1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF ALFRED A. HEARTLEY
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 7, 2003
6		~
7	Q.	PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR
8		POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
9		("BELLSOUTH").
10		
11	Α.	My name is Alfred A. Heartley. My business address is 754 Peachtree Street,
12		Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance
13		and Regional Centers for BellSouth.
14		
15	Q.	ARE YOU THE SAME ALFRED HEARTLEY WHO EARLIER FILED DIRECT
16		TESTIMONY IN THIS DOCKET?
17		
18	Α.	Yes.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY BEING FILED
21		TODAY?
22		
23	Α.	I will respond to portions of the direct testimonies of Mr. James D. Webber on
24		behalf of MCI and Mr. Mark David Van de Water on behalf of AT&T regarding the
25		batch hot cut process.

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1 Q. PRIOR TO REBUTTING THE CLEC WITNESSES, HAS BELLSOUTH MADE ANY 2 CHANGES TO ITS LOAD AND FORCE PROJECTIONS SINCE IT FILED DIRECT TESTIMONY ON DECEMBER 4, 2003 ABOUT WHICH YOU WOULD 3 LIKE TO INFORM THE COMMISSION? 4 5 6 A. Yes, BellSouth recently discovered that the model was incorrectly adding the annual 7 assumed rate of churn of UNEP and UNEL facilities (48%) to each month's 8 activity. The annual rate is based on a monthly churn rate of 4%. Corrections to 9 the model have been made and a revised version of Exhibit AH-1 is attached. 10 The overall force required in Florida is 759 compared to 1080 in the forecast in 11 my direct testimony. 12 13 Q. ON PAGE 22, MR. WEBBER ALLUDES (WITHOUT SUPPORT) TO "REAL-WORLD CONSTRAINTS ON THE NUMBER OF TECHNICIANS THAT CAN 14 15 WORK ON A GIVEN FRAME AT A GIVEN TIME." IS THIS A PROBLEM? 16 17 Α. No. As explained in my direct testimony, certainly there are limitations on the 18 number of technicians that can work on a frame at one time. BellSouth, 19 however, can manage around limitations on the number of technicians who can 20 work on the frame to address even "worst-case" anticipated volumes. For 21 example, on conventional frames, two (2) technicians may work for every 50 22 verticals in length with a maximum of ten (10). These technicians would work 23 together in tandem with one technician laying in the wires on the horizontal side 24 of the frame and the other technician terminating the wires on the vertical side of 25 the frame. The maximum number of jumpers being laid in the frame

1 simultaneously would be five (5). This is known as the pre-wire step in the hot 2 cut process. On modular type frames (sometimes referred to as "COSMIC" 3 frames), a single technician may prewire circuits for every ten (10) modules in 4 length. The hot cut prewiring steps are the most restrictive steps of the 5 conversion process. However, prewiring may be conducted 24 hours per day 6 utilizing three (3), eight-hour shifts. Therefore BellSouth will be able to handle 7 the prewiring for all its central offices without a problem. For example, 8 BellSouth's force model indicates that even in a worst-case scenario BellSouth 9 would have to prewire 4,493 circuits per day in Florida. BellSouth's model 10 indicates that 452 central office technicians would be required for these 11 conversions. These technicians can easily wire an average of 10 circuits in an 12 eight-hour shift.

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The actual individual loop cutovers will then take place at a single location on the frame (that is, at the location on the distributing frame where the loop cable pair appears) for each circuit. However, it is possible to cut more circuits in a single eight-hour shift (8 AM to 5 PM) than can be wired in two (2), eight-hour shifts because the hot-cut conversion steps take less time per circuit that the pre-wire steps per circuit.

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21 Q. ON PAGE 23, MR. WEBBER DESCRIBES WHAT HE CALLS "THE

22 POTENTIALLY CHAOTIC SITUATION" THAT COULD RESULT WHEN

23 MULTIPLE TECHNICIANS WORK ON THE MAIN DISTRIBUTING FRAME

24 ("MDF"). IS HIS SPECULATION CREDIBLE?

25

1 Α. No. Mr. Webber's baseless speculation of a potentially chaotic situation is not 2 credible because BellSouth will properly and efficiently manage the conversions. That is the reason BellSouth determined the number of technicians that can work 3 4 simultaneously on a given distributing frame. While BellSouth's technicians are 5 trained to work safely together, too many working in a tight location could become cumbersome. BellSouth routinely prevents such a situation by working 6 7 the appropriate number of technicians on different shifts. This may require 24-8 hour scheduling but BellSouth is willing to do such scheduling. BellSouth will not 9 permit a chaotic situation to occur. I would also point out that BellSouth has 10 successfully replaced entire switching systems and has done so with minimal 11 customer disruption. 12 13 Q. DO YOU AGREE WITH THE EXTRAPOLATION OF WORK TIMES MR. VAN DE 14 WATER DOES ON PAGE 37-38, LINES 17-14 OF HIS TESTIMONY? 15 16 Α. No. Mr. Van de Water's analysis of the time required to cutover a UNEP to a 17 UNEL does not differ substantially from BellSouth's own analysis; however, his 18 conclusion that such work times will preclude BellSouth from handling anticipated 19 volumes is incorrect. 20 21 Beginning on page 37, at line 17, Mr. Van de Water uses BellSouth data to argue 22 that any given technician could complete 12-13 UNE-P conversions per day 23 (using a seven-hour day). BellSouth's force model is more conservative, yielding 24 an average of 9.93 conversions per shift (using a 7.5-hour day). Even taking 25 BellSouth's more conservative view, BellSouth will still complete all of the

required conversions within 21 months. BellSouth's analysis takes into
 consideration the different times required to complete a conversion depending on
 the type of unbundled loop requested (for example, SL1 or SL2) and the type
 conversion requested for SL1 orders (for example, Coordinated or Non Coordinated).

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Beginning on page 38 at line 3, Mr. Van de Water uses BellSouth data in an 7 8 attempt to prove that there is insufficient space on the MDF in the West 9 Hollywood, FL central office for enough technicians to work simultaneously to complete enough conversions to create "meaningful" UNE competition. Again, 10 11 while BellSouth's own analysis does not differ substantially, the conclusion that Mr. Van de Water draws is incorrect. Mr. Van de Water alleges that completing 12 13 104 hot cuts per day cannot support competition. Notably, he does not put forth 14 a number of cuts that would, in his view, support competition. Moreover, 15 BellSouth's worst-case force model assumes that only 126 cuts per day are required in West Hollywood to handle the UNEP to UNEL migration as well as 16 17 normal growth within the 21-month timeframe. Based on the information provided above, 126 cuts per day would require approximately 12 technicians to 18 19 complete. As noted in interrogatory item 45, 8 technicians can work on the West 20 Hollywood frame simultaneously without impacting productivity. Assuming this 21 work is done during the other two (2) available shifts (that is evening and night) to avoid interfering with any other activities, West Hollywood can accommodate up 22 23 to 16 technicians per day. Therefore, BellSouth can readily handle the required 24 load in its West Hollywood central office as well as in all other BellSouth wire centers. 25

Q. HOW DO UNMANNED CENTRAL OFFICES AFFECT BELLSOUTH'S ABILITY
 TO HANDLE ANTICIPATED VOLUMES OF UNE-L ORDERS? (SEE MR. VAN
 DE WATER'S TESTIMONY AT PAGE 40)?

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5 Α. Mr. Van de Water's statements beginning on page 40, line 12, that unmanned Central Offices coupled with the use of Integrated Digital Loop Carrier ("IDLC") 6 7 will limit BellSouth's capacity to work hot cuts in Florida are incorrect. It is true 8 that Bellsouth does not have employees report to work daily at each and every 9 central office simply for the reason that there are some central offices in which 10 there would be no work required to be performed even if BellSouth were to 11 assign its employees daily to those central offices. Instead, for those offices with a low volume of work, technicians are dispatched as needed to work the pending 12 13 load, daily if required. However, while not all offices are manned daily at the 14 beginning of the workday, all BellSouth central offices are manned if work is 15 required therein. BellSouth's force model includes hours for working hot cuts at 16 all BellSouth wirecenters. Thus, BellSouth already has taken into account any 17 so-called "unmanned" offices.

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Q. MR. VAN DE WATER DISCUSSES THE IMPACT OF IDLC DISPATCHES ON
HIS LOAD PRODUCTIONS AT PAGES 40-41 OF HIS TESTIMONY. DID
BELLSOUTH FACTOR THOSE DISPATCHES INTO ITS LOAD PROJECTION?
A. Yes. BellSouth's worst-case force model accounts conservatively for dispatching
outside technicians to handle conversions involving IDLC. Unlike Mr. Van de

25 Water's analysis, the force model bases the number of field dispatches required

1 on the %IDLC in each wire center. The force model assumes that every hot cut 2 involving IDLC will require a separate dispatch. In reality, however, a technician would be dispatched to work all of the conversions at a single interface 3 (sometimes referred to as the "remote terminal") at one time. BellSouth's 4 5 assumption is therefore conservative as it is unknown how many hot cuts will be 6 required at each field interface each day. Based on regional estimates of 4,827 7 daily outside dispatches, well over 2.2 million dispatches could be required to 8 complete the conversions and handle growth. BellSouth took those dispatches into account in its force model and is confident of its ability to perform those 9 10 dispatches effectively and efficiently. 11 12 DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY? 13 Q. 14 15 Α. Yes. 16

BellSouth Telecommunications, inc Flonda Public Service Commission Docket No 030851-TP Exhibit AH-1 Page 1 of 2

100% 22.3	Top 20 Regional Wire Centers List Worst Case Force Projection				Page 1 of 2
				First Line	
116,295	Daily Conversion % to SL1 Non-Coordinated	50.00%	CO Cutover Times (Hours)	(Worst Case)	Additional Line
19,029	Daily Conversion % to SL1 Coordinated	25.00%	CO Time SL1 Non Coordinated	0.43333	0.30000
4%	Daily Conversion % to SL2 (Coordinated)	25 00%	CO Time SL1 Coordinated	0 60000	0.33333
5%			CO Time SL2 (Coordinated)	1.05000	0 63333
	100% 22.3 116,295 19,029 4% 5%	100% 22.3Top 20 Regional Wire Centers List Worst Case Force Projection116,295 19,029Daily Conversion % to SL1 Non-Coordinated Daily Conversion % to SL1 Coordinated Daily Conversion % to SL2 (Coordinated) 5%	100% Top 20 Regional Wire Centers List 22.3 Worst Case Force Projection 116,295 Daily Conversion % to SL1 Non-Coordinated 50.00% 19,029 Daily Conversion % to SL1 Coordinated 25.00% 4% Daily Conversion % to SL2 (Coordinated) 25 00% 5% State Conversion % to SL2 (Coordinated) 25 00%	100% 22.3 Top 20 Regional Wire Centers List Worst Case Force Projection 116,295 Daily Conversion % to SL1 Non-Coordinated 19,029 50.00% CO Cutover Times (Hours) CO Time SL1 Non Coordinated Daily Conversion % to SL2 (Coordinated 25.00% 4% Daily Conversion % to SL2 (Coordinated 5% 25.00% CO Time SL1 Coordinated CO Time SL2 (Coordinated)	100% Top 20 Regional Wire Centers List First Line 22.3 Worst Case Force Projection First Line 116,295 Daily Conversion % to SL1 Non-Coordinated 50.00% CO Cutover Times (Hours) (Worst Case) 19,029 Daily Conversion % to SL1 Coordinated 25.00% CO Time SL1 Non Coordinated 0.43333 4% Daily Conversion % to SL2 (Coordinated) 25 00% CO Time SL2 (Coordinated) 0 60000 5% CO Time SL2 (Coordinated) 1.05000 1.05000 1.05000

Outside Tech Cutover Hours per Dispatch 1.0000

							No new UNER Only new UN	». E•L.			-				
								Monthly UNE-P to UNE-L							
						INIC_1		Conversions plus	Doily UNE D to	Dolly Conversions	Delly Conversions	Dally Conversions	Dally Conversions		
		a	6 of Total UNE.		Growth per C	INC-L	Total UNE-D	and LINE	Daily UNE-P to	Daily Conversions	to SI 1 Non	to SL1	bally conversions	CO Transfor	Outcido Transfor
STAT	E W/C	ISM Work Center	Pe	% IDLC	Month N	fonth	Dec 2004	Growth	Conversions	Diepatch	Coordinated	Coordinated	(Coordinated)	Man-Houre	Man-Houre
FI	hlwdfine	61 NW 98 AVE / 1390	1 25174%	82%	1 456	238	48 042	3 979	104	5 161	Q7	40	(Coordinated)	122 60	160 57
FI	mamfihi	13305 NW 45 AVENU	0.81674%	51%	950	155	31 347	2 596	127	64	64	32	32	80.00	64.44
F)	hiwdflwh	250 SW 62 AVE.	0.81249%	21%	945	155	31,183	2,583	126	3 27	63	32	32	79.58	26.96
GA	mrttgama	185 Old Hamilton Rd	0.70588%	52%	821	134	27.092	2.244	110	57	55	27	27	69.14	57.02
FL	prmfima	10330 SW 184 St. F	0.68049%	47%	791	129	26,117	2.163	106	50	53	26	26	66.65	49.83
GA	Irvigaos	330 Oak Street,	0.59361%	73%	690	113	22,783	1,887	92	68	46	23	23	58.14	67.91
FL	pmbhflcs	9500 Royal Palm Blvd	0.54365%	56%	632	103	20,865	1,728	85	5 47	42	21	21	53.25	47.15
FL	wpbhflga	1201 Barnett Dr. Lake	0.53062%	51%	617	101	20,365	1,687	83	42	41	21	21	51.97	42.45
FL	miamfica	12800 SW 56 St Miar	0.52962%	46%	616	101	20,327	1,684	82	2 38	41	21	21	51.87	38.07
FL	ftidfica	4200 W Oakland Pk.	0.50691%	14%	590	96	19,455	1,611	79) 11	39	20	20	49.65	11.26
FL	pmbhfima	1180 Banks Rd., Març	0.48107%	37%	559	92	18,463	1,529	75	5 28	37	19	19	47.12	28.04
FL	ndadfibr	19051 N E 3RD CT.	0 46745%	42%	544	89	17,941	1,486	73	31	36	18	18	45 78	30 64
GA	jnbogama	107 Smith Street, Jon	0.43383%	63%	505	83	16,650	1,379	68	3 43	34	17	17	42.49	42.55
GA	smyrgama	1359 Springs St., Smy	0 43315%	33%	504	82	16,624	1,377	67	23	34	17	17	42 42	22.52
GA	wdstgacr	1200 JVL Industrial Cl	0.43220%	68%	503	82	16,588	1,374	67	46	34	, 17	17	42.33	45.93
FL.	orldfiph	5120 SilverStar Road	0.42568%	63%	495	81	16,338	1,353	66	i 42	33	17	17	41.69	41.78
FL	ftidfipi	4401 DAVIE BLVDF	0.42563%	27%	495	81	16,336	1,353	66	6 18	33	17	17	41.69	18.03
GA	rswigama	850 Holcomb Bridge F	0.42048%	46%	489	80	16,138	1,337	65	5 30	33	16	16	41.18	30 10
GA	alprgama	1525 Hembree Rd & 2	0 41699%	75%	485	79	16,004	1,326	65	5 48	32	16	16	40.84	48.37
FL	mamflwd	12800 SW 56 St. Miar	0.40957%	55%	476	78	15,719	1,302	64	. 35	32	16	16	40.12	35.05
FL	ftidfija	10141 W. BROWARD	0.40898%	54%	476	78	15,697	1,300	64	4 34	32	16	16	40 06	34.26
Regio	mai Total		100.00000%	31%	116,295	19,029	3,838,007	317,903	15,567	4,827	7,784	3,892	3,892	9,794	4,827
													lloadaauat	1200	644

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Headcount	1306	644
Add Undistributed	1567	772
Supervisors 15/1	104	51
Total Force	2495	

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BellSouth Telacommunications, Inc. Flordia Public Service Commission Docket No 030851-TP Exhibit AH-1 Page 2 of 2

ercentage of UNEPs that will convert to UNEL Business days per month	100% 22,3	Top 20 Florida Wire Centers List Worst Case Force Projection				Page 2 of 2
Regional growth UNEPs per month Regional IM UNELs per month Chum percentage per month	116,295 19,029 4%	Daily Conversion % to SL1 Non-Coordinated Daily Conversion % to SL1 Coordinated Daily Conversion % to SL2 (Coordinated)	50.00% 25 00% 25.00%	CO Cutover Times (Hours) CO Time SL1 Non Coordinated CO Time SL1 Coordinated	First Line (Worst Case) 0.43333 0.60000	Additional Line 0.30000 0.33333
Maintenance and Repair Report Rate increase per month	5%			CO Time SL2 (Coordinated)	1.05000	0.63333
		No new UNEP.		Outside Tech Cutover Hours per Dispatch	1.0000	

							Only new or	E*L.							
								Monthly UNE-P to							
								UNE-L							
								Conversions plus							
					UNE-P	UNE-L		Normal UNE-P	Daily UNE-P to	Daily Conversions	Daily Conversions	Daily Conversions	Daily Conversions		
			% of Total UNE-		Growth per	Growth per	Total UNE-P	and UNE-L	UNE-L	Requiring Outside	to SL1 Non-	to SL1	to SL2	CO Transfer	Outside Transfer
STAT	E W/C	I&M Work Center	Ps	% IDLC	Month	Month	Dec. 2004	Growth	Conversions	Dispatch	Coordinated	Coordinated	(Coordinated)	Man-Hours	Man-Hours
FL	hlwdfipe	61 NW 98 AVE./ 1390	1 25174%	82%	1,456	ô 238	48,042	3,979	19	5 161	97	49	49	122.60	160.57
FL	mamfhl	13305 NW 45 AVENU	0.81674%	51%	950) 155	31,347	2,596	121	64	64	32	32	80.00	64 44
FL	hlwdflwh	250 SW 62 AVE.	0 81249%	21%	945	5 155	31,183	2,583	120	5 27	63	32	32	79.58	26.96
FL	prmfima	10330 SW 184 St, F	0.68049%	47%	791	1 129	26,117	2,163	101	5 50	53	26	26	66.65	49.83
FL	pmbhflcs	9500 Royal Palm Blvd	0.54365%	56%	632	2 103	20,865	1,728	8	5 47	42	21	21	53 25	47 15
FL	wpohfiga	1201 Barnett Dr, Lake	0.53062%	51%	617	7 101	20,365	1,687	83	3 42	41	21	21	51.97	42.45
FL	miamfica	12800 SW 56 St. Miar	0 52962%	46%	616	5 101	20,327	1,684	82	2 38	41	21	21	51.87	38.07
FL	ftldfloa	4200 W. Oakland Pk	0.50691%	14%	590) 96	19,455	1,611	79) 11	39	20	20	49.65	11.26
FL	pmbhfima	1180 Banks Rd., Març	0.48107%	37%	559	9 92	18,463	1,529	78	5 28	37	19	19	47.12	28.04
FL	ndadflbr	19051 N E 3RD CT.	0.46745%	42%	544	4 89	17,941	1,486	7:	3 31	36	18	18	45.78	30.64
FL	orldfiph	5120 SilverStar Road	0.42568%	63%	495	5 81	16,338	1,353	66	6 42	33	17	17	41.69	41 78
FL	fildfipi	4401 DAVIE BLVDF	0 42563%	27%	495	5 81	16,336	1,353	66	5 18	33	17	17	41.69	18.03
FL	miamflwd	12800 SW 56 St. Miar	0.40957%	55%	476	5 78	15,719	1,302	64	4 35	32	16	16	40.12	35 05
FL	ftidfija	10141 W. BROWARD	0.40898%	54%	476	5 78	15,697	1,300	64	4 34	32	, 16	16	40.06	34.26
FL	ndadflac	19051 N.E 3RD CT	0.40441%	8%	470) 77	15,521	1,286	63	3 5	31	16	16	39.61	5.02
FL	bybhfima	321 SE 2nd St, Delray	0 40333%	56%	469	9 77	15,480	1,282	63	3 35	31	16	16	39.50	34 85
FL	pmbhfife	1117 NE 3rd Ave., Po	0.37418%	21%	435	5 71	14,361	1,190	58	3 12	29	15	15	36.65	12 26
FL	hiwdfima	715 N FEDERAL HW	0 37360%	17%	434	4 71	14,339	1,188	58	3 10	29	15	15	36.59	9.88
FL	ftldfimr	201 S.W. 14 STREET	0 36581%	17%	425	5 70	14,040	1,163	57	r 10	28	14	14	35 83	9.93
FL	ndadfigg	19051 N.E 3RD CT.	0.35925%	13%	418	3 68	13,788	1,142	56	5 7	28	14	14	35.19	7.21
FL	miamflpl	9090 NW 41 Street	0.35251%	62%	410	0 67	13,529	1,121	55	5 34	27	14	14	34.53	33.93
FL	miamflsh	8451 NE AVE	0.35043%	0%	408	3 67	13,449	1,114	55	; 0	27	14	14	34.32	0.04
FL	bortfima	6037 W. Atlantic Ave,	0.34848%	39%	405	5 66	13,375	1,108	54	21	27	14	14	34 13	21.34
Florid	a Total		28.86247%	36%	33,566	5,492	1,107,743	91,755	4,493	1,620	2,247	1,123	1,123	2,827	1,620

377	216
452	259
30	17
759	
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