BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION **DOCKET NO. 960916-TP REBUTTAL TESTIMONY** OF DR. MARVIN H. KAHN ON BEHALF OF AMERICAN COMMUNICATIONS SERVICES, INC. **SEPTEMBER 16, 1996**

DOCUMENT NUMBER - DATE
19854 SEP 16 %
FPSC-RECORDS/REPORTING

1	BEF	ORE THE FLORIDA PUBLIC SERVICE COMMISSION	
2	DOC	KET NO. 960916- TP	
3	REB	UTTAL TESTIMONY OF DR. MARVIN H. KAHN	
4	Q.	PLEASE STATE YOUR NAME.	
5	A.	My name is Marvin H. Kahn.	
6	Q.	ARE YOU THE SAME DR. KAHN THAT EARLIER PREPARED	
7		DIRECT TESTIMONY AND SUPPLEMENTAL TESTIMONY THAT	
8		WAS FILED ON BEHALF OF AMERICAN COMMUNICATIONS	
9		SERVICES, INC.?	
10	A.	Yes, I am.	
11	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?	
12	A.	In this rebuttal testimony, I am responding to the major issues raised in t	he
13		Direct Testimony filed on behalf of BellSouth Telecommunications, Inc	
14		(BellSouth). The testimony of BellSouth's witnesses, D. Daonne	
15		Caldwell, Dr. Richard D. Emmerson, and Robert C. Scheye, set out the	
16		Company's position on the pricing of unbundled network elements	
17		pursuant to the Federal Telecommunications Act of 1996 (1996 Act). M	y
18		rebuttal focuses on these witnesses' views about how TELRIC ¹ studies	
19		relate to TSLRIC ² studies, how forward-looking joint and common costs	
20	1 T	otal Element Long Run Incremental Cost.	
21	² T	otal Service Long Run Incremental Cost.	
	Rebut	tal Testimony of Dr. Marvin H. Kahn Page	1

I		should be identified and affocated, the consistency of Florida's loop rates
2		adopted in Doclet No. 950984-TP (Order No. PSC-96-0444-FOF-TP)
3		with the pricing standards of the 1996 Act, in addition to other matters.
4	Q.	PLEASE SUMMARIZE YOUR CONCLUSIONS.
5	A.	BellSouth has not provided TELRIC and joint and common cost studies
6		which satisfy the criteria established in the Federal Communications
7		Commission's August 8, 1996, Interconnection Order (CC Docket No. 96-
8		98) for pricing unbundled elements. Once these studies are made
9		available, a time period of at least three weeks would be required to
10		properly evaluate and respond to the studies.
11		Messrs. Caldwell and Emmerson, however, take the position that
12		using TSLRIC as a basis for setting rates does not violate the FCC
13		mandates because TSLRIC will yield lower rates than TELRIC. There is
14		no a priori reason to believe that TSLRIC will yield lower rates than
15		TELRIC. In fact, as I show, the opposite is likely to be the case.
16		I also show that the BellSouth assertions with respect to the mark-
17		up of joint and common costs are inappropriate and inconsistent with the
18		requirements of the Interconnection Order.
19		Finally, I discuss why the \$17.00 interim loop rate authorized by
20		the Florida Public Service Commission (PSC) in Docket No. 950984-TP is
21		not an appropriate interim rate.

1	Q.	HAS BELLSOUTH PERFORMED TELRIC STUDIES AND
2		PROVIDED THEM TO YOU FOR REVIEW?
3	A.	No. As the FCC said repeatedly in its August 8, 1996, Interconnection
4		Order in Docket No. 96-98, the 1996 Act requires prices for unbundled
5		network elements to be set at TELRIC plus a reasonable allocation of
6		forward-looking joint and common costs. Thus, BellSouth must prepare
7		TELRIC studies which satisfy the FCC standards and conform to the
8		methodology promulgated in the Interconnection Order to support loop
9		rates. Once such studies are prepared, at least three weeks will be needed
10		to conduct an adequate review and response. If the studies are not
11		prepared sufficiently in advance of the deadline for completing this
12		arbitration, then interim rates based upon the best available cost
13		information consistent with the proxy ceilings established in the FCC's
14		Interconnection Order (i.e., the Hatfield Model) must be established.
15		Further, as I explained in my Supplemental Testimony filed on September
16		6, 1996, the "statewide" rate which must not exceed the FCC's proxy
17		ceiling is to represent a weighted average, based on rates in at least three
18		density-zones.
19	Q.	HAS BELLSOUTH PROVIDED ACSI WITH ANY COST
20		INFORMATION REGARDING UNBUNDLED LOOPS AND
21		RELATED ELEMENTS?

1	Δ.	140. Delisodal has stated that it will how provide ACSI with access to
2		LRIC ³ and TSLXIC studies it has completed for unbundled loops (2-Wire
3		Analog, 4-Wire Analog, and 2-Wire ISDN Digital), all Unbundled Loop
4		Channelization Systems and Central Office Channel Interfaces. However
5		ACSI has not been provided with any cost studies to date, and I have thus
6		not yet had a chance to review BellSouth's cost information. BellSouth's
7		witness states in his testimony (Caldwell p.3) that cost studies for other
8		loop types requested by ACSI and for the loop cross connect are not yet
9		completed. As a result, the comments contained herein necessarily are
0		then based upon the testimony of Messrs. Caldwell and Emmerson.
ı	Q.	WITH RESPECT TO THE COST STUDIES PRODUCED BY
2		BELLSOUTH TO DATE, DO THESE STUDIES FORM AN
3		ADEQUATE BASIS FOR PRICES THAT WOULD BE CONSISTENT
4		WITH THE 1996 ACT?
.5	A.	No. As stated earlier, under the Interconnection Order implementing the
.6		interconnection and unbundling provisions of the 1996 Act, prices for
.7		unbundled network elements must be set at TELRIC plus a reasonable
8		allocation of joint and common costs. In the absence of the appropriate
.9		TELRIC information, rates are to be set at or below proxy rate ceilings
20		established by the FCC in its Interconnection Order. For Florida, this

21

³ Long Run Incremental Costs.

1		proxy has been set at \$15.06. The PCC also required geographic
2		deaveraging, with rates based on at least three density zones.4 This rate
3		represents a weighted average. Because BellSouth has not performed
4		TELRIC cost studies, permanent rates cannot be established.
5	Q.	WITNESSES CALDWELL AND EMMERSON SUGGEST THAT
6		TSLRIC IS NECESSARILY LOWER THAN TELRIC AND THAT
7		TSLRIC STUDIES CAN THEREFORE BE USED TO ESTABLISH
8		PERMANENT RATES FOR UNBUNDLED ELEMENTS. DO YOU
9		AGREE?
10	A.	No. There are two major differences between TELRIC and TSLRIC that
11		prevent one from stating a priori that TELRIC is always higher. In fact,
12		the opposite is much more likely to be the case.
13	Q.	WHAT ARE THE MAJOR DIFFERENCES BETWEEN TELRIC AND
14		TSLRIC?
15	A.	First, all retail-related costs are eliminated in TELRIC studies because the
16		focus is the incremental cost of producing an unbundled element, not a
17		service. TSLRIC studies, by comparison, will include retail-related costs
18		Because all retail activities are eliminated, TELRIC should never exceed
19		TSLRIC for that reason alone.
20 21		As noted in my Supplemental Testimony filed on September 6, ACSI has fied its original loop rate proposal to make it consistent with these
22	requi	rements.

1		Second, in its discussion of the TELRIC and TSLRIC
2		methodologies, the FCC states:
3		The costs of local loops and their associated line
4		cards in local switches, for example, are common
5		with respect to interstate access service and local
6		exchange service because once these facilities are
7		installed to provide one service they are able to
8		provide the other at no additional cost. By contrast,
9		the network elements, as we have defined them,
10		largely correspond to distinct network facilities.
11		Therefore, the amount of joint and common costs
12		that must be allocated among separate offerings is
13		likely to be much smaller using a TELRIC
14		methodology rather than a TSLRIC approach that
15		measures the costs of conventional services.
16		who as the case of control and ser thous.
17		Interconnection Order, ¶ 678 (emphasis added). The FCC's finding does
18		not support Mr. Caldwell's and Mr. Emmerson's suggestion that a TSLRIC
19		rate is necessarily lower than a TELRIC rate.
20		In addition, there is no reason, as witnesses Caldwell and
21		Emmerson assume, that lower joint and common costs are necessarily
22		correlated with an increase in the direct costs of providing a network
23		element. Instead, because certain activities associated with the production
24		of services may be unnecessary in the production of elements, direct costs
25		will probably be reduced as well.
26	Q.	WHAT IS YOUR OVERALL CONCLUSION ON THE
27		RELATIONSHIP OF TELRIC VS. TSLRIC?
28	A.	There is no a priori reason to conclude that a TELRIC study would yield a
29		higher rate than a TSLRIC study. In fact, the opposite is more likely. The
	Rebu	ettal Testimony of Dr. Marvin H. Kahn Page 6

	only way to determine the relationship is to have both studies completed.
	There is no theoretical relationship between them that allows for the
	generalization made by BellSouth's witnesses, certainly none than can
	assure that TELRIC will exceed TSLRIC as BellSouth suggests. If
	anything, one would expect, as I have explained, that TELRIC is below
	TSLRIC. Thus, until such time as BellSouth can complete TELRIC
	studies, only interim rates consistent with the FCC's proxies can be
	established.
Q.	HOW IS THE REASONABLE ALLOCATION OF FORWARD-
	LOOKING JOINT AND COMMON COSTS TO BE ESTABLISHED?
A.	As I stated in my initial testimony, one appropriate way to set an upper
	bound for the reasonable allocation of forward-looking joint and common
	costs would be to determine what allocations BellSouth itself has accepted
	in setting prices for services that have experienced some measure of actual
	competition. Such services include Centrex, PBX trunk service, and
	special access.
Q.	WITNESS EMMERSON STATES THAT A "REASONABLE
	CONTRIBUTION" IS THAT "WHICH WOULD BE OBTAINED
	ACCORDING TO EFFECTIVELY COMPETITIVE MARKET
	CONDITIONS." DO YOU AGREE WITH THIS STATEMENT?
A.	A market-determined allocation is entirely consistent with the approach I
	have advocated for allocating joint and common costs. Indeed, witness
Re	buttal Testimony of Dr. Marvin H. Kahn Page 7

	Rebut	tal Testimony of Dr. Marvin H. Kahn Page 8
22		viability. The market in non-regulated industries will not permit firms to
21		competition will not deny the revenue support necessary for economic
20		allowing for appropriate recovery of shared costs. In other words,
19		virtually all cases will include a pricing mark-up above direct costs,
18	A.	No. Indeed, witness Emmerson explains that even competitive services in
17		SUPPORT FOR LESS COMPETITIVE SERVICES. DO YOU AGREE?
16		MONOPOLY ELEMENTS SO AS TO PROVIDE REVENUE
15		THAT ABOVE-MARKET PRICING IS APPROPRIATE FOR
14		APPROPRIATE ONLY FOR COMPETITIVE SERVICES IMPLYING
13	Q.	WITNESS SCHEYE STATES THAT "MARKET" PRICING IS
12		Order pursuant to the 1996 Act.
11		rates is not consistent with the FCC's mandates in the Interconnection
10		I discuss below, Mr. Emmerson's unique concept of market-determined
9		reasonable, assuming competitive market conditions existed. However, as
8		how much allocation of forward-looking shared costs would be
7		itself on such services. There is no better way to gauge an upper bound to
6		services, so as to develop some sense as to the mark-up BellSouth affords
5		asked to review BellSouth's contract prices for its more competitive
4	·	such conditions, his testimony does not support this declaration. ACSI has
3		continues by declaring categorically that BellSouth does not experience
2		"minimal or even zero if market conditions so indicate." While he
1		Emmerson goes on to state (p. 8, fn. 5) that the contribution could be

1		provide this kind of revenue support for competitive services. BellSouth
2		should not have this luxury. In the wake of the 1996 Act and its
3		requirement of a universal service funding mechanism, there is no longer
4		any need for such a "monopolistic" approach, assuming there ever was.
5	Q.	SHOULD THE MARK-UP OF FORWARD-LOOKING JOINT AND
6		COMMON COSTS BE EQUAL ACROSS ALL ELEMENTS?
7	Α.	From the standpoint of policy, there are strong reasons to require
8		approximately equal marks-up on network elements that are provided
9		principally by a single provider, i.e., BellSouth. Theoretically,
10		competitive conditions could lead to different mark-ups for different
11		elements. Indeed, the FCC itself, in its Interconnection Order, states that
12		there may be good reasons for some network elements, including
13		unbundled loops, to be allocated a smaller share of common costs over and
14		above what is already incorporated into the measure of TELRIC.
15		Interconnection Order, ¶ 696. Certainly, where, as under the 1996 Act,
16		the clear goal is to introduce competition from carriers that take these
17		elements to provide telecommunications services in competition with
18		BellSouth and other incumbent providers, an equal mark-up rule is
19		appropriate. Such a rule (which could allow for minor variations from
20		strict equality, as appropriate) would limit the extent to which joint and
21		common costs could be recovered from any one element. As a result, the
22		rule would prevent cross-subsidies (lowering the mark-up for an element
	Rebut	tal Testimony of Dr. Marvin H. Kahn Page 9

1		that the Company provides in competition with other suppliers and
2		increasing the mark-up for other less competitive or monopolistic
3		elements) and provide BellSouth with additional incentives to make more
4		efficient use of overhead. In other words, if BellSouth is able to reduce its
5		overheads through more efficient operating techniques because of the
6		mark-up methodology, it can improve its bottom line.
7	Q.	WHAT IS YOUR ANALYSIS OF THE ALLOCATION METHOD
8		PROPOSED BY WITNESS EMMERSON?
9	A.	In contrast to the (near) equal mark-up rule we propose, witness
10		Emmerson suggests the application of what is known as the "inverse
11		elasticity rule," or Ramsey pricing (p. 10). Under this pricing
12		methodology, BellSouth would be free to increase the mark-up on its least
13		competitive services, the demand for which is least affected by price.
14		However, the FCC, in evaluating the pricing standards the states must
15		follow under the 1996 Act when arbitrating prices for unbundled network
16		elements, expressly rejected Ramsey pricing. The FCC concluded, at ¶
17		696 of the Interconnection Order, that:
18		an allocation methodology that relies exclusively on
19		allocating common costs in inverse proportion to
20		the sensitivity of demand for various network
		elements and services may not be used. We
21 22		conclude that such an allocation could unreasonably
23		limit the extent of entry into local exchange markets
24		by allocating more costs to, and thus raising the
25		prices of, the most critical bottleneck inputs, the
26		demand for which tends to be relatively inelastic.

	Such an allocation of these costs would undermine the pro-competitive objectives of the 1996 Act.
Q.	DO YOU AGREE WITH WITNESS EMMERSON'S STATEMENT
	THAT THE JOINT AND COMMON COSTS OF A MULTISERVICE
	NETWORK-BASED LEC LIKE BELLSOUTH ARE SIGNIFICANT?
A.	No, I do not concur in his estimate of the relative magnitude of efficiently
	incurred joint and common costs. At pages 11-12 of his testimony,
	Emmerson reports that in proceedings in Georgia and Kansas the
	monopoly incumbent LECS have reported shared and common costs
	accounting for up to 50 percent of total costs, i.e., all costs over and above
	long-run incremental costs. My experience with LEC5 pricing of
	competitive local services, has been that estimates of this nature result
	from comparison of LRIC not TSLRIC to total revenue or total
	revenue requirements.
Q.	WHAT EFFECT DOES THIS APPROACH HAVE ON THE ESTIMATE
	OF JOINT AND COMMON COSTS AS A PERCENTAGE OF TOTAL
	COSTS?
A.	Comparing LRIC to total revenue or total revenue requirements inflates
	the estimate of shared and common costs significantly for two reasons.
	First, by using LRIC as the "numerator," i.e., the portion of costs that are
	not shared, one underestimates the level of element (or service) specific
5	I.e., Pacific Bell in California and Bell Atlantic in Pennsylvania.
Doby	attal Testimony of Dr. Marvin H. Kahn Page 11

1	costs. Specifically, TELRIC (of TSERIC) equals ERIC plus element- (or
2	service-) specific non-volume variable costs. Hence, LRIC is less than
3	and never more than TELRIC (or TSLRIC).
4	Second, the "denominator," or total costs, are overestimated when
5	total revenue instead of total cost, is used. The proper number for the
6	present purposes is the sum of TELRIC plus efficiently incurred, forward-
7	looking joint and common costs. By including all costs contained in the
8	monopoly provider's revenue requirements, BellSouth would throw in the
9	full complement of embedded costs, contrary to the requirements
10	established by the 1996 Act and the FCC's Interconnection Order.
11	In sum, the appropriate indication of the direct to total cost is
12	
13	TELRIC
14	EJCC + TELRIC
15	where "EJCC" is the reasonable measure of efficiently incurred joint and
16	common costs, not
17	
18	LRIC
19	TOTAL REVENUE
20	My analysis in California and Pennsylvania, as I stated in my initial
21	testimony, suggest that a mark-up in the vicinity of 10-15% would be
22	more appropriate than an inflationary 100% indicated by BellSouth's
23	witness. In short, the estimate provided by witness Emmerson is
24	inappropriate and even meaningless.
	Rebuttal Testimony of Dr. Marvin H. Kahn Page 12

1	Q.	MR. EMMERSON INDICATES AT PAGE 19 OF HIS TESTIMONY
2		THAT THERE IS A NATURAL MONOPOLY ASPECT OF LOOPS
3		AND THAT THIS, IN TURN, SUGGESTS THE EXISTENCE OF
4		LARGE QUANTITIES OF JOINT AND COMMON COSTS RELATIVE
5		TO DIRECT COSTS. DO YOU AGREE WITH THIS CONCLUSION?
6	A.	No. It is true that the existence of substantial economies of scale and
7		scope would likely result in higher levels of common and shared costs
8		than would be the case where economies of scale are not as significant,
9		holding everything else constant. It does not follow, however, that if
10		carriers are not prepared to supply their own loop facilities in this initial
1		phase of opening the market to local competition, a conclusion that there
12		are large quantities of joint and common relative to direct costs will
13		necessarily follow. This is true for at least two reasons.
14		First, the 'bottleneck' or monopolistic aspect of loop provision may
15		not be in the loop construction or provision itself, but largely may be due
16		to access to the existing rights-of-way. There are no economies of scale or
17		scope, per se, associated with access to rights-of-way. Consequently, the
18		current "monopoly" aspect of the loop is not, in and of itself, a basis on
19		which to draw conclusion with respect to the amount of joint and common
20		costs relative to total costs. Secondly, under the FCC's prescribed

methodology, all costs, including the incremental costs of shared facilities

and operations, must be attributed to specific elements to the greatest

21

22

l		extent possible.° In discussing loops, for example, the FCC included not
2		only the cost of installed copper wire and telephone poles but also the cos
3		of payroll and other back office operations relating to the line technicians.
4		Consequently, using the FCC's prescribed methodology, all relevant costs
5		should be maximally attributable to particular elements.
6	Q.	IS THE UNBUNDLED LOOP RATE ADOPTED BY THE FLORIDA
7		PSC IN DOCKET NO. 950984-TP APPROPRIATE FOR
8		ESTABLISHING INTERIM LOOP RATES?
9	A.	No. As I noted earlier, the 1996 Act, which was enacted after Florida
10		established its interim loop rate, requires that loop rates be set at TELRIC
11		plus a reasonable allocation of forward-looking joint and common costs.
12		In this case, BellSouth to date has provided neither TELRIC information
13		nor sufficient shared and common cost information to establish a rate
4		consistent with the FCC's applicable standards. Their rates in Docket
5		950984-TP were established only as an interim rate in the absence of
6		appropriate cost analyses. The Florida PSC's discussion in the order
17		authorizing the use of that rate on a interim basis clearly indicates that
8		appropriate cost information was not available. ⁷ Further, the current

19

21

⁶ Interconnection Order, ¶ 682.

⁷ Order No. PSC-96-0444-FOF-TP, Docket No. 9500984-TP, p. 15-16. "Although cost information was filed for two elements, we are unable to 20 determine whether the cost information is appropriate" 22

		Profita internit rate exceeds the PCC's proxy rate centing by more main
2		\$3.00 and does not employ at least three density zones as required by the
3		FCC's Interconnection Order. Under that decision, rates for unbundled
4		network elements may not exceed the established proxy ceiling (on a
5		weighted average basis) unless supported by cost studies based on
6		TELRIC plus a reasonable allocation of joint and common costs. In the
7		absence of such cost information, the Florida PSC should use the
8		information derived from the best, publicly available cost model that best
9		approximates the methodologies laid out in the Interconnection Order.
10		For the reasons set forth in my Direct and Supplemental Testimony, the
11		best available model is the Hatfield Study, which supports a weighted
12		statewide average below both the \$17.00 interim rate and the FCC's
13		\$13.68 proxy. In short, the current Florida interim loop rate of \$17.00 can
14		neither serve as an interim rate or a permanent state-wide rate or rate
15		average.
16	Q.	ARE THERE ANY OTHER FLAWS IN THE LOOP COST
17		INFORMATION CURRENTLY ON FILE WITH THE FLORIDA
18		PUBLIC SERVICE COMMISSION?
19	A.	Yes. Witness Caldwell (p. 7) explains that BellSouth's loop cost study
20		includes the Network Interface Device ("NID"). In its Interconnection
21		Order, the FCC required the NID to be unbundled from the loop. (¶¶ 392-
22		96). The result is that BellSouth's existing cost study necessarily
	Rebu	ttal Testimony of Dr. Marvin H. Kahn Page 15

1		overstates the costs for the unbundled network element, ignoring any
2		analysis of the cost study methodology itself.
3	Q.	WHAT IS YOUR RESPONSE TO BELLSOUTH'S CRITICISM OF
4		ACSI'S PROPOSAL FOR A SINGLE LOOP RATE FOR ALL LOOP
5		TYPES?
6	A.	BellSouth has mischaracterized ACSI's proposal. First, while ACSI's
7		initial petition proposed a single rate, ACSI noted that higher prices for
8		conditioned loops were to be expected, but that they would have to be
9		supported by BellSouth's cost information. Second, ACSI's single price
10		proposal was for the "most dense" zone. As indicated in my Supplementa
11		Testimony, ACSI has modified its proposal to advocate zone-density
12		pricing in at least three density zones, as the Interconnection Order
13		requires. Once again, higher rates for conditioned loops, with the
14		difference based on TELRIC differences, would be appropriate under such
15		zone density pricing.
16	Q.	DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
17	A.	Yes.