

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
 )  
Amendment to The Bell Atlantic ) Transmittal Nos. 741, 786  
Telephone Companies ) Amended  
Tariff FCC No. 10 )

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BELL ATLANTIC DIRECT CASE

Attachments Pre(2) through P(1)

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October 26, 1995



PROJECTED CONSTRUCTION COSTS

<u>LINE</u>	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>PROJECTED COSTS</u>
			A
1.	DIRECT ACCESS CONNECTION	Page 3	\$215,581.04
2.	SERVING WIRE CENTER CONNECTION	Page 4	\$41,451.64
3.	BROADCAST CHANNELS	Page 5	\$66,790,017.00
4.	NARROWCAST CHANNELS	Page 6	\$837,270.15
5.	MESSAGING PORT	Page 7	\$518,114.00
6.	TOTAL INVESTMENT	L1 ... L5	<b>\$68,402,433.83</b>

PROJECTED OPERATING COSTS

LINE	RATE ELEMENT	SOURCE	ANNUAL	YEAR 1 - 5	TOTAL OPERATING
			OPERATING COSTS	TOTAL DEMAND	COSTS
			A	B	C = A * B
<b>DIRECT ACCESS CONNECTION</b>					
1.	- TERMINATION	Page 3	\$1,690.71	20	\$33,814.20
2.	- FIXED	Page 3	\$1,088.22	20	\$21,364.40
3.	- PER MILE	Page 3	\$17.71	200	\$3,542.00
<b>SERVING WIRE CENTER CONNECTION</b>					
4.	- FIXED	Page 4	\$2,115.99	5	\$10,579.95
5.	- PER MILE	Page 4	\$17.71	50	\$885.50
6.	<b>BROADCAST/NARROWCAST CHANNELS</b>	Pages 5 & 6	\$4,594,036.67 **	5 *	\$22,970,183.34
7.	<b>MESSAGING PORT</b>	Page 7	\$3,030.48	150	\$454,572.71
8.	<b>TOTAL</b>				<b>\$23,494,942.10</b>

NOTES:

\* The Operations costs for broadcast/narrowcast channels are calculated for the "system." Since one system is working each year (1-5), demand is set at 5 units.

\*\* Source: Page 5, Line 47D + Page 6, Line 49D

**DIRECT ACCESS CONNECTION  
VIDEO DIALTONE ACCESS LINK  
TOTAL INVESTMENTS**

LINE	DESCRIPTION	ACCT		INVESTMENT	ANNUAL OPERATING COSTS		
					MTCE	ADMIN	TOTAL
				A	B	C	D
<b>TERMINATION CHARGE</b>							
1.	POP ELECTRONICS	257C	2232 CKT EQUIPMENT	\$15,325.00	\$403.05	\$461.28	\$864.33
2.	POP TO CENTRAL OFFICE	85C	2232 NON-MET UNDRG	\$268.85	\$2.02	\$8.33	\$10.35
3.		82C	2421 NON-MET AERIAL	\$138.50	\$1.43	\$4.29	\$5.72
4.		4C	2441 CONDUIT	\$194.65	\$2.47	\$6.03	\$8.51
5.		1C	2411 POLES	\$17.22	\$0.26	\$0.52	\$0.77
6.	TOTAL			\$619.22	\$6.17	\$19.18	\$25.35
7.	TIMING GENERATOR	257C	2232 CKT EQUIPMENT	\$8,625.00	\$226.84	\$259.61	\$486.45
8.	TIMING LINK	4C	2441 CONDUIT	\$2,784.00	\$35.36	\$86.30	\$121.66
9.		60C	2121 BUILDING	\$50.00	\$1.67	\$1.53	\$3.20
10.		70C	2111 LAND	\$12.00	\$0.00	\$0.37	\$0.37
11.		85C	2232 NON-MET UNDRG	\$161.00	\$1.21	\$4.99	\$6.20
12.		5C	MET UNDRGRD	\$63.00	\$1.59	\$1.95	\$3.55
13.		257C	2232 CKT EQUIPMENT	\$3,175.00	\$83.50	\$95.57	\$179.07
14.	TOTAL			\$6,245.00	\$123.33	\$190.71	\$314.04
15.	TOTAL			\$30,814.22	\$759.39	\$930.78	\$1,690.17
16.	PROJECTED DEMAND			4			
17.	TOTAL PROJECTED INVESTMENT			\$123,256.88			
<b>FIXED CHARGE</b>							
18.	SERVING OFFICE ELECTRONICS	257C	2232 CKT EQUIPMENT	\$148.19	\$3.90	\$4.46	\$8.36
19.	VDO ELECTRONICS	257C	2232 CKT EQUIPMENT	\$15,325.00	\$403.05	\$461.28	\$864.33
20.	POWER/Common EQUIPMENT	257C	2232 CKT EQUIPMENT	\$933.03	\$24.54	\$28.08	\$52.62
21.	LAND	70C	2111 LAND	\$165.70	\$0.00	\$5.05	\$5.05
22.	BUILDING	60C	2121 BUILDING	\$2,157.42	\$72.06	\$65.80	\$137.86
23.	TOTAL			\$18,729.34	\$503.54	\$564.68	\$1,068.22
24.	PROJECTED DEMAND			4			
25.	TOTAL PROJECTED INVESTMENT			\$74,917.36			
<b>PER MILE CHARGE</b>							
26.	CENTRAL OFFICE TO VDO	85C	2232 NON-MET UNDRG	\$252.27	\$1.89	\$7.82	\$9.71
27.		4C	2441 CONDUIT	\$182.90	\$2.32	\$5.67	\$7.99
28.	TOTAL			\$435.17	\$4.21	\$13.49	\$17.71
29.	PROJECTED DEMAND			40			
30.	TOTAL PROJECTED INVESTMENT			\$17,406.80			
31.	TOTAL INVESTMENT		L17 + L25 + L30	\$215,581.04			

**SERVING WIRE CENTER CONNECTION  
VIDEO DIALTONE ACCESS LINK  
TOTAL INVESTMENTS**

LINE	DESCRIPTION	ACCT		INVESTMENT	ANNUAL OPERATING COSTS		
					MTCE	ADMIN	TOTAL
				A	B	C	D
<b>FIXED CHARGE</b>							
1.	SWC ELECTRONICS	257C	2232 CKT EQUIPMENT	\$15,325.00	\$403.05	\$461.28	\$864.33
2.	VDO ELECTRONICS	257C	2232 CKT EQUIPMENT	\$15,325.00	\$403.05	\$461.28	\$864.33
3.	POWER/Common EQUIPMENT	257C	2232 CKT EQUIPMENT	\$1,848.20	\$48.61	\$55.63	\$104.24
4.	LAND	70C	2111 LAND	\$328.23	\$0.00	\$10.01	\$10.01
5.	BUILDING	60C	2121 BUILDING	\$4,273.51	\$142.74	\$130.34	\$273.08
6.	<b>TOTAL</b>			<b>\$37,099.94</b>	<b>\$997.44</b>	<b>\$1,118.55</b>	<b>\$2,115.99</b>
7.	<b>PROJECTED DEMAND</b>			<b>1</b>			
8.	<b>TOTAL PROJECTED INVESTMENT</b>			<b>\$37,099.94</b>			
<b>PER MILE CHARGE</b>							
9.	CENTRAL OFFICE TO VDO	85C	2232 NON-MET UNDRG	\$252.27	\$1.89	\$7.82	\$9.71
10.		4C	2441 CONDUIT	\$182.90	\$2.32	\$5.67	\$7.99
11.	<b>TOTAL</b>			<b>\$435.17</b>	<b>\$4.21</b>	<b>\$13.49</b>	<b>\$17.71</b>
12.	<b>PROJECTED DEMAND</b>			<b>10</b>			
13.	<b>TOTAL PROJECTED INVESTMENT</b>			<b>\$4,351.70</b>			
14.	<b>TOTAL INVESTMENT</b>		<b>L8 + L13</b>	<b>\$41,451.64</b>			

**BROADCAST SERVICE  
TOTAL INVESTMENTS**

LINE	DESCRIPTION	ACCT		VIDEO PLUS DIALTONE INVESTMENT PER POT SUB	ANNUAL OPERATING COSTS			TOTAL
					A	B	C	
<b>INCREMENTAL INVESTMENTS*</b>								
1.	VDO EQUIPMENT	257C	2232 CKT EQUIP.	\$40.07	\$1.053841	\$1.206107		\$2.2599
2.	VDO TO VSO FACILITIES	85C	2422 NONMET. UNDGR	\$0.19	\$0.001425	\$0.005890		\$0.0073
3.		82C	2421 NONMET. AERIAL	\$0.07	\$0.000721	\$0.002170		\$0.0029
4.		4C	2442 CONDUIT	\$0.13	\$0.001651	\$0.004030		\$0.0067
5.		1C	2411 POLES	\$0.01	\$0.000150	\$0.000300		\$0.0005
6.	TOTAL			\$0.40	\$0.003947	\$0.012390		\$0.0163
7.	VSO CROSS CONNECT EQUIP	257C	2232 CKT EQUIP.	\$0.85	\$0.022355	\$0.025585		\$0.0479
8.	VSO TO HDT FACILITIES	85C	2422 NONMET. UNDGR	\$5.89	\$0.044175	\$0.182590		\$0.2268
9.		82C	2421 NONMET. AERIAL	\$2.57	\$0.026471	\$0.079670		\$0.1061
10.		4C	2442 CONDUIT	\$4.24	\$0.053848	\$0.131440		\$0.1853
11.		1C	2411 POLES	\$0.30	\$0.004500	\$0.009000		\$0.0135
12.	TOTAL			\$13.00	\$0.128994	\$0.402700		\$0.5317
13.	VIDEO ADMIN MODULE	357C	2232 CKT EQUIP	\$17.82	\$1.218888	\$0.475794		\$1.6947
14.		357C		\$1.96	\$0.134064	\$0.052332		\$0.1864
15.	TOTAL			\$19.78	\$1.352952	\$0.528126		\$1.8811
16.	VAM-OSP	85C	2422 NONMET. UNDGR	\$0.18	\$0.001350	\$0.005580		\$0.0069
17.		82C	2421 NONMET. AERIAL	\$0.07	\$0.000721	\$0.002170		\$0.0029
18.		4C	2441 CONDUIT	\$0.14	\$0.001778	\$0.004340		\$0.0061
19.		1C	2411 POLES	\$0.01	\$0.000150	\$0.000300		\$0.0005
20.	TOTAL			\$0.40	\$0.003999	\$0.012390		\$0.0164
21.	LAND-VIDEO ONLY	70C	2111 LAND	\$0.61	\$0.000000	\$0.018605		\$0.0186
22.	BUILDING-VIDEO ONLY	60C	2121 BUILDINGS	\$7.98	\$0.266532	\$0.243390		\$0.5099
23.	POWER AND CE-VIDEO ONLY	257C	2232 CKT EQUIP.	\$2.47	\$0.064961	\$0.074347		\$0.1393
24.	SUBTOTAL			\$85.56	\$2.90	\$2.52		\$6.42
<b>SHARED PLANT INVESTMENTS</b>								
25.	HOST DIGITAL TERMINAL EQ	257C	2232 CKT EQUIP	\$456.91	\$12.016733	\$13.752991		\$25.7697
26.	QUAD CURRENT LIMITER EQ	257C	2232 CKT EQUIP	\$30.33	\$0.797679	\$0.912933		\$1.7106
27.	HDT TO ONU FACILITIES	85C	2422 NONMET. UNDGR	\$1.55	\$0.011625	\$0.048050		\$0.0597
28.		82C	2421 NONMET. AERIAL	\$94.61	\$0.974483	\$2.932910		\$3.9074
29.		845C	2423 BURIED CABLE	\$20.06	\$0.194582	\$0.621860		\$0.8164
30.		4C	2442 CONDUIT	\$1.85	\$0.023495	\$0.057350		\$0.0608
31.		1C	2411 POLES	\$19.74	\$0.296100	\$0.592200		\$0.8883
32.		2C	2421 MET. AERIAL	\$74.06	\$7.008076	\$2.285880		\$9.3019
33.		5C	2422 MET. UNDERGRN	\$1.02	\$0.025806	\$0.031620		\$0.0574
34.		45C	2423 MET. BURIED	\$35.86	\$1.979472	\$1.111660		\$3.0911
35.	TOTAL			\$248.75	\$10.511639	\$7.691510		\$18.2031
36.	OPTICAL NETWORK UNIT EQ	257C	2232 CKT EQUIP	\$535.57	\$14.085491	\$16.120657		\$30.2061
37.	DROP	1C	2411 POLES	\$9.77	\$0.146550	\$0.293100		\$0.4397
38.		2C	2421 MET. AERIAL	\$83.57	\$7.905722	\$2.590670		\$10.4964
39.		45C	2423 MET. BURIED	\$249.60	\$13.777920	\$7.737600		\$21.5155
40.	TOTAL			\$342.94	\$21.830192	\$10.621370		\$32.4516
41.	NETWORK INTERFACE DEVICE	2C	2421 MET. AERIAL	\$35.14	\$3.324244	\$1.089340		\$4.4136
42.	LAND-INTEGRATED	70C	2111 LAND	\$0.39	\$0.000000	\$0.011895		\$0.0119
43.	BUILDING-INTEGRATED	60C	2121 BUILDINGS	\$5.08	\$0.169672	\$0.154940		\$0.3246
44.	POWER AND CE-INTEGRATED	257C	2232 CKT EQUIP.	\$2.33	\$0.061279	\$0.070133		\$0.1314
45.	SUBTOTAL			\$1,657.44	\$62.80	\$50.43		\$113.22
46.	TOTAL			\$1,743.00	\$65.69	\$52.95		\$118.64
47.	TOTAL INVESTMENT * 38,319 POT SUBS			\$66,790,017.00	\$2,517,347.93	\$2,028,968.40		\$4,546,316.33

\* Note: Included here are those incremental investments associated with video dialtone only. Incremental investments that serve dial tone only are shown in Attachment C(1).

**NARROWCAST SERVICE  
TOTAL INVESTMENTS**

LINE	DESCRIPTION	ACCT	VIDEO PLUS DIAL TONE INVESTMENT PER POT SUB	ANNUAL OPERATING COSTS			TOTAL D=B+C
				MTCE A	ADMIN B	TOTAL C	
<b>INCREMENTAL INVESTMENTS*</b>							
1.	VDO EQUIPMENT	257C 2232 CKT EQUIP.	\$58.22	\$1,531,186	\$1,752,422	\$3,283,608	
2.	VDO TO VSO FACILITIES	85C 2422 NONMET. UNDGRN	\$0.19	\$0,001,425	\$0,005,890	\$0,007,315	
3.		82C 2421 NONMET. AERIAL	\$0.07	\$0,000,721	\$0,002,170	\$0,002,891	
4.		4C 2442 CONDUIT	\$0.13	\$0,001,651	\$0,004,030	\$0,005,732	
5.		1C 2411 POLES	\$0.01	\$0,000,150	\$0,000,300	\$0,000,450	
6.	TOTAL		\$0.40	\$0,003,947	\$0,012,390	\$0,016,337	
7.	VSO CROSS CONNECT EQUIP	257C 2232 CKT EQUIP.	\$0.88	\$0,023,144	\$0,026,488	\$0,049,632	
8.	VSO TO HDT FACILITIES	85C 2422 NONMET. UNDGRN	\$5.89	\$0,044,175	\$0,182,590	\$0,226,765	
9.		82C 2421 NONMET. AERIAL	\$2.57	\$0,028,471	\$0,079,670	\$0,108,141	
10.		4C 2442 CONDUIT	\$4.24	\$0,053,848	\$0,131,440	\$0,185,288	
11.		1C 2411 POLES	\$0.30	\$0,004,500	\$0,009,000	\$0,013,500	
12.	TOTAL		\$13.00	\$0,128,994	\$0,402,700	\$0,531,694	
13.	VIDEO ADMIN MODULE	357C 2232 CKT EQUIP	\$17.82	\$1,218,888	\$0,475,794	\$1,694,682	
14.		357C	\$1.96	\$0,134,064	\$0,052,332	\$0,186,466	
15.	TOTAL		\$19.78	\$1,352,952	\$0,528,126	\$1,881,078	
16.	VAM-OSP	1C 2411 POLES	\$0.01	\$0,000,150	\$0,000,300	\$0,000,450	
17.		82C 2421 NONMET. AERIAL	\$0.07	\$0,000,721	\$0,002,170	\$0,002,891	
18.		85C 2422 NONMET. UNDGRN	\$0.18	\$0,001,350	\$0,005,890	\$0,007,240	
19.		4C 2441 CONDUIT	\$0.14	\$0,001,778	\$0,004,340	\$0,006,118	
20.	TOTAL		\$0.40	\$0,003,999	\$0,012,390	\$0,016,389	
21.	LAND-VIDEO ONLY	70C 2111 LAND	\$0.80	\$0,000,000	\$0,024,400	\$0,024,400	
22.	BUILDING-VIDEO ONLY	60C 2121 BUILDINGS	\$10.37	\$0,348,358	\$0,316,285	\$0,664,643	
23.	POWER AND CE- VIDEO ONLY	257C 2232 CKT EQUIP.	\$3.56	\$0,093,628	\$0,107,156	\$0,200,784	
24.	<b>SUBTOTAL</b>		<b>\$107.41</b>	<b>\$3.48</b>	<b>\$3.18</b>	<b>\$6.67</b>	
<b>SHARED PLANT INVESTMENTS</b>							
25.	HOST DIGITAL TERMINAL EQ	257C 2232 CKT EQUIP	\$456.91	\$12,016,733	\$13,752,991	\$25,769,724	
26.	QUAD CURRENT LIMITER EQ	257C 2232 CKT EQUIP	\$30.33	\$0,797,679	\$0,912,933	\$1,710,612	
27.	HDT TO ONU FACILITIES	85C 2422 NONMET. UNDGRN	\$1.55	\$0,011,625	\$0,049,050	\$0,060,675	
28.		82C 2421 NONMET. AERIAL	\$94.61	\$0,974,483	\$2,932,910	\$3,901,874	
29.		845C 2423 BURIED CABLE	\$20.06	\$0,194,582	\$0,621,960	\$0,816,542	
30.		4C 2442 CONDUIT	\$1.85	\$0,023,495	\$0,057,350	\$0,080,845	
31.		1C 2411 POLES	\$19.74	\$0,296,100	\$0,592,200	\$0,888,300	
32.		2C 2421 MET. AERIAL	\$74.06	\$7,006,078	\$2,296,990	\$9,303,068	
33.		5C 2422 MET. UNDERGRND	\$1.02	\$0,025,606	\$0,031,620	\$0,057,226	
34.		45C 2423 MET. BURIED	\$35.86	\$1,979,472	\$1,111,660	\$3,091,132	
35.	TOTAL		\$248.75	\$10,511,639	\$7,891,510	\$18,203,164	
36.	OPTICAL NETWORK UNIT EQ	257C 2232 CKT EQUIP	\$535.57	\$14,085,491	\$16,120,657	\$30,206,148	
37.	DROP	1C 2411 POLES	\$9.77	\$0,146,550	\$0,293,100	\$0,439,650	
38.		2C 2421 MET. AERIAL	\$83.57	\$7,905,722	\$2,590,670	\$10,496,944	
39.		45C 2423 MET. BURIED	\$249.60	\$13,777,920	\$7,737,600	\$21,515,440	
40.	TOTAL		\$342.94	\$21,830,192	\$10,621,370	\$32,451,562	
41.	NETWORK INTERFACE DEVICE	2C 2421 MET. AERIAL	\$35.14	\$3,324,244	\$1,089,340	\$4,413,584	
42.	LAND-INTEGRATED	70C 2111 LAND	\$0.39	\$0,000,000	\$0,011,895	\$0,011,895	
43.	BUILDING-INTEGRATED	60C 2121 BUILDINGS	\$5.08	\$0,169,672	\$0,154,940	\$0,324,612	
44.	POWER AND CE-INTEGRATED	257C 2232 CKT EQUIP.	\$2.33	\$0,061,279	\$0,070,133	\$0,131,412	
45.	<b>SUBTOTAL</b>		<b>\$1,657.44</b>	<b>\$62.80</b>	<b>\$50.43</b>	<b>\$113.22</b>	
46.	<b>TOTAL</b>		<b>\$1,764.85</b>	<b>\$66.28</b>	<b>\$53.61</b>	<b>\$119.89</b>	
47.	<b>TOTAL INVESTMENT * 38,319 POT SUBS</b>		<b>\$67,627,287.15</b>	<b>\$2,539,826.89</b>	<b>\$2,054,206.78</b>	<b>\$4,594,036.67</b>	
48.	<b>BROADCAST TOTAL INVESTMENT</b>		<b>\$66,790,017.00</b>	<b>\$2,517,347.93</b>	<b>\$2,028,968.40</b>	<b>\$4,546,316.33</b>	
49.	<b>NARROWCAST INCREMENTAL INCREASE OVER BROADCAST</b>		<b>\$837,270.15</b>	<b>\$22,478.96</b>	<b>\$25,241.38</b>	<b>\$47,720.34</b>	

\* Note: Included here are those incremental investments associated with video dialtone only. Incremental investments that serve dial tone only are shown in Attachment C(1).

**MESSAGING PORT  
TOTAL INVESTMENTS**

LINE	DESCRIPTION	ACCT	INVEST. PER PORT	ANNUAL OPERATING COSTS			TOTAL
				A	B	C	
1.	PACKET SWITCH	377C	\$3,867.92	\$264.565728	\$103.273464	\$367.8392	
2.	DXI CARD	257C 2232 CKT EQUIPMENT	\$4,111.66	\$108.136658	\$123.760966	\$231.8976	
3.	CHAN TERM FIXED	257C 2232 CKT EQUIPMENT	\$1,122.03	\$29.509389	\$33.773103	\$63.2825	
4.	POWER/Common EQUIPMENT	257C 2232 CKT EQUIPMENT	\$22.31	\$0.586753	\$0.671531	\$1.2583	
5.		377C	\$233.24	\$15.953616	\$6.227508	\$22.1811	
6.	TOTAL		\$255.55	\$16.540369	\$6.899039	\$23.4394	
7.	LAND	70C 2111 LAND	\$56.70	\$0.000000	\$1.729350	\$1.7294	
8.	BUILDING	60C 2121 BUILDING	\$738.44	\$24.663896	\$22.522420	\$47.1863	
9.	CO TO HDT	85C 2232 NON-MET UNDRG	\$95.58	\$0.716850	\$2.962980	\$3.6798	
10.		82C 2421 NON-MET AERIAL	\$36.90	\$0.380070	\$1.143900	\$1.5240	
11.		4C 2441 CONDUIT	\$73.81	\$0.937387	\$2.288110	\$3.2255	
12.		1C 2411 POLES	\$3.69	\$0.055350	\$0.110700	\$0.1661	
13.	TOTAL		\$209.98	\$2.089657	\$6.505690	\$8.5953	
14.	TOTAL INVESTMENT		\$10,362.28	\$445.51	\$298.46	\$743.97	
15.	PROJECTED DEMAND		50				
16.	TOTAL PROJECTED INVESTMENT		\$518,114.00				



PROJECTED DEMAND

LINE	RATE ELEMENT	SERVICE					
		START-UP	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
		A	B	C	D	E	F
<b>VIDEO DIALTONE ACCESS LINK</b>							
<b>DIRECT ACCESS CONNECTION</b>							
1.	- TERMINATION	4	4	4	4	4	4
2.	- FIXED	4	4	4	4	4	4
3.	- PER MILE	40	40	40	40	40	40
<b>SERVING WIRE CENTER CONNECTION</b>							
4.	- FIXED	1	1	1	1	1	1
5.	- PER MILE	10	10	10	10	10	10
<b>BROADCAST SERVICE</b>							
6.	- PER CHANNEL - MONTHLY	16	5	5	7	9	10
7.	- PER CHANNEL - 5 YEAR	0	12	15	18	20	20
8.	- GROUP OF 24 - MONTHLY	4	4	3	2	2	2
9.	- GROUP OF 24 - 5 YEAR	8	9	10	11	11	11
<b>OPTIONAL FEATURE</b>							
10.	- MESSAGING PORT	4	10	20	30	40	50



**VIDEO DIALTONE ACCESS LINK  
TOTAL INVESTMENTS AND ANNUAL COSTS  
DIRECT ACCESS CONNECTION**

DESCRIPTION	ACCT		INVEST.	ANNUAL COSTS							TOTAL
			PER ACCESS CHANNEL	DEPR	COM	INC TAX	MTCE	ADMIN	OTH TAX		
			A	B	C	D	E	F	G	H	
ACCESS LINK-TERMINATION POP ELECTRONICS	257C 2232	CKT EQUIPMENT	\$15,325.00	\$1,846.66	\$1,216.81	\$482.74	\$403.05	\$461.28	\$116.47	\$4,527.01	
POWER/Common EQUIPMENT	257C 2232	CKT EQUIPMENT		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
LAND	70C 2111	LAND		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
BUILDING	60C 2121	BUILDING		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
POP TO CENTRAL OFFICE	85C 2232	NON-MET UNDRGRD	\$298.49	\$18.02	\$25.00	\$9.91	\$2.01	\$8.32	\$1.96	\$65.22	
	82C 2421	NON-MET AERIAL	\$138.87	\$6.86	\$13.23	\$5.25	\$1.43	\$4.30	\$1.01	\$32.09	
	4C 2441	CONDUIT	\$194.65	\$3.97	\$20.01	\$7.92	\$2.47	\$6.03	\$1.48	\$41.89	
	1C 2411	POLES	\$17.22	\$1.91	\$1.64	\$0.65	\$0.26	\$0.52	\$0.13	\$5.11	
		TOTAL	\$619.23	\$30.76	\$59.88	\$23.73	\$6.17	\$19.18	\$4.58	\$144.31	
TIMING GENERATOR	257C 2232	CKT EQUIPMENT	\$8,625.00	\$1,039.31	\$684.83	\$271.69	\$226.84	\$259.61	\$85.55	\$2,547.83	
TIMING LINK	4C 2441	CONDUIT	\$2,784.00	\$56.79	\$286.20	\$113.31	\$35.36	\$86.30	\$21.16	\$589.12	
	60C 2121	BUILDING	\$50.00	\$1.39	\$5.21	\$2.06	\$1.67	\$1.52	\$0.39	\$12.23	
	70C 2111	LAND	\$12.00	\$0.00	\$1.24	\$0.49	\$0.00	\$0.37	\$0.08	\$2.18	
	85C 2232	NON-MET UNDRGRD	\$161.00	\$10.80	\$14.99	\$5.94	\$1.21	\$4.99	\$1.18	\$39.11	
	5C		\$63.00	\$4.40	\$6.12	\$2.43	\$1.59	\$1.95	\$0.47	\$16.86	
	257C 2232	CKT EQUIPMENT	\$3,175.00	\$382.59	\$252.10	\$100.01	\$83.50	\$95.57	\$24.13	\$837.90	
		TOTAL	\$6,245.00	\$455.97	\$566.85	\$224.24	\$123.33	\$190.71	\$47.40	\$1,607.49	
TOTAL:			\$30,814.23	\$3,372.71	\$2,527.36	\$1,002.39	\$759.39	\$930.78	\$234.01	\$8,826.63	
ACCESS LINK - PER MILE CHARGE: CENTRAL OFFICE TO VDO	85C 2232	NON-MET UNDRGRD	\$252.27	\$16.93	\$23.49	\$9.31	\$1.89	\$7.82	\$1.84	\$61.28	
	4C 2441	CONDUIT	\$182.90	\$3.73	\$18.80	\$7.44	\$2.32	\$5.67	\$1.39	\$39.36	
		TOTAL	\$435.17	\$20.66	\$42.29	\$16.75	\$4.21	\$13.49	\$3.23	\$100.64	
TOTAL:			\$435.17	\$20.66	\$42.29	\$16.75	\$4.21	\$13.49	\$3.23	\$100.64	
ACCESS LINK- FIXED CHARGE SERVING OFFICE ELECTRONICS	257C 2232	CKT EQUIPMENT	\$148.19	\$17.86	\$11.77	\$4.67	\$3.90	\$4.46	\$1.13	\$43.78	
VDO ELECTRONICS	257C 2232	CKT EQUIPMENT	\$15,325.00	\$1,846.66	\$1,216.81	\$482.74	\$403.05	\$461.28	\$116.47	\$4,527.01	
POWER/Common EQUIPMENT	257C 2232	CKT EQUIPMENT	\$933.03	\$112.43	\$74.08	\$29.39	\$24.54	\$28.08	\$7.09	\$275.62	
LAND	70C 2111	LAND	\$165.70	\$0.00	\$17.10	\$6.74	\$0.00	\$5.05	\$1.21	\$30.11	
BUILDING	60C 2121	BUILDING	\$2,157.42	\$59.76	\$224.80	\$88.89	\$72.06	\$65.80	\$16.61	\$527.92	
TOTAL:			\$18,729.34	\$2,036.71	\$1,544.56	\$612.43	\$503.54	\$564.68	\$142.51	\$5,404.43	

**VIDEO DIALTONE ACCESS LINK  
TOTAL INVESTMENTS AND ANNUAL COSTS  
SERVING WIRE CENTER CONNECTION**

DESCRIPTION	ACCT	INVEST. PER ACCESS CHANNEL	ANNUAL COSTS							TOTAL
			DEPR	COM	INC TAX	MTCE	ADMIN	OTH TAX		
		A	B	C	D	E	F	G	H	
FIXED CHARGE										
POP ELECTRONICS	257C 2232	CKT EQUIPMENT	\$15,325.00	\$1,846.66	\$1,216.81	\$482.74	\$403.05	\$461.28	\$116.47	\$4,527.01
VDO ELECTRONICS	257C 2232	CKT EQUIPMENT	\$15,325.00	\$1,846.66	\$1,216.81	\$482.74	\$403.05	\$461.28	\$116.47	\$4,527.01
POWER/Common EQUIPMENT	257C 2232	CKT EQUIPMENT	\$1,848.20	\$222.71	\$146.75	\$58.22	\$48.61	\$55.63	\$14.05	\$545.96
LAND	70C 2111	LAND	\$328.23	\$0.00	\$33.87	\$13.36	\$0.00	\$10.01	\$2.40	\$59.64
BUILDING	60C 2121	BUILDING	\$4,273.51	\$118.38	\$445.30	\$176.07	\$142.74	\$130.34	\$32.91	\$1,045.73
TOTAL:			\$37,089.94	\$4,034.41	\$3,059.53	\$1,213.12	\$997.44	\$1,118.55	\$282.29	\$10,705.34

ACCESS LINK - PER MILE CHARGE:											
CENTRAL OFFICE TO VDO	85C	2232	NON-MET UNDRGRD	\$252.27	\$16.93	\$23.49	\$9.31	\$1.89	\$7.82	\$1.84	\$61.28
	4C	2441	CONDUIT	\$182.90	\$3.73	\$18.90	\$7.44	\$2.32	\$5.67	\$1.39	\$39.36
			TOTAL	\$435.17	\$20.66	\$42.29	\$16.75	\$4.21	\$13.49	\$3.23	\$100.64
TOTAL:				\$435.17	\$20.66	\$42.29	\$16.75	\$4.21	\$13.49	\$3.23	\$100.64

BROADCAST CHANNELS  
TOTAL INVESTMENT AND ANNUAL COSTS

DESCRIPTION	FRC	ACCT	INVEST.	VIDEO PLUS	VIDEO ONLY	VOICE ONLY	SHARED	TOTAL VIDEO	VIDEO	ANNUAL COSTS						TOTAL	
				DIAL TONE	INVESTMENT	INVESTMENT	INVESTMENT	INVESTMENT	INVESTMENT	PER CHAN	DEPR	COM	INC TAX	MTCE	ADMIN		OTHER
				PER POT SUB		G	H	I	J	K	L	M					
				A	B	C	D	E	F								
VDO EQUIPMENT	257C	2232	CKT EQUIP.	\$40.07	\$40.07	\$0.00	\$0.00	\$40.07	\$0.1048	\$0.012807	\$0.008307	\$0.003298	\$0.002752	\$0.003149	\$0.000795		\$0.0309
VDO TO VSO FACILITIES	85C	2422	NONMET. UNDGRND	\$0.19	\$0.19	\$0.00	\$0.00	\$0.19	\$0.0005	\$0.000033	\$0.000046	\$0.000018	\$0.000004	\$0.000015	\$0.000004		\$0.0001
	82C	2421	NONMET. AERIAL	\$0.07	\$0.07	\$0.00	\$0.00	\$0.07	\$0.0002	\$0.000009	\$0.000017	\$0.000007	\$0.000002	\$0.000008	\$0.000001		\$0.0000
	4C	2442	CONDUIT	\$0.13	\$0.13	\$0.00	\$0.00	\$0.13	\$0.0003	\$0.000007	\$0.000035	\$0.000014	\$0.000004	\$0.000011	\$0.000003		\$0.0001
	1C	2411	POLES	\$0.01	\$0.01	\$0.00	\$0.00	\$0.01	\$0.0000	\$0.000003	\$0.000002	\$0.000001	\$0.000000	\$0.000001	\$0.000000		\$0.0000
	TOTAL			\$0.40	\$0.40	\$0.00	\$0.00	\$0.40	\$0.0010	\$0.000082	\$0.000101	\$0.000040	\$0.000010	\$0.000032	\$0.000008		\$0.0002
VSO CROSS CONNECT EQUIP	257C	2232	CKT EQUIP.	\$0.85	\$0.85	\$0.00	\$0.00	\$0.85	\$0.0022	\$0.000287	\$0.000176	\$0.000070	\$0.000058	\$0.000087	\$0.000017		\$0.0007
VSO TO HDT FACILITIES	85C	2422	NONMET. UNDGRND	\$5.89	\$5.89	\$0.00	\$0.00	\$5.89	\$0.0154	\$0.001032	\$0.001432	\$0.000567	\$0.000115	\$0.000477	\$0.000112		\$0.0037
	82C	2421	NONMET. AERIAL	\$2.57	\$2.57	\$0.00	\$0.00	\$2.57	\$0.0067	\$0.000331	\$0.000639	\$0.000254	\$0.000069	\$0.000208	\$0.000049		\$0.0016
	845C	2423	BURNED CABLE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000		\$0.0000
	4C	2442	CONDUIT	\$4.24	\$4.24	\$0.00	\$0.00	\$4.24	\$0.0111	\$0.000226	\$0.001138	\$0.000451	\$0.000141	\$0.000343	\$0.000084		\$0.0024
	1C	2411	POLES	\$0.30	\$0.30	\$0.00	\$0.00	\$0.30	\$0.0008	\$0.000087	\$0.000075	\$0.000030	\$0.000012	\$0.000023	\$0.000006		\$0.0002
	TOTAL			\$13.00	\$13.00	\$0.00	\$0.00	\$13.00	\$0.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.01
VIDEO ADMIN MODULE	357C	2232	CKT EQUIP	\$17.82	\$17.82	\$0.00	\$0.00	\$17.82	\$0.0465	\$0.003806	\$0.003804	\$0.001559	\$0.003182	\$0.001242	\$0.000354		\$0.0140
	357C			\$1.96	\$1.96	\$0.00	\$0.00	\$1.96	\$0.0051	\$0.000418	\$0.000429	\$0.000171	\$0.000350	\$0.000137	\$0.000039		\$0.0015
VAM-OSP	1C	2411	POLES	\$0.01	\$0.01	\$0.00	\$0.00	\$0.01	\$0.0000	\$0.000003	\$0.000002	\$0.000001	\$0.000000	\$0.000001	\$0.000000		\$0.0000
	82C	2421	NONMET. AERIAL	\$0.07	\$0.07	\$0.00	\$0.00	\$0.07	\$0.0002	\$0.000009	\$0.000017	\$0.000007	\$0.000002	\$0.000006	\$0.000001		\$0.0000
	85C	2422	NONMET. UNDGRND	\$0.18	\$0.18	\$0.00	\$0.00	\$0.18	\$0.0005	\$0.000032	\$0.000044	\$0.000017	\$0.000004	\$0.000015	\$0.000003		\$0.0001
	845C	2423	NONMET. BURNED	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000		\$0.0000
	4C	2441	CONDUIT	\$0.14	\$0.14	\$0.00	\$0.00	\$0.14	\$0.0004	\$0.000007	\$0.000038	\$0.000015	\$0.000005	\$0.000011	\$0.000003		\$0.0001
	TOTAL			\$0.40	\$0.40	\$0.00	\$0.00	\$0.40	\$0.0010	\$0.0001	\$0.0001	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0002
POWER AND CE- VIDEO ONLY	257C	2232	CKT EQUIP.	\$2.47	\$0.00	\$0.00	\$2.47	\$2.47	\$0.0064	\$0.000777	\$0.000512	\$0.000203	\$0.000170	\$0.000194	\$0.000049		\$0.0019
LAND-VIDEO ONLY	70C	2111	LAND	\$0.61	\$0.00	\$0.00	\$0.61	\$0.61	\$0.0016	\$0.000000	\$0.000164	\$0.000085	\$0.000000	\$0.000049	\$0.000012		\$0.0003
BUILDING-VIDEO ONLY	60C	2121	BUILDINGS	\$7.98	\$0.00	\$0.00	\$7.98	\$7.98	\$0.0208	\$0.000577	\$0.002171	\$0.000858	\$0.000698	\$0.000635	\$0.000160		\$0.0051
HOT DIGITAL TERMINAL EQ	257C	2232	CKT EQUIP	\$456.91	\$21.23	\$104.44	\$331.24	\$115.04	\$0.3004	\$0.038198	\$0.023850	\$0.008462	\$0.007900	\$0.009041	\$0.002283		\$0.0887
QUAD CURRENT LIMITER EQ	257C	2232	CKT EQUIP	\$30.33	\$0.00	\$0.00	\$30.33	\$8.59	\$0.0224	\$0.002703	\$0.001781	\$0.000707	\$0.000590	\$0.000875	\$0.000170		\$0.0086
HDT TO ONU FACILITIES	85C	2422	NONMET. UNDGRND	\$1.55	\$0.00	\$0.00	\$1.55	\$0.44	\$0.0011	\$0.000077	\$0.000107	\$0.000042	\$0.000009	\$0.000036	\$0.000008		\$0.0003
	82C	2421	NONMET. AERIAL	\$94.61	\$0.00	\$0.00	\$94.61	\$26.80	\$0.0700	\$0.003468	\$0.006867	\$0.002845	\$0.000721	\$0.002189	\$0.000511		\$0.0162
	845C	2423	BURNED CABLE	\$20.06	\$0.00	\$0.00	\$20.06	\$5.88	\$0.0148	\$0.000740	\$0.001426	\$0.000584	\$0.000144	\$0.000480	\$0.000110		\$0.0034
	4C	2442	CONDUIT	\$1.85	\$0.00	\$0.00	\$1.85	\$0.52	\$0.0014	\$0.000028	\$0.000141	\$0.000096	\$0.000017	\$0.000042	\$0.000010		\$0.0003
	1C	2411	POLES	\$19.74	\$0.00	\$0.00	\$19.74	\$5.59	\$0.0146	\$0.001623	\$0.001383	\$0.000550	\$0.000219	\$0.000438	\$0.000111		\$0.0043
	2C	2421	MET. AERIAL	\$74.06	\$0.00	\$0.00	\$74.06	\$20.98	\$0.0648	\$0.003456	\$0.005373	\$0.002130	\$0.0005181	\$0.001698	\$0.000427		\$0.0183
	5C	2422	MET. UNDERGRND	\$1.02	\$0.00	\$0.00	\$1.02	\$0.29	\$0.0008	\$0.000053	\$0.000073	\$0.000029	\$0.000019	\$0.000023	\$0.000006		\$0.0002
	45C	2423	MET. BURNED	\$35.86	\$0.00	\$0.00	\$35.86	\$10.16	\$0.0285	\$0.001411	\$0.002631	\$0.001040	\$0.001484	\$0.000822	\$0.000202		\$0.0076
	TOTAL			\$248.75	\$0.00	\$0.00	\$248.75	\$70.45	\$0.1839	\$0.0108	\$0.0178	\$0.0071	\$0.0078	\$0.0057	\$0.0014		\$0.0506
OPTICAL NETWORK UNIT EQ	257C	2232	CKT EQUIP	\$535.57	\$13.45	\$180.19	\$361.93	\$115.96	\$0.3028	\$0.036483	\$0.024039	\$0.008537	\$0.007983	\$0.009113	\$0.002301		\$0.0894
DROP	1C	2411	POLES	\$9.77	\$3.82	\$5.95	\$0.00	\$3.82	\$0.0100	\$0.001109	\$0.000952	\$0.000376	\$0.000180	\$0.000299	\$0.000076		\$0.0030
	2C	2421	MET. AERIAL	\$83.57	\$32.99	\$50.88	\$0.00	\$32.99	\$0.0854	\$0.006386	\$0.006373	\$0.003320	\$0.008074	\$0.002846	\$0.000666		\$0.0285
	45C	2423	MET. BURNED	\$249.80	\$30.28	\$24.27	\$195.05	\$95.52	\$0.2233	\$0.011879	\$0.022151	\$0.008753	\$0.012326	\$0.006922	\$0.001687		\$0.0637
	TOTAL			\$342.94	\$66.79	\$81.10	\$195.05	\$122.03	\$0.3186	\$0.0184	\$0.0315	\$0.0124	\$0.0205	\$0.0089	\$0.0024		\$0.0952
NETWORK INTERFACE DEVICE	2C	2421	MET. AERIAL	\$35.14	\$35.14	\$0.00	\$0.00	\$35.14	\$0.0917	\$0.005789	\$0.009001	\$0.003569	\$0.008579	\$0.002844	\$0.000716		\$0.0306
LAND-INTEGRATED	70C	2111	LAND	\$0.39	\$0.00	\$0.00	\$0.39	\$0.11	\$0.0003	\$0.000000	\$0.000030	\$0.000012	\$0.000000	\$0.000009	\$0.000002		\$0.0001
BUILDING-INTEGRATED	60C	2121	BUILDINGS	\$5.08	\$0.00	\$0.00	\$5.08	\$1.44	\$0.0038	\$0.000104	\$0.000381	\$0.000155	\$0.000125	\$0.000115	\$0.000029		\$0.0009
POWER AND CE-INTEGRATED	257C	2232	CKT EQUIP.	\$2.33	\$0.00	\$0.00	\$2.33	\$0.66	\$0.0017	\$0.000208	\$0.000137	\$0.000064	\$0.000045	\$0.000052	\$0.000013		\$0.0005
TOTAL				\$1,743.00	\$211.11	\$345.73	\$1,186.16	\$554.99	\$1.45	\$0.1306	\$0.1271	\$0.0804	\$0.0610	\$0.0438	\$0.0110		\$0.4239

**NARROWCAST CHANNELS  
TOTAL INVESTMENT AND ANNUAL COSTS**

DESCRIPTION	FRC	ACCT	INVEST.	VIDEO PLUS	VIDEO ONLY	VOICE ONLY	SHARED	TOTAL VIDEO	VIDEO	ANNUAL COSTS							
				DIAL TONE	INVESTMENT	INVESTMENT	INVESTMENT	INVESTMENT	INVESTMENT	INVESTMENT	PER CHAN	DEPR	COM	INC TAX	MTC	ADMIN	OTHER
				PER POT SUB		G	H	I	J	K	L	M					
VDO EQUIPMENT	257C	2232	CKT EQUIP.	\$58.22	\$58.22	\$0.00	\$0.00	\$58.22	\$0.1520	\$0.018317	\$0.012070	\$0.004788	\$0.003998	\$0.004576	\$0.001155	\$0.0449	
VDO TO VSO FACILITIES	85C	2422	NONMET. UNDGRND	\$0.19	\$0.19	\$0.00	\$0.00	\$0.19	\$0.0005	\$0.000033	\$0.000046	\$0.000018	\$0.000004	\$0.000018	\$0.000004	\$0.0001	
	82C	2421	NONMET. AERIAL	\$0.07	\$0.07	\$0.00	\$0.00	\$0.07	\$0.0002	\$0.000008	\$0.000017	\$0.000007	\$0.000002	\$0.000008	\$0.000001	\$0.0000	
	4C	2442	CONDUIT	\$0.13	\$0.13	\$0.00	\$0.00	\$0.13	\$0.0003	\$0.000007	\$0.000035	\$0.000014	\$0.000004	\$0.000011	\$0.000003	\$0.0001	
	1C	2411	POLES	\$0.01	\$0.01	\$0.00	\$0.00	\$0.01	\$0.0000	\$0.000003	\$0.000002	\$0.000001	\$0.000000	\$0.000001	\$0.000000	\$0.0000	
	TOTAL			\$0.40	\$0.40	\$0.00	\$0.00	\$0.40	\$0.0010	\$0.000052	\$0.000101	\$0.000040	\$0.000010	\$0.000032	\$0.000008	\$0.0002	
VSO CROSS CONNECT EQUIP	257C	2232	CKT EQUIP.	\$0.88	\$0.88	\$0.00	\$0.00	\$0.88	\$0.0023	\$0.000277	\$0.000182	\$0.000072	\$0.000060	\$0.000069	\$0.000017	\$0.0007	
VSO TO HDT FACILITIES	85C	2422	NONMET. UNDGRND	\$5.89	\$5.89	\$0.00	\$0.00	\$5.89	\$0.0154	\$0.001032	\$0.001432	\$0.000567	\$0.000115	\$0.000477	\$0.000112	\$0.0037	
	82C	2421	NONMET. AERIAL	\$2.57	\$2.57	\$0.00	\$0.00	\$2.57	\$0.0067	\$0.000331	\$0.000639	\$0.000284	\$0.000089	\$0.000208	\$0.000049	\$0.0018	
	845C	2423	BURIED CABLE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.0000	
	4C	2442	CONDUIT	\$4.24	\$4.24	\$0.00	\$0.00	\$4.24	\$0.0111	\$0.000228	\$0.000138	\$0.000451	\$0.000141	\$0.000343	\$0.000084	\$0.0024	
	1C	2411	POLES	\$0.30	\$0.30	\$0.00	\$0.00	\$0.30	\$0.0008	\$0.000087	\$0.000078	\$0.000030	\$0.000012	\$0.000023	\$0.000008	\$0.0002	
	TOTAL			\$13.00	\$13.00	\$0.00	\$0.00	\$13.00	\$0.0339	\$0.001876	\$0.003284	\$0.001301	\$0.000337	\$0.001051	\$0.000291	\$0.0079	
VIDEO ADMIN MODULE	357C	2232	CKT EQUIP	\$17.82	\$17.82	\$0.00	\$0.00	\$17.82	\$0.0466	\$0.003806	\$0.003804	\$0.001859	\$0.003182	\$0.001242	\$0.000354	\$0.0140	
	357C			\$1.96	\$1.96	\$0.00	\$0.00	\$1.96	\$0.0051	\$0.000419	\$0.000429	\$0.000171	\$0.000350	\$0.000137	\$0.000039	\$0.0015	
	TOTAL			\$19.78	\$19.78	\$0.00	\$0.00	\$19.78	\$0.0516	\$0.004225	\$0.004333	\$0.001730	\$0.003533	\$0.001379	\$0.000393	\$0.0156	
VAM-OSP	1C	2411	POLES	\$0.01	\$0.01	\$0.00	\$0.00	\$0.01	\$0.0000	\$0.000003	\$0.000002	\$0.000001	\$0.000000	\$0.000001	\$0.000000	\$0.0000	
	82C	2421	NONMET. AERIAL	\$0.07	\$0.07	\$0.00	\$0.00	\$0.07	\$0.0002	\$0.000008	\$0.000017	\$0.000007	\$0.000002	\$0.000008	\$0.000001	\$0.0000	
	85C	2422	NONMET. UNDGRND	\$0.18	\$0.18	\$0.00	\$0.00	\$0.18	\$0.0005	\$0.000032	\$0.000044	\$0.000017	\$0.000004	\$0.000015	\$0.000003	\$0.0001	
	845C	2423	NONMET. BURIED	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.0000	
	4C	2441	CONDUIT	\$0.14	\$0.14	\$0.00	\$0.00	\$0.14	\$0.0004	\$0.000007	\$0.000038	\$0.000015	\$0.000005	\$0.000011	\$0.000003	\$0.0001	
	TOTAL			\$0.40	\$0.40	\$0.00	\$0.00	\$0.40	\$0.0010	\$0.00001	\$0.00001	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.0002	
POWER AND CE- VIDEO ONLY	257C	2232	CKT EQUIP.	\$3.56	\$0.00	\$0.00	\$3.56	\$3.56	\$0.0093	\$0.001120	\$0.000738	\$0.000293	\$0.000244	\$0.000280	\$0.000071	\$0.0027	
LAND-VIDEO ONLY	70C	2111	LAND	\$0.80	\$0.00	\$0.00	\$0.80	\$0.80	\$0.0021	\$0.000000	\$0.000216	\$0.000085	\$0.000000	\$0.000064	\$0.000015	\$0.0004	
BUILDING-VIDEO ONLY	80C	2121	BUILDINGS	\$10.37	\$0.00	\$0.00	\$10.37	\$10.37	\$0.0271	\$0.0000750	\$0.002821	\$0.001118	\$0.000904	\$0.000828	\$0.000208	\$0.0066	
HOST DIGITAL TERMINAL EQ	257C	2232	CKT EQUIP	\$456.91	\$21.23	\$104.44	\$331.24	\$116.04	\$0.3004	\$0.038196	\$0.023850	\$0.009462	\$0.007900	\$0.009041	\$0.002283	\$0.0887	
QUAD CURRENT LIMITER EQ	257C	2232	CKT EQUIP	\$30.33	\$0.00	\$0.00	\$30.33	\$8.59	\$0.0224	\$0.002703	\$0.001781	\$0.000707	\$0.000590	\$0.000675	\$0.000170	\$0.0066	
HDT TO ONU FACILITIES	85C	2422	NONMET. UNDGRND	\$1.55	\$0.00	\$0.00	\$1.55	\$0.44	\$0.0011	\$0.000077	\$0.000107	\$0.000042	\$0.000009	\$0.000038	\$0.000008	\$0.0003	
	82C	2421	NONMET. AERIAL	\$94.61	\$0.00	\$0.00	\$94.61	\$26.80	\$0.0700	\$0.008466	\$0.008667	\$0.002845	\$0.000721	\$0.002169	\$0.000511	\$0.0162	
	845C	2423	BURIED CABLE	\$20.08	\$0.00	\$0.00	\$20.08	\$6.08	\$0.0148	\$0.000740	\$0.001428	\$0.000584	\$0.000144	\$0.000460	\$0.000110	\$0.0034	
	4C	2442	CONDUIT	\$1.85	\$0.00	\$0.00	\$1.85	\$0.52	\$0.0014	\$0.000028	\$0.000141	\$0.000086	\$0.000017	\$0.000042	\$0.000010	\$0.0003	
	1C	2411	POLES	\$19.74	\$0.00	\$0.00	\$19.74	\$5.59	\$0.0148	\$0.001623	\$0.001383	\$0.000860	\$0.000219	\$0.000438	\$0.000111	\$0.0043	
	2C	2421	MET. AERIAL	\$74.06	\$0.00	\$0.00	\$74.06	\$20.98	\$0.0648	\$0.003486	\$0.006973	\$0.002130	\$0.0005181	\$0.001898	\$0.000427	\$0.0183	
	9C	2422	MET. UNDERGRND	\$1.02	\$0.00	\$0.00	\$1.02	\$0.29	\$0.0008	\$0.000063	\$0.000073	\$0.000029	\$0.000019	\$0.000023	\$0.000006	\$0.0002	
	45C	2423	MET. BURIED	\$35.86	\$0.00	\$0.00	\$35.86	\$10.18	\$0.0296	\$0.001411	\$0.002831	\$0.001040	\$0.001484	\$0.000622	\$0.000202	\$0.0076	
	TOTAL			\$248.75	\$0.00	\$0.00	\$248.75	\$70.45	\$0.1839	\$0.010844	\$0.017809	\$0.007056	\$0.007773	\$0.006688	\$0.001385	\$0.0506	
OPTICAL NETWORK UNIT EQ	257C	2232	CKT EQUIP	\$535.57	\$13.45	\$160.19	\$361.93	\$115.96	\$0.3028	\$0.038483	\$0.024039	\$0.009537	\$0.007963	\$0.009113	\$0.002301	\$0.0894	
DROP	1C	2411	POLES	\$9.77	\$3.82	\$5.95	\$0.00	\$3.82	\$0.0100	\$0.001108	\$0.000982	\$0.000376	\$0.000150	\$0.000299	\$0.000076	\$0.0030	
	2C	2421	MET. AERIAL	\$83.57	\$32.89	\$50.68	\$0.00	\$32.89	\$0.0864	\$0.008388	\$0.008373	\$0.003320	\$0.008074	\$0.002848	\$0.000866	\$0.0288	
	45C	2423	MET. BURIED	\$249.60	\$30.28	\$24.27	\$195.05	\$65.52	\$0.2233	\$0.011879	\$0.022151	\$0.008763	\$0.012328	\$0.008922	\$0.001897	\$0.0637	
	TOTAL			\$342.94	\$66.79	\$81.10	\$195.05	\$122.03	\$0.3189	\$0.018374	\$0.031476	\$0.012449	\$0.020550	\$0.009867	\$0.002439	\$0.0952	
NETWORK INTERFACE DEVICE	2C	2421	MET. AERIAL	\$35.14	\$35.14	\$0.00	\$0.00	\$35.14	\$0.0917	\$0.005789	\$0.009001	\$0.003869	\$0.008679	\$0.002844	\$0.000716	\$0.0308	
LAND-INTEGRATED	70C	2111	LAND	\$0.39	\$0.00	\$0.00	\$0.39	\$0.11	\$0.0003	\$0.000000	\$0.000030	\$0.000012	\$0.000000	\$0.000009	\$0.000002	\$0.0001	
BUILDING-INTEGRATED	80C	2121	BUILDINGS	\$5.08	\$0.00	\$0.00	\$5.08	\$1.44	\$0.0038	\$0.000104	\$0.000391	\$0.000155	\$0.000125	\$0.000115	\$0.000029	\$0.0009	
POWER AND CE-INTEGRATED	257C	2232	CKT EQUIP.	\$2.33	\$0.00	\$0.00	\$2.33	\$0.66	\$0.0017	\$0.000208	\$0.000137	\$0.000084	\$0.000045	\$0.000052	\$0.000013	\$0.0005	
TOTAL				\$1,764.85	\$229.29	\$345.73	\$1,189.83	\$576.84	\$1.5061	\$0.139900	\$0.131800	\$0.062200	\$0.062800	\$0.048500	\$0.011400	\$0.4404	

**MESSAGING PORT  
TOTAL INVESTMENT AND ANNUAL COSTS**

DESCRIPTION	ACCT	INVEST. PER ACCESS CHANNEL	ANNUAL COSTS						TOTAL
			DEPR	COM	INC TAX	MTCE	ADMIN	OTH TAX	
PACKET SWITCH	377C	\$3,867.92	\$316.40	\$324.52	\$129.58	\$264.57	\$103.27	\$29.40	\$1,167.73
DXI CARD	257C 2232 CKT EQUIPMENT	\$4,111.66	\$495.46	\$326.47	\$129.52	\$108.14	\$123.76	\$31.25	\$1,214.58
CHAN TERM FIXED	257C 2232 CKT EQUIPMENT	\$1,122.03	\$135.20	\$89.09	\$35.34	\$29.51	\$33.77	\$8.53	\$331.45
POWER/Common EQUIPMENT	257C 2232 CKT EQUIPMENT	\$22.31	\$2.69	\$1.77	\$0.70	\$0.59	\$0.67	\$0.17	\$6.59
	377C	\$233.24	\$19.08	\$19.57	\$7.81	\$15.95	\$6.23	\$1.77	\$70.42
LAND	70C 2111 LAND	\$56.70	\$0.00	\$5.85	\$2.31	\$0.00	\$1.73	\$0.41	\$10.30
BUILDING	60C 2121 BUILDING	\$738.44	\$20.45	\$76.95	\$30.42	\$24.66	\$22.52	\$5.69	\$180.70
CO TO HDT	85C 2232 NON-MET UNDRGRD	\$95.58	\$6.41	\$8.90	\$3.53	\$0.72	\$2.96	\$0.70	\$23.22
	82C 2421 NON-MET AERIAL	\$36.90	\$1.82	\$3.52	\$1.39	\$0.38	\$1.14	\$0.27	\$8.53
	4C 2441 CONDUIT	\$73.81	\$1.51	\$7.59	\$3.00	\$0.94	\$2.29	\$0.56	\$15.88
	1C 2411 POLES	\$3.69	\$0.41	\$0.35	\$0.14	\$0.06	\$0.11	\$0.03	\$1.10
	TOTAL	\$209.98	\$10.15	\$20.35	\$8.06	\$2.09	\$6.51	\$1.56	\$48.72
<b>TOTAL:</b>		<b>\$10,362.28</b>	<b>\$999.43</b>	<b>\$864.57</b>	<b>\$343.75</b>	<b>\$445.51</b>	<b>\$298.46</b>	<b>\$78.77</b>	<b>\$3,030.48</b>



**AFFIDAVIT OF  
WILLIAM E. TAYLOR, Ph.D.**

I, William E. Taylor, being duly sworn, depose and say:

1. I am Senior Vice President of National Economic Research Associates, Inc. (NERA) and head of its Cambridge office, located at One Main Street, Cambridge, Massachusetts 02142. I have been an economist for over twenty years. I received a B.A. degree in economics (Magna Cum Laude) from Harvard College in 1968, a master's degree in statistics from the University of California at Berkeley in 1970, and a Ph.D. in Economics from Berkeley in 1974, specializing in industrial organization and econometrics. I have taught and published research in the areas of microeconomics, theoretical and applied econometrics, and telecommunications policy at academic institutions (including the economics departments of Cornell University, the Catholic University of Louvain in Belgium, and the Massachusetts Institute of Technology) and at research organizations in the telecommunications industry (including Bell Laboratories and Bell Communications Research, Inc.) and have published research on economic costing and pricing in broadband networks. I have participated in telecommunications regulatory proceedings before state public service commissions and the Federal Communications Commission concerning competition, incentive regulation, price cap regulation, productivity, access charges, pricing for economic efficiency, and cost allocation methods for joint supply of video, voice and data services on broadband networks. A copy of my vita is provided as Attachment 1 to this Affidavit.

2. I prepared this Affidavit at the request of Bell Atlantic to appraise the economic methods used to support the Company's tariff to provide Video Dialtone (VDT) Service in light of the Commission's rules<sup>1</sup> and standard economic practice. In response to criticisms introduced

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<sup>1</sup>See Telephone Company-Cable Television Cross-Ownership Rules, Sections 63.54-63.58, Memorandum Opinion and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, CC Docket No. 87-266, released Nov. 7, 1994 ("Reconsideration Order").

in filed petitions,<sup>2</sup> I address (i) the cost allocation issues under the standards of the Commission's rules, including price ceilings, price floors, and the allocation of common costs, (ii) volume and term discounts, (iii) the use of telephony factors to determine annual direct costs, (iv) VDT network cost issues, and (v) telephone separations.

#### A. Introduction

3. As the Commission has recognized, provision of VDT services is likely to stimulate investment in a modern, broadband telecommunications infrastructure, supply added competition in the provision of video services, and provide customers with additional choices.<sup>3</sup> The risk inherent with entering this new market--not generating enough revenues to cover its VDT costs--is borne only by Bell Atlantic's shareholders, not its other customers.

4. Throughout the twentieth century, technological change in telecommunications has contributed to rapid growth in productivity, so that prices of telecommunications services have fallen steadily in real terms.<sup>4</sup> However, despite the overall reduction of telephone prices in real terms, there has been little change in the architecture and cost of supplying outside plant distribution facilities to customers, i.e., local loops. The use of Bell Atlantic's broadband network to provide the transmission of video programming and telephony services represents a fundamental change from the current network architecture which will reduce the cost of providing conventional narrowband network access and local telephone service as well as supply transport for broadband video, data and interactive video services.<sup>5</sup> In addition, the Bell Atlantic

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<sup>2</sup>Adelphia Communications Corp., Comcast Cable Communications, Inc., Cox Enterprises, Inc., Jones Intercable, Inc. ("ACCJ"), The Atlantic Cable Coalition ("ACC"); AT&T Corp. ("AT&T"); MCI Telecommunications Corp. ("MCI"); and National Cable Television Association, Inc. ("NCTA"); Cablevision Systems Corporation ("Cablevision").

<sup>3</sup>Telephone Company-Cable Television Cross-Ownership Rules, Sections 63.54-63.58, 7 FCC Rcd 5781, ¶ 9 (1992) ("VDT Order").

<sup>4</sup>See, for example, the long-run price studies of Thomas C. Spavins and James M. Lande, "Total Telephone Productivity In The Pre and Post-Divestiture Periods", presented as Appendix D of the Supplemental Notice of Proposed Rulemaking, CC Docket No. 87-313, Released: March 12, 1990.

<sup>5</sup>Such fundamental changes in network technology or architecture occur intermittently throughout the history of telecommunications, leading to productivity gains in telecommunications that have been significantly more rapid than in the U.S. economy as a whole.

broadband network offers three opportunities to reduce the cost of providing conventional local exchange telephone services. First, it is generally recognized that the broadband network uses a fundamentally more efficient network design which helps to reduce the initial capital costs per subscriber serviced by reducing the outside plant required to serve customers. A conventional narrowband analog network uses twisted pairs of copper wire to connect each subscriber to a central office by means of a local loop dedicated to each subscriber. In contrast, the Bell Atlantic network will distribute voice, video and control traffic over common optical fiber facilities. In this architecture, much more plant is used in common among subscribers which leads to lower capital costs.

5. Second, once in place, Bell Atlantic's broadband network will have lower maintenance costs than traditional copper distribution plant. In the current network, changing a customer's service or eliminating a faulty loop often requires a physical reconnection of wires in the central office or in the field. With a broadband network, subscriber moves and service changes, as well as network operations and maintenance, are accomplished mainly by using software either by the company from a central office or by a customer. Third, the proposed network architecture supports many additional services other than traditional voice telephony,<sup>6</sup> and the potential economies of scope in building and operating a single broadband platform for many services are large. Such scope economies permit recovery of some portion of the common costs of the broadband network from new services such as VDT, so that new service prices are competitive and the costs remaining to be recovered from traditional telephony services can be reduced.

6. Since the proposed network supports current and future services and lowers the cost of maintaining and provisioning current services, it would be economically incorrect to require that all the costs of the upgraded network platform be recovered entirely from only one of the many new services that it will make available. Rather, the price of each service that uses the platform should be required to recover at least the incremental cost of the service and, together, revenue from all services that use the platform must recover the incremental cost of the platform.

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<sup>6</sup>Including services such as packet switching, ISDN services, private line and high-speed data services, infrastructure for cellular, PCS and other wireless services, interactive information services, and video dialtone services.

Just as multiproduct firms in competitive markets recover common costs from all of the services they supply in proportions that depend on market conditions for the different services, the common cost of the network platform should be recovered from all services that use the platform, and cost allocation should not force the price of any service so high above its incremental cost that its contribution to the common costs of the platform is diminished.

**B. Bell Atlantic's VDT Tariff Complies with the Commission's Rules.**

7. In its Video Dialtone Service tariff filing, Bell Atlantic sets the initial prices for its VDT services and supports those prices with a cost study conducted in conformance with Commission rules.<sup>7</sup>

8. To comply with the Commission's requirements, Bell Atlantic first calculates the direct cost of VDT service. Following the Reconsideration Order, direct costs are calculated as the sum of (i) primary plant investment incremental to VDT service, (ii) incremental costs associated with plant shared between VDT and other services, (iii) a reasonable allocation of other plant shared between VDT and all other services,<sup>8 9</sup> and (iv) costs incremental to VDT service assigned to categories other than primary plant investment. Direct costs are then taken as a floor for VDT tariff prices; they exceed the incremental cost of VDT service by the amount of shared plant allocated to VDT service in (iii) above.

9. The ceiling prices for VDT services are calculated by loading the direct costs of VDT services to ensure recovery of no more than a reasonable proportion of common overhead expenses from VDT services. Since VDT is treated as a switched access service by the

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<sup>7</sup>Reconsideration Order at ¶¶ 215-219.

<sup>8</sup>The share in question is the ratio of direct VDT investment to the sum of direct VDT and direct voice investment. This allocator corresponds to the "relative proportion of directly-attributable cost" method of allocation that the Commission has ordered in other contexts (see, e.g., 47 C.F.R. § 64.901).

<sup>9</sup>Generally, costs directly assigned to a service are those costs that change with the provision of the service or with the volume of demand of the service, following the economic concept of incremental cost. However, the Commission also requires that a portion of the shared plant costs be included in the direct costs. Reconsideration Order, ¶¶ 217-18). While the Commission does not expect to approve an allocation of 0%, a specific allocation of shared plant and other costs to "direct costs" is not established.

Commission, Bell Atlantic multiplies VDT direct costs by the ratio of total switched transport costs to direct switched transport costs to determine the fully loaded costs. As a result, the price ceiling for its VDT service assures that VDT service will bear no greater burden of common overhead costs than other Bell Atlantic switched transport services bear. This choice of a loading factor is reasonable because it is used for other switched access services and would minimize possible distortions in selection of a switched transport service due to unequal loadings of common overhead expenses.

10. At the outset, all economists recognize that after incremental costs are directly assigned to services on the basis of cost-causation, the assignment of the remaining fixed common costs to services, on a cost basis, is arbitrary. And such costs have no relevance in determining whether or not VDT service is receiving a subsidy: as long as the incremental revenues from the provision of VDT service exceed the incremental--directly, cost-causally assigned--costs of VDT service, all customers are better off if the service is provided. While allocation of fixed costs is an inherently arbitrary process, there are cost allocators that, though arbitrary, are reasonable. After all, unregulated multiproduct firms in competitive markets take market prices as given, and yet, in equilibrium, recover their total costs from prices which equal or exceed their incremental costs in each market. Those prices can be thought of as being based on "reasonable" allocators of cost and are reasonable because the "allocators" are determined by competitive processes in different markets.

11. A reasonable (but arbitrary) allocator of costs for a regulated firm likewise would depend on market conditions and the demand for the service in question. To take a simple case, any allocator that ignores the market and causes prices for a service to be set above the level that would maximize the contribution (price less incremental cost) that the firm would receive from the service is unreasonable. A smaller allocation of overhead costs and consequently a lower price would make all parties better off. Customers of the service in question would prefer lower prices and would buy more at the lower price. The net revenue that the regulated firm receives from the service would be higher, and would increase the contribution from this service to the common costs of the firm. The end result would be that either (i) customers of other services

would receive lower prices or (ii) other prices would remain unchanged and the firm's earnings would increase. In general, all parties to the transaction would be made better off if the firm were permitted to lower prices to the contribution-maximizing level. As a result, in allocating common costs to a competitive service like video dialtone, it is critical to avoid use of an arbitrarily high allocator that will cause business to be lost to competitors, leaving both Bell Atlantic and its customers worse off.

12. Three separate basic service components make up Bell Atlantic's VDT service: (i) an access link connecting the video information provider (VIP) with the network, (ii) broadcast and narrowcast channels by which the VIP provides services to its subscribers, and (iii) messaging ports that enable text communications between VIPs and their subscribers.

13. The calculation of the direct costs for each of these service components is straightforward. Access links and messaging ports are clearly incremental to VDT service because they are necessary to supply the service and are not used in any fashion by voice services. Thus, there is no shared plant associated with the provision of either an access link or a messaging port, and there are no shared platform costs to be allocated between video and voice services for these service elements. Channel facilities are more complex: some channel plant investment is incremental to VDT service, some to voice service, and some is incremental to neither VDT or voice service. Direct video investment for VDT channel facilities is calculated as the sum of channel investment attributable solely to the supply of VDT service and an allocation of shared investment based on the proportion of directly attributable investment that is attributable to VDT service.<sup>10</sup> Assignment of primary plant investment for channel facilities to voice and video services is unambiguous, based on the location and function of the plant in the shared network. A fully-loaded cost for VDT services is then calculated using the same loading above direct cost as experienced for other interstate switched transport services, about 65 percent. As shown in the tariff workpapers, Bell Atlantic's proposed prices are set below fully distributed cost and, on average, about 20 percent above the direct costs of the component services, where those direct costs also include a reasonable allocation of shared costs.

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<sup>10</sup>Using the relative proportion of directly attributable cost method of allocation discussed above in footnote 8.

14. Because Bell Atlantic's VDT prices are set above direct cost, provision of VDT service will pay its own way and, in addition, contribute to the recovery of the common costs of the firm.<sup>11</sup> NCTA is wrong in its assertion that "the introduction of video dialtone service will surely result in a substantial increase in these overhead expenses, which include income taxes, plant non-specific costs, customer operations, and corporate expenses."<sup>12</sup> By definition, overhead expenses do not change when a new service is introduced or the volume of a service is increased. Other costs such as maintenance, administration and taxes are not treated as fixed in Bell Atlantic's cost study; rather they are specifically included in the annual cost factors used to convert investment into annual expenses. At the same time, this contribution to overhead costs cannot be artificially set higher than the maximum amount the market will permit. If Bell Atlantic were required to set VDT service prices higher than their profit-maximizing level, everyone would lose; video customers would pay too much and telephone customers would face the same burden of overhead costs as before.

**1. Interstate switched access prices are not required to be set at fully distributed cost.**

15. The purpose of requiring the loading of two sets of allocated costs onto the direct cost of VDT service is not to create some artificial standard for pricing based on a measure of fully distributed costs. Rather, the Commission requires only that new services under the price cap rules be priced above the (direct cost) price floor and no higher than the (fully distributed cost) price ceiling, which Bell Atlantic has done. Prices for LEC interstate telephone services are no longer set at some measure of fully distributed costs -- nor from an economic standpoint should they be. MCI thus errs in its assertion that

Bell Atlantic has also used unusually low overhead loadings for its video dialtone rate elements. In all cases, the overhead loadings are far less than comparable switched access loadings.

MCI at 9. On the contrary, Bell Atlantic has calculated a fully allocated cost for VDT service using precisely the same overhead loadings as are currently reflected in its switched transport prices. Bell Atlantic proposes to price its VDT service below the ceiling determined by fully

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<sup>11</sup>NCTA Petition at 11-22.

<sup>12</sup>Id., at 21.