ORIGINAL

MARY K. KEYER General Attorney

BellSouth Telecommunications, Inc. 150 South Monroe Street Room 400 Tallahassee, Florida 32301 (404) 335-0729 Legal Department

October 9, 1998

Mrs. Blanca S. Bayo Director, Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399

RE: Docket No. 980696-TP

Dear Mrs. Bayo:

Enclosed are an original and 15 copies of BellCouth Telecommunications, Inc.'s, updated Exhibits RSB-4, RSB-7, and RSB-8, as requested in the deposition of Dr. Randall S. Billingsley. These updated exhibits were requested of Dr. Billingsley to be presented at the hearing next week. Also, enclosed is an updated Schedule A to Dr. Billingsley's prefiled Rebuttal Testimony. In addition, enclosed is Exhibit WET-1 to Dr. William E. Taylor's Rebuttal Testimony, which was inadvertently omitted with his prefiled Rebuttal Testimony. Please file these documents in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served on the parties shown on the attached Certificate of Service.

Sincerely,

Mary K. Kever

LEG 8

__Enclosures

All Parties of Record

A. M. Lombardo

R. G. Beatty

DOCUMENT NUMBER - DATE

11181 OCT-98

FISC RECORDS/REPORTING

BellSouth Telecommunications & Sprint-Florida Docket No. 980696-TP Billingsley Exhibit No. RSB-4-Updated Treasury Bond Futures Interest Rate Page 1 of 1

CALCULATION OF U. S. TREASURY BOND FUTURES' IMPLIED INTEREST RATE

The interest rate implied by the price of a U.S. Treasury Bond futures contract cannot be directly taken from **The Wall Street Journal**. Rather, it must be calculated as follows:

(Price of Contract) X 10 =
$$\frac{\$40}{(1+i)^1} + \frac{\$40}{(1+i)^2} + \dots + \frac{\$40}{(1+i)^{40}} + \frac{\$1,000}{(1+i)^{40}}$$

where i = the semi-annual rate of return

The implied annual rate of return on U.S. Treasury bond futures is calculated as: Annual Rate of Return = $(1 + i)^2 - 1$.

The U.S. Treasury Bond futures contract prices shown below are averaged, by contract maturity, using the Friday settlement prices for September of 1998.

U.S. TREASURY BOND FUTURES CONTRACT DATA

Contract Maturity	09/04/98	09/11/98	09/18/98	09/25/98	Average Price	Implied Yield
12/98	127.3438	128.4063	129.1563	129.8125	128.6797	5.68%
03/99	127.0625	128.0625	128.8438	129.4375	128.3516	5.70%
09/99	126.2500	127.1563	127.9375	128.4063	127.4375	5.77%

AVERAGE IMPLIED YIELD

5.72%

Aaa vs. Treasury Bond Yields

Date	Moody's Aza Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
10/87	10.92%	9.62%	1.30%
11/87	10.43%	8.91%	1.52%
12/87	10.64%	9.09%	1.55%
01/88	10.39%	8.81%	1.58%
02/88	9.77%	8:42%	1.35%
03/88	9.72%	8.59%	1.13%
04/88	10.07%	8.98%	1.09%
05/88	10.29%	9.26%	1.03%
06/88	10.27%	9.06%	1.21%
07/88	10.50%	9.22%	1.28%
08/88	10.66%	9.37%	1.29%
09/88	10.15%	9.11%	1.04%
10/88	9.62%	8.92%	0:70%
11/88	9.52%	9.02%	0.50%
12/88	9.67%	9.01%	0.66%
01/89	9.72%	8.94%	0.78%
02/89	9.71%	9.00%	0.71%
03/89	9.87%	9,14%	0.73%

Date	Moody's Azz Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
04/89	9.88%	9.06%	0.82%
05/89	9,60%	8.90%	0.70%
06/89	9.13%	8.35%	0.78%
07/89	8.98%	8.10%	0.88%
08/89	9.02%	8.11%	0.91%
09/89	9.10%	8.17%	0.93%
10/89	9.01%	8.00%	1.01%
11/89	8.92%	789%	1.03%
12/89	8.92%	7.90%	1.02%
01/90	9.08%	8.24%	0.84%
02/90	9.35%	8.48%	0.87%
03/90	9.48%	8.57%	0.91%
04/90	9.60%	8.75%	0.85%
05/90	9.58%	8.73%	0.85%
06/90	9.38%	8.43%	0.95%
07/90	9.36%	8.50%	0.86%
08/90	9.54%	8.85%	0.69%
09/90	9.73%	8.99%	0.74%
10/90	9.66%	8.86%	0.80%
11/90	9.43%	8.58%	0.85%
12/90	9.18%	8.23%	0.95%

Date	Moody's Ana Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
01/91	9.17%	8.20%	0.97%
02/91	8.92%	8.08%	0.84%
03/91	9.04%	8.21%	0.83%
04/91	8.95%	8.22%	0.73%
05/91	8.93%	8.24%	0.69%
06/91	9.10%	8.48%	0.62%
07/91	9.10%	8.44%	0.66%
08/91	8.81%	8.15%	0.66%
09/91	8.65%	7,96%	0.69%
10/91	8.57%	7.95%	0.62%
11/91	8.52%	7.91%	0.61%
12/91	8.38%	7.69%	0,69%
01/92	8.22%	7.61%	0.61%
02/92	8.30%	7.86%	0.44%
03/92	8.39%	8.00%	0.39%
(14/92	8.36%	7.95%	0.41%
05/92	8.32%	7.89%	0.43%
06/92	8.26%	7.83%	0.43%
07/92	8.12%	7.50%	0.53%
08/92	8.04%	7,39%	0.65%
09/92	8.04%	7.34%	0.70%

Date	Moody's Aza Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
10/92	8.06%	7.50%	0.56%
11/92	8.11%	7,56%	0.55%
12/92	8.01%	7.46%	0.55%
01/93	7.94%	7,34%	0.60%
02/93	7.75%	7.06%	0.69%
03/93	7.64%	6.78%	0.86%
04/93	7.50%	6.85%	0.65%
05/93	7,44%	6.92%	0.52%
06/93	7,37%	6.82%	0.55%
07 93	7.25%	6.63%	0.62%
08/93	6.94%	6.30%	0.64%
09/93	6.76%	6.03%	0.73%
10/93	6.75%	5.93%	0.82%
11/93	7.06%	6.24%	0.82%
12/93	7.06%	6.26%	0.80%
01/94	7.05%	6.29%	0.76%
02/94	7.19%	6.51%	0.68%
03/94	7.60%	6.94%	0.66%
04/94	8.00%	7.25%	0.75%
05/94	8.11%	7.32%	0.79%
06/94	8.07%	7.38%	0.69%

Date	Moody's Azz Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
07/94	8.21%	7.60%	0.61%
08/94	8.15%	7.61%	0.54%
09/94	8.41%	7,84%	0.57%
10/94	8.65%	8.02%	0.63%
11/94	8.77%	8.17%	0.60%
12/94	8.55%	7.91%	0.64%
01/95	8.53%	7,86%	0.67%
02/95	8.33%	7.66%	0.67%
03/95	8.18%	7.52%	0.66%
04/95	8.08%	7.43%	0.65%
05/95	7.71%	7.04%	0.67%
06/95	7.39%	6.68%	0.71%
07/95	7.51%	6.75%	0.76%
08/95	7.66%	6.92%	0.74%
09/95	7.42%	6,44%	0.98%
10/95	7.23%	6.35%	0.88%
11/95	7.13%	6.29%	0.84%
12/95	6.94%	6.05%	0.89%
01/26	6.92%	6.05%	0.87%
02/96	7.11%	6.25%	0.86%
03/96	7,45%	6.62%	0.83%

Date	Moody's Azz Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
04/96	7,60%	6.76%	0.84%
05/96	7.73%	6.94%	0.79%
06/96	7,83%	6.94%	0.89%
07/96	7.78%	7.05%	0.73%
08/96	7.59%	6.88%	0.71%
09/96	7.76%	7.00%	0.76%
10/96	7.50%	6.78%	0.72%
11/96	7.21%	6.55%	0.66%
12/96	7.33%	6.56%	0.77%
01/97	7.53%	6.82%	0.71%
02/97	7,47%	6.70%	0.77%
03/97	7,70%	6.96%	0.74%
04/97	7.88%	7.13%	0.75%
05/97	7.72%	6.93%	0.79%
06/97	7.55%	6.73%	0.82%
07/97	7.29%	6.53%	0.76%
08/97	7.39%	6.58%	0.81%
09/97	7.33%	6.49%	0.84%
10/47	7.18%	6.33%	0.85%
11/97	7.09%	6.08%	1.01%
12/97	6.99%	5.96%	1.03%

Date	Moody's Ana Public Utility Bond	30-Year U.S. Treasury Bond	Ana/U.S. Treasury Bond Spread
01/98	6.85%	5.83%	1.02%
02/98	6.91%	5.89%	1.02%
03/98	6.96%	5.92%	1.04%
04/98	6.94%	5.87%	1.07%
05/98	6.94%	5.93%	1.01%
06/98	6.80%	5.69%	1.11%
07/98	6.80%	5.68%	1.12%
08/98	6.75%	5.56%	1.19%
09/98	6.66%	5.19%	1.47%
AVERAGE	8.33%	7.51%	0.81%

Sources: Moody's Bond Record The Wall Street Journal

Updated forward-looking cost of debt for BellSouth Telecommunications: (Average 30-year U.S. Treasury bond yield from July to September of 1998) + (Average Aaa/30-year U.S. Treasury bond spread form October of 1987 to September of 1998) = [(5.68% + 5.56% + 5.19%)/3] + .81% = 5.48% + .81% = 6.29%. Thus, a reasonable updated estimate of BellSouth Telecommunications' forward-looking cost of debt is 6.30%.

Calculated as the average of the Aaa/U.S. Treasury bond apreads rather than as the difference between the average Aaa rate and the average 30-year rate.

"A" vs. Treasury Bond Yields

Date	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasury Bond Spread
10/87	11.34%	9.62%	1.72%
11/87	10.82%	8.91%	1.91%
12/87	10.98%	9.09%	1.89%
01/88	10.76%	8.81%	1.95%
02/88	10.10%	8,42%	1.68%
03/88	10.09%	8.59%	1.50%
04/88	10.54%	8.98%	1.56%
05/88	10.81%	9.26%	1.55%
06/88	10.79%	9.06%	1.73%
07/88	11.04%	9.22%	1.82%
08/88	11.17%	9.37%	1.80%
09/88	10.61%	9.11%	1.50%
10/88	10.01%	8.92%	1.09%
11/88	9.90%	9.02%	0.88%
12/88	10.06%	9.01%	1.05%
01/89	10.08%	8.94%	1.14%
02/89	10.07%	9.00%	1.07%
03/89	10.23%	9.14%	1.09%
04/89	10.18%	9.06%	1.12%
05/89	9.99%	8:90%	1.09%
06/89	9.64%	8.35%	1.29%

Page 2 of 7

Date	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasury Bond Spread
07/89	9.50%	8.10%	1.40%
08/89	9.52%	8.11%	1.41%
09/89	9.58%	8.17%	1.41%
10/89	9.54%	8.00%	1.54%
11/89	9.51%	7.89%	1.62%
12/89	9.44%	7.90%	1.54%
01/90	9.56%	8.24%	1.32%
02/90	9.76%	8.48%	1.28%
03/90	9.85%	8.57%	1.28%
04/90	9.92%	8.75%	1.17%
05/90	10.00%	8.73%	1.27%
06/90	9.80%	8.43%	1.37%
07/90	9.75%	8.50%	1.25%
08/90	9.92%	8.85%	1.07%
09/90	10.12%	8,99%	1.13%
10/90	10.05%	8.86%	1.19%
11/90	9.90%	8.58%	1.32%
12/90	9.73%	8.23%	1.50%
01/91	9.71%	8.20%	1.51%
02/91	9.47%	8.08%	1.39%
03/91	9.55%	8.21%	1.34%
04/91	9.46%	8.22%	1.24%
05/91	9.44%	8.24%	1.20%

Date	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasury Bond Spread
06/91	9.59%	8.48%	1.11%
07/91	9,55%	8.44%	1.11%
08/91	9.29%	8.15%	1.14%
09/91	9.16%	7.96%	1.20%
10/91	9.12%	7.95%	1.17%
11/91	9.05%	7.91%	1.14%
12/91	8.88%	7,69%	1.19%
01/92	8.84%	7.61%	1.23%
02/92	8.93%	7.86%	1.07%
03/92	8,97%	8.00%	0.97%
04/92	8.93%	7.95%	0.98%
05/92	8.87%	7.89%	0.98%
06/92	8.78%	7.83%	0.95%
07/92	8.57%	7,59%	0.98%
08/92	8,44%	7.39%	1.05%
09/92	8.40%	7.34%	1.06%
10/92	8.54%	7.50%	1.04%
11/92	8.63%	7.56%	1.07%
12/92	8.43%	7.46%	0.97%
01/93	8.27%	7.34%	0.93%
02/93	8.04%	7.06%	0.98%
03/93	7.90%	6.78%	1.12%
04/93	7.81%	6.85%	0.96%

Date	Page 4 of 7				
	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasur, Bond Spread		
05/93	7.86%	6.92%	0.94%		
06/93	7.75%	6.82%	0.93%		
07/93	7.54%	6.63%	0.91%		
08/93	7.25%	6.30%	0.95%		
09/93	7.04%	6.03%	1.61%		
10/93	7.03%	5.93%	1.10%		
11/93	7.30%	6.24%	1.06%		
12/93	7.34%	6.26%	1.08%		
01/94	7.33%	6.29%	1.04%		
02/94	7.47%	6.51%	0.96%		
03/94	7.85%	6.94%	0.91%		
04/94	8.22%	7.25%	0.97%		
05/94	8.33%	7.32%	1.01%		
06/94	8.31%	7.38%	0.93%		
07/94	8,47%	7.60%	0.87%		
08/94	8.41%	7.61%	0.80%		
09/94	8.64%	7.84%	0.80%		
10/94	8.86%	8.02%	0.84%		
11/94	8.98%	8.17%	0.81%		
1201		22220	201070.55		

7.91%

7.86%

7.66%

7.52%

0.85%

0.87%

0.86%

0.85%

12/94

01/95

02/95

03/95

8.76%

8.73%

8.52%

8.37%

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Date	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasury Bond Spread
04/95	8.27%	7,43%	0.84%
05/95	7.91%	7.04%	0.87%
06/95	7.60%	6.68%	0.92%
07/95	7.70%	6,75%	0.95%
08/95	7.83%	6.92%	0.91%
09/95	7,62%	6.44%	1,18%
10/95	7.46%	6.35%	1.11%
11/95	7.43%	6.29%	1.14%
12/95	7.23%	6.05%	1.18%
01/96	7.22%	6.05%	1.17%
02/96	7.37%	6.25%	1.12%
03/96	7.73%	6.62%	1.11%
04/96	7.89%	6.76%	1.13%
05/96	7.98%	6.94%	1.04%
06/96	8.06%	6.94%	1.12%
07/96	8.02%	7.05%	0.97%
08/96	7,84%	6.88%	0.96%
09/96	8.01%	7.00%	1.01%
10/96	7.77%	6.78%	0.99%
11/96	7,49%	6.55%	0.94%
12/96	7.59%	6.56%	1.03%
01/97	7,77%	6.82%	0.95%
02/97	7,64%	6.70%	0.94%

		Page 6 of 7	Bond Tierds
Date	Moody's A Public Utility Bond	30-Year U.S. Treasury Bond	A/U.S. Treasury Bond Spread
03/97	7.87%	6.96%	0.91%
04/97	8.03%	7.13%	0.90%
05/97	7.89%	6.93%	0.96%
06/97	7.72%	6.73%	0.99%
07/97	7,48%	6.53%	0.95%
08/97	7.51%	6.58%	0.93%
09/97	7,47%	6.49%	0.98%
10/97	7.35%	6.33%	1.02%
11/97	7.25%	6.08%	1.17%
12/97	7.16%	5.96%	1.20%
01/98	7.04%	5.83%	1.21%
02/98	7.12%	5.89%	1.23%
03/98	7.16%	5.92%	1.24%
()4/98	7.16%	5.87%	1.29%
05/98	7.16%	5.93%	1.23%
06/98	7.03%	5.69%	1.34%
07/98	7.03%	5.68%	1.35%
08/98	7.00%	5.56%	1.44%
09/98	6.93%	5.19%	1.74%
VERAGE	8.67%	7.51%	1.16%1

Sources: Moody's Bond Record The Wall Street Journal

Calculated as the average of the A/U.S. Treasury bond spreads rather than as the difference between the average A rate and the average 30-year rate.

Updated forward-looking cost of debt for Sprint-FL: (Average 30-year U.S. Treasury bond yield from July to September of 1998) + (Average A/30-year U.S. Treasury bond spread form October of 1987 to September of 1998) = [(5.68% + 5.56% + 5.19%)/3] + 1.16% = 5.48% + 1.16% = 6.64%. Thus, a reasonable updated estimate of Sprint-FL's forward-looking cost of debt is 6.65%.

Randall Billingsley Rebuttal Testimons FPSC Docket 980696-1P Schodule A

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As of 12/31/97

VALUE LAR **************** Curveth Rute Growth Rate Dividend BURSA BEESTY Tomes interest Earland Raturn p. Lquft Ut e e e e c. 4 e c. 7 e u 20 C D 4 e 4 e e U d d d C d X E B C S Z P B P U S X Z B 2 d Earned Ratio 0.0477 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 0.0478 Morhal to Book Ratio STURST TRANSPORTATION OF STREET 3+3+44413+444444 Connect inc.
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Electronic Data Systems Corp. Southers New Eng Teleconors Aluminum Co of America Anheuser-Busch Cos Inc. Avery Dennistan Corp. The loc Warner-Lambert Co Simple Average Hershey Foods Corp. Naico Chemical Co. Abbott Laboratories Cincornate Bed Inc. Rohm & Hass Co Company Name Karlangs Co Lifty (E3) & Co Amodo Corp

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	Wennes DCF 54.0	SAD Bond	Martin	100	Equity	Terres interest	Earned Return	EARSA		Dividend		Saftery	Predominant
npany Name	Finding	Raleng	Sooth Radio	Radio	Radio	Earned Ratio	on Equity	Besta	Growth Rate	Growth Rate	Detta	Ranking	industry
whense - Busch Cos Inc.	12.80%	٨.	2.8	18.41	0.4807	4.21	0.2887	0.78	-	6.5%	0.85	*	Severage
che Corp	13.84%	P66+	1.89	20.50	0.5324	132	0.0064	20	12.82	75	0.75	•	Petroleum
Martic Ruhfleid Co	10 49%	4	2 86	13.63	0 5832	7.13	0.2149	2	200	52%	0 2		Petroleum
Avery Dennison Corp.	15.75%	4	5 47	22.49	0.6516	0.97	0.2454	0.36	13.86	70%	0.85	**	Chemical
won Products	17.44%	4	22.32	23.97	2250	13.80	1,7865	0 93	15.45	2.5%	18	**	Tolestnes
covnet Bell Inc.	19 23%	4	77.	21.50	0.5577	× 0	57273	0.87	17.78	25%	0.85		Telecommunication
v Chemical	12.54%	4	300	13.00	0.5473	6.3.7	0.2321	20	8.42	35%	100		Coemical
Post (£ f) De Namourt	13 03%	ŧ	6.15	28.33	0.4774	6.72	0.2237	75	10.85	50%	1 10	-	Chemical
Ecolab Inc	15 41%	4	6 45	18 97	0.5415	13.15	0.2500	0.83	100	60	0.75	**	Overnical
Chons Data Systems Corp.		A.	4.07	23.45	0.7364	7.50	0.1448	3	14.38	55%	2	-	Computer
ley-Devidson Inc.		d	5.02	23.70	0.6904	13.99	0.2337	0.83	17.45	20.5%	8	~	Recreation
get & Platt loc		*	344	19.12	0.6960	17.11	0.1970	0 83	14.14	14.0%	1.10	**	Fumbure
Tigs. Petroleum Co.		d	2.66	13.36	0.5682	878	0.2116	0.82	9.32	5.5%	0.30	-	Petroleum
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WILLIAM E. TAYLOR

BUSINESS ADDRESS

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Dr. Taylor received a B.A. magna cum laude in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, economic issues concerning broadband network architectures, quantitative analyses of state and federal price cap and incentive regulation proposals, mergers, network interconnection, implementation of the Telecommunications Act of 1996 and antitrust and contract litigation in telecommunications markets. He has worked on problems of competition law as applied to telecommunications in Italy, Canada, Australia and New Zealand. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-Television and Telecommunications Commission, federal and state congressional committees and state and federal courts. He has appeared as a telecommunications commentator on The News Hour with Jim Lehrer.

He has published extensively in the areas of telecommunications policy related to access and in theoretical and applied econometrics. His articles have appeared in numerous telecommunications industry publications as well as Econometrica, the American Economic Review, the International Economic Review, the Journal of Econometrics, Econometric Reviews, the Antitrust Law Journal, The Review of Industrial Organization, and The Encyclopedia of Statistical Sciences. He has served as a referee for these journals (and others) and the National Science Foundation and has served as an Associate Editor of the Journal of Econometrics.

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY Ph.P., Economics, 1974

UNIVERSITY OF CALIFORNIA, BERKELEY M.A., Statistics, 1970

HARVARD COLLEGE B.A., Economics, 1968 (Magna Cum Laude)

EMPLOYMENT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)

1988- Senior Vice President, Office Head, Telecommunications Practice Director, Dr. Taylor has directed many studies applying economic and statistical reasoning to regulatory, antitrust and competitive issues in telecommunications markets. In the area of environmental regulation, he has studied statistical problems associated with measuring the level and rate of change of emissions.

BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)

1983-1988 <u>Division Manager</u>, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company. While at Bellcore, Dr. Taylor performed theoretical and quantitative research focusing on problems raised by the implementation of access charges. His work included design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

BELL TELEPHONE LABORATORIES

1975-1983 Member, Technical Staff, Economics Research Center. Performed basic research on theoretical and applied econometries, focusing on small sample theory, panel data and simultaneous equations systems.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Fall 1977 <u>Visiting Associate Professor</u>, Department of Economics. Taught graduate courses in econometrics.

CENTER FOR OPERATIONS RESEARCH AND ECONOMETRICS

Université Catholique de Louvain, Belgium.

1974-1975 <u>Research Associate</u>. Performed post-doctoral research on finite sample econometric theory and on cost function estimation.

CORNELL UNIVERSITY

1972-1975 <u>Assistant Professor</u>, Department of Economics. (On leave 1974-1975.) Taught graduate and undergraduate courses on econometrics, microeconomic theory and principles.

MISCELLANFOUS

1985-1995 Associate Editor, Journal of Econometrics, North-Holland Publishing Company.

1990- Board of Directors, National Economic Research Associates, Inc.

1995- Board of Trustees, Treasurer, Episcopal Divinity School, Cambridge, Massachusetts.

TESTIMONIES

Florida Public Service Commission (Docket No. 820537-TP) on behalf of Southern Bell Telephone and Telegraph Company: economic analysis of premium intraLATA access charges. Filed July 22, 1983.

Arkansas Public Service Commission (Docket No. 83-042-U) on behalf of Southwestern Bell Telephone Company: economic analysis of non-traffic sensitive cost recovery proposals. Filed October 7, 1985.

Florida Public Service Commission (Docket No. 820400-TP) on behalf of Southern Bell Telephone and Telegraph Company: economic principles underlying a proposed method for calculating marginal costs for private line services. Filed June 25, 1986.

Federal Communications Commission (Docket No. 87-313) on behalf of Bell Communications Research, Inc.: empirical analysis of the United States Telephone Association proposal for price cap regulation of interstate access service, entitled "The Impact of Federal Price Cap Regulation on Interstate Toll Customers." Filed March 17, 1988.

Florida Public Service Commission (Docket No. 880069-TL) on behalf of Southern Bell Telephone and Telegraph Company: economic incentives for firms under the proposed Florida Rate Stabilization Plan. Filed June 10, 1988.

California Public Utilities Commission (Case 88-04-029) on behalf of Pacific Bell: commission payment practices, cross-subsidization of pay telephones, and compensation payments to competitive pay telephone suppliers. Filed July 11, 1988.

Federal Communications Commission (Docket No. 87-313) on behalf of Bell Communications Research, Inc.: empirical analysis of the price cap plan proposed in the FCC Further Notice of Proposed Rulemaking, entitled "The Impact of the FCC Proposed Price Cap Plan on Literstate Consumers." Filed August 18, 1988.

Federal Communications Commission (Docket No. 87-313) on behalf of Bell Communications Research, Inc.: Rebuttal analysis of intervenor comments on "The Impact of the FCC Proposed Price Cap Plan on Interstate Consumers." Filed November 18, 1988.

New Hampshire Public Service Commission (Docket 89-010)) on behalf of New England Telephone & Telegraph Company: appropriate level and structure of productivity adjustments in a proposed price regulation plan. Filed March 3, 1989.

Federal Communications Commission (Docket No. 87-313) on behalf of Cincinnati Bell Telephone Company, "Incentive Regulation and Estimates of Productivity," (with J. Rohlfs), June 9, 1989. Delaware Public Service Commission (Docket No. 86-20, Phase II) on behalf of The Diamond State Telephone Company: appropriate costing and pricing methods for a regulated firm facing competition, in connection with a proposed rate reduction. Filed March 31, 1989. Rebuttal testimony filed November 17, 1989.

Federal Communications Commission (Docket No. 87-313) on behalf of the United States Telephone Association: analysis of an AT&T filing and an empirical analysis of productivity growth under price cap regulation, entitled "Analysis of AT&T's Comparison of Interstate Access Charges Under Incentive Regulation and Rate of Return Regulation." Filed as Reply Comments regarding the FCC's Report and Order and Second Further Notice of Proposed Rulemaking in CC Docket 87-313, August 3, 1989.

Federal Communications Commission (Docket No. 87-313) on behalf of Southwestern Bell Telephone Company, "Taxes and Incentive Regulation," filed as Exhibit 3 to the Reply Comments of Southwestern Bell regarding the FCC's Report and Order and Second Further Notice of Proposed Rulemaking in CC Docket 87-313, August 3, 1989.

New York State Public Service Commission (Case 28961 - Fifth Stage) on behalf of New York Telephone Company: appropriate level and structure of productivity adjustments in a proposed price regulation plan. Filed September 15, 1989.

Georgia Public Service Commission (Docket No. 3882-U) on behalf of Southern Bell Telephone and Telegraph Company: analysis of incentive regulation plans. Filed September 29, 1989.

Public Utility Commission of Texas (Docket No. 8585) on behalf of Southwestern Bell Telephone Company: analysis of Texas intrastate switched access charges and bypass of switched access. Filed December 18, 1989.

Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: analysis of appropriate productivity offsets for local exchange carriers in the FCC price cap plan, entitled "Local Exchange Carrier Productivity Offsets for the FCC Price Cap Plan," May 3, 1990.

Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: analysis of appropriate productivity offsets for local exchange carriers in the FCC price cap plan, entitled "Productivity Offsets for LEC Interstate Access," June 8, 1990.

Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: analysis of appropriate productivity offsets for mid-size telephone companies in the FCC price cap plan, entitled "Interstate Access Productivity Of sets for Mid-Size Telephone Companies," June 8, 1990.

State of Maine Public Utilities Commission (Docket No. 89-397) on behalf of New England Telephone & Telegraph Company: theoretical and historical analysis of incentive regulation in telecommunications, entitled "Incentive Regulation in Telecommunications," filed June 15, 1990

Illinois Commerce Commission (Docket No. 88-0412) on behalf of Illinois Bell Telephone Company: analysis of pricing issues for public telephone service. Filed August 3, 1990. Rebuttal testimony filed December 9, 1991.

Delaware Public Service Commission (Docket No. 89-24T) on behalf of The Diamond State Telephone Company: rebuttal testimony describing the appropriate costing and pricing methods for the provision of contract Centrex services by a local exchange carrier. Filed August 17, 1990.

Montana Public Service Commission (Docket No. 90.8.46) on behalf of US West Communications: theoretical and historical analysis of incentive regulation plans in telecommunications. Filed October 4, 1990.

Arizona State Air Pollution Control Hearing Board (Docket No. A-90-02) on behalf of Arizona Public Service Company. A statistical study of SO₂ emissions entitled, "Analysis of Cholla Unit 2 SO₂ Compliance Test Data," (October 24, 1990) and an Affidavit (December 7, 1990).

Canadian Radio-Television and Telecommunications Commission (Docket No. 1990-73) on behalf of Bell Canada: "The Effect of Competition on U.S. Telecommunications Performance," (with L.J. Perl). Filed November 30, 1990.

New Jersey Board of Public Utilities (Docket No. TX90050349) on behalf of New Jersey Bell Telephone Company: theoretical and empirical analysis of the Board's intraLATA compensation policy. Filed December 6, 1990.

Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: analysis of total factor productivity calculations, entitled "Productivity Measurements in the Price Cap Docket," December 21, 1990.

Tennessee Public Service Commission (In re: The Promulgation of Agency Statements o: General Applicability to Telephone Companies That Prescribe New Policies and Procedures for Their Regulation) on behalf of South Central Bell Telephone Company: theoretical analysis and appraisal of the proposed Tennessee Regulatory Reform Plan. Filed February 20, 1991.

Florida Public Service Commission (Docket No. 900633-TL) on behalf of Southern Bell Telephone and Telegraph Company; alternative measures of cross-subsidization. May 9, 1991. Federal Communications Commission (Docket 87-313) on behalf of BellSouth Corporation, "The Treatment of New Services under Price Cap Regulation," (with Alfred E. Kahn), June 12, 1991.

Federal Communications Commission (Docket 91-141, Expanded Interconnection with Local Telephone Company Facilities) on behalf of Bell Atlantic, "Effects of Competitive Entry in the U.S. Interstate Toll Markets." August 6, 1991.

California Public Utilities Commission (Phase II of Case 90-07-037) on behalf of Pacific Bell: economic analysis of the effects of FAS 106, (accrual accounting for post-retirement benefits other than pensions) under state price cap regulation, (with Timothy J. Tardiff). Filed August 30, 1991. Supplemental testimony filed January 21, 1992.

Federal Communications Commission (Docket 91-141, Expanded Interconnection with Local Telephone Company Facilities) on behalf of Southwestern Bell, "Economic Effects of the FCC's Tentative Proposal for Interstate Access Transport Services." Filed September 20, 1991.

Rhode Island Public Utilities Commission (Docket No. 1997) on behalf of New England Telephone & Telegraph Company, "Rhode Island Price Regulation Plan," analysis of proposed price regulation plan and evidence of the effects of incentive regulation on prices and infrastructure development. Filed September 30, 1991.

Montana Public Service Commission (Docket No. 90.12.86) on behalf of US West Communications: economic analysis of a proposed incentive regulation plan. Filed November 4, 1991. Additional testimony filed January 15, 1992.

Testimony before the Michigan Circuit Court (Case No. 87-709234-CE and 87-709232-CE) on behalf of Combustion Engineering, Inc., in Her Majesty the Queen, et al., v. Greater Detroit Resource Recovery Authority, et al., re-statistical analysis of air pollution data to determine emissions limits for the Detroit municipal waste-to-energy facility, February, 1992.

Federal Communications Commission, (Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1579) on behalf of Pacific Bell, "The Treatment of FAS 106 Accounting Changes Under FCC Price Cap Regulation," (with T.J. Tardiff). Filed April 15, 1992. Reply comments filed July 31, 1992.

New York Public Service Commission (Case No. 28425) on behalf of New York. Felephone Company, "Costs and Benefits of IntraLATA Presubscription," (with T.J. Tardiff). Filed May 1, 1992.

California Public Utilities Commission. (Docket No. I.87-11-033), on behalf of Pacific Bell, "The New Regulatory Framework 1990-1992: An Economic Review," (with T.J. Tardiff). Filed May 1, 1992.

New Hampshire Public Service Commission, (Docket DE 90-002), on behalf of New England Telephone & Telegraph Company: the appropriate relationship between carrier access and toll prices. Filed May 1, 1992. Reply testimony filed July 10, 1992. Rebuttal testimony filed August 21, 1992.

Delaware Public Utilities Commission, (Docket No. 33), on behalf of Diamond State Telephone Company, "Incentive Regulation of Telecommunications Utilities in Delaware," filed June 22, 1992.

Federal Communications Commission, (CC Docket 92-141, In the Matter of 1992 Annual Access Tariff Filings) on behalf of Bell Atlantic, "Effects of Competitive Entry in the U.S. Interstate Toll Markets: An Update," filed July 10, 1992.

Florida Public Service Commission (Docket No. 920385-TL) on behalf of Southern Bell Telephone and Telegraph Company: the economic relationship between depreciation rates, investment, and infrastructure development. September 3, 1992.

Maryland Public Service Commission (Case No. 8462) on behalf of The Chesapeake and Potomac Telephone Company of Maryland: competition and the appropriate regulatory treatment of Yellow Pages. Filed October 2, 1992.

Federal Communications Commission (ET Docket 92-100) on behalf of BellSouth Corporation, "Assigning PCS Spectrum: An Economic Analysis of Eligibility Requirements and Licensing Mechanisms," (with Richard Schmalensee). Filed November 9, 1992.

Florida Public Service Commission (Docket No. 920260-TL) on behalf of Southern Bell Telephone and Telegraph Company: economic analysis of a proposed price cap regulation plan. December 18, 1992.

Science, Technology and Energy Committee of the New Hampshire House of Representatives on behalf of New England Telephone Company, "An Economic Perspective on New Hampshire Senate Bill 77," an analysis of resale of intraLATA toll services. April 6, 1993

California Public Utilities Commission, (Docket No. 1.87-11-033), on behalf of Pacific Bell, "Pacific Bell's Performance Under the New Regulatory Framework: An Economic Evaluation of the First Three Years," (with T.J. Tardiff). Filed April 8, 1993, reply testimony filed May 7, 1993.

Canadian Radio-Television and Telecommunications Commission (Docket No. 92-78) on behalf of Alberta General Telephone: "Lessons for the Canadian Regulatory Structure from the U.S. Experience with Incentive Regulation," and "Performance Under Alternative Forms of Regulation in the U.S. Telecommunications Industry," (with T.J. Tardiff). Filed April 13, 1993.

Federal Communications Commission (Petition for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region) on behalf of Ameritech: "Price Cap Regulation and I nhanced Competition for Interstate Access Services," filed April 16, 1993, Reply Comments, July 12, 1993.

Delaware Public Utilities Commission, (Docket No. 33), on behalf of Diamond State Telephone Company, "Reply Comments," June 1, 1993, "Supplementary Statement," June 7, 1993, "Second Supplementary Statement," June 14, 1993; analysis of productivity growth and a proposed incentive regulation plan.

Federal Communications Commission (Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems) PR Docket No. 93-61 on behalf of PacTel Teletrac, "The Economics of Co-Channel Separation for Wideband Pulse Ranging Location Monitoring Systems," (with R. Schmalensee). Filed June 29, 1993.

Vermont Public Service Board, Petition for Price Regulation Plan of New England Telephone on behalf of New England Telephone Company, Dockets 5760:5702: analysis of appropriate parameters for a price regulation plan. Filed September 30, 1993. Rebuttal testimony filed July 5, 1994.

Pennsylvania Public Utility Commission, (Docket No. P-009350715), on behalf of Bell Atlantic: a study of inflation offsets in a proposed price regulation plan. Filed October 1, 1993. Rebuttal testimony filed January 18, 1994.

New Jersey Board of Regulatory Commission rs, (Docket No. TX93060259), Affidavit analyzing statistical evidence regarding the effect of intraLATA competition on telephone prices. Filed October 1, 1993.

Federal Communications Commission (In the Matter of Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorization Therefor) on behalf of four Regional Bell Holding Companies, Affidavit "Interstate Long Distance Competition and AT&T's Motion for Reclassification as a Nondominant Carrier," filed November 12, 1993, (with A.E. Kahn).

Maryland Public Service Commission (Case No. 8584) on behalf of The Chesapeake and Potomac Telephone Company of Maryland: appropriate pricing and regulatory treatment of interconnection to permit competition for local service. Filed November 19, 1993, (with A.E. Kahn). Rebuttal testimony filed January 10, 1994, surrebuttal testimony filed January 24, 1994.

Testimony before the United States District Court, Eastern District of New York on behalf of Jancyn Manufacturing Corp., in Jancyn Manufacturing Corp. v. The County of Suffolk. Commercial damages. Depositions: September 19, 1991, November 22, 1993; Testimony and Cross-Examination: January 11, 1994.

Affidavit to the U.S. District Court for the District of Columbia on behalf of Bell Atlantic Corporation in United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company, re-relief from the interLATA restrictions of the MFJ in connection with the pending merger with Tele-Communications, Inc. and Liberty Media Corporation. Filed January 14, 1994. (with A.E. Kahn).

New Jersey Board of Public Utilities (Docket Nos. TX90050349, TE92111047, TE93060211) on behalf of Bell Atlantic-New Jersey: economic impacts of intral ATA toll competition and regulatory changes required to accommodate competition. Filed April 7, 1994. Rebuttal testimony filed April 25, 1994. Summary Affidavit and Technical Affidavit filed April 19, 1994.

Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-50), on behalf of NYNEX: analysis of appropriate parameters for a price regulation plan. Filed April 14, 1994. Rebuttal testimony filed October 26, 1994.

Federal Communications Commission (CC Docket 94-1) on behalf of the United States Telephone Association: "Economic Performance of the LEC Price Cap Plan," filed as Attachment 5 to the <u>United States Telephone Association</u> Comments, May 9, 1994, "Economic Performance of the LEC Price Cap Plan: Reply Comments," filed as Attachment 4 to the <u>United States Telephone Association Reply Comments</u>, June 29, 1994.

Federal Communications Commission (CC Docket 94-1) on behalf of the United States Telephone Association: "Comments on the USTA Pricing Flexibility Proposal," filed as Attachment 4 to the <u>United States Telephone Association</u> Comments, May 9, 1994, "Reply Comments: Market Analysis and Pricing Flexibility for Interstate Access Services," filed as Attachment 3 to the <u>United States Telephone Association Reply Comments</u>, June 29, 1994 (with Richard Schmalensee).

Affidavit to the U.S. District Court for the District of Columbia on behalf of Southwestern Bell in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of telecommunications and information services across LATA boundaries outside the regions in which its local exchange operations are located. Filed May 13, 1994, (with A.E. Kahn).

Federal Communications Commission (File Nos. W-P-C 6912 and 6966) on behalf of Bell Atlantic Corporation, affidavit supporting Section 214 applications to provide video dialtone services, August 5, 1994.

Affidavit to the U.S. Department of Justice on behalf of NYNEX in United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company, regarding provision of telecommunications services across LATA boundaries for traffic originating or terminating in New York State. Filed August 25, 1994.

Federal Communications Commission (File Nos. W-P-C 6982 and 6983) on behalf of NYNEX: affidavit supporting Section 214 applications to provide video dialtone services in Massachusetts and Rhode Island, September 21, 1994.

New York State Public Service Commission (Case 92-C-0665, Proceeding on Motion of the Commission to Investigate Performance-Based Incentive Regulatory Plans for New York Telephone Company) on behalf of New York Telephone Company; appropriate level and structure of productivity adjustments and competitive pricing safeguards in a proposed incentive regulation plan. Filed as part of panel testimony, October 3, 1994.

Delaware Public Utilities Commission, (Docket No. 42), on behalf of Bell Atlantic - Delaware, rebuttal testimony concerning the historical effects of equal access competition in interstate toll markets and the likely future effects of competition under 1+ presubscription in Delaware. Filed October 21, 1994.

Maryland Public Service Commission (Case No. 8659) on behalf of Bell Atlantic -Maryland: appropriate pricing of interconnection among competing local exchange carriers. Filed November 9, 1994.

Pennsylvania Public Utility Commission, (Docket No. I-940034) on behalf of Bell Atlantic: issues regarding proposed presubscription for intraLATA toll traffic in Pennsylvania, including the likely demand effects of 1+ presubscription and the role of economically efficient imputation of carrier access charges. Filed as part of panel testimony, December 8, 1994. Reply testimony filed February 23, 1995. Surrebuttal testimony filed March 16, 1995.

State of Maine Public Utilities Commission (Docket Nos. 94-123/94-254) on behalf of New England Telephone & Telegraph Company: analysis of appropriate parameters for a price regulation plan. Filed December 13, 1994. Rebuttal testimony filed January 13, 1995.

Maryland Public Service Commission (Case No. 8584, Phase II) on behalf of Bell Atlantic - Maryland: geographically deaveraged incremental and embedded costs of service. Filed December 15, 1994. Additional direct testimony concerning efficient rate structures for interconnection pricing filed May 5, 1995. Rebuttal testimony filed June 30, 1995.

Canadian Radio-Television and Telecommunications Commission (Application of Teleglobe Canada for Review of the Regulatory Framework of Teleglobe Canada Inc.): on behalf of Teleglobe Canada, Inc., structure of a price regulation plan for the franchised supplier of overseas telecommunications services in Canada. Filed December 21, 1994.

Canadian Radio-Television and Telecommunications Commission, Response to Interrogatory SRCI(CRTC) 1Nov94-906, "Economies of Scope ir. Telecommunications," on behalf of Stentor. Filed January 31, 1995.

Canadian Radio-Television and Telecommunications Commission, Implementation of Regulatory Framework and Related Issues, Telecom Public Notices CRTC 94-52, 94-56 and 94-58, "Economic Welfare Benefits from Rate Rebalancing," on behalf of Stentor, Filed February 20, 1995.

Federal Communications Commission on behalf of Bell Atlantic Corporation, affidavit examining cost support for Asymmetric Digital Subscriber Loop (ADSL) video dialtone market trial. Filed February 21, 1995.

Federal Communications Commission on behalf of Bell Atlantic Corporation, affidavit examining cost support for Bell Atlantic's video dialtone tariff. Filed March 6, 1995.

Federal Communications Commission on behalf of C., United States Telephone Association, study entitled "Competition in the Interstate Long-Distance Markets: Recent Evidence from AT&T Price Changes," ex parte filing in CC Docket No. 94-1, March 16, 1995.

Public Service Commission of West Virginia (Case No. 94-1103-T-GI) on behalf of Bell Atlantic - West Virginia: economic analysis of issues regarding proposed presubscription for intraLATA toll traffic in West Virginia, March 24, 1995.

Kentucky Public Service Commission on behalf of South Central Bell Telephone Company, testimony concerning telecommunications productivity growth and price cap plans, April 18, 1995.

Federal Communications Commission (CC Docket No. 79-252) on behalf of Bell Atlantic, BellSouth, SBC, and Pacific Telesis, "An Analysis of the State of Competition in Long-Distance Telephone Markets," study attached to ex parte comments examining the competitiveness of interstate long-distance telephone markets, (with J. Douglas Zona), April 1995.

California Public Utilities Commission, (U 1015 C) on behalf of Roseville Telephone Company, testimony regarding productivity measures in Roseville's proposed new regulatory framework. Filed May 15, 1995. Rebuttal testimony filed January 12, 1996.

Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-185) on behalf of NYNEX: economic analysis of terms and conditions for efficient local competition. Filed May 19, 1995. Rebuttal testimony filed August 23, 1995.

Affidavit to the U.S. Department of Justice on behalf of SBC Communications Inc. in United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company, regarding Telefonos de Mexico's (Telmex's) provision of interexchange telecommunications services within the United States. Filed May 22, 1995.

The Public Utilities Commission of Ohio (Case No. 94-1695-TP-ACE) on behalf of Cincinnati Bell Telephone Company: economic analysis of terms and conditions for efficient local competition. Filed May 24, 1995.

Affidavit to the U.S. Department of Justice on behalf of SBC Communications Inc. in United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company, regarding provision of interexchange telecommunications services to customers with independent access to interexchange carriers. Filed May 30, 1995.

The New Jersey Board of Public Utilities (Docket No. TX94090388) on behalf of Bell Atlantic - New Jersey: economic analysis of issues regarding proposed presubscription for intraLATA toll traffic in New Jersey. Amended direct testimony filed April 17, 1995. Rebuttal Testimony filed May 31, 1995.

Vermont Public Service Board, (Open Network Architecture Docket No. 5713) on behalf of New England Telephone Company, economic principles for local competition, interconnection and unbundling, direct testimony filed June 7, 1995. Rebuttal testimony filed July 12, 1995.

State of Connecticut, Department of Public Utility Control, (DPUC Docket No. 95-03-01) on behalf of Southern New England Telephone Company, testimony concerning productivity growth targets in a proposed state price cap regulation plan. Filed June 19, 1995.

Federal Communications Commission (File Nos. W-P-C 7074) on behalf of Southern New England Telephone Company, affidavit supporting Section 214 applications to provide video dialtone services, July 6, 1995.

Louisiana Public Service Commission (Docket No. U-17949, Subdocket E) on behalf of South Central Bell Telephone Company, rebuttal testimony concerning productivity growth accounting and other aspects of a price regulation plan, July 24, 1995.

New York Public Service Commission (Case 94-C-0017) on behalf of New York Telephone Company, testimony regarding competition and market power in intrastate tall markets. Filed August 1, 1995.

Louisiana Public Service Commission (Docket No. U-20883, Subdocket A) on behalf of South Central Bell Telephone Company, rebuttal testimony concerning methods for measuring the cost of providing universal service, August 16, 1995.

Canadian Radio-Television and Telecommunications Commission, "Imputation Test to be Applied to Competitive Local Exchange Services," position paper on imputation for local exchange services filed in response to Telecom Public Notice CRTC 95-36 on behalf of Stentor on August 18, 1995.

US WATS v. AT&T: Retained by counsel for US WATS, a reseller of AT&T long distance services, plaintiff in an antitrust suit alleging monopolization and conspiracy in business long distance markets. Antitrust liability and damages. Confidential Report, August 22, 1995. Depositions September 30, October 1, October 12, December 3, 1995. Testimony October 18-20, 25-27, 30, 1995. Rebuttal testimony December 4, December 11, 1995.

California Public Utilities Commission, (Investigation No. 1.95-05-047), on behalf of Pacific Bell, "Incentive Regulation and Competition: Issues for the 1995 Incentive Regulation Review," (with R.L. Schmalensee and T.J. Tardiff). Filed September 8, 1995, reply testimony filed September 18, 1995.

Mississippi Public Service Commission (Docket No. 95-UA-313) on behalf of BellSouth Telecommunications, Inc. d/b/a South Central Bell Telephone Company, rebuttal testimony addressing cost issues, as they pertain to price regulation raised in the direct testimony by intervenors. Filed October 13, 1995.

Mexican Secretariat of Communications and Transport on behalf of Southwestern Bell International Holdings Corporation, affidavit on interconnection regulation (with T.J. Tardiff). Filed October 18, 1995.

Affidavit to the U.S. District Court for the Eastern District of Virginia (Alexandria Division) on behalf of United States Telephone Association, United States Telephone Association, et al., v. Federal Communications Commission, et al., (Civil Action No. 95-533-A) regarding the Section 214 process for local exchange companies providing cable television services. Filed October 30, 1995, (with A.E. Kahn).

Tennessee Public Service Commission (Docket No. 95-02499) on behalf of BellSouth Telecommunications, Inc. d/b/a BellSouth Telephone Company, testimony addressing the definition and measurement of the cost of supplying universal service. (Direct testimony filed October 20, 1995. Rebuttal testimony filed October 25, 1995). Additional testimony regarding economic principles underlying the creation of a competitively-neutral universal service fund: direct testimony filed October 30, 1995. Rebutal testimony filed November 3, 1995.

Federal Communications Commission (CC Docket No. 95-145) on behalf of Bell Atlantic Corporation, affidavit examining economic issues raised in the investigation of Bell Atlantic's video dialtone tariff. Filed October 26, 1995. Supplemental Affidavit filed December 21, 1995.

New England Telephone and Telegraph Company, D/B/A NYNEX, State of Rhode Island (Docket No. 2252), testimony addressing the economic conditions under which competition in the local exchange and intraLATA markets will bring benefits to customers. Direct testimony, November 17, 1995.

Darren B. Swain, Inc. d/b/a U.S. Communications v. AT&T Corp., United States District Court for the Northern District of Texas, Dallas Division, Civil Action 394CV-1088D: Retained by counsel for U.S. Communications, a reseller of AT&T long distance services, plaintiff in an antitrust suit alleging monopolization in inbound business long distance markets. Antitrust liability and damages. Confidential Report, November 17, 1995.

Louisiana Public Service Commission (Docket No. U-20883) on behalf of South Central Bell Telephone Company, "Price Regulation and Local Competition in Louisiana," affidavit evaluating a framework for local competition and price regulation in Louisiana, November 21, 1995.

Louisiana Public Service Commission (Docket No. U-17949, Subdocket E) on behalf of South Central Bell Telephone Company, supplemental and rebuttal testimony concerning economic issues in depreciation accounting in the presence of competition and price cap regulation, November 17, 1995. Surrebuttal testimony, December 13, 1995, further surrebuttal testimony, January 12, 1996.

Federal Communications Commission (CC Docket No. 94-1) on behalf of the United States Telephone Association, "Economic Evaluation of Selected Issues from the Fourth Further Notice of Proposed Rulemaking in the LEC Price Cap Performance Review," Attachment C to the United States Telephone Association "Comments," filed December 18, 1995 (with T. Tardiff and C. Zarkadas). Reply Comments filed March 1, 1996.

State Corporation Commission of Virginia (Case No. PUC 950067) on behalf of Bell Atlantic - Virginia, Inc., rebuttal testimony concerning economic standards for the classification of services as competitive for regulatory purposes, January 11, 1996.

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