS: -- systems? WITNESS CALDWELL: The OSS electronic 23 interfaces, I studied eight systems. And those systems 24

are, if you think about them, they are prior to

25

Bellsouth's existing OSS systems. And so all I did was study those eight systems. And I like to think of them as being separate. And I only divided by the demand that would go through them.

COMMISSIONER JACOBS: Okay.

WITNESS CALDWELL: Okay?

In the nonrecurring costs, there was really two areas: The first one was just the general question of whether or not we used the correct cost methodology. We used the same methodology that this Commission has looked at for many years and also spent a lot of time analyzing in the last cost docket or the last arbitration that we had, Docket 960833.

We basically look at the time that the subject matter expert says it's going to really require us to perform that activity. And I included that work time in my studies. And I also made all the adjustments that the Commission ordered by taking out all service order and all service inquiry time associated with service level 1 and service level 2 loops.

The other issue on the nonrecurring concerned disconnect. There was some point that we needed to separate the disconnect and have it as a separate rate element. I had done that. So, I don't think that's an issue any more.

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The other one was that I was somehow including
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   costs for work that was not done or somehow BellSouth was
2
   charging a disconnect when no work was being done.
3
   is work being done. When an ALEC disconnects an
   unbundled loop, they have purchased a UNE from us.
                                                         It is
 5
   their UNE.
                They decide to disconnect it. It is
 6
   currently connected to their collocation space. So, when
   they disconnect or say they no longer want that loop, we
 8
   have to physically have a technician remove it from the
 9
    collocated cross connect and cross connect it back to
10
    Bellsouth's switch or cross connect it to another ALEC.
11
    So, it's the -- And it's only at time of disconnect I
12
    have included, the physical disconnect.
13
14
              And the last item was that the BellSouth cost
    studies conform to the TELRIC methodology. I think I
15
    covered that in my direct testimony sufficiently.
16
17
              Thank you.
              MR. ALEXANDER: Witness is available for cross.
18
              COMMISSIONER CLARK: Okay. Mr. Jones.
19
              MR. JONES: Thank you, Ms. Commissioner.
20
                        CROSS EXAMINATION
21
    BY MR. JONES:
22
23
              Ms. Caldwell, Clay Jones on behalf of
         0
    ITC^DeltaCom; how are you this evening?
24
25
              Just fine.
         Α
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Ms. Caldwell, I think it's fair to say that you
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        0
   take the position that the cost studies you rely on in
2
   this proceeding, whether they're ones that you submitted
3
   for this proceeding or whether they are cost studies
   relied on in prior decisions of the Commission, are
 5
   compliant with the FCC pricing rules?
 6
              Yes, I do.
 7
        Α
              Okay. I'd like to talk with you about one of
 8
 9
   those rules in particular. And, Commissioners, I have a
    copy of the rules. And it might be easier if I just
10
   provided the witness with it.
11
              Ms. Caldwell, do you recognize what I have
12
13
   handed you?
14
              Yes, I do.
              And this is the -- Well, what have I handed
15
    you? You would describe them as the FCC pricing rules?
16
              Yes. This is the part of the pricing rules --
17
    Well, I quess it's the pricing rules. It's Section --
18
    It's 51.5, et cetera.
19
20
              Okay. And I'd like you to turn over to I guess
    what would be page B-32 and ask if you are familiar with
21
22
    Rule 51.511(a)?
              Yes.
23
         Α
24
              And I hope this isn't tedious, but, if you
25
    would, please just read it into the record for us.
```

A A?

16l

Q Uh-huh, .511(a); that's right.

A "The forward-looking economic cost per unit of an element equals the forward-looking economic cost of the element as identified in 51.505 of this part, divided by a reasonable projection of the sum of the total number of units of the element that the incumbent LEC is likely to provide to requesting telecommunications carriers and the total number of units of the element that the incumbent LEC is likely to use in offering its own services during a reasonable measuring period."

Q So, following this rule, when you're costing element, a UNE, the FCC pricing rules require you to factor in the forward-looking economic cost of the element as well as the total units or projections of the total units that an ILEC is likely to provide to ALECs and that an ILEC is likely to use in offering its own retail services; is that a fair statement?

A Yes, as long as the demand you're looking at here is going to use that particular UNE.

Q Okay. And Rule 51.511 mentions Rule, or incorporates, I suppose, Rule 51.505, which is on the first page of what I've handed you. And that's the rule that at least in part says that you have to factor the total quantity of facilities; is that familiar to you?

```
Yes, that's familiar. I can't remember exactly
1
        Α
2
   which sub part it is.
              I believe (b) would be the --
3
        Α
              Oh.
              51.505(b).
5
6
              Yes, I'm with you.
7
              Actually 51.511 -- 51.511 includes the entire
         0
   Rule 505, but the portion I was referring to, the total
8
   quantity of facilities and functions, is found in sub
9
   part (b) of that rule; do you see that?
10
              Yes, but we're talking about -- And let me just
11
   be clear I'm following you here. Is 51.505(b) talks
12
   about the total element long-run incremental cost, and in
13
   this element it's the quantity of facilities and function
14
    that are directly attributable to, or reasonably defined
15
    as incremental to such an element.
16
              To the element.
17
         0
18
              (Witness nods head affirmatively).
              Okay. Thank you.
         0
19
              So, in general, could you please describe to me
20
21
    the process by which you incorporated this rule, .511, as
    well as the principles of .505, into your cost studies
22
23
    that you've submitted in this proceeding, just in
    general.
24
25
         Α
              Okay. Probably best to use the loop as an
```

example.

Q That will be fine.

A What we basically did, not going into excruciating detail, but we looked at the existing customer locations. We looked at the existing wire centers. We did use a sample that told us where the customers are located today and how they are served. We then redesigned every one of those loops to the most current or the currently available technology. I think the best way to look at that is if you've got a 20-mile loop that's served on copper, we converted that to digital loop carrier, which is the most efficient cost effective way to serve those long loops.

So, for each one of loops we redesigned them. So, that took into consideration the forward-looking aspect of the study.

And then we looked at developing, since it was a sample, a statistically valid sample of all the loops in the state of Florida, then that represented the entire demand for all loops, whether it be a loop used by BellSouth or a loop to be used by an ALEC. I think those are the major issues you were talking about here.

I can go into the depreciation or the other.

Q Unless you've -- I don't think that's necessary. That gives me a general understanding.

Well, let me just say in summary on that, when Α 1 it deals with the depreciation, the cost of capital, all 2 those issues, I think the staff has well addressed that 3 and I followed their adjustments in my study. 5 Thank you. So, you would agree that a loop is 6 a UNE? Yes, I would. 7 Α 8 0 And, as you just said in your example, on your cost analysis you factored in the loops provided to ALECs 9 as well as those used by BellSouth to provide retail 10 service to its own customers? 11 Yes. Α 12 And some of those loops have probably been in 13 0 the system for sometime when you're figuring out the 14 total number of loops that are present? 15 Α Oh, yes. 16 Would you agree that switching capacity is a 17 UNE, local circuit switching? 18 And I guess I should go back and say that in 19 terms of the costs, what I have developed in terms of 20 UNE, I guess we'll have to get back to the fact that we 21 really don't really know what UNEs are available now. 22 23 have a tendency to talk about the ones I've studied. So, 24 let me just clarify here that I am talking about the elements of the network that I had previously developed 25

costs for unbundled network elements. Okay. Now, have you done, either in this 2 proceeding or in prior proceedings upon which you're 3 relying on certain cost studies, an analysis of switching 5 capacity? I have looked at the port and then I have 6 looked at the usage on the switch, of local switching component. 8 Okay. And when you did that, did you look 9 Q at -- and I'll refer to it as switching capacity, if 10 that's an acceptable definition of how you're describing 11 12 it. That's fine. 13 Α When you did, you looked at the switching 14 0 capacity provided -- when you factored in the switching 15 capacity provided to ALECs as well as that used by 16 17 BellSouth to provide its own retail services? 18 Yes. Α Would you agree that dedicated and shared 19 20 transport is a UNE? 21 Again, the same. Α 22 Same answer? 0 23 Same answer, but I did study them. Α That's fine. And you studied those, not in 24 0 this -- You didn't provide that in the cost study in this 25

proceeding but in a prior proceeding? They had been studied prior. And when you did that, you considered the dedicated and shared transport to be -- you factored in 4 the dedicated and shared transport to be provided to ALECs as well as that used by BellSouth to provide retail services to its own customers? Yes. Let me just point out that we keep using 8 Α the term retail, but especially in the switch and in the 9 10 dedicated transports, you're going to have the wholesale environment, because you have your access 11 services. Any demand that actually would traverse or use 12 13l that facility, I considered that. Okay. But everything in that realm that is 14 Q used by BellSouth, in this instance not limited to 15 16 retail, but you consider the entire universe of dedicated and shared transport in your analysis; you factored that 17 18 in? 19 Yes. Would you agree, subject to your answer before, 20 21 that signalling is a UNE? 22 Α Yes. 23 Okay. And you provided a cost analysis of signalling and other correlated databases in a previous 24

filing with the Commission here, not in this proceeding

25

```
but in another, that you were relying on?
1
              Yes. I started to say automatically yes.
2
   know some of the databases were. I believe signalling
3
   was previously.
              MR. ALEXANDER: May I -- Several of these
5
   questions have been about cost studies about elements
6
7
   that DeltaCom has not requested as a part of this
   proceeding. I'm not sure the relevancy of the questions.
8
9
              MR. JONES: They're relevant because I'm trying
   to address her methodology for how she has provided cost
10
    studies for the ones that we're asking for. It's within
11
    the realm of relevancy for me to ask her about her
12
   methodology for performing a cost analysis.
13
              COMMISSIONER CLARK: That's fine, but let's not
14
15
   belabor the point.
              MR. JONES: I think we're getting to where we
16
17
   need to be.
18
    BY MR. JONES (Continuing):
              Now, you've also in this docket provided a cost
19
    study for OSS?
20
              Yes, I have.
21
         Α
22
              Okay. And would you agree with me that at
    least according to the FCC's press release that OSS or,
23
    as you would probably would want to prefer to put it,
24
    access to OSS is a UNE?
25
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A That's my understanding, yes.

Q Now, with regard to the OSS cost study that you provided here, did you look at the OSS system to be used by ALECs or did you factor in the OSS to be used by ALECs or did you also consider Bellsouth's own OSS system used to provide service to its own customers?

A The only cost that's included in the access to OSS cost study is the cost associated with the electronic interfaces that interface the ALEC's order processing systems with Bellsouth's existing OSS legacy systems. So, that's what's in my cost study. Just those electronic interfaces. The existing OSS legacy systems are in the shared and common factors.

- Q Okay. But not included in your cost analysis then?
  - A No, they're not.
- Q Okay. So, for these other UNEs that we've been discussing, and perhaps according to opposing counsel belaboring, but loops, switching capacity, transport, signalling, you did consider, in fact you factored in in assuming the total quality, pursuant to the FCC rules, both elements provided to ALECs as well as those used by BellSouth, but you did not do that for OSS?
- A Yes. And that's appropriate. When I look at a loop, the loop could be used by BellSouth. It could be

used by an ALEC. Or if you look at a switch, as I 1 mentioned it could be used, again, by the ALEC or by 2 BellSouth. So, you need to look at all of the demand that that particular facility is going to have traveling across it or be using it. But when you're looking at OSSs, I did the same The OSS electronic interfaces never receive a 7 thina. BellSouth retail order. They are only for the purpose of 8 9 taking the order from the CLEC or ALEC and transmitting it to Bellsouth's OSS systems. So, the only demand that 10 ever goes across those is the ALEC demand. So, I feel 11 that you are in compliance with the order. 12 13 BellSouth has an OSS system that it uses to provide to fill orders for its own retail customers; is 14 that correct? 15 That's part of the OSS legacy systems. 16 Α Yes. 17 There's probably more than one. COMMISSIONER JACOBS: If I understood 18 correctly, then you looked at the interfaces only to the 19 20 ALEC, for the ALECs? 21 WITNESS CALDWELL: Right. COMMISSIONER JACOBS: But the back room or the 22

legacy systems, are they common? The one, the systems

for your processing, are they common or are they

that actually do the number crunching for both ALECs and

23

24

25

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different?
1
              WITNESS CALDWELL: At some point they do enter
2
   the OSS legacy systems, so they would be common.
3
   believe Mr. Pate can probably tell you exactly which
   systems and how they interface.
              COMMISSIONER JACOBS: And what I hear you to be
 6
   saying is that you distinguished those costs?
              WITNESS CALDWELL: Yes. I looked at it very
8
   differently. I looked at just the electronic
 9
    interfaces. That's what's in the cost study I provided.
10
   And then the OSS, anything that was an existing system,
11
    that's in the shared and common. So it -- It by default
12
    is spread across retail and wholesale offerings because
13
    it's in the shared and common.
14
15
              COMMISSIONER JACOBS: Thank you.
              MR. JONES: I have no further questions.
16
             COMMISSIONER CLARK: Staff.
17
                        CROSS EXAMINATION
18
19
    BY MS. CALDWELL:
              Good evening, Ms. Caldwell. I'm Diana Caldwell
20l
21
    of the Commission staff.
22
              Good evening.
         Α
              When BellSouth --
23
         0
              COMMISSIONER JACOBS: This is the first time;
24
    isn't it?
25
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MS. CALDWELL: No, we had the opportunity for
1
   depositions. We got this all settled in deposition. I'm
2
   Q and she's A.
   BY MS. CALDWELL (Continuing):
              When BellSouth enters rates into the TELRIC
   calculator, what time frame or interval does BellSouth
 6
   apply as forward looking?
              We use normally a three-year time frame. I
         Α
8
   believe in these particular studies we entered in a base
 9
    year of 1997, and then we had a forward-looking time
10
    frame of '98 through 2000. The OSS study is the one
11
    exception. It's a '99 through 2001.
12
              Does the recurring costs of ongoing processing
13
    OSS orders in your exhibit include LENS, EDI, and TAG?
14l
15
         Α
              Yes.
              And which of these systems was released as
16
    Bellsouth's latest version?
17
              I need to defer that to Mr. Pate.
18
         Α
19
              Okay. Would you also -- Would you happen to
    know the highest level of functionality?
20
              I'm afraid not.
21
         Α
              That's all right. On what basis did you
22
         Q
    determine which systems were forward looking in your
23
    costs and did you include all of them?
24
25
         Α
              All right. I looked at eight systems.
```

that would be all the systems that BellSouth developed associated with providing these OSS electronic interfaces. So, some of the systems have been -- You have had newer systems come on, but it's been a development process. So, I looked at from the beginning of the time frame what it would take us to develop the systems to get us to where we are today.

And I think that's forward looking because it was a learning process in which you just didn't really know what the standards would be. And so, therefore, we've had to develop them as we go along. So, those costs are legitimate costs that anybody would have incurred, whether it be BellSouth or anyone else, in developing systems of this type because you -- The systems are modified as you move through times, as requirements change, and as you learn more about the industry.

Q Would you agree that the only forward-looking incremental costs should be included in a TELRIC study? Only the forward-looking incremental costs should be included in TELRIC?

A Yes.

Q And would you agree that Bellsouth's cost model may have some OSS elements which are not forward looking?

A Not really, because I think I answered that in

terms of we looked at what it would take to develop these 1 So, even though the system may have changed or 2 you may have a different version, it's taken us that cost 3 to get there. It's a learning process. It's all new. It's not like I can go out and buy a switch that Lucent 5 has developed over the last, you know, twenty years. This was a learning process that we would go through. So, from that standpoint, beginning at the time 8 we started to develop these systems, I do consider them 9 10 forward looking. I want to look at your Exhibit DDC-2 on page 6 11 of 9. 12 Okay. 13 Α This portion of the exhibit explains the 14 Q methodology used to calculate fallout, order costs as a 15 nonrecurring charge. Why does an order fall out? 16 Normally, what happens is it's the result of an 17 Α error in like one of the fields has the wrong number of 18 spaces and the customer line has a slash when it 19 shouldn't have a slash, something of that, and so it 20 21 doesn't process into the system. Then a little bit later on down the system, 22 if -- and I'll try not to get too far out of my line 23 here. Maybe Mr. Pate can give you some more detail. 24

for the reason we looked at the costs is that it could

25

fall out because the wrong information, once it got into our systems it couldn't process it; it couldn't talk to one of our existing systems.

23l

Q So, if ITC^DeltaCom makes an error in an order, is that considered a fallout order?

A Yes, if it will not transfer. It if will not pass all the way through the systems and it falls out and a service rep has to actually take the order and do something with it, that's what I'm talking about.

Q Bellsouth's position is that ITC^DeltaCom is responsible for labor costs associated with manual entry of an order when the system is designed to route certain orders to the local carrier service center. Would you agree with that statement?

A I'm going to have to ask you to repeat it.

Q Okay. I'll read it slowly. Would it be Bellsouth's position that ITC^DeltaCom is responsible for labor costs associated with manual entry of an order when the system is designed to route certain orders to the LCSC?

A My understanding is if the order starts out as an electronic order into the electronic interfaces, then that is considered an electronic order. A manual order is an order that, for instance, ITC^DeltaCom originally would have faxed to us.

Q All right. But would it be Bellsouth's position, though, that if it was started out as an electronic order but it fell out because of an error, and it caused BellSouth to do some manual, any kind of manual labor to that order, would it then be ITC should be responsible for that cost?

A I think the answer to that is, yes. And let me explain how it's handled. In the OSS cost study, I talk mainly about the systems because that's where the interest has been. There is a small component associated with this fallout, which is where we are right now. And say, for instance, and without going into the numbers, just let me use an example. Let's say it took ten minutes to handle an order, and the orders would fall out ten percent of the time. Well, in my study I would have taken the ten minutes and multiplied it by the ten percent probability that that would happen, and I would have put one minute, and then multiplied that times a labor rate. So, that's what I use these fallouts for.

So, yes, if it falls out, then every order has a small amount of costs associated with the fallout percentage that's listed here, which is exactly 6.67%. But they do not pay the full manual costs. It is the \$6.63. They are charged the manual rate for the LSR.

Q Do you know whether BellSouth has orders that

are designated to fallout even without an error?

- A You'll have to ask Mr. Pate that.
- Q Going -- I'm sorry, Commissioner.

COMMISSIONER JACOBS: As I understand it then, so each LSR picks up some portion of costs having to do with potential fallouts?

WITNESS CALDWELL: Correct.

COMMISSIONER JACOBS: And you heard the testimony earlier of -- I'm getting real bad with names -- but there was earlier testimony from ITC^DeltaCom that an alternative would be to have only those orders which actually fallout pay that overhead.

What's the disadvantage to BellSouth in doing it that way?

WITNESS CALDWELL: I think there is -- There's really two issues that have to be looked at here. And I think Dr. Taylor talked a little bit about this when he was talking about the cost efficiency.

First of all, if you were to go to the effort and cost of designing a system, let's even assume you could do this, that would never allow any fallout, the cost would be prohibitive because you just never get that level. There is always -- Since a human being is going to put information into a system, at some point you are going to have some level of fallout. That just always

happens.

The other thing is from an administrative standpoint, it would cost more money for us to -- the small amount of orders you have here, I mean, this is less than ten percent of the orders that would actually ever fallout, to track every one of those orders and then issue a separate bill, it would be cost -- in my mind not only costly for BellSouth to administer that and do the billing, because they'd have to set up all the systems, but then ITC^DeltaCom would have to pay every one of those bills, too. So, they would have to administer it, also.

COMMISSIONER JACOBS: Well, you understand the flip side of that argument is that if you have 90% of the bills -- of the orders out there that don't fall out and you're collecting a fee for that from them, kind of argues that there may be an over recovery of this potential cost.

WITNESS CALDWELL: The overall amount of money is not over recovered because I only used a small -- I only used a ten percent probability of falling out.

COMMISSIONER JACOBS: I see.

WITNESS CALDWELL: So, I think from that standpoint I have appropriately looked at -- The amount of money in here is just spread over, in your example,

all one hundred percent, rather than just the ones that fall out. But that would still be appropriate because this is the cost effective and efficient way, from an administrative and also from an outlay of money to do all the programming, an efficient way to handle it.

COMMISSIONER JACOBS: Thank you.

BY MS. CALDWELL (Continuing):

12l

Q Ms. Caldwell, you stated in your response to Commissioner Jacobs that you had used a ten percent assumption. Did you base that ten percent on anything?

A I'm sorry, I was just trying to use ten percent as an example because it was easy to multiply.

Q All right. Well, let's say -- and I don't need to know the numbers, but did you do any studies or look at the actual data when you made certain assumptions in your cost study? Did you look at the number of fallouts and actually get a percentage?

A Yes.

Q And that's what you used?

A Excuse me. Yes. In fact, the actual number that we started with is listed on page 6, where we're looking. The actual fallout rate for 1998 was calculated at 15%. That was an actual number.

And then we worked with the individuals that are responsible for the OSS systems. And they gave us

estimates that over time this fallout rate would actually start to decrease.

And there is some -- In one of my questions I had back to them, well, if it starts to decrease, how about the amount of time to handle the order. Well, the answer back to me was as the amount of fallout actually decreases, the time to handle the order increases. And the reason that that is is because you've solved all your simple problems. Now, you've only got hard problems left. So, therefore it takes longer to handle them. So your time estimate would go up.

So, therefore, I think I have looked at it appropriately from a forward-looking standpoint by looking at the amount of time it takes to handle them now with this decrease in fallout rate, yet not including any additional time to handle the more difficult orders.

Q I want to go back to an earlier line of questioning on the different types of OSS order processing, the different types that are used by the ALECs. And you indicated that because it was something new to BellSouth and it was a learning process, that you took all of that into account and that, therefore, you felt like it was forward looking and should be -- and all of it should be included.

If -- However, are you aware that there is a

newer version versus older versions?

- A (Witness nods head affirmatively).
- Q If you've got a newer version, why would you not just use the cost of the newer version rather than including -- include all three versions?
  - A Okay.

Q For your ongoing costs.

A I was going to answer it from a development standpoint. Just from the ongoing cost. What we have determined here is these systems are still in place. And for each year, if you look at Exhibit DDC-4, it shows the hardware and maintenance that would be incurred. So, therefore, we have only looked at the costs associated with what would be used on them.

The only system I know that is totally going away is the BSOG system. And that's why I revised and refiled the DDC-4 and adjusted the cost down because we did find out that BSOG literally went away.

And just to give you an idea, it used basically four processors. And two of those processors were going to be taken away and used by BellSouth in some other area, and two were left to move over to the existing electronic interfaces, these electronic interfaces.

So, I went into the study and removed the costs associated with those two systems that were going to be

used somewhere else.

17l

So, all the equipment that is included in the study and the maintenance on these systems is ongoing during the time period we're looking at.

Q I thought earlier in your testimony, when you were describing forward-looking costs, when you would take -- your description I think was a loop -- and you said you would take that loop and you would look at it, if it was a long, like a 20-mile loop, then you would go back and replace it with the most forward-looking technology, which you said would be probably fiber.

A Uh-huh.

Q It seems to me the same analogy should be applied in this instance where you should look at just the most forward-looking technology, which would be the most updated version and replace all of the costs with just that most forward-looking technology. Why is that a wrong assumption on my part?

A Well, and I'm not saying it's necessarily a wrong assumption. I feel that that's what I have done from an ongoing standpoint. We discussed the development and I talked about developing all the systems and why I did that because you're starting from ground zero and that's indicative of the type costs you're going to have starting from ground zero development.

But in the ongoing, my understanding is these systems are not slated for any of them, other than the one I just mentioned, to actually go away. They are still going to be there for some time frame for them to be using, them being the ALECs.

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Q Okay. And from an ongoing standpoint, looking at ongoing costs, would you agree that ALECs use the most efficient -- Would you agree that ALECs that use the most efficient systems will still be charged for the system they are upgraded from?

A I guess I'm having a little bit of a problem in terms of which is the upgraded system. I'll answer that from a cost standpoint. What's included in the cost is the ongoing costs associated with all the systems because all the systems are available for any CLEC to use.

And, again, you get into the administrative function of trying to see which CLEC uses EDI, which one uses TAG, and trying to maintain all that information. So, rather than that do, we just looked at if you took all the systems, all eight systems, which includes preordering, ordering, and maintenance, and looked at the cost of those systems, that's what is in the \$6.63.

Q So, what you're saying is that ALECs who have let's say upgraded from EDI to TAG, they're still going to pay through the \$6.67, they're still going to be

paying for all the old systems because it's a conglomerate cost or an aggregated cost?

16l

A In terms of the costs, yes; all the systems are in there. It's just I'm having a little bit of trouble with what's old and what's new and what replaces what.

Mr. Pate knows more about that.

But from a cost standpoint, what I looked at is my understanding is you can still use EDI. You can use TAG. Those are about the only two I know very much about. And you can use one or the other.

And rather than look at each one of the individual systems and try to develop a cost for it when they're all sitting in the same data center, in most cases they're being run many times by the same computer programmers, you have the same OSS support team behind them, all the same individuals working on every one of these systems, rather than try to allocate any of that costs, which becomes very difficult and not necessarily accurate when you try to allocate, we looked at, to the best of our ability, all of the systems. And then we included all the systems' costs, regardless of which one you used. So, if you used EDI, you pay \$6.63. Maybe this is what we're getting to. If you used EDI, you pay \$6.63.

Q Right. So, it doesn't matter whether you use

the most forward looking; you're still going to pay the 2 same costs? I just have a problem with you calling it the most forward looking, but you would pay for all the systems, yes. 0 It doesn't matter which one you use, you're still going to pay the same? 8 Α That is correct. 9 Just a few more. Are you familiar -- I think 10 you are familiar with Issue 41, which asks BellSouth if 11 BellSouth should be permitted to charge a disconnect 12 charge when BellSouth does not incur any costs associated 13 with disconnection. I mean, I think that's a statement of the issue. 14 15 Α Yes, I'm familiar with that. On page 8 of your direct testimony, in lines 5 16 17 through 6, you state disconnect charges only apply when 18 the ALEC requests that the UNE no longer -- that a UNE no longer be provided by BellSouth. 19 20 What specific cost does BellSouth seek to 21 recover through disconnection charges assessed to 22 ITC^DeltaCom? 23 Α Give me just one minute. In Exhibit DDC-1 --24 25 0 No, I think we're on page 8 of your direct. I'm

sorry. 2 Okay. I'm on page 8 of my direct. You were asking me what the disconnect costs were? 0 Right. Α All right. They are listed in Exhibit DDC-1. 6 0 Okay. I'm sorry; I got confused then. Α 8 0 Under what circumstances does BellSouth not 9 incur costs during the disconnection process? 10 Oh, I misunderstood. Well, the first question was what specific 11 12 costs does BellSouth seek to recover through its 13 disconnect charges, and you directed me to, that it's listed on that page. 14 15 Α Yes. 16 So, my next question is under what circumstances does BellSouth not incur costs during the 17 18 disconnection process. 19 Α I cannot think of one. 20 And let me just clarify, we're talking about a full disconnect, where, for instance, ITC^DeltaCom has a 21 22 loop today purchased from BellSouth, a UNE, and they disconnect. That loop goes somewhere. It's either going 23 to go back to BellSouth or it's going to go to another 24 ALEC. So, BellSouth physically goes to the collocation 25

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area and disconnects that cross connect to take it
1
   wherever they need to. So, there is physical activity.
   And that's the only example of disconnect I can think
   about.
              MS. CALDWELL: Okay. That answers all my
 6
   questions.
 7
              WITNESS CALDWELL:
                                 Okay.
              MS. CALDWELL: Thank you very much.
 8
 9
              WITNESS CALDWELL: Okay.
              COMMISSIONER CLARK: Redirect?
10
11
              MR. ALEXANDER: Yes.
                      REDIRECT EXAMINATION
12
13
    BY MR. ALEXANDER:
              Ms. Caldwell, do you recall earlier the
14
         Q
    discussions by Mr. Jones on behalf of DeltaCom regarding
15
    I believe it was FCC Rule 51.511 and 51.505?
16
17
         Α
              Yes.
18
         Q
              Do you still have a copy of that in front of
19
    you, Ms. Caldwell?
20
         Α
              Yes, I do.
              Would you look at the -- It's actually, this is
21
22
    51.511(a). Can you see the last part of that provision?
23
    It says, "and the total number of units of the element
24
    that the incumbent LEC is likely to use in offering its
25
    own services during a reasonable measuring period;" do
```

you see that phrase? Yes, I do. With respect to the electronic and manual interfaces that BellSouth developed for access to its OSS, is there any of that that the incumbent LEC is 5 likely to use in offering its own services? We will not -- BellSouth will not use Α No. those electronic interfaces to process any of their own 8 9 services. 10 Are there separate charges for manually 0 submitted orders as opposed to electronically submitted 11 12 orders? 13 The electronic costs were \$6.63 and the manual was \$20.08. 14 15 Now, just to be clear, the cost study that 16 you've sponsored in this case for the OSS charges is not 17 for Bellsouth's legacy OSS systems that it uses for its own retail operations; is it? 18 19 Α That's correct. 20 Is it for just the electronic interfaces and 21 manual interfaces that provide ALECs such as DeltaCom access to BellSouth OSS? 22 23 Α It's just the electronic interfaces and then 24 the manual is the service rep time to handle the order. 25 MR. ALEXANDER: Okay. No further redirect.

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COMMISSIONER CLARK: Exhibits.
1
              Commissioner Jacobs, I forgot to ask you, did
2
   you have any questions?
3
              COMMISSIONER JACOBS: No.
              COMMISSIONER CLARK: Exhibits.
5
              MR. ALEXANDER: I believe it's -- we marked it
6
   as Exhibit 25. Ms. Caldwell's -- Actually, there's --
             COMMISSIONER CLARK: We'll move Exhibits 25 and
8
   26 into the record.
 9
              MR. ALEXANDER: I was going to say her direct
10
    exhibits are 25 and Exhibit 26 is the rebuttal.
11
              MR. JONES: No objection.
12
13
              COMMISSIONER CLARK: Without objection.
              Thank you.
14
              (Exhibit 25 and 26 received into evidence.)
15
              COMMISSIONER CLARK: Thank you, Ms. Caldwell,
16
    you are done.
17
              WITNESS CALDWELL: Thank you.
18
19
              COMMISSIONER CLARK: How about Mr. Scollard? Is
    there any chance we can get done with him in the next
20
    half hour?
21
              MR. ALEXANDER: I thought Mr. Pate was next,
22
    and that would be longer. But if you want to take
23
    Mr. Scollard first, I would think that's a possibility.
24
             MR. ADELMAN: We have no objection to switching
25
```

```
the order in the interest of getting another witness in
2
   tonight.
              COMMISSIONER CLARK: Let's try and do that
   because he only has the one issue. And what is it?
   Meet-point billing.
              MR. ALEXANDER: Let me make sure he's here and
 6
 7
   ready.
              He's here and ready.
8
              WITNESS SCOLLARD: I have not been sworn in
 9
10
    yet, though.
              COMMISSIONER CLARK: All right. Stand up and
11
    raise your right hand.
12
13
    WHEREUPON,
                         DAVID SCOLLARD
14
       was called as a witness on behalf of BellSouth and,
15
16
         having been duly sworn, testified as follows:
                       DIRECT EXAMINATION
17
    BY MR. GOGGIN:
18
              Mr. Scollard, would you please state your name
19
    and address for the record?
20
              Yes. My name is David Scollard, 600 North 19th
21
    Street, Birmingham, Alabama.
22
23
              By whom are you employed?
              BellSouth Billing, Incorporated.
24
         Α
              Have you previously caused to be prepared and
25
         Q
```

submitted in this matter direct testimony, four pages? Α Yes. 2 Do you have any substantive additions, corrections, or changes to make to that testimony at this time? No, I don't. Α If I were to ask you the same questions that 0 were posed in the prefiled testimony today, would your answers be the same? 9 10 Α Yes, they would. MR. GOGGIN: I would like to have the testimony 11 inserted into the record as if read. 12 COMMISSIONER CLARK: It will be inserted in the 13 record as if read. 14 15 16 17 18 19 20 21 22 23 24 25

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		TESTIMONY OF DAVID P. SCOLLARD
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 990750-TP
5		AUGUST 16, 1999
6		
7		
8	Q.	PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH
9		BELLSOUTH TELECOMMUNICATIONS, INC.
10		
11	A.	i am David P. Scollard, Room 26D3, 600 N. 19th St., Birmingham, AL
12		35203. My current position is Manager, Wholesale Billing at BellSouth
13		Billing, Inc., a wholly owned subsidiary of BellSouth
14		Telecommunications, Inc. In that role, I am responsible for overseeing
15		the implementation of various changes to BellSouth's Customer
16		Records Information System ("CRIS") and Carrier Access Billing
17		System ("CABS").
18		
19	Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
20		
21	A.	I graduated from Auburn University with a Bachelor of Science Degree
22		in Mathematics in 1983. I began my career at BellSouth as a Systems
23		Analyst within the Information Technology Department with
24		responsibility for developing applications supporting the Finance
25		organization. I have served in a number of billing system design and

1		billing operations roles within the billing organization. Since I assumed
2		my present responsibilities, I have overseen the progress of a number
3		of billing system revision projects such as the implementation of the
4		1997 Federal Communications Commission ("FCC") access reform
5		provisions, billing of unbundled network elements ("UNE's"), as well as
6		the development of billing solutions in support of new products offered
7		to end user customers. I am familiar with the billing services provided
8		by BellSouth Telecommunications to local competitors, interexchange
9		carriers and retail end user customers.
10		
11	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED
12		TODAY?
13		
14	A.	The purpose of my testimony is to address issue 44 raised by
15		ITC^DeltaCom Communications, Inc. (ITC^DeltaCom) in this
16		proceeding.
17		
18	Issue	44: [ITC^DeltaCom No. 7(b)(ii)] What procedures should
19	ITC^[	DeltaCom and BellSouth adopt for meet-point billing?
20		
21	Q.	WHAT IS BELLSOUTH'S UNDERSTANDING OF THIS ISSUE?
22		
23	A.	BellSouth believes the issues associated with Meet Point Billing
24		("MPB") are those specific details that are either not covered by the
25		broad industry guidelines found in the Ordering and Billing Forum

1 ("OBF") Multiple Exchange Carrier Access Billing ("MECAB") or 2 Multiple Exchange Carrier Ordering Document ("MECOD") documents 3 or are new conditions which exist due to the introduction of local 4 competition where industry standards are still under development. In 5 these situations, it may be necessary for the Parties to reach mutually 6 agreeable interim arrangements until industry guidelines are 7 completed. 8 Q. WHAT SPECIFIC ISSUE IS NOT RESOLVED UNDER THE OVERALL 9 10 TOPIC OF MEET POINT BILLING IN THIS DOCKET? 11 A. 12 The only remaining issue on meet point billing involves the 13 responsibilities of the parties to notify other interconnecting companies 14 of the meet point billing arrangements made between BellSouth and 15 ITC^DeltaCom. These arrangements impact the rate elements charged 16 by both BellSouth and ITC^DeltaCom to these other interconnecting 17 companies and, therefore, these companies must be provided 18 information pertaining to the arrangements. Over the years, the 19 industry has used the infrastructure surrounding the National Exchange 20 Carrier Association ("NECA") FCC Tariff No. 4 to provide the needed 21 information. As such, the MECAB and MECOD methods are based on 22 the capabilities of this infrastructure. BellSouth's position is that these 23 time tested methods efficiently handle the information needs of all 24 impacted companies. ITC^DeltaCom, however, in Paragraphs 9.9 and

9.10 of Attachment 3 of the proposed agreement proposes that the

25

1		parties will notify other entities of MPB arrangements by the use of
2		other tariff methods since it is not willing to become a member of
3		NECA. BellSouth's position is that this would result in an administrative
4		nightmare for all to develop and administer parallel infrastructures to
5		communicate MPB data.
6		
7		As an alternative, BellSouth has proposed that default MPB
8		parameters be used in lieu of the NECA processes. Under this
9		proposal all meet point arrangements will be billed based on a multi-
10		tariff, multi-bill method with the border interconnection percentage
11		("BIP") fixed at 95% BellSouth and 5% ITC^DeltaCom. In this way, all
12		impacted companies will have a reasonable opportunity to have the
13		information necessary to validate the bills received from both BellSouth
14		and ITC^DeltaCom. This interim method would be discontinued once
15		ITC^DeltaCom begins to use the NECA infrastructure or when the
16		industry develops an alternative solution.
17		
18	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
19		
20	A.	Yes.
21		
22		
23		
24		
25		

MR. GOGGIN: This witness is ready for cross.

Excuse me. I'm sorry, Mr. Scollard has a summary.

MS. EDWARDS: Caught me off guard myself.

COMMISSIONER CLARK: Would you like to
summarize your four pages of testimony?

WITNESS SCOLLARD: Yes, I would. And it will take somewhat less than four pages to do it.

My testimony in this proceeding addresses Issue 44, meet-point billing. And the issue really boils down to one thing: And will ITC^DeltaCom commit to contract language that insures that the interconnection of its network with BellSouth's network does not hinder BellSouth from providing quality billing to its customers.

And let me explain. When BellSouth and DeltaCom interconnect their networks, many other carriers are impacted by that interconnection. As an example, interexchange carriers are impacted because traffic bound for DeltaCom end users will many times be routed through the BellSouth network. This traffic, which has been handled by both networks, will generate revenues for both networks, and, therefore, both companies will bill the interexchange carrier the appropriate charges based on how much of the route is covered by each of the

companies.

24l

The industry-defined processes which directs the manner in which BellSouth and DeltaCom will bill for these jointly provided services is generally or generically called meet-point billing. And this brings us to Issue 44.

As the interexchange carrier in my example receives the two bills from this traffic jointly handled by DeltaCom and BellSouth, it will need detailed information with which to verify the bills. For example, who is billed for the interoffice transport? Is it DeltaCom? Is it BellSouth? Is it both? Whose tariffs will be used? If both companies are to bill for transport, how much goes to each.

This is critical information the IXC will need to verify the accuracy of the bills.

BellSouth's position is that this information shall be made available using the long-established processes supported by the National Exchange Carriers Association, NECA. The NECA processes and supporting databases provide reliable, reasonable means for BellSouth and DeltaCom to exchange billing data with our joint customers.

BellSouth is asking the Commission to agree with BellSouth that language committing both parties to

follow the NECA processes in performing meet-point billing be included in the Interconnection Agreement. Thank you. COMMISSIONER CLARK: Ms. Edwards. MS. EDWARDS: Thank you, Commissioner. CROSS EXAMINATION BY MS. EDWARDS: Good evening, Mr. Scollard. 8 Good evening. 9 Α Neither the FCC nor the National Exchange 10 Carriers Association, or otherwise known as NECA, 11 requires ALECs to file a meet-point billing percentage; 12 isn't that correct? 13 I know of no requirement for ALECs to file. 14 Α That's why we're trying to handle it in the agreements 15 that we have between the companies. 16 Were you here for Mr. Hyde's testimony? 17 Yes, I was. 18**l** Α Okay. You are aware that currently, between 19 Q the two parties, there is no current system or no 20 meet -- there is no meet-point billing arrangement 21 between the two parties today; are you aware of that? 22 That's not correct. I understand that Mr. Hyde 23 Α believes there's not, but let me explain why BellSouth 24 feels that there is. And the way to explain that is in

the tariffs that was referenced in Mr. Hyde's testimony, I think Mr. Alexander provided it to him, the way that BellSouth bills an interexchange carrier for access is depicted in our tariffs on page 34 of the exhibit that Mr. Alexander provided. And there's a diagram that shows how, how jointly provided services are to be billed. And the fallacy in Mr. Hyde's --COMMISSIONER CLARK: Mr. Scollard? 8 WITNESS SCOLLARD: Yes; I'm sorry. 9 COMMISSIONER CLARK: Let me ask you: 10 Do you 11 think that is Exhibit 21? WITNESS SCOLLARD: I can't remember which 12 exhibit it is. 13 MR. ALEXANDER: I think that's correct. 14 COMMISSIONER CLARK: Okay. Tell me what page 15 you would be on. 16 17 WITNESS SCOLLARD: It's Section E.2.4.8 of our tariff, page 34. And there's a diagram on page 34 that 18 19 shows precisely the network interactions or network 20 interconnections that Mr. Hyde had described in his 21 testimony. 22 On the left-hand side of the diagram, there's 23 an end office. And that end office is in Company A's territory. And for the purposes of our interconnection 24

with DeltaCom, that would be DeltaCom's end office.

25

There's also in this diagram an access tandem, which would belong to BellSouth, in the way that Mr. Hyde described DeltaCom's interconnection with BellSouth. And Mr. Hyde had suggested that DeltaCom provides the transport between the DeltaCom end office and Bellsouth's tandem. Well, what he didn't describe is the other side of the coin.

And that is the interoffice transport between BellSouth's access tandem and the serving wire center for the interexchange carrier.

Now, when BellSouth bills for that interoffice transport, we bill, as you can see in the diagram, the distance between the serving wire center to DeltaCom's end office. Clearly, DeltaCom has not provided all of that transport. They have provided a piece up to the tandem. We have provided a piece to the serving wire center to the customer.

So, there is no way that you can say accurately that we don't have a meet-point billing arrangement.

BY MS. EDWARDS (Continuing):

Q Isn't it true, though, Mr. Scollard, that you bill from the tandem?

A No, that's not true. As the diagram depicts and the example clearly shows, we bill the 20 miles of interoffice transport. And depicted here it's from

serving wire center to end office. So, it really doesn't make any difference that DeltaCom is providing half of that. We are entitled to bill the other half. Or it may not be half. It's a negotiated percentage on who bills which piece of the 20 miles.

Q But isn't it also, true, Mr. Scollard, that today, if this is the procedure we've had for the past two years, BellSouth has not reported any problems with this billing arrangement to ITC^DeltaCom; isn't that true?

A That's true. We have not found any instances where an IXC has disputed bills because of the failure for both parties to file in NECA. What we're trying to do is make sure that, you know, going forward we don't have those kind of disputes. And the only way to do that is to use the databases described in NECA.

COMMISSIONER JACOBS: How does the IXC resolve -- Well, you said they don't dispute, but how do they resolve their billing now?

WITNESS SCOLLARD: Now, what we've told our interexchange carriers is that if -- if there are CLECs that will not file in NECA, we will use a default set of parameters with which they can verify their bills.

COMMISSIONER JACOBS: So, in that arrangement, you feel that you get your due revenues and I guess the

```
CLECs do as well since they don't dispute it?
              WITNESS SCOLLARD: Well, I'm not sure exactly
2
   how the CLECs bill for this type of service.
3
   assuming they have come up with some way. Sometimes we
   do and sometimes we don't.
   BY MS. EDWARDS (Continuing):
              Mr. Scollard, I was flipping through your
7
         Q
8
   testimony and I notice that you have not cited to a
9
   single provision in the Telecom Act that requires this of
    ITC^DeltaCom; isn't that true?
10
11
              Yes, that's true.
              MS. EDWARDS:
12
                            Thank you.
              That's all I have.
13
              COMMISSIONER CLARK:
                                   Staff.
14
                        CROSS EXAMINATION
15
16
   BY MS. CALDWELL:
17
              Good evening, Mr. Scollard. I'm Diana
18
   Caldwell. And I think this was just asked, but does
19
    BellSouth need ITC to concur in order to file with NECA?
20
                    The processes that NECA set up have some
              Yes.
21
    controls built in. And the controls are built in to make
22
    sure that both companies are in agreement and the IXCs
23
    have information about those agreements.
24
              And so what happens is one of the companies
25
    will agree to actually go to NECA and file there.
```

```
then the other providers will actually log on to the same
   system and initiate a transaction that says, yes, we
   agree and we concur with the percentages that BellSouth
   just added here. So, we can't go by ourselves, no.
              All right. So, concur would mean that they
   have to agree to it and they have to be willing to log on
   to accept the percentages that, say, BellSouth has filed?
 7
              Yes, absolutely.
        Α
8
                                  I'm going to do something
 9
              COMMISSIONER CLARK:
   I told Mr. Adelman not to do. Why is it called
10
11
   meet-point billing?
              WITNESS SCOLLARD: I believe it's just to --
12
    I'm not exactly sure, but it is to acknowledge the fact
13
   that the two networks meet together at some point is the
14
15
   best I can explain it, anyway
    BY MS. CALDWELL (Continuing):
16
              Do you have any understanding as too why
17
    ITC^DeltaCom won't agree with you on this meet-point
18
19
   billing?
20
              It's a little -- It's a little hazy.
    been several reasons. First of all, in one of the
21
22
    states, and I can't remember which one, Mr. Hyde
23
   testified that since DeltaCom provides the transport
24
    between their end office and our tandem, then it's not a
   relevant issue.
25
```

Well, as you can see from our tariff here in Florida, it is a relevant issue, even in that case. 2 Even if DeltaCom were providing one hundred percent of the transport, the IXC does not know that unless both companies go and file that. So, that was one 5 issue; they said it was just not relevant. 6 They brought up issues of the cost of it, but 8 that's about all I can glean from the testimony. 9 Mr. Hyde this morning, or when he gave his 10 testimony, I believe agreed to concur in the tariffs if 11 we were going to file a hundred percent. So, I think they're in agreement to some extent. It's just a little 12 13 unclear to which extent. We think they need to file 14 regardless of what the percents are. 15 MS. CALDWELL: All right. Thank you. That's all I have. 16 17 WITNESS SCOLLARD: Thank you. COMMISSIONER CLARK: Commissioner. 18 19 COMMISSIONER JACOBS: 20 COMMISSIONER CLARK: Redirect. REDIRECT EXAMINATION 21 22 BY MR. GOGGIN: 23 Q Just one question: You mentioned in response 24 to a question from counsel for DeltaCom, that BST has not reported any problems with its billing arrangements with 25

```
ALECs.
             MS. EDWARDS: I object. Actually, that wasn't
2
   my question. I said with DeltaCom.
3
             MR. GOGGIN: All right. With DeltaCom.
   BY MR. GOGGIN (Continuing):
              How long have you been -- has BellSouth been
 6
   dealing with DeltaCom in this arrangement?
              I believe the agreement is two years old, '96,
 8
    '97. I don't exactly know how long.
              In contrast, how far back do Bellsouth's
10
11
   meet-point billing arrangements with other carriers to
   serve interexchange carriers, other ILECs, how far back
13
   do they go?
              I believe they go back not long after
         Α
14
   divestiture. Probably into the mid to late '80's.
15l
              Almost from the beginning of Bellsouth's
16
         0
17
   existence?
              It was somewhere probably within five years of
18
         Α
19
    that, anyway.
20
              Your proposal to do this is then to head off
    potential future problems?
21
22
              MS. EDWARDS: I'm going to object at this
23
    point. I think this is leading.
24
              MR. GOGGIN: Okay. Question is withdrawn.
                                                           And
25
   the direct is -- Or the redirect is complete.
```

```
Thank you, Mr. Scollard.
              WITNESS SCOLLARD: Thank you.
                                   Thank you, Mr. Scollard.
              COMMISSIONER CLARK:
             You did not have an exhibit.
              Okay. You are excused. Maybe there is a
 5
 6
    flight home.
              WITNESS SCOLLARD: Twenty minutes ago there
8
    was.
 9
              COMMISSIONER CLARK:
                                   Sorry.
              I think -- I don't think there is any chance
10
    we'll be through with either Mr. Pate or Mr. Milner.
11
    we will adjourn for the evening.
12
              What time tomorrow? Nine o'clock?
13
14
              COMMISSIONER JACOBS: Nine sounds good, to be
15
    through by lunch time.
              MR. ALEXANDER: With the hope of -- I was going
16l
17
    to say with the hope of finishing, we would be willing to
    come in earlier than 9:00.
18
19
              COMMISSIONER CLARK: Let me ask a question:
                                                            Do
    you have any idea how much, time wise, cross examination
20
21
    you have for Mr. Milner or Mr. Pate?
22
              MR. ADELMAN: For Mr. Pate, I believe it will
23
    be approximately 45 minutes; for Mr. Milner,
24
    approximately one hour.
25
              COMMISSIONER CLARK: Staff?
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MS. CALDWELL: For Mr. Pate, probably about 45
   minutes, and less than that for Witness Milner.
2
              COMMISSIONER CLARK: All right. I think we
3
   will start at 9:00 because I know I have a meeting at
   8:30.
              COMMISSIONER JACOBS: Okay.
              MR. ADELMAN: And we will endeavor to shorten
8
   that.
 9
              COMMISSIONER CLARK: That sounds good, but it
    sounds like we might be able to get out by 1:00, anyway.
10
11
             But thank you all very much and we'll adjourn
    until 9:00 o'clock tomorrow.
12
              (Proceedings in evening recess at 8:00 p.m.).
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6.67%.: 1033;22
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20-mile: 1021;10, 1039;9
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23: 979;14, 982;8, 982;8, 982;12
                                                                                              accurately: 1057;18
24: 979;15, 982;8, 982;12, 984;6
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25: 979;16, 1046;8, 1046;11
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34: 1056;4, 1056;18, 1056;18
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44: 1053;10, 1054;6
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45: 1063;23, 1064;1
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505: 1020;8, 1020;22
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51.5: 1018;19
                                                                                              admission: 983;18, 999;22
51.505: 1019;5, 1019;22, 1044;16
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51.505(b: 1020;12
                                                                                              ADMTD: 979;13
51.505(b).: 1020;5
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51.511: 1019;21, 1020;7, 1020;7, 1044;16
                                                                                              affirmatively: 1020;18, 1038;2
51.511(a: 1018;22
                                                                                              afraid: 1029;21
51.511(a).: 1044;22
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511: 1020:21
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511(a: 1019;2
                                                                                              agree: 1022;5, 1022;17, 1023;19, 1024;20, 1025;22, 1030;18, 1030;23,
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