98-C-1357

Exhibits 368-376

Vol. 26

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Case: 98-C-1357
Bell Atlantic
Date of Request: April 20, 2000
Respondent: BA Panel

CA-BA-35	On page 171 of the panel testimony, it states that NERA analyzed over 388,000 individual work operations associated with over 4,000 outside plant estimate jobs throughout the state." Identify the NERA personnel involved in such analysis and detail their educational and professional experience in performing such analyses. Produce all documents and other materials provided by BA-NY to the involved NERA personnel and produce all documents and other materials generated and or relied upon in the course of their analysis.

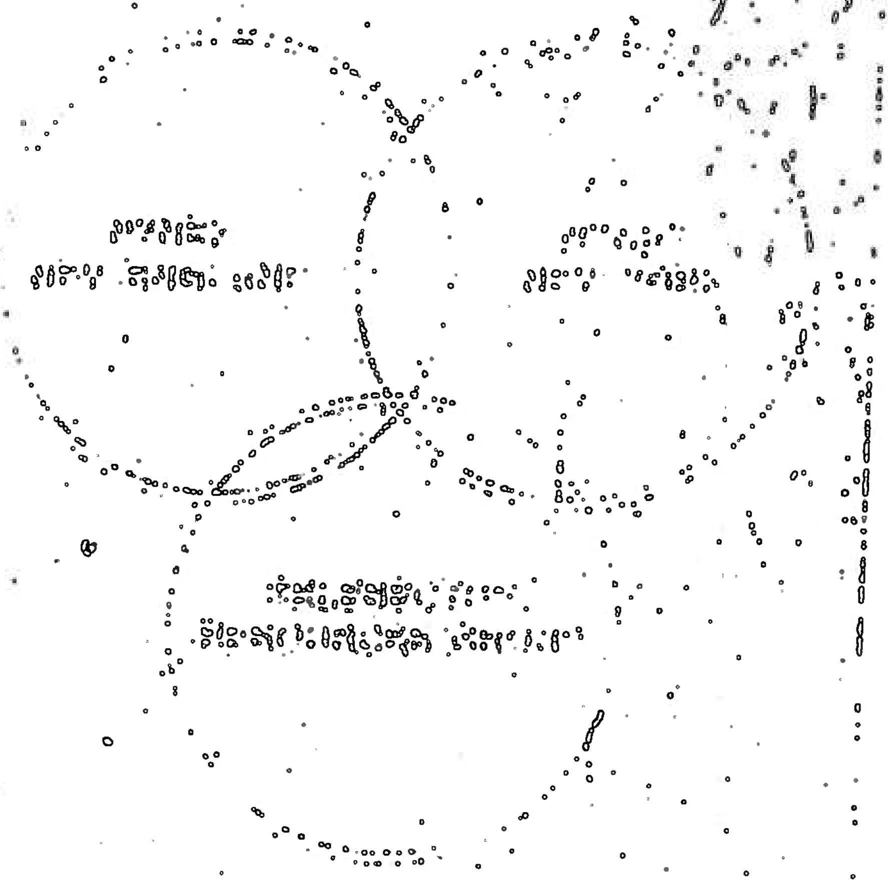
RESPONSE:

The analysis was conducted under the direction and supervision of William Taylor, the witness of record in this proceeding. Dr. Taylor's education and professional experience is described in an attachment to the testimony.

Most of the documents and other materials provided by BA-NY and generated or relied upon by NERA are attached to CA-BA-80. In addition, the following attached documents were provided by BA-NY to NERA:

(1) FASC Coder Guide
(2) ECRIS Definition Document, Draft, September 1, 1993
(3) WCDENSNY2A.xls -- BA-NY wire centers
(4) Files.doc -- field descriptions for ECRIS database provided in CA-BA-80

CASE: 98-C-1357
CA-BA-35
ATTACHMENT 1



JUIPMENT CFC
R83X

EQUIPMENT-REPAIRS R83X

R831

): 3138R (NYNEX N.Y.)

RELATIONSHIP OF FIELD REPORTING CODE (FRC) TO UNIFORM SYSTEM OF ACCOUNTS LEVEL SUBACCOUNT (USOA) AND FUNCTION CODE (FC)

GENERAL

Work reports, as well as some other source documents, prepared by plant occupational personnel and by reporting engineers can show field reporting codes. Field reporting codes are reflected on input transactions to the Property and Cost System and are used to generate Cost Function Codes (CFC) or Special Purpose Function Codes (SPFC). These function codes should be the NYNEX Standard codes described in Volume II of the FA Specifications or a subset of the Standard function codes.

TABLE ORGANIZATION

The table provides a numerical listing of field reporting codes and their relationship to specific accounts and function codes. The following explains each column.

1. FIELD REPORTING CODE (FRC) - FRCs included in this table are those which are most commonly used in the NYNEX FA System. Local field reporting codes are contained in this table. When a Company chooses to use field reporting codes, the codes should be used to generate function codes. The following is a brief description of the alpha suffix of the FRC. For additional information, refer to the function code narratives or AI-45 for Field Reporting Codes.

C - Construction (See note.)
E - Expensing of station connections
H - Telco Shop Repairs and Salvage Adjustment
M - Rearrangements and changes (See note.)
P - Customer preceding R, M, E and Y (See note.)
R - Repairs (See note.)
T - Testing/Pre-Service Interoffice Testing
X - Removal (See note.)
Y - Line disconnections and station apparatus removal (See note.)

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
POLE LINES						
1C	A	2411.1	C10010	5G1010		Except Actual Cost
1C	B	2411.1	C10001	5G1001	*	Whole Ownership
1H	A,B	6411	H100	-		
1M	A,B	6411	M100	-	*	
1R	A,B	6411	R100	-	*	
1X	A	3100.51	D10010	5F1010		Except Actual Cost
1X	B	3100.51	D10001	5F1001	*	Whole Ownership
AERIAL CABLE METALLIC						
2C	B	2421.1121	C20209	5G2005	*	
2H	A,B	6421.1	H200	-	* *	Shop Repairs
2M	A	6421.1	M20001	-		
2M	B	6421.1	M20001	-	*	Non-Svc Acc. Lines
2R	A	6421.1	R20001	-		
2R	B	6421.1	R200	-	*	
2TC	A	2421.21	C20301	5G3001		Out Mass
2TC	B	2421.21	C203	5G30	*	Out Mass
2TX	A	3100.52	D20301	5F3001		Toll Out Mass
2TX	B	3100.5221	D203	5F30	*	Toll Out Mass
2X	B	3100.5213	D20201	5F2001	*	
2Y	A,B	6421.1	7224	-		Line Disconnection
AERIAL WIRE						
3C	A,B	2431	C300	5G22	*	
3H	A,B	6431	H300	-		
3M	A,B	6431	M300	-	*	
3R	A,B	6431	R300	-	*	
3X	A,B	3100.57	D300	5F22	*	

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
UNDERGROUND CONDUIT						
4C	A	2441.1	C40010	5G1110		Except Actual Costs
4H	A,B	6441.1	H400	-		
4M	A,B	6441.1	M400	-	* *	
4R	A,B	6441.1	R400	-	*	
4X	A	3100.58	D40010	5F1110		Except Actual Cost
UNDERGROUND CABLE - METALLIC						
5C	A,B	2422.11	C500	5G23	*	Exchange
5M	A,B	6422.1	M500	-	*	
5R	A,B	6422.1	R500	-	*	
5TC	A,B	2422.21	C503	5G33	*	Toll
5TX	A	3100.53	D503	5F33		Toll
5TX	B	3100.5321	D503	5F33	*	Toll
5X	A	3100.53	D500	5F23		Exchange
5X	B	3100.5311	D500	5F23	*	Exchange
SUBMARINE CABLE - METALLIC						
6C	A	2424.11	C60010	5G2410		Exchange - Clearing Costs - Actual
6C	B	2424.11	C600	5G24	*	Exchange
6M	A,B	6424.1	M600	-	*	
6R	A,B	6424.1	R600	-	*	
6TC	A	2424.21	C60310	5G3410		Toll-Clearing Costs Actual
6TC	B	2424.21	C603	5G34	*	Toll
6TX	A	3100.55	D603	5F34		Toll
6TX	B	3100.5521	D603	5F34	*	Toll
6X	A	3100.55	D600	5F24		Exchange
6X	B	3100.5511	D600	5F24	*	Exchange

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
TERMINAL EQUIPMENT - SHOP REPAIRS AND SALVAGE ADJUSTMENTS						
8H	A,B	6362.4	H800	-	* *	
BUILDING						
10C	A,B	2121.1	C014	5G7K		
10C	K	161-1110	C014	5G7K		
10X	B	3100.211	D016	5F7K		
10X	K	171-1110	D016	5F7K		
10X	A	3100.21	D016	5F71		
AERIAL CABLE - METALLIC						
12C	A	2421.111	C20101	5G2101		Block - Out Mass.
12M	B	6421.1	M20002	-	*	Svc Acc. Wires
12X	A	3100.52	D20101	5F2101		Block - Out Mass.
CONDUIT SYSTEMS - MAIN/TESTING						
14C	B	2441.11	C404	5G1U	* *	Conduit - Main
14T	A	6533.41	T41A-F	-		Testing-Inter-office Intralata
14X	B	3100.581	D40001	5F1101	* *	Conduit - Main
UNDERGROUND CABLE - NON METALLIC						
15TC	B	2422.222	C581	5G3B		Toll
15TX	B	3100.5323	D581	5F38		Toll
MANUAL C.O. EQUIPMENT						
17X	B	3100.3331	D710	5F00		

NYT only: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
LAND/BUILDING FIXTURES						
20C	A	2111	C020	5G76		Land
20C	B	2121.2	C013	5G7L		Building Fixtures
20X	B	3100.212	D015	5F75		Building Fixtures
LEASEHOLD IMPROVEMENTS						
20C	K	161-1310	613A	5G5A		
20X	K	171-1310	614A	5F5A		
TREE TRIMMING						
21R	A,B	6411	R120	-	* *	
AERIAL CABLE - METALLIC - EXCHANGE						
22C	A	2421.112	C20201	5G2001		Outside - Mass.
22X	A	3100.52	D20201	5F2001		Outside - Mass.
CONDUIT SYSTEMS - SUBSIDIARY						
24C	B	2441.12	C403	5G13	* *	
24X	B	3100.582	D40002	5F1102	* *	
PANEL C.O. EQUIPMENT						
27X	B	3100.3332	D720	5F01		

NYT only: Contracted Labor - Plant Cost Results Plan (E5300)
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
LEASEHOLD IMPROVEMENTS						
30C	A,B	2682	613A	5G5A		
30X	A,B	3420	614A	5F5A		
BUILDING FIXTURES						
30C	K	161-1210	C013	5G7L		
30X	K	171-1210	D015	5F75		
POLE LINES-ACTUAL COST ITEMS						
31C	A	2411.1	C10003	5G1003		
31X	A	3100.51	D10003	5F1003		
AERIAL CABLE - METALLIC - BLOCK						
32C	B	2421.1111	C20109	5G2109	*	
32X	B	3100.5211	D20101	5F2101	*	
UNDERGROUND CONDUIT - ACTUAL COST						
34C	A	2441.1	C40003	5G1103		
34C	B	2441.13	C40003	5G1103		
34X	A	3100.58	D40003	5F1103		
34X	B	3100.583	D40003	5F1103		
ELECTRO-MECHANICAL SWITCHING - STEP BY STEP EQUIPMENT						
37C	A	2215.1	C730	5G02		
37C	B	2215.1	C73001	5G0201		
37H	B	6215.1	H730	-		
37M	A,B	6215.1	M730	-	*	
37R	A,B	6215.1	R730	-	*	
37X	A	3100.331	D730	5F02		
37X	B	3100.331	D73001	5F0201		

NY <u>only</u>: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
SUBSCRIBER LINE TESTING - MAINTENANCE						
41T	A,B	6533.1	T114	-		
AERIAL CABLE - EXCHANGE - METALLIC						
42C	A	2421.112	C20241	5G2041		Outside Mass., Drop & Block
42M	A	6421.1	M20003	-		Drop & Block
42R	A	6421.1	R20002	-		Drop & Block
42X	A	3100.52	D20241	5F2041		Outside Mass., Drop & Block
BURIED CABLE - METALLIC						
45C	A	2423.11	CB0110	5G2P10	*	Except Actual Cost Cable and Wire
45C	B	2423.1111	CB0101	5G2P04		
45M	A	6423.1	MB0001	-	*	
45M	B	6423.1	MB0009	-		
45R	A	6423.1	RB0001	-	*	
45R	B	6423.1	RB00	-		
45TC	A	2423.21	CB0310	5G3510		Toll-Except Actual Cost
45TC	B	2423.21	CB03	5G35	*	Toll
45TX	A	3100.54	DB0310	5F3510		Toll-Except Actual Cost
45TX	B	3100.5421	DB03	5F35	*	Toll
45X	A	3100.54	DB0010	5F2510		Except Actual Cost (Exchange)
45X	B	3100.5411	DB0001	5F2501	*	Line Disconnection
45Y	A,B	6423.1	7226	-		
CROSSBAR EQUIPMENT						
47C	A	2215.2	C740	5G03		Equipment
47C	B	2215.2	C74001	5G0301		
47H	B	6215.2	H740	-		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
CROSSBAR EQUIPMENT (CONTN'D)						
47M	A	6215.2	M740	-		
47M	B	6215.2	M74009	-	*	
47R	A	6215.2	R740	-		
47R	B	6215.2	R74009	-	*	
47X	A	3100.332	D740	5F03		
47X	B	3100.332	D74001	5F0301		
AERIAL CABLE - VDT DIRECT - METALLIC DROP						
52C	A,B	2421.51	C208	5G3K		
52M	A,B	6421.51	M208			
52R	A,B	6421.51	R208			
52X	A,B	3100.5251	D208	5F3K		
TESTING - INTEROFFICE, INTERLATA						
54T	A	6533.45	T453 T45B-F	-		
BURIED CABLE - VDT DIRECT - METALLIC DROP						
55C	A,B	2423.51	CB08	5G3P		
55M	A,B	6423.51	MB08			
55R	A,B	6423.51	RB08			
55X	A,B	3100.5451	DB08	5F3P		
OTHER CIRCUIT EQUIPMENT - ANALOG						
57C	A	2232.29	C75001	5G0A01		
57C	B	2232.29	C75001	5G0A01		
57H	B	6232.29	H758	-		
57M	A	6232.29	M75C	-		
57M	B	6232.29	M75C01	-	*	
57R	A,B	6232.29	R758	-	*	
57X	A	3100.3629	D75B	5F0Z		
57X	B	3100.3629	D75B01	5F0Z01		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
SUBSCRIBER LINE TESTING - SUBSCRIBER REPORTS						
61E	A,B	6533.31	T217	-		
61T	A,B	6533.21	T11A	-		
OTHER RADIO FACILITIES						
67C	A	2231.21	C76001	5G0501		Terstrial Microwave
67C	B	2231.21	C76001	5G0501		Equipment
67H	B	6231.21	H760	-		Terstrial Microwave
67M	A,B	6231.21	M766	-	*	Terstrial Microwave
67R	A,B	6231.21	R764	-	*	Terstrial Microwave
67X	A	3100.3521	D760	5F05		Terstrial Microwave
67X	B	3100.3521	D76001	5F0501		Terstrial Microwave
STATION APPARATUS, NETWORK TERMINATING WIRE						
68AM	A,B	6362.913	720L	-		
68AY	A,B	6362.913	722L	-		
68E	A,B	6362.911	7213	-	*	
68M	A,B	6362.911	7204	-	*	
68PE	A,B	6362.912	7212	-		Cust Prem Insd Wire
68PM	A,B	6362.912	7202	-		Cust Prem Insd Wire
68PR	A,B	6362.912	7303	-	*	Cust Prem Insd Wire
68PY	A,B	6362.912	7222	-		Cust Prem Insd Wire
68R	A,B	6362.911	7305	-		
68Y	A,B	6362.911	7223	-	*	
AERIAL CABLE - VDT JOINT USE - METALLIC DROP						
72C	A,B	2421.71	C209	5G3M		
72M	A,B	6421.71	M209			
72R	A,B	6421.71	R209			
72X	A,B	3100.5271	D209	5F3M		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
CONDUIT SYSTEMS - EMPIRE CITY SUBWAY						
74C	B	2441.7	C405	5G14		
74H	B	6441.8	H401			
74M	B	6441.8	M401			
74R	B	6441.8	R401			
74X	B	3100.974	D401	5F14		
BURIED CABLE - VDT JOINT USE - METALLIC DROP						
75C	A,B	2423.71	CB09	5G3Q		
75M	A,B	6423.71	MB09			
75R	A,B	6423.71	RB09			
75X	A,B	3100.5471	DB09	5F3Q		
ELECTRONIC ANALOG EQUIPMENT						
77C	A	2211.1	C775	5G07		
77C	B	2211.1	C77501	5G0701		
77H	B	6211.1	H775	-		
77M	A	6211.1	M775	-		
77M	B	6211.1	M77509	-	*	
77R	A	6211.1	R775	-		
77R	B	6211.1	R77509	-	*	
77X	A	3100.311	D775	5F07		
77X	B	3100.311	D77501	5F0701		
CUSTOMER PREMISES INSIDE WIRE						
78PE	A,B	6362.912	721C	-	*	
78PM	A,B	6362.912	720K	-	*	
78PR	A,B	6362.912	730F	-	*	
78PY	A,B	6362.912	722C	-	*	
SUBSCRIBER LINE TESTING - PUBLIC TELEPHONE						
81E	A,B	6533.32	T218	-		
81T	A,B	6533.22	T118	-		

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - NONMETALLIC						
82C	B	2421.122	C282	5G26	*	
82H	A,B	6421.2	H280	-	**	
82M	A,B	6421.2	M280	-	*	
82R	A,B	6421.2	R280	-	**	
82TC	A	2421.22	C28301	5G3601		Outside Mass.
82TC	B	2421.22	C283	5G36	*	
82TX	A	3100.52	D28301	5F3601		Outside Mass.
82TX	B	3100.5222	D283	5F36	*	
82X	B	3100.5216	D282	5F26	*	
82Y	A,B	6421.2	7225	-		
UNDERGROUND CABLE - NONMETALLIC						
85C	A,B	2422.12	C580	5G28	*	
85M	A,B	6422.2	M580	-	*	
85R	A,B	6422.2	R580	-	**	
85TC	A	2422.22	C583	5G38	*	Toll
85TC	B	2422.221	C583	5G38	*	Toll
85TX	A	3100.53	D583	5F38		Toll
85TX	B	3100.5322	D583	5F38	*	Toll
85X	A	3100.53	D580	5F28		Exchange
85X	B	3100.5312	D580	5F28	*	Exchange
SUBMARINE CABLE - NONMETALLIC						
86C	A	2424.12	C68010	5G2910		Exchange
86C	B	2424.12	C680	5G29	*	Exchange
86M	A,B	6424.2	M680	-	*	
86R	A,B	6424.2	R680	-	**	
86TC	A	2424.22	C68310	5G3910		Toll
86TC	B	2424.22	C683	5G39	*	Toll
86TX	A	3100.55	D683	5F39		Toll
86TX	B	3100.5522	D683	5F39	*	Toll
86X	A	3100.55	D680	5F29		Exchange
86X	B	3100.5512	D680	5F29	*	Exchange

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
CENTRAL OFFICE EQUIPMENT						
87C	B	2212.1	C77601	5G0801		Electronic Digital
87H	B	6212.1	H776	-		Electronic Digital
87M	B	6212.1	M77609	-		Electronic Digital
87R	B	6212.1	R77609	-	*	Electronic Digital
87X	B	3100.321	D77601	5F0801	*	Electronic Digital
INTRABUILDING CABLE - CUSTOMER OWNED						
88PE	A	6362.912	721K			Installation
88PM	A	6362.912	720V			Rearrgmts. & Chgs.
88PR	A	6362.912	730R			Repairs & Upkeep
88PY	A	6362.912	722K			Disconnect
TOWERS/TESTING						
91C	A,B	2411.9	C103	5G12	* *	Towers
91M	A,B	6411.	M109	-		Towers
91R	A,B	6411.	R109	-		Towers
91T	A	6533.92	T190	-		Testing - Other
91T	B	6533.9	T190	-		Testing - Other
91X	A,B	3100.51	D103	5F12	* *	Towers
OTHER DIGITAL EQUIPMENT						
97C	B	2232.19	C75901	5GIH01		
97H	B	6232.19	H750	-		
97M	B	6232.19	M75001	-		
97R	B	6232.19	R750	-		
97X	B	3100.3619	D75004	5F0A04		
CONSTRUCTION IN PROGRESS						
100-2000C	K	161-4010	632H	5G9H		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - METALLIC						
102C	B	2421.1121	C20201	5G2003		New Svc. Access Wires (Labor)
MAINTAINING TRANSMISSION POWER						
107R	A	6531	R795			
AIR CONDITIONING - PLANT AUTHORIZED						
110M	A	6121.1	M011	-	* *	
110M	B	6121.11	M011	-	* *	
110R	A	6121.1	R011	-	* *	
110R	B	6121.11	R011	-	* *	
AERIAL CABLE - METALLIC - BUILDING - BLOCK MASS. EXCLUDING U.G. CONN.						
112C	A	2421.111	C20111	5G2111		
112X	A	3100.52	D20111	5F2111		
OPERATOR SYSTEMS CONTROL OFFICE EQUIPMENT						
117C	A	2220.1	C714	5G1A		
117M	A	6220.1	M721	-		
117R	A	6220.1	R711	-		
117X	A	3100.34	D711	5F04		
AERIAL CABLE - METALLIC - EXCHANGE - MASS. EXCEPT U.G. CONN.						
122C	A	2421.112	C20211	5G2011		
122TC	A	2421.21	C20311	5G3011		
122TX	A	3100.52	D20311	5F3011		
122X	A	3100.52	D20211	5F2011		

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** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
FURNITURE AND OTHER TOOLS IN C.O. EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
127C	A	2116.93	C700	5G00		
127X	A	3100.924	D700	5G08		
TELEPHONE - DISPOSITION COSTS						
128C	A,B	2311.11	6102	5G42		Construction Terminal Equip-Disposition Units
128X	A,B	3100.41	-	5F08		
AERIAL CABLE - EXCHANGE - METALLIC						
132C	B	2421.1111	C20101	5G2101	*	Block - New Svc
BURIED CABLE - METALLIC						
145M	B	6423.1	MB0001	-	*	Svc Access Wires
CROSSBAR #1						
147M	B	6215.2	M74001	-	*	
147R	B	6215.2	R74001	-	*	
O.D.S. EQUIPMENT						
157C	A	2232.11	C751	5G09		
157C	B	2232.11	C75101	5G0901		
157H	B	6232.11	H751	-		
157M	A	6232.11	M751	-		
157M	B	6232.11	M75101	-		
157R	A,B	6232.11	R751	-	*	
157X	A	3100.3611	D751	5F09	*	
157X	B	3100.3611	D75101	5F0901		

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
RADIO - NON CELLULAR AND OTHER						
167C	A	2231.22	C764	5G1E		
167C	B	2231.22	C76401	5G1E01		Equipment
167H	B	6231.22	H761	-		
167M	B	6231.22	M767	-		
167R	A,B	6231.22	R765	-	*	
167X	A	3100.3522	D764	5FOW		
167X	B	3100.3522	D76401	5FOW01		Equipment
PARTY-LINE SET CONVERSIONS						
168PE	A	6362.92	721E	-		
ELECTRONIC ANALOG EQUIPMENT - #1 ESS						
177M	B	6211.1	M77501	-	*	#1 ESS-Rearrange.
177R	B	6211.1	R77501	-	*	#1 ESS - Repair
PUBLIC TELEPHONE EQUIPMENT - COIN						
188C	A,B	2351.1	6180	5GE0	*	
188E	A,B	6351.1	7370	-		
188H	A,B	6351.1	H881	-		
188M	A,B	6351.1	7280	-	*	
188R	A,B	6351.1	7380	-	*	
188X	A,B	3100.451	6190	5FE0	*	
188Y	A,B	6351.1	7360			
HEATING - PLANT AUTHORIZED						
210M	A	6121.1	M012	-	**	
210M	B	6121.11	M012	-	**	
210R	A	6121.1	R012	-	**	
210R	B	6121.11	R012	-	**	

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
LAND						
211-00C	B	2111	C020	5G76		
211-00C	K	161-1010	C020	5G76		
211-70C	B	2111.7	C022	5G79		
LAND IMPROVEMENTS						
212-00C	K	161-1030	C021	5G78		
AERIAL CABLE - METALLIC - BUILDING EXCHANGE - BLOCK MASS. U. G. CONN.						
212C	A	2421.111	C20121	5G2121		
212X	A	3100.52	D20121	5F2121		
212X	K	171-1030	D021	5F78		
AERIAL CABLE - METALLIC - EXCHANGE						
222C	A	2421.112	C20221	5G2021		Other Mass-UG Conn
222TC	A	2421.21	C20321	5G3021		Mass U.G. Conn
222TX	A	3100.52	D20321	5F3021		Mass U.G. Conn
222X	A	3100.52	D20221	5F2021		Mass U.G.Conn
STATION APPARATUS - TEL. & MISC. - STATION APPARATUS OTHER COST						
228C	A,B	2311.12	6103	5G43	* *	
228X	A,B	3100.41	-	5F43	* *	
BURIED CABLE - EXCHANGE - METALLIC						
245C	B	2423.112	CB02	5G2Q	*	Wire-Ex Svc Access
245X	B	3100.5411	DB0002	5F2502	*	Wire

NY <u>only</u>: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
SUBSCRIBER PAIR - GAIN CIRCUIT EQUIPMENT						
257C	A	2232.12	C752	5G0C		Digital Equipment
257C	B	2232.21	C75E01	5G0W01	*,#,**	Analog Equipment
257EM	A	6232.12	M759	-		Remote
257EM	B	6232.21	M75B	-	* *	Anlg-Remte & Int.Rep
257H	B	6232.21	H754	-		Analog Equipment
257M	A	6232.12	M752	-		C.O. Term
257M	B	6232.21	M75A	-	*	Analog
257ER	B	6232.21	R755	-	* *	Anlg-Remte & Int.Rep
257R	A	6232.12	R752	-		C.O. Term
257R	B	6232.21	R754	-	*	Analog
257ER	A	6232.12	R759	-		Remote & Int.Rep
257X	A	3100.3612	D752	5F0C		Digital
257X	B	3100.3621	D75A01	5F0Y01	* *	Analog
GENERAL PURPOSE COMPUTER EQUIPMENT						
261-03C	B	2124.1	6303	5G82		
261-03C	K	161-2110	630305	5G8205		
261-03X	B	3100.24	6313	5F82		
261-03X	K	171-2110	631305	5F8205		
261-04C	B	2124.3	6307	5G84		
261-04C	K	161-2113	6307	5G84		
261-04X	B	3100.24	6314	5F84		
261-04X	K	171-2113	6314	5F84		
261-05C	K	161-2112	630306	5G8206		Details Mats. Mgmt.
261-05X	K	171-2112	631306	5F8206		Details Mats. Mgmt.

NY <u>only</u>: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work
\# Measured only for Outside Plant Work (JFC 42XX)

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
FURNITURE/OFFICE EQUIPMENT						
261-11C	B	2122.11	630B	5G88		Storeroom Furn.
261-11C	K	161-2021	630101	5G8001		Storeroom Offc Equip
261-11X	B	3100.22	D013	5F74		
261-11X	K	171-2012	631101	5F8001		
261-12C	B	2122.12	630C	5G89		Other Furniture
261-12C	K	161-2023	630201	5G8101		Other Office Equip
261-12X	B	3100.22	D014	5F76		
261-12X	K	171-2012	631201	5F8101		
FURNITURE/EQUIPMENT						
261-21C	K	161-2022	630102	5G8002		Storerm. Bldg Equip
261-21X	K	171-2012	631102	5F8002		Storerm. Bldg Equip
261-22C	B	2122.9	630H	5G8G		Embedded Invest-ment Furniture
261-22C	K	161-2024	630202	5G8102		Other Bldg Equip
261-22X	B	3100.925	D01A	5F7P		Embedded Investment Furniture
261-22X	K	171-2012	631202	5F8102		Other Bldg Equip
OFFICE EQUIPMENT						
261-41C	B	2123.11	630D	5G8B		Storeroom
261-41X	B	3100.231	D017	5F7M		Storeroom
261-42C	B	2123.12	630E	5G8C		
261-42X	B	3100.231	D018	5F7N		
261-52C	B	2123.91	630J	5G8H		
261-52X	B	3100.926	D01B	5F7Q		Embedded Invest-ment Off. Sup Equip
261-70C	B	2122.7	630K	5G87		
261-70X	B	3100.973	D012	5F79		
ARTWORK						
261-71C	B	2122.2	630A	5G8A		
261-71C	K	161-2210	630A	5G8A		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
VEHICLES AND OTHER WORK EQUIPMENT						
264-01C	B	2112.1	6321	5G90		Motor Vehicles
264-01C	K	161-3110	6321	5G90		Auto & Light Trucks
264-01X	B	3100.12	6331	5F90		
264-01X	K	171-3110	6331	5F90		
264-02C	B	2115.1	6322	5G91		Garage Work Equip
264-02X	B	3100.15	6332	5F91		
264-22C	B	2115.9	632C	5G9C		Embedded Invest-ment Garage Work Equip
264-22X	B	3100.921	633C	5F9B		
264-23C	B	2116.3	632A	5G9A		Spec Tools/Wrk Equp
264-23C	K	161-3010	632A	5G9A		Tools/Wrk Equip
264-23X	B	3100.16	633A	5F9A		
264-23X	K	171-3010	633A	5F9A		
264-33C	B	2114	6328	5G97		Spec Purp Vehicles
264-33C	K	161-3210	632F	5F9F		Other trucks, trailers, aircraft and watercraft
264-33X	B	3100.14	6338	5F97		
264-33X	K	171-3210	633F	5F9F		
264-34C	K	161-3211	632G	5G9G		Tractors
264-34X	K	171-3211	633G	5F9G		
264-43C	B	2116.91	632D	5G9D		Spec Tool/Wrk Equip
264-43X	B	3100.922	633D	5F9D		
264-71C	B	2112.7	6323	5G92		
264-71X	B	3100.97	6333	5F92		
264-215C	B	2116.51	632504	5G9404		Sta App/Lg PBX Misc
264-215X	B	3100.16	633504	5F9404		
264-225C	B	2116.52	632B02	5G9B02		Eng. Tools - Miscel
264-225X	B	3100.16	633506	5F9406		
264-315C	B	2116.92	632E	5G9E		Embedded Investment -Other Tools & Wk Eqp

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
VEHICLES AND OTHER WORK EQUIPMENT (CONTN'D)						
264-315X	B	3100.923	633E	5F9C		Embedded Investment - C.O.
264-415C	B	2116.93	C700	5G00		
264-415X	B	3100.924	D700	5F0B		
RADIO - SATELLITE AND EARTH STATION FACILITIES						
267C	B	2231.1	C76301	5G1001		
267H	B	6231.1	H763	-		
267M	B	6231.1	M765	-		
267R	B	6231.1	R763	-		
267X	B	3100.351	D76301	5F0V01	*	
PUBLIC TELEPHONE EQUIPMENT - COINLESS						
288C	A,B	2351.2	6181	5GE1	*	
288E	A,B	6351.2	7371	-		
288H	A,B	6351.2	H882	-		
288M	A,B	6351.2	7281	-	*	
288R	A,B	6351.2	7381	-	*	
288X	A	3100.452	6191	5FE1	*	
288X	B	3100.451	6191	5FE1	*	
288Y	A,B	6351.2	7361	-		
SUBSCRIBER PAIR GAIN SYSTEMS						
297C	B	2232.12	C75204	5G0C04		Equipment
297EM	B	6232.12	M759	-		Remote Terminals - Interven Repeat
297ER	B	6232.12	R759	-		Remote Terminals - Interven Repeat
297H	B	6232.12	H752	-		C.O. Terminal
297M	B	6232.12	M752	-		C.O. Terminal
297R	B	6232.12	R752	-		C.O. Terminal
297X	B	3100.3612	D75204	5F0C04		Equipment

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
POLE LINE - JOINT USE						
301C	B	2411.1	C10002	5G1002	*	
301X	B	3100.51	D10002	5F1002	*	
OTHER - PLANT AUTHORIZED						
310M	A	6121.1	M013	-	**	
310M	B	6121.11	M013	-	**	
310R	A	6121.1	R013	-	**	
310R	B	6121.11	R013	-	**	
NETWORK CHANNEL TERMINATING EQUIPMENT						
328C	A,B	2311.5	6107	5G47	**	
328X	A,B	3100.41	-	5F45	**	
STEP BY STEP C.O. EQUIPMENT - FURNITURE AND OTHER TOOLS						
337C	B	2215.1	C73002	5G0202		
337X	B	3100.331	D73002	5F0202		
BURIED CABLE - EXCHANGE - METALLIC						
345C	A	2423.11	CB0103	5G2P03		Actual Cost
345C	B	2423.1111	CB0102	5G2P05		New Svc Acc. Wire - Labor
345TC	A	2423.21	CB0303	5G3503		Toll - Actual Cost
345TX	A	3100.54	DB0303	5F3503		Toll - Actual Cost
345X	A	3100.54	DB0003	5F2503		Actual Cost
CROSSBAR EQUIPMENT						
347C	B	2215.2	C74002	5G0302		Furniture and Other Tools
347X	B	3100.332	D74002	5F0302		Furniture and Other Tools

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* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
OTHER CIRCUIT EQUIPMENT						
357C	A	2232.19	C759	5G1H		Digital
357C	B	2232.29	C75002	5G0A02		Furniture and Other Tools
357M	A	6232.19	M750	-		Digital
357R	A	6232.19	R750	-		Digital
357X	A	3100.3619	D750	5F0A		Digital
357X	B	3100.3629	D75B03	5F0Z03		Furniture and Other Tools
LARGE PBX, DIGITAL DATA SYSTEMS						
358C	A,B	2362.1	6163	5G7C	**	
358M	A,B	6362.1	720E		**	
358R	A,B	6362.1	730A		*	
358X	A,B	3100.461	6173	5F7C	**	
RADIO EQUIPMENT						
367C	A	2231.1	C763	5G1D		Satellite and Earth Station
367C	B	2231.21	C76002	5G0502		Furniture and Other Tools
367M	A	6231.1	M765	-		Satellite and Earth Station
367R	A	6231.1	R763	-		Satellite and Earth Station
367X	A	3100.351	D763	5F0V		Satellite and Earth Station
367X	B	3100.3521	D76002	5F0502		Station

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC EQUIPMENT						
377C	A	2212.1	C776	5G08		Digital
377C	B	2211.1	C77502	5G0702		Analog - Furniture, Other Tools
377M	A	6212.1	M776	-		Digital
377R	A	6212.1	R776	-		Digital
377X	A	3100.321	D776	5F08		Digital
377X	B	3100.311	D77502	5F0702		Analog - Furniture, Other Tools
ELECTRONIC DIGITAL EQUIPMENT - FURNITURE AND OTHER TOOLS						
387C	B	2212.1	C77602	5G0802		
387X	B	3100.321	D77602	5F0802		
PUBLIC TELEPHONE EQUIPMENT - PHONE BOOTH ADVERTISING						
388C	B	2351.3	6183	5GE5		
388X	B	3100.453	6193	5FE5		
OTHER DIGITAL EQUIPMENT - FURNITURE AND OTHER TOOLS						
397C	B	2232.19	C75903	5G1H03		
397X	B	3100.3619	D75006	5F0A06		
AIR CONDITIONING - ENGINEERING AUTHORIZED						
410M	A	6121.1	M021			
410M	B	6121.12	M021			
410R	A	6121.1	R021			
410R	B	6121.12	R021			
AERIAL CABLE - METALLIC EXCHANGE - OTHER-MASS, DROP AND BLOCK WIRE						
422C	A	2421.112	C20242	5G2042		
422X	A	3100.52	D20241	5F2041		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
STEP BY STEP C.O. EQUIPMENT - ADMINISTRATION						
437C	B	2215.1	C73003	5G0203		
437X	B	3100.331	D73003	5F0203		
BURIED CABLE - EXCHANGE - METALLIC - DROP AND BLOCK WIRE						
445C	A	2423.11	CB0104	5G2P04		
445M	A	6423.1	MB0002	-		
445R	A	6423.1	RB0002	-		
445X	A	3100.54	DB0004	5F2504		
CROSSBAR EQUIPMENT - ADMINISTRATIVE						
447C	B	2215.2	C74003	5G0303		
447X	B	3100.332	D74003	5F0303		
SUBSCRIBER PAIR GAIN - ANALOG EQUIPMENT						
457C	A	2232.21	C75E	5G0W		
457EM	A	6232.21	M75B	-		Remote & Int Repeat
457ER	A	6232.21	R755	-		Remote & Int Repeat
457R	A	6232.21	R754	-		C.O. Terminal
457M	A	6232.21	M75A	-		C.O. Terminal
457X	A	3100.3621	D75A	5F0Y		
NONREGULATED TERMINAL EQUIPMENT - CPE						
458M	A,B	6362.5	720D			
458R	A,B	6362.5	730D			
ELECTRONIC ANALOG EQUIPMENT - ADMINISTRATIVE						
477C	B	2211.1	C77503	5G0703		
477X	B	3100.311	D77503	5F0703		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC DIGITAL EQUIPMENT - ADMINISTRATIVE						
487C	B	2212.1	C77603	5G0803		
487X	B	3100.321	D77603	5F0803		
PUBLIC TELEPHONE EQUIPMENT - TDD						
488C	A,B	2351.4	6187	5GE7		
488E	A,B	6351.4	7374	-		
488H	A,B	6351.4	H884	-		
488M	A,B	6351.4	7284	-		
488R	A,B	6351.4	7384	-		
488X	A	3100.454	6197	5FE8		
488X	B	3100.451	6197	5FE8		
488Y	A,B	6351.4	7364	-		
DROP AND BLOCK WIRE - PLANT ASSIGNMENT						
498E	A,B	6421.1	M203	-		
POLE LINES - JOINT OWNERSHIP						
501C	B	2411.1	C10003	5G1003	*	
501X	B	3100.51	D10003	5F1003	*	
HEATING - ENGINEERING AUTHORIZED						
510M	A	6121.1	M022			
510M	B	6121.12	M022			
510R	A	6121.1	R022			
510R	B	6121.12	R022			

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
STEP BY STEP C.O. EQUIPMENT - DEFERRABLE PLUG-INS						
537C 537X	B B	2215.1 3100.331	C73004 D73004	5G0204 5F0204		
CROSSBAR EQUIPMENT - DEFERRABLE PLUG-INS						
547C 547X	B B	2215.2 3100.332	C74004 D74004	5G0304 5F0304		
OTHER CIRCUIT EQUIPMENT - DEFERRABLE PLUG-INS						
557C 557X	B B	2232.29 3100.3629	C75003 D75B02	5G0A03 5F0Z02		
TERMINAL EQUIPMENT MAINTENANCE - TRAVEL TIME						
558R	A,B	6362.915	730N	-		
RADIO EQUIPMENT - DEFERRABLE PLUG-INS						
567C 567X	B B	2231.21 3100.3521	C76003 D76003	5G0503 5F0503		
TERMINAL EQUIPMENT - NO ACCESS						
568R	A,B	6362.916	730P	-		
ELECTRONIC ANALOG EQUIPMENT - DEFERRABLE PLUG-INS						
577C 577X	B B	2211.1 3100.31	C77504 D77504	5G0704 5F0704		
TERMINAL EQUIPMENT MAINTENANCE - NO TROUBLE FOUND						
578R	A,B	6362.917	730Q	-		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC DIGITAL EQUIPMENT - DEFERRABLE PLUG-INS						
587C 587X	B B	2212.1 3100.321	C77604 D77604	5G0804 5F0804		
OTHER DIGITAL EQUIPMENT - DEFERRABLE PLUG-INS						
597C 597X	B B	2232.19 3100.3619	C75902 D75005	5G1H02 5F0A05		
OTHER - ENGINEERING AUTHORIZED						
610M 610M 610R 610R	A B A B	6121.1 6121.12 6121.1 6121.12	M023 M023 R023 R023			
INTRABUILDING NETWORK CABLE - METALLIC						
632C 632M 632R 632X	B B B B	2426.11 6426.1 6426.1 3100.561	C246 M246 R246 D246	5G2L - - 5F2L	* * * *	
INTRABUILDING NETWORK CABLE - METALLIC - OUTSIDE MASS.						
642C 642M 642R 642X	A A A A	2426.11 6426.1 6426.1 3100.56	C24601 M246 R246 D24601	5G2L01 - - 5F2L01		
CROSSBAR #5						
647M 647R	B B	6215.2 6215.2	M74002 R74002	- -	* *	

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
D.O.S. EQUIPMENT - FURNITURE AND OTHER TOOLS						
657C	B	2232.11	C75102	5G0902		
657X	B	3100.3611	D75102	5F0902		
RADIO - NON CELLULAR AND OTHER - FURNITURE AND OTHER TOOLS						
667C	B	2231.22	C76403	5G1E03		
667X	B	3100.3522	D76403	5F0W03		
BUILDINGS - EMPIRE CITY SUBWAY						
670C	B	2121.7	C015	5G73		
670X	B	3100.972	D019	5F73		
ELECTRONIC ANALOG EQUIPMENT - #1A ESS						
677M	B	6211.1	M77502	-	*	
677R	B	6211.1	R77502	-	*	
SERVICE ORDER - CONTROL AND DISPATCH - SIMPLE						
698E	A,B	6532.9	721L	-		
INTRABUILDING NETWORK CABLE - NONMETALLIC						
732C	B	2426.12	C248	5G2M	*	
732M	B	6426.2	M248	-	*	
732R	B	6426.2	R248	-	* *	
732X	B	3100.562	D248	5F2M	*	
CONSTRUCTION MANAGEMENT CENTERS						
733M	A	8710.1	M337	-		

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
* Measured Work
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
INTRABUILDING NETWORK CABLE - NONMETALLIC						
742C	A	2426.12	C24801	5G2M01		Outside Mass.
742M	A	6426.2	M248	-		
742R	A	6426.2	R248	-		
742X	A	3100.56	D24801	5F2M01		Outside Mass.
D.O.S. EQUIPMENT- DEFERRABLE PLUG-INS						
757C	B	2232.11	C75103	5G0903		
757X	B	3100.3611	D75103	5F0903		
LARGE PBX - SUBSCRIBER PAIR GAIN						
758C	A,B	2362.7	616A	5G7H	*,#,**	
758M	A,B	6362.7	720R	-	* *	
758R	A,B	6362.7	730K	-	* *	
758X	A,B	3100.4692	617A	5F7H	* *	
RADIO - NON CELLULAR AND OTHER - DEFERRABLE PLUG-INS						
767C	B	2231.22	C76402	5G1E02		
767X	B	3100.3522	D76402	5F0W02		
ELECTRONIC ANALOG EQUIPMENT - #2 ESS						
777M	B	6211.1	M77503	-	*	
777R	B	6211.1	R77503	-	*	
SERVICE ORDER - CONTROL AND DISPATCH - COMPLEX						
798E	A,B	6532.9	721M	-		

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
FURNITURE						
801C	A	2122.1	630B	5G88		
801X	A	3100.22	D013	5F74		
OFFICE SUPPORT EQUIPMENT						
803C	A	2123.1	630D	5G8B		
803X	A	3100.231	D017	5F7M		
INTEROFFICE FACILITY ASSIGNMENT AND CIRCUIT LAYOUT						
808M	A	6532.81	M791	-		
AERIAL CABLE - NONMETALLIC - BUILDING - EXCHANGE - OUTSIDE MASS.						
812C	A	2421.121	C28101	5G2701		Outside Mass.
812X	A	3100.52	D28101	5F2701		Outside Mass.
FURNITURE - ARTWORKS						
817C	A	2122.2	630A	5G8A		Artworks
AERIAL CABLE - NONMETALLIC - OTHER - EXCHANGE - OUTSIDE MASS.						
822C	A	2421.122	C28201	5G2601		
822X	A	3100.52	D28201	5F2601		
AERIAL CABLE - NONMETALLIC - BUILDING - EXCHANGE						
832C	B	2421.121	C281	5G27	*	
832X	B	3100.5215	D281	5F27	*	
BURIED CABLE - NONMETALLIC						
845C	A	2423.12	CB8010	5G2A10		Except Actual Cost
845C	B	2423.12	CB80	5G2A	*	Exchange
845M	A,B	6423.2	MB80	-	*	Exchange

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
BURIED CABLE - NONMETALLIC (CONTN'D)						
845R	A,B	6423.2	RB80	-		
845TC	A	2423.22	CB8310	5G3A10		Except Actual Cost
845TC	B	2423.22	CB83	5G3A	*	
845TX	A	3100.54	DB8310	5F3A10		Except Actual Cost
845TX	B	3100.5422	DB83	5F3A	*	
845X	A	3100.54	DB8010	5F2A10		Except Actual Cost
845X	B	3100.5413	DB80	5F2A	*	
845Y	A,B	6423.2	7227	-		
CIRCUIT EQUIPMENT						
857C	B	2232.21	C75E02	5G0W02	*,#,**	Subscrib Pair Gain - Deferrable Plug-Ins
857X	B	3100.3621	D75A02	5F0Y02	* *	Subscrib Pair Gain - Deferrable Plug-Ins
LARGE PBX - NETWORK CHANNEL TERMINATING EQUIPMENT						
858C	A,B	2362.8	6165	5G77	* *	
858M	A,B	6362.8	720G	-	* *	
858R	A,B	6362.8	730C	-	*	
858X	A,B	3100.4692	6175	5F77	* *	
RADIO - SATELLITE AND EARTH STATION FACILITIES - DEFERRABLE PLUG-INS						
867C	B	2231.1	C76302	5G1D02		
867X	B	3100.351	D76302	5F0V02		
ELECTRONIC EQUIPMENT - ANALOG						
877M	B	6211.1	M77504	-	*	#3 ESS
877R	B	6211.1	R77504	-	*	#3 ESS

NY only: Contracted Labor - Plant Cost Results Plan (E5300)
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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
GENERAL PURPOSE COMPUTERS						
881C	A	2124.1	630301	5G8201		Accounting Office
881X	A	3100.24	631801	5F8A01		Accounting Office
883C	A	2124.1	630303	5G8203		Other
883X	A	3100.24	631803	5F8A03		Other
884C	A	2124.1	630304	5G8204		Personal/Word Proc
884X	A	3100.24	631804	5F8A04		Personal/Word Proc
885C	A	2124.1	630302	5G8202		Central Office
885X	A	3100.24	631802	5F8A02		Central Office
SUBSCRIBER PAIR - GAIN - DEFERRABLE PLUG-INS						
897C	B	2232.12	C75205	5G0C05		
897X	B	3100.3612	D75205	5F0C05		
PUBLIC TELEPHONE EQUIPMENT - COIN						
898E	A,B	6351.1	7283	-		
AERIAL CABLE - METALLIC - EXCHANGE - EMBEDDED SERVICE ACCESS WIRES						
902C	B	2421.1122	C20202	5G2004		
902X	B	3100.5214	D20202	5F2002		
AERIAL CABLE - METALLIC - EXCHANGE - EMBEDDED SERVICE ACCESS WIRE						
932C	B	2421.1112	C20102	5G2102		
932X	B	3100.5212	D20102	5F2102		
BURIED CABLE - EXCHANGE - METALLIC - EMBEDDED SERVICE ACCESS WIRES						
945C	B	2423.1112	CB0103	5G2P06		
945X	B	3100.5412	DB0003	5F2503		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
SUBSCRIBER PAIR GAIN - ANALOG EQUIPMENT - FURNITURE AND OTHER TOOLS						
957C	B	2232.21	C75E03	5G0W03	*,#,**	
957X	B	3100.3621	D75A03	5F0Y03	* *	
LARGE PBX - MISCELLANEOUS						
958C	A,B	2362.92	6164	5G7E	* *	
958M	A,B	6362.92	720F	-	* *	
958R	A,B	6362.92	730B	-	*	
958X	A,B	3100.4692	6174	5F7E	* *	
GARAGE WORK EQUIPMENT						
962C	A	2115.1	6322	5G91		
962X	A	3100.15	6332	5F91		
SPECIAL PURPOSE VEHICLES						
963C	A	2114	6328	5G97		
963X	A	3100.14	6338	5F97		
OTHER TOOLS AND WORK EQUIPMENT						
965C	A	2116.5	6325	5G94		
965X	A	3100.16	6335	5F94		
RADIO SATELLITE AND EARTH STATION FACILITIES - FURNITURE AND OTHER TOOLS						
967C	B	2231.1	C76303	5G1D03		
967X	B	3100.351	D76303	5F0V03		
MOTOR VEHICLE						
971C	A	2112	6321	5G90		
971X	A	3100.12	6331	5F90		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC DIGITAL EQUIPMENT - #5 ESS						
987M	B	6212.1	M77602	-	*	
987R	B	6212.1	R77602	-	*	
PUBLIC TELEPHONE EQUIPMENT - OTHER						
988C	A,B	2351.9	6189	5GE2	*	
988E	A,B	6351.9	7379	-		
988H	A,B	6351.9	H889	-		
988M	A,B	6351.9	7289	-	*	
988R	A,B	6351.9	7389	-	*	
988X	A	3100.459	6199	5FE2	*	
988X	B	3100.451	6199	5FE2	*	
988Y	A,B	6351.9	7369	-		
SUBSCRIBER PAIR - GAIN - FURNITURE AND OTHER TOOLS						
997C	B	2232.12	C75206	5G0C06		
997X	B	3100.3612	D75206	5F0C06		
OTHER CIRCUIT EQUIPMENT - PICS						
1057M	B	6232.19	M75002	-	*	
OPERATOR SYSTEMS CENTRAL OFFICE EQUIPMENT						
1117C	B	2220.1	C71401	5G1A01		
1117H	B	6220.1	H711	-		
1117M	B	6220.1	M721	-		
1117R	B	6220.1	R711	-		
1117X	B	3100.341	D71101	5F0401		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
TELETYPEWRITER AND DATA - OFFICIAL COMMUNICATIONS						
1118C	A	2123.21	634001	5GE301		
1118M	A	6123.21	M811	-		
1118R	A	6123.21	R811	-		
1118X	A	3100.2321	635001	5FE301		
TELEPHONE AND MISCELLANEOUS - OFFICIAL COMMUNICATIONS						
1128C	A	2123.21	634002	5GE302		
1128M	A	6123.21	M821	-		
1128R	A	6123.21	R821	-		
1128X	A	3100.2321	635002	5FE302		
RADIO - OFFICIAL COMMUNICATIONS						
1138C	A	2123.21	634003	5GE303		
1138M	A	6123.21	M831	-		
1138R	A	6123.21	R831	-		
1138X	A	3100.2321	635003	5FE303		
CROSSBAR TANDEM						
1147M	B	6215.2	M74003	-	*	
1147R	B	6215.2	R74003	-	*	
OFFICIAL COMMUNICATIONS EQUIPMENT - EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
1148C	A	2123.92	6342	5GE6		
1148X	A	3100.927	6352	5FE6		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
DIGITAL DATA SYSTEMS CIRCUIT EQUIPMMENT - PICS						
1157M	B	6232.11	M75102	-	*	
CROSSBAR DID						
1247M	B	6215.2	M74004	-	*	
1247R	B	6215.2	R74004	-	*	
CIRCUIT EQUIPMENT - ANALOG - PICS						
1257M	B	6232.29	M75C02	-		
OPERATOR SYSTEMS EQUIPMENT - FURNITURE AND OTHER TOOLS						
1317C	B	2220.1	C71403	5G1A03		
1317X	B	3100.341	D71103	5F0403		
CIRCUIT EQUIPMENT - COLLOCATION INVESTMENT						
1357C	A,B	2232.4	C75M	5G3M		
1357M	A,B	6232.4	M75M			
1357R	A,B	6232.4	R75M			
1357X	A,B	3100.364	D75M	5F3M		
OPERATOR SYSTEMS CENTRAL OFFICE EQUIPMENT - ADMINISTRATIVE						
1417C	B	2220.1	C71404	5G1A04		
1417X	B	3100.341	D71104	5F0404		
ELECTRONIC DIGITAL - DMS - 10						
1487M	B	6212.1	M77603	-	*	
1487R	B	6212.1	R77603	-	*	

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
OPERATOR SYSTEMS CENTRAL OFFICE EQUIPMENT - DEFERRABLE PLUG-INS						
1517C	B	2220.1	C71402	5G1A02		
1517X	B	3100.341	D71102	5F0402		
ELECTRONIC DIGITAL - DMS100						
1587M	B	6212.1	M77604	-	*	
1587R	B	6212.1	R77604	-	*	
INTRABUILDING NETWORK CABLE - METALLIC - MASS. EXCLUDING U.G. CONN.						
1642C	A	2426.11	C24611	5G2L11		
1642X	A	3100.56	D24611	5F2L11		
ELECTRONIC DIGITAL - DMS200						
1687M	B	6212.1	M77605	-	*	
1687R	B	6212.1	R77605	-	*	
INTRABUILDING NETWORK CABLE - NONMETALLIC - MASS. EXCLUDING U.G. CONN.						
1742C	A	2426.12	C24811	5G2M11		
1742X	A	3100.56	D24811	5F2M11		
ELECTRONIC DIGITAL - TANDEM						
1787M	B	6212.1	M77601	-	*	
1787R	B	6212.1	R77601	-	*	
FURNITURE - EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
1801C	A	2122.9	630H	5G8G		
1801X	A	3100.925	D01A	5F7P		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
OFFICE EQUIPMENT - EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
1803C	A	2123.91	630J	5G8H		
1803X	A	3100.926	0018	5F7Q		
AERIAL CABLE - NONMETALLIC - BUILDING - EXCHANGE-MASS. EXCLUDING U.G. CONN.						
1812C	A	2421.121	C28111	5G2711		
1812X	A	3100.52	D28111	5F2711		
AERIAL CABLE - NONMETALLIC - OTHER - EXCHANGE -MASS. EXCLUDING U.G. CONN.						
1822C	A	2421.122	C28211	5G2611		
1822TC	A	2421.22	C28311	5G3611		
1822TX	A	3100.52	D28311	5F3611		
1822X	A	3100.52	D28211	5F2611		
GARAGE WORK EQUIPMENT - EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
1962C	A	2115.9	632C	5G9C		
1962X	A	3100.921	633C	5F9B		
OTHER TOOLS AND WORK EQUIPMENT - EMBEDDED INVESTMENT IN INDIVIDUAL ITEMS OF SMALL VALUE						
1965C	A	2116.92	632E	5G9E		
1965X	A	3100.923	633E	5F9C		
LARGE PBX INTRASYSTEMS - NON ELECTRONIC						
2058C	A	2123.22	634101	5GE401		
2058M	A	6123.22	M851	-		
2058R	A	6123.22	R851	-		
2058X	A	3100.2322	635101	5FE401		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
KEY SYSTEMS AND SMALL PBX INTRASYSTEMS - OFFICIAL COMMUNICATION						
2128C	A,B	2123.21	634005	5GE305	*	
2128C	K	161-2041	634102	5GE402		
2128M	A,B	6123.21	M822	-		
2128R	A,B	6123.21	R822	-		
2128X	A	3100.2321	635004	5FE304	*	
2128X	B	3100.232	635004	5FE304		
2128X	K	171-2013	635004	5FE304		
LARGE PBX INTRASYSTEMS - OFFICIAL COMMUNICATION						
2158C	A	2123.22	634103	5GE403		
2158C	B	2123.22	6341	5GE4	*	
2158C	K	161-2042	634103	5GE403		
2158M	A,B	6123.22	M850	-		
2158R	A,B	6123.22	R850	-		
2158X	A	3100.2322	635103	5FE403		
2158X	B	3100.232	6351	5FE4	*	
2158X	K	171-2014	6351	5FE4		

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
COMPANY - USED STATION APPARATUS TRANSFER						
2318C	K	161-2011	6106	5G49		
2318X	K	171-2011	6116	5F49		
FURNITURE EXPENSE						
2611M	A,B	6122.1	7248	-		
2611R	A,B	6122.1	7246	-		
OTHER COMMUNICATIONS EQUIPMENT						
2612C	A,B	2123.21	634004	5GE304		
OFFICE SUPPORT EQUIPMENT						
2614M	A,B	6123.1	M416	-		
2614R	A,B	6123.1	R416	-		
ARTWORKS EXPENSE						
2617M	A,B	6122.2	7249	-		
2617R	A,B	6122.2	7247	-		
INTRABUILDING NETWORK CABLE - METALLIC - MASS. U.G. CONN.						
2642C	A	2426.11	C24621	5G2L21		
2642X	A	3100.56	D24621	5F2L21		
INTRABUILDING NETWORK CABLE - NONMETALLIC - MASS. - U.G. CONN.						
2742C	A	2426.12	C24821	5G2M21		
2742X	A	3100.56	D24821	5F2M21		
AERIAL CABLE - NONMETALLIC - BUILDING - EXCHANGE - MASS. - U.G. CONN.						
2812C	A	2421.121	C28121	5G2721		
2812X	A	3100.52	D28121	5F2721		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - NONMETALLIC						
2822C	A	2421.122	C28221	5G2621		Mass. - U.G. Conn.
2822TC	A	2421.22	C28321	5G3621		Mass.-U.G. Conn. - Toll
2822TX	A	3100.52	D28321	5F3621		Mass.- U.G.Conn. - Toll
2822X	A	3100.52	D28221	5F2621		Mass. - U.G. Conn.
TELETYPEWRITER AND DATA - OFFICIAL COMMUNICATIONS						
3118C	B	2123.21	634001	5GE301	*	
3118C	K	161-2031	634001	5GE301		
3118M	B	6123.21	M811	-		
3118R	B	6123.21	R811	-		
3118X	B	3100.232	635001	5FE301	*	
3118X	K	171-2013	635001	5FE301		
TELEPHONE AND MISCELLANEOUS - OFFICIAL COMMUNICATIONS						
3128C	B	2123.21	634002	5GE302	*	
3128C	K	161-2032	634002	5GE302		
3128M	B	6123.21	M821	-		
3128R	B	6123.21	R821	-		
3128X	B	3100.232	635002	5FE302	*	
3128X	K	171-2013	635002	5FE302		
RADIO - OFFICIAL COMMUNICATIONS						
3138C	B	2123.21	634003	5GE303	*	
3138M	B	6123.21	M831	-		
3138R	B	6123.21	R831	-		
3138X	B	3100.232	635003	5FE303	*	

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FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
BURIED CABLE - NONMETALLIC						
3845C	A	2423.12	CB8003	5G2A03		Exchng-Actual Cost
3845TC	A	2423.22	CB8303	5G3A03		Toll - Actual Cost
3845TX	A	3100.54	DB8303	5F3A03		Toll - Actual Cost
3845X	A	3100.54	DB8003	5F2A03		Exchng-Actual Cost
OFFICIAL COMMUNICATIONS EQUIPMENT						
4118C	B	2123.92	6342	5GE6		
4118X	B	3100.927	6352	5FE6		
RESERVE DEFICIENCY						
5000X	B	3100.6		5F2D		
UNDERGROUND CABLE - VDT DIRECT - METALLIC						
5105C	A,B	2422.51	C508	5G2S		
5105M	A,B	3100.51	M508			
5105R	A,B	3100.51	R508			
5105X	A,B	5100.5351	D508	5F2S		
BUILDINGS - VDT EQUIPMENT - DIRECT						
5110C	A,B	2121.5	C01C	5G7A		
5110M	A,B	6121.5	M01C			
5110R	A,B	6121.5	R01C			
5110X	A,B	3100.25	D01C	5F7A		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - VDT - DIRECT - METALLIC						
5132C	A,B	2421.51	C206	5G2D		
5132M	A,B	6421.51	M206			
5132R	A,B	6421.51	R206			
5132X	A,B	3100.5251	D206	5F1M		
BURIED CABLE - VDT - DIRECT - METALLIC						
5145C	A,B	2423.51	CB05	5G2U		
5145M	A,B	6423.51	MB05			
5145R	A,B	6423.51	RB05			
5145X	A,B	3100.5451	DB05	5F2U		
CONDUIT SYSTEMS - VDT - DIRECT						
5214C	A,B	2441.5	C408	5G1L		
5214M	A,B	6441.5	M408			
5214R	A,B	6441.5	R408			
5214X	A,B	3100.585	D408	5F1L		
AERIAL CABLE - VDT - DIRECT - NONMETALLIC						
5232C	A,B	2421.52	C286	5G2R		
5232M	A,B	6421.52	M286			
5232R	A,B	6421.52	R286			
5232X	A,B	3100.5252	D286	5F1N		
BURIED CABLE - VDT - DIRECT - NONMETALLIC						
5245C	A,B	2423.52	CB85	5G2V		
5245M	A,B	6423.52	MB85			
5245R	A,B	6423.52	RB85			
5245X	A,B	3100.5452	DB85	5F2V		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
CIRCUIT EQUIPMENT - VDT - DIRECT						
5257C	A,B	2232.5	C75G	5G1B		
5257M	A,B	6232.5	M75G			
5257R	A,B	6232.5	R75G			
5257X	A,B	3100.365	D75G	5F1B		
OTHER TERMINAL EQUIPMENT - VDT DIRECT						
5258C	A,B	2362.5	616G	5G7U		
5258M	A,B	6362.95	720M			
5258R	A,B	6362.95	730G			
5258X	A,B	3100.465	617G	5F7U		
ANALOG ELECT SWITCHING EQUIPMENT - VDT - DIRECT						
5277C	A,B	2211.5	C77G	5G0B		
5277M	A,B	6211.5	M77G			
5277R	A,B	6211.5	R77G			
5277X	A,B	3100.315	D77G	5F1G		
UNDERGROUND CABLE - VDT DIRECT - NONMETALLIC						
5285C	A,B	2422.52	C588	5G2T		
5285M	A,B	6422.52	M588			
5285R	A,B	6422.52	R588			
5285X	A,B	3100.5352	D588	5F2T		
DIGITAL ELECT SWITCHING EQUIPMENT - VDT - DIRECT						
5287C	A,B	2212.5	C77J	5G01		
5287M	A,B	6212.5	M77J			
5287R	A,B	6212.5	R77J			
5287X	A,B	3100.325	D77J	5F1H		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
INTRABUILDING NETWORK CABLE - VDT DIRECT - METALLIC						
5632C	A,B	2426.51	C242	5G2U		
5632M	A,B	6426.51	M242			
5632R	A,B	6426.51	R242			
5632X	A,B	3100.5651	D242	5F2W		
INTRABUILDING NETWORK CABLE - VDT DIRECT - NONMETALLIC						
5732C	A,B	2426.52	C243	5G2Y		
5732M	A,B	6426.52	M243			
5732R	A,B	6426.52	R243			
5732X	A,B	3100.5652	D243	5F2Y		
OTHER WORK EQUIPMENT - VDT - DIRECT						
5965C	A,B	2116.6	632L	5G9L		
5965X	A,B	3100.17	633L	5F9L		
WORK EQUIPMENT - FULLY DEDICATED NONREGULATED - VDT						
6265C	A,B	2116.201	632N01	5G9N01		
6265X	A,B	3100.1961	633N01	5F9N01		
ELECTRONIC ANALOG EQUIPMENT - FULLY DEDICATED NONREGULATED - VDT						
6277C	A,B	2211.201	C77L01	5G1S01		
6277M	A,B	6211.201	M77L01			
6277R	A,B	6211.201	R77L01			
6277X	A,B	3100.3121	D77L01	5F1S01		
INTEROFFICE FACILITY ASSIGNMENT AND CIRCUIT LAYOUT						
6647M	B	6532.81	M791	-		
WORK EQUIPMENT - FULLY DEDICATED NONREGULATED - OTHER						
6965C	A,B	2116.209	632N09	5G9N09		
6965X	A,B	3100.1969	633N09	5F9N09		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC ANALOG EQUIPMENT - FULLY DEDICATED NONREGULATED - OTHER						
6977C	A,B	2211.209	C77L09	5G1S09		
6977M	A,B	6211.209	M77L09			
6977R	A,B	6211.209	R77L09			
6977X	A,B	3100.3129	D77L09	5F1S09		
UNDERGROUND CABLE - VDT JOINT USE - METALLIC						
7105C	A,B	2422.71	C509	5G3S		
7105M	A,B	6422.71	M509			
7105R	A,B	6422.71	R509			
7105X	A,B	3100.5371	D509	5F3S		
BUILDINGS - VDT EQUIPMENT - JOINT USE						
7110C	A,B	2121.6	C01D	5G7B		
7110M	A,B	6121.6	M01D			
7110R	A,B	6121.6	R01D			
7110X	A,B	3100.26	D01D	5F7B		
AERIAL CABLE - VDT JOINT USE - METALLIC						
7132C	A,B	2421.71	C207	5G3D		
7132M	A,B	6421.71	M207			
7132R	A,B	6421.71	R207			
7132X	A,B	3100.5271	D207	5F3D		
BURIED CABLE - VDT JOINT USE - METALLIC						
7145C	A,B	2423.71	CB06	5G3U		
7145M	A,B	6423.71	MB06			
7145R	A,B	6423.71	RB06			
7145X	A,B	3100.5471	DB06	5F3U		
CONDUIT SYSTEMS						
7214C	A,B	2441.4	C407	5G1K		
7214M	A,B	6441.4	M407			
7214R	A,B	6441.4	R407			

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
CONDUIT SYSTEMS (CONTN'D)						
7214X	A,B	3100.584	D407	5F1R		
AERIAL CABLE - VDT JOINT USE - NONMETALLIC						
7232C	A,B	2421.72	C287	5G3R		
7232M	A,B	6421.72	M287			
7232R	A,B	6421.72	R287			
7232X	A,B	3100.5272	D287	5F3R		
BURIED CABLE - VDT JOINT USE - NONMETALLIC						
7245C	A,B	2423.72	CB86	5G3V		
7245M	A,B	6423.72	MB86			
7245R	A,B	6423.72	RB86			
7245X	A,B	3100.5472	DB86	5F3V		
TERMINAL EQUIPMENT - VDT JOINT USE						
7258C	A,B	2362.4	616H	5G7T		
7258M	A,B	6362.94	720J			
7258R	A,B	6362.94	730H			
7258X	A,B	3100.464	617H	5F7T		
ANALOG ELECTRONIC SWITCHING EQUIPMENT - VDT JOINT USE						
7277C	A,B	2211.7	C77H	5G0V		
7277M	A,B	6211.7	M77H			
7277R	A,B	6211.7	R77H			
7277X	A,B	3100.317	D77H	5F1V		
UNDERGROUND CABLE - VDT JOINT USE - NONMETALLIC						
7285C	A,B	2422.72	C589	5G3T		
7285M	A,B	6422.72	M589			
7285R	A,B	6422.72	R589			
7285X	A,B	3100.5372	D589	5F3J		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
DIGITAL ELECTRONIC SWITCHING EQUIPMENT - VDT JOINT USE						
7287C	A,B	2212.7	C77K	5G04		
7287M	A,B	6212.7	M77K			
7287R	A,B	6212.7	R77K			
7287X	A,B	3100.327	D77K	5F1K		
INTRABUILDING NETWORK CABLE - VDT JOINT USE - METALLIC						
7632C	A,B	2426.71	C244	5G3W		
7632M	A,B	6426.71	M244			
7632R	A,B	6426.71	R244			
7632X	A,B	3100.5671	D244	5F3W		
INTRABUILDING NETWORK CABLE - VDT JOINT USE - NONMETALLIC						
7732C	A,B	2426.72	C245	5G3Y		
7732M	A,B	6426.72	M245			
7732R	A,B	6426.72	R245			
7732X	A,B	3100.5672	D245	5F3Y		
OTHER WORK EQUIPMENT - VDT JOINT USE						
7965C	A,B	2116.7	632M	5G9M		
7965X	A,B	3100.18	633M	5F9M		
CIRCUIT EQUIPMENT - VDT JOINT USE						
8257C	A,B	2232.7	C75L	5G3L		
8257M	A,B	6232.7	M75L			
8257R	A,B	6232.7	R75L			
8257X	A,B	3100.367	D75L	5F3L		
AERIAL CABLE - METALLIC BLOCK - MASS E911						
9112C	A	2421.611	C20401	5G2B01		
9112M	A	6421.6	M201			

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - METALLIC BLOCK - MASS E911 (CONTN'D)						
9112R	A	6421.6	R201			
9112X	A	3100.62	D20401	5F2B01		
CONDUIT SYSTEMS - MASS E911						
9114C	A	2441.6	C406	5G16		
9114M	A	6441.6	M406			
9114R	A	6441.6	R406			
9114X	A	3100.68	D406	5F16		
UNDERGROUND CABLE - METALLIC - MASS E911						
9115C	A	2422.61	C507	5G2G		
9115M	A	6422.6	M501			
9115R	A	6422.6	R501			
9115X	A	3100.63	D507	5F2G		
DIGITAL ELECTRONIC SWITCHING - MASS E911						
9117C	A	2212.6	C77A	5G0H		
9117M	A	6212.6	M77E			
9117R	A	6212.6	R77E			
9117X	A	3100.326	D77A	5F0H		
OFFICIAL COMMUNICATIONS EQUIPMENT - MASS E911						
9118C	A	2123.23	634006	5GE306		
9118M	A	6123.23	M832			
9118R	A	6123.23	R832			
9118X	A	3100.2323	635006	5FE306		
AERIAL CABLE - METALLIC OTHER - EXCL-MASS E911						
9122C	A	2421.612	C20501	5G2C01		
9122X	A	3100.62	D20501	5F2C01		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
BURIED CABLE - METALLIC - MASS E911						
9145C	A	2423.61	CB04	5G2K		
9145M	A	6423.6	MB01			
9145R	A	6423.6	RB01			
9145X	A	3100.64	DB04	5F2K		
CIRCUIT EQUIPMENT - MASS E911						
9157C	A	2232.6	C757	5G0U		
9157M	A	6232.6	M753			
9157R	A	6232.6	R753			
9157X	A	3100.366	D757	5F0U		
OTHER TERMINAL EQUIPMENT - MASS E911						
9158C	A	2362.6	616F	5G7F		
9158M	A	6362.6	720H			
9158R	A	6362.6	730T			
9158T	A	6533.91	T191			
9158X	A	3100.466	617F	5F7F		
UNDERGROUND CABLE - MASS E911						
9185C	A	2422.6	C587	5G2H		
9185M	A	6422.6	M581			
9185R	A	6422.6	R581			
9185X	A	3100.63	D587	5F2H		
AERIAL CABLE - METALLIC BLOCK EXCL - MASS E911						
9212C	A	2421.611	C20402	5G2B02		
9212X	A	3100.62	D20402	5F2B02		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE - METALLIC OTHER - U.G. - MASS E911						
9222C	A	2421.612	C20502	5G2C02		
9222X	A	3100.62	D20502	5F2C02		
CIRCUIT EQUIPMENT - FULLY DEDICATED NONREGULATED - VDT						
9257C	A,B	2232.301	C75K01	5G1901		
9257M	A,B	6232.301	M75K01			
9257R	A,B	6232.301	R75K01			
9257X	A,B	3100.3681	D75K01	5F1901		
OTHER TERMINAL EQUIPMENT - FULLY DEDICATED NONREGULATED - VDT						
9258C	A,B	2362.201	616J01	5G7V01		
9258M	A,B	6362.201	720U			
9258R	A,B	6362.201	730U			
9258X	A,B	3100.4621	617J01	5F7V01		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED - VERMONTNET						
9317C	A	2212.202	C77N01	5G1701		
9317M	A	6212.202	M77N01			
9317R	A	6212.202	R77N01			
9317X	A	3100.3222	D77N01	5F1701		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED - VDT						
9327C	A,B	2212.205	C77N04	5G1704		
9327M	A,B	6212.205	M77N04			
9327R	A,B	6212.205	R77N04			
9327X	A,B	3100.3225	D77N04	5F1704		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED-CO LAN						
9347C	A,B	2212.203	C77N02	5G1702		
9347M	A,B	6212.203	M77N02			

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED-CO LAN (CONTN'D)						
9347R	A,B	6212.203	R77N02			
9347X	A,B	3100.3223	D77N02	5F1702		
CIRCUIT EQUIPMENT - FULLY DEDICATED NONREGULATED - DSO PRIME SERVICE						
9357C	B	2232.302	C75K02	5G1902		
9357M	B	6232.302	M75K02			
9357R	B	6232.302	R75K02			
9357X	B	3100.3682	D75K02	5F1902		
LEASED TERMINAL EQUIPMENT - DDS - NCTE						
9358C	A,B	2362.31	616D	5G7M	* *	
9358E	A,B	6362.31	721F	-		
9358M	A,B	6362.31	720S	-	* *	
9358R	A,B	6362.31	730L	-	* *	
9358X	A,B	3100.4631	617D	5F7R	* *	
9358Y	A,B	6362.31	722D	-		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED - CUST CHG						
9367C	B	2212.204	C77N03	5G1703		
9367M	B	6212.204	M77N03			
9367R	B	6212.204	R77N03			
9367X	B	3100.3224	D77N03	5F1703		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED						
9377C	A,B	2212.201	C777	5G06	* *	
9377H	B	6212.201	H770	-		
9377R	A,B	6212.201	R770	-	* *	
9377X	A,B	3100.3221	D777	5F06	* *	
9377M	A,B	6212.201	M770	-	* *	
9377E	A,B	6212.201	7400	-		
9377Y	A,B	6212.201	7410	-		

NY only: Contracted Labor Plant Cost Results Plan (E5300)
** Non Measured Work

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED						
9387C	A,B	2212.31	C779	5G0T		
9387E	A,B	6212.31	7500	-		
9387M	A,B	6212.31	M777	-		
9387R	A,B	6212.31	R777	-		
9387X	A,B	3100.3231	D779	5F0T		
9387Y	A,B	6212.31	7510	-		
ELECTRONIC DIGITAL EQUIPMENT - FULLY DEDICATED NONREGULATED - OTHER						
9397C	A,B	2212.299	C77N09	5G1709		
9397M	A,B	6212.299	M77N09			
9397R	A,B	6212.299	R77N09			
9397X	A,B	3100.3229	D77N09	5F1709		
OPERATOR SYSTEMS - SHARED EQUIPMENT - OSDI						
9417C	A,B	2220.21	C71601	5G3F01		
9417M	A,B	6220.21	M71601			
9417R	A,B	6220.21	R71601			
9417X	A,B	3100.3421	D71601	5F3F01		
OTHER TERMINAL EQUIPMENT - FULLY DEDICATED NONREGULATED - OTHER						
9458C	A,B	2362.209	616J09	5G7V09		
9458M	A,B	6362.209	720W			
9458R	A,B	6362.209	730W			
9458X	A,B	3100.4622	617J09	5F7V09		
DIGITAL ELECTRONIC SWITCHING - SHARED EQUIPMENT - TOPS/OIS						
9487C	A,B	2212.32	C77T	5G3C		
9487M	A,B	6212.32	M77T			
9487R	A,B	6212.32	R77T			
9487X	A,B	3100.3232	D77T	5F3C		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
OPERATOR SYSTEMS - SHARED EQUIPMENT - OTHER						
9517C	A,B	2220.29	C71609	5G3F09		
9517M	A,B	6220.29	M71609			
9517R	A,B	6220.29	R71609			
9517X	A,B	3100.3429	D71609	5F3F09		
DIGITAL ELECTRONIC SWITCHING - SHARED EQUIPMENT - OTHER						
9587C	A,B	2212.39	C77U	5G3E		
9587M	A,B	6212.39	M77U			
9587R	A,B	6212.39	R77U			
9587X	A,B	3100.3239	D77U	5F3E		
OPERATOR SYSTEMS - NONREGULATED EQUIPMENT - OIS						
9617C	A,B	2220.31	C71701	5G3G01		
9617M	A,B	6220.31	M71701			
9617R	A,B	6220.31	R71701			
9617X	A,B	3100.3431	D71701	5F3G01		
OPERATOR SYSTEMS - NONREGULATED EQUIPMENT - OTHER						
9717C	A,B	2220.39	C71709	5G3G09		
9717M	A,B	6220.39	M71709			
9717R	A,B	6220.39	R71709			
9717X	A,B	3100.3439	D71709	5F3G09		
AERIAL CABLE NONMETALLIC BLOCK EXCL.-MASS E911						
9812C	A	2421.621	C28401	5G2E01		
9812M	A	6421.61	M281			
9812R	A	6421.61	R281			
9812X	A	3100.62	D28401	5F2E01		
AERIAL CABLE NONMETALLIC BLOCK U.G. - MASS E911						
9822C	A	2421.621	C28402	5G2E01		
9822X	A	3100.62	D28402	5F2E02		

FIELD REPORTING CODE	COMPANY	USOA	CFC	SPFC	NYT-E-5300	DETAIL
AERIAL CABLE NONMETALLIC OTHER EXCL.- MASS E911						
9832C	A	2421.622	C28501	5G2F01		
9832X	A	3100.62	D28501	5F2F01		
AERIAL CABLE NONMETALLIC OTHER U.G. - MASS E911						
9842C	A	2421.622	C28502	5G2F02		
9842X	A	3100.62	D28502	5F2F02		
BURIED CABLE NONMETALLIC - MASS E911						
9845C	A	2423.62	CB84	5G2N		
9845M	A	6423.6	MB81			
9845R	A	6423.6	RB81			
9845X	A	3100.64	DB84	5F2N		
CIRCUIT EQUIPMENT - FULLY DEDICATED NONREGULATED - OTHER						
9957C	A,B	2232.309	C75K09	5G1909		
9957M	A,B	6232.309	M75K09			
9957R	A,B	6232.309	R75K09			
9957X	A,B	3100.3689	D75K09	5F1909		
LEASED TERMINAL EQUIPMENT - OTHER						
9958C	A,B	2362.32	616E	5G7N	**	
9958E	A,B	6362.32	721G	-		
9958M	A,B	6362.32	720T	-	**	
9958R	A,B	6362.32	730M	-	**	
9958X	A,B	3100.4632	617E	5F5S	**	
9958Y	A,B	6362.32	722E	-		

NY only: Contracted Labor Plant Cost Results Plan (E5300)
** Non Measured Work

LOCATION	LOOPS PER WC	1998 wkg	CLLI8	WC	WC SQ_MI	LOOPS PER_SQ_MI	1998 WKG PER_SQ_MI	Manhattan (Incl. N. Manh)
115TH AVE.	71,563	77584	NYCQNYOP	088	7.96641	8983.09	9738.89	
14TH AVE.	79,205	84685	NYCKNYFT	052	3.19351	24801.86	26517.84	
14TH ST.	39,894	45269	NYCKNY14	069	3.24428	12296.72	13953.48	
71ST ST.	59,836	62707	NYCKNY71	053	2.91739	20510.11	21494.21	
77TH ST.	79,255	86732	NYCKNY77	054	4.50479	17593.49	19253.28	
AKRON	4,690	5194	AKRNNYAK	643	69.5302	67.45	74.70	
ALBEMARLE RD.	75,106	78614	NYCKNYAL	050	3.08334	24358.65	25496.38	
ALBION	5,598	6101	ALBNNYAI	673	100.366	55.78	60.79	
ALBY STATE	62,141	76666	ALBYNYSS	366	31.4709	1974.55	2436.09	
ALBY WASHINGTON	44,387	50201	ALBYNYWA	371	21.045	2109.15	2385.41	
ALDEN	4,338	4841	ALDNNYAD	720	46.1841	93.93	104.82	
ALEXANDRIA BAY	4,173	4647	AXBANYAX	526	80.2624	51.99	57.90	
ALTAMONT	2,485	2730	ALMTNYAL	375	27.1891	91.40	100.41	
AMBER	1,100	1122	AMBRNYAB	508	20.6845	53.18	54.24	
AMENIA	1,848	2042	AMENNYAN	318	40.3466	45.80	50.61	
AMHERST	37,856	38026	AMHRNYMP	644	54.0927	699.84	702.98	
AMSTERDAM	15,624	16706	AMSTNYPE	416	97.4079	160.40	171.51	
ANGELICA	776	877	ANGENYAG	702	69.4941	11.17	12.62	
ANGOLA	6,472	6967	ANGLNYAO	685	46.5577	139.01	149.64	
ANTWERP	453	452	ATWPNYAW	527	79.5194	5.70	5.68	
ARCADE-CHAFFEE	5,598	6206	ARCDNYAE	725	134.708	41.56	46.07	
ARGYLE	1,484	1605	ARGYNYAY	438	55.0716	26.95	29.14	
ARKPORT	1,015	1105	ARPTNYAR	609	32.0507	31.67	34.48	
ARMONK	6,019	8463	ARVGNYAV	278	21.4227	280.96	395.05	
ASTORIA	84,461	90596	NYCQNYAS	081	4.3764	19299.20	20701.03	
ATTICA	3,321	3699	ATTCNYAT	674	87.203	38.08	42.42	
AUBURN	23,009	24588	AUBNNYAU	558	124.325	185.07	197.77	
AVE. I	54,771	59165	NYCKNYAI	057	7.37482	7426.76	8022.57	
AVE. R	61,406	66180	NYCKNYAR	058	3.06225	20052.58	21611.56	
AVE. U	58,171	62689	NYCKNYAU	060	3.6373	15992.91	17235.04	
AVE. Y	62,411	65751	NYCKNYAY	059	3.87653	16099.71	16961.30	
AVERILL PARK	4,137	4551	AVPKNYAV	404	46.6367	88.71	97.58	
AVOCA	1,448	1514	AVOCNYAC	600	86.5437	16.73	17.49	
BABYLON	47,882	54085	BBYLNYBN	226	19.9393	2401.39	2712.48	
BALDWINSVILLE	13,354	14914	BAVLNYBV	520	60.8296	219.53	245.18	
BALLSTON SPA	9,598	10618	BALSNYBA	476	55.995	171.41	189.62	
BARKER	1,352	1436	BRKRNYBK	664	40.6044	33.30	35.37	
BARNEVELD	1,557	1699	BNVDNYBD	426	38.5531	40.39	44.07	
BATAVIA	14,451	15511	BATVNYBT	675	113.63	127.18	136.50	
BATH	6,678	15511	BATHNYBH	601	141.958	47.04	109.26	
BAYSHORE	49,172	55141	BYSHNYBY	223	29.458	1669.22	1871.85	
BAYSIDE	85,882	68202	NYCQNYBA	082	8.92011	9627.91	7645.87	
BEACON	11,874	12839	BECNNYBE	326	24.3923	486.79	526.35	
BEDFORD VILLAGE	7,372	8797	BDVGNYBV	276	39.499	186.64	222.71	
BELFAST	1,080	1128	BLFSNYBZ	703	73.9412	14.61	15.26	
BELLE HARBOR	25,595	27686	NYCQNYBH	096	5.58148	4585.70	4960.33	
BELMONT	1,282	1540	BLMTNYBM	704	64.4371	19.90	23.90	
BERNE	2,863	3124	BERNNYBR	377	115.233	24.85	27.11	
BIG FLATS	2,063	2336	BGFLNYBF	592	19.2128	107.38	121.59	
BING-HENRY	39,750	43146	BNGHNYHY	596	57.4802	691.54	750.62	
BING-ROBERT	5,733	6187	BNGHNYRO	597	62.1582	92.23	99.54	
BLACK RIVER	6,137	4536	BLRVNYBC	528	26.6595	230.20	170.15	
BLISS	924	996	BLSSNYBS	726	81.735	11.30	12.19	
BOLIVAR	1,586	1723	BLVRNYBX	705	64.7728	24.49	26.60	

BOLTON LANDING	1,894	1128	BLLNNYBG	439	73.8469	25.65	15.27	
BOSTON	3,028	3282	BSTNNYBN	686	58.0782	52.14	56.51	
BRAINARDSVILLE	663	694	BRNVNYBW	456	53.1051	12.48	13.07	
BREWSTER	12,430	14431	BRWSNYBW	272	39.3271	316.07	366.95	
BRIDGE ST.	131,173	159098	NYCKNYBR	066	4.53849	28902.34	35055.27	
BRIDGEPORT	2,718	2862	BRPTNYBP	500	27.1041	100.28	105.59	
BROAD STREET	183,665	287323	NYCMNYBS	001	0.33365	550475.35	861156.07	X
BUFF BAILEY	44,631	42325	BFLONYBA	648	13.7287	3250.93	3082.96	
BUFF ELMWOOD	44,947	45013	BFLONYEL	638	7.08562	6343.41	6352.73	
BUFF FRANKLIN	40,575	44367	BFLONYFR	646	2.22555	18231.45	19935.30	
BUFF HERTEL	47,366	50615	BFLONYHE	660	16.5105	2868.84	3065.62	
BUFF MAIN	59,272	62519	BFLONYMA	636	16.4652	3599.83	3797.04	
BUFF S.PARK	49,288	51351	BFLONYSP	651	35.2597	1397.86	1456.37	
BUSHWICK AVE.	50,059	53675	NYCKNYBU	067	2.88047	17378.76	18634.11	
BYRON	1,151	1186	BYRNNYBY	676	39.9138	28.84	29.71	
CAIRO	3,547	3896	CAIRNYCA	332	61.4048	57.76	63.45	
CALLICOON	2,022	2288	CLCNNYCN	355	88.9934	22.72	25.71	
CAMBRIDGE	2,640	2882	CMBRNYCM	477	79.0219	33.41	36.47	
CAMDEN	4,393	4980	CMDNNYZM	417	222.503	19.74	22.38	
CAMERON	347	376	CMRNNYCF	610	44.1408	7.86	8.52	
CAMILLUS	1,944	2178	CMLSNYID	509	22.7436	85.47	95.76	
CAMPBELL	1,212	1217	CMPBNYCP	602	52.1521	23.24	23.34	
CANASERAGA	822	864	CNSRNYCX	611	80.0834	10.26	10.79	
CANASTOTA	4,741	5102	CNSTNYZA	421	59.6405	79.49	85.55	
CANISTEO	1,829	1948	CANSNYCZ	608	101.325	18.05	19.23	
CANTON	5,162	6426	CNTNNYZO	543	280.84	18.38	22.88	
CARMEL	11,045	12944	CRMLNYCL	273	51.1197	216.06	253.21	
CARTHAGE	5,463	6122	CRTHNYZG	529	227.132	24.05	26.95	
CASTLETON	2,727	3014	CSTNNYCS	368	37.3208	73.07	80.76	
CATON	640	683	CTONNYZN	603	30.7661	20.80	22.20	
CATSKILL	7,413	8347	CTSKNYCT	330	69.7586	106.27	119.66	
CATTARAUGUS	1,928	2112	CTRGNYSO	695	138.78	13.89	15.22	
CENTRAL BRIDGE	1,152	1192	CNBRNYCD	410	36.7044	31.39	32.48	
CENTRAL ISLIP	60,834	71283	BRWDNYBW	224	25.0497	2428.53	2845.66	
CHAPPAQUA	6,246	7438	CHPQNYCP	277	7.63758	817.80	973.87	
CHATEAUGAY	1,237	1351	CHTGNYZH	457	92.3201	13.40	14.63	
CHEEKTOWAGA	11,751	12446	CHKTNYFR	719	7.37141	1594.13	1688.42	
CHERRY CREEK	669	713	CHCKNYCE	697	52.7939	12.67	13.51	
CHERRY VALLEY	1,198	1336	CHVYNYZV	381	103.939	11.53	12.85	
CHITTENANGO	4,309	4608	CTNGNYCH	501	43.417	99.25	106.13	
CICERO	9,353	10390	CICRNYCJ	510	43.1356	216.83	240.87	
CITY ISLAND	3,134	3443	NYCXNYCI	039	3.45293	907.63	997.12	
CLARENCE	3,567	4069	CLNCNYBA	641	15.5048	230.06	262.43	
CLARENCE CTR.	4,205	5095	CLCTNYCC	642	36.2953	115.86	140.38	
CLARKSVILLE	858	976	CLVLNYCK	370	28.2867	30.33	34.50	
CLAVERACK	2,834	3109	CLVRNYCV	333	76.2359	37.17	40.78	
CLAYTON	3,425	3812	CYTNNYZY	530	76.0124	45.06	50.15	
CLEVELAND	1,549	1637	CLEVNYCE	512	50.3331	30.77	32.52	
CLIFTON PARK	19,261	22630	CLPKNYCP	478	40.8832	471.12	553.53	
CLINTON	6,664	7093	CLTNNYZI	427	31.0946	214.31	228.11	
CLINTON AVE.	62,893	69356	NYCKNYCL	068	2.71243	23186.96	25569.69	
CLINTON CORNERS	2,995	3370	CLCRNYCC	307	48.7908	61.38	69.07	
CLINTONDALE	3,078	3358	CNDLNYCL	308	22.1939	138.69	151.30	
CLYDE	1,754	1881	CLYDNYCY	568	46.3895	37.81	40.55	
COBLESKILL	4,760	5306	CBLSNYZB	382	102.012	46.66	52.01	
COLD SPRING	3,403	3826	CSPPNYCS	300	31.3029	108.71	122.23	

COMMACK	27,646	32509	CMMKNYCM	207	23.227	1190.25	1399.62	
CONGERS	8,963	10127	CNGRNYCN	285	12.2206	733.43	828.68	
CONSTANTIA	1,291	1363	CNTTNYCI	511	31.3526	41.18	43.47	
CONVENT AVE.	66,640	73652	NYCMNYCA	023	1.7248	38636.36	42701.76	X
COOPERSTOWN	4,519	5122	CPTWNYZW	383	112.182	40.28	45.66	
COPENHAGEN	783	841	CPNHNYZP	531	84.6831	9.25	9.93	
CORNING	16,051	17924	CRNGNYCG	606	170.39	94.20	105.19	
CORNWALL	5,463	6275	CRNWNYCW	324	24.4778	223.18	256.35	
CORONA	31,940	34589	NYCQNYCO	085	1.91495	16679.29	18062.61	
CORTLAND	14,359	16012	CRLDNYCR	620	75.1925	190.96	212.95	
CROTON	6,573	7622	CRHDNYCH	303	14.2415	461.54	535.20	
CRUGER AVE.	103,360	110716	NYCXNYCR	036	7.5795	13636.78	14607.30	
CTR BRUNSWICK	3,475	3785	CTBRNYCB	401	63.5646	54.67	59.55	
CUBA	2,855	3102	CUBANYEM	706	118.069	24.18	26.27	
CUTCHOGUE	11,729	13672	CTCHNYCU	216	40.1227	292.33	340.75	
DANNEMORA	1,242	1306	DNMRNYDN	458	60.4759	20.54	21.60	
DAVENPORT	1,284	1417	DVPTNYDT	384	76.3088	16.83	18.57	
DEER PARK	47,116	52103	DRPKNYDP	227	25.4089	1854.31	2050.58	
DELANSON	1,654	1812	DLSNNYDL	411	38.4818	42.98	47.09	
DELMAR	11,856	13487	DLMRNYDA	372	31.7091	373.90	425.34	
DERBY	2,408	2669	DRBYNYDB	687	12.0045	200.59	222.33	
DOBBS FERRY	22,402	26585	DBFYNYDF	263	11.9413	1876.01	2226.31	
DOLGEVILLE	2,537	2597	DLGVNYDG	434	190.046	13.35	13.67	
DOVER PLAINS	2,374	3006	DVPLNYDP	309	33.2591	71.38	90.38	
DUNKIRK	8,236	8772	DNKRNYDK	696	17.567	468.83	499.35	
E. 150TH ST.	44,009	50256	NYCXNYMH	030	2.93096	15015.22	17146.60	
E. 167TH ST.	51,921	57125	NYCXNYJE	033	1.59379	32577.06	35842.24	
E. 30TH ST.	171,872	158628	NYCMNY30	010	0.74996	229176.42	211516.69	X
E. 37TH ST.	144,301	207532	NYCMNY37	012	0.24544	587927.80	845550.85	X
E. 56TH ST.	206,233	295611	NYCMNY56	018	1.05365	195731.98	280559.01	X
E. 79TH ST.	138,387	160473	NYCMNY79	020	2.5089	55158.44	63961.50	X
E. 97TH ST.	110,254	124767	NYCMNY97	021	2.90794	37914.81	42905.63	X
E. FIRE ISLAND	4,645	5000	OCBHNYOB	225	5.84381	794.86	855.61	
E. GLENVILLE	10,810	11800	EGLVNYGL	408	48.6694	222.11	242.45	
E. GREENBUSH	7,766	8961	EGNBNYEG	367	37.8823	205.00	236.55	
E. HAMPTON	18,024	21484	EHTNNYEH	220	49.3587	365.16	435.26	
E. NORTHPORT	43,107	49055	ENPTNYEN	206	30.0234	1435.78	1633.89	
EAST AURORA	14,646	16168	EAURNYEA	722	125.35	116.84	128.98	
EDEN	2,932	3136	EDENNYED	688	35.9756	81.50	87.17	
EDMESTON	1,862	2002	EDTNNYET	385	95.7187	19.45	20.92	
ELBA	888	945	ELBANYEB	677	31.5297	28.16	29.97	
ELIZABETH TOWN	1,366	1539	EZTWNYEZ	459	149.428	9.14	10.30	
ELLENBURG DEPOT	1,064	1107	ELDPNYEU	460	152.935	6.96	7.24	
ELLENVILLE	6,547	7036	ELVLNYEL	356	123.019	53.22	57.19	
ELLICOTTVILLE	2,843	3111	ELCVNYEV	714	84.3982	33.69	36.86	
ELMIRA	31,483	34022	EMIRNYEM	590	148.698	211.72	228.80	
ENDICOTT	31,248	34908	ENDCNYEN	613	92.1585	339.07	378.78	
ESPERANCE	951	1080	ESPRNYER	412	38.7359	24.55	27.88	
EVANS MILLS	1,985	2114	EVMLNYEI	532	64.7805	30.64	32.63	
FABIUS	732	805	FABSNYFB	502	41.1675	17.78	19.55	
FAIRVIEW	21,424	25123	GNBGNYFV	265	7.77049	2757.10	3233.13	
FAIRVIEW AVE.	80,765	90031	NYCKNYFA	070	7.23356	11165.32	12446.29	
FALLSBURG	9,814	10864	FLBGNYFB	357	99.1921	98.94	109.52	
FAR ROCKAWAY	35,459	38749	NYCQNYFR	095	8.16532	4342.63	4745.56	
FARMINGDALE	55,678	68067	FRDLNYFM	238	21.1632	2630.89	3216.29	
FAYETTE	789	814	FYTTNYFY	582	35.4927	22.23	22.93	

FAYETTEVILLE	6,320	6993	FYVLNYFV	503	14.5508	434.34	480.59	
FISHKILL EAST	10,056	12222	FSHKNYLD	327	23.109	435.16	528.88	
FLEISCHMANNS	1,866	1929	FLSCNYFM	346	112.323	16.61	17.17	
FLORAL PARK	83,104	91160	FLPKNYFP	248	13.2691	6262.97	6870.10	
FLUSHING	102,189	111523	NYCQNYFL	086	8.76078	11664.37	12729.80	
FOREST HILLS	85,721	93275	NYCQNYFH	094	4.45087	19259.38	20956.58	
FORESTVILLE	944	1028	FSVLNYFL	698	52.326	18.04	19.65	
FORT ANN	819	818	FTANNYFA	440	55.0814	14.87	14.85	
FORT COVINGTON	2,666	2897	FTCVNYFC	461	123.094	21.66	23.53	
FRANKLIN	29,774	32964	WDMRNYFR	247	9.07544	3280.72	3632.22	
FRANKLINVILLE	2,075	2311	FKVLNYFK	710	123.832	16.76	18.66	
FREEHOLD	1,350	1411	FRHDNYFH	334	31.5372	42.81	44.74	
FREEPORT	64,827	70504	FRPTNYFP	250	16.1573	4012.24	4363.60	
FRIENDSHIP	990	1072	FRSHNYFS	707	60.1301	16.46	17.83	
GALWAY	2,659	2875	GLWYNYGW	413	76.2366	34.88	37.71	
GARRISON	1,539	1841	GRSNNYGA	299	15.4232	99.78	119.37	
GASPORT	1,816	1936	GSPTNYGP	665	38.4279	47.26	50.38	
GENEVA	12,439	12241	GENVNYGN	581	75.3998	164.97	162.35	
GLEN COVE	31,751	35919	GLCVNYGC	230	21.3104	1489.93	1685.52	
GLENS FALLS	31,870	36135	GLFLNYGF	441	157.061	202.91	230.07	
GOUVERNEUR	4,836	5985	GVRNNYGO	533	2.69724	1792.94	2218.93	
GOWANDA	4,873	5282	GWNDNYGD	692	111.784	43.59	47.25	
GRAHAMSVILLE	1,872	2056	GHVLNYGH	358	123.129	15.20	16.70	
GRAND CONCOURSE	42,575	46866	NYCXNYGC	032	1.60003	26608.88	29290.70	
GRAND GORGE	1,309	1433	GRGRNYGG	386	70.8049	18.49	20.24	
GRAND ISLAND	9,151	10107	GDISNYGI	662	28.5738	320.26	353.72	
GRANVILLE	3,026	3450	GRVINYGE	442	82.9407	36.48	41.60	
GREAT NECK	36,272	42001	GRNKNYGN	236	9.4675	3831.21	4436.33	
GREENFIELD CTR	1,933	2075	GRCTNYGC	479	59.1551	32.68	35.08	
GREENPORT	7,402	8434	GPTSNYGP	215	26.2503	281.98	321.29	
GREENVILLE	2,321	2561	GRVGNYGV	335	63.8274	36.36	40.12	
GREENWICH	3,144	3438	GNWCNYGW	480	93.0237	33.80	36.96	
GREENWICH CO.	38,181	51989	GNWCCTGN	269	47.8235	798.37	1087.10	
GREENWOOD LAKE	3,092	3442	GRLKNYGL	289	9.6344	320.93	357.26	
GROTON	2,257	2407	GRTNNYGT	622	46.5546	48.48	51.70	
GUILDERLAND	27,510	32079	ALBYNYGD	376	28.0665	980.17	1142.96	
HAGUE	872	946	HAGUNYHQ	443	65.8711	13.24	14.36	
HAMBURG	19,737	21788	HMBGNYHB	684	43.5006	453.72	500.87	
HAMILTON	2,960	2869	HMTNNYHA	423	31.5279	93.89	91.00	
HAMPTON BAYS	9,738	11127	HMBYNYHB	218	16.7034	583.00	666.15	
HARRISON	9,933	13798	HRSNNYHN	261	3.98641	2491.72	3461.26	
HARRISVILLE	1,115	1197	HRVLNYHV	534	164.412	6.78	7.28	
HARTFORD	789	835	HRFRNYHR	444	40.5702	19.45	20.58	
HARTWICK	873	930	HRWKNYHW	387	67.5168	12.93	13.77	
HEMPSTEAD	67,074	74950	HMPSNYHS	251	13.2252	5071.68	5667.21	
HERKIMER	8,145	8730	HRKMNYHC	432	82.0848	99.23	106.35	
HEUVELTON	1,325	1423	HVTNNYHX	544	115.317	11.49	12.34	
HICKSVILLE	67,949	79438	HCVLNYHV	239	17.8805	3800.17	4442.72	
HIGH FALLS	3,812	4276	HIFLNYHF	347	41.474	91.91	103.10	
HIGHLAND	4,604	5321	HGLDNYHG	311	23.4099	196.67	227.30	
HIGHLAND FALLS	3,191	5020	HHFLNYHF	301	26.022	122.63	192.91	
HINSDALE	801	864	HNDLNYHI	708	47.6021	16.83	18.15	
HOBART	1,329	1381	HBRTNYHZ	388	83.6129	15.89	16.52	
HOE AVE.	134,117	72933	NYCXNYHO	031	5.80414	23107.13	12565.69	
HOLLAND	1,752	1924	HLLDNYHO	724	41.9155	41.80	45.90	
HOLLEY	3,399	3602	HLLYNYHE	678	61.0136	55.71	59.04	

HOLLIS	64,438	69373	NYCQNYHS	092	8.55424	7532.87	8109.78	
HOMER	3,853	4119	HOMRNYHM	621	96.1148	40.09	42.86	
HOOSICK FALLS	4,234	4782	HSFLNYHS	481	103.094	41.07	46.38	
HORNELL	7,255	8138	HRNLNYHL	607	90.637	80.04	89.79	
HORSEHEADS	12,193	13636	HSHDNYHH	591	142.573	85.52	95.64	
HUDSON	9,642	11373	HDSNNYHD	336	66.1335	145.80	171.97	
HUDSON FALLS	8,038	8690	HDFLNYMS	445	60.3162	133.26	144.07	
HUNTER	1,459	1498	HNTRNYHN	337	30.2727	48.20	49.48	
HUNTINGTON	70,240	80647	HNSTNYHU	205	53.8008	1305.56	1498.99	
HYDE PARK	6,274	6599	HYPKNYHK	310	20.484	306.29	322.15	
ILION	7,353	7757	ILINNYIL	431	50.9356	144.36	152.29	
ITHACA PLEAS GR	9,185	11153	ITHCNYPG	626	51.746	177.50	215.53	
ITHACA TIOGA	26,876	29849	ITHCNYIH	618	151.412	177.50	197.14	
J. F. KENNEDY	14,406	25842	NYCQNYIA	090	7.33216	1964.77	3524.47	
JAMAICA	71,004	76617	NYCQNYJA	091	4.71668	15053.81	16243.84	
JAVA	1,435	1513	JAVANYJA	723	57.2208	25.08	26.44	
JEFFERSONVILLE	2,608	2459	JFVLNYJF	359	64.581	40.38	38.08	
JOHNSON CITY	26,688	30052	JHCYNYJC	598	66.6077	400.67	451.18	
JONESVILLE	3,809	4486	JNVLNYJV	482	14.0329	271.43	319.68	
JORDAN	3,971	4149	JRDNNYJD	559	56.8008	69.91	73.04	
KATONAH	7,629	9149	KTNHNYKA	279	31.1126	245.21	294.06	
KATTSKILL BAY	1,109	1153	KTBANYKB	446	18.5228	59.87	62.25	
KEENE	978	1122	KNVYNYKV	462	161.034	6.07	6.97	
KENDALL	1,395	1479	KENDNYKD	679	34.7825	40.11	42.52	
KENMORE PL.	76,314	82477	NYCKNYKP	051	7.33345	10406.29	11246.68	
KERHONKSON	3,888	3964	KRHNNYKR	360	78.8159	49.33	50.29	
KINGSBRIDGE	50,046	53445	NYCXNYKB	035	4.49983	11121.75	11877.12	
KINGSTON	27,173	31425	KGTNNYKG	345	88.4302	307.28	355.37	
L. I. C.	91,854	100338	NYCQNYLI	080	5.87747	15628.15	17071.63	
LAFARGEVILLE	762	802	LFRVNYLE	535	58.7117	12.98	13.66	
LAFAYETTE	2,223	2431	LFYTNYLF	504	51.8209	42.90	46.91	
LAKE GEORGE	3,700	4024	LKGRNYLR	447	41.1176	89.99	97.87	
LAKE HUNTINGTON	757	770	LKHNNYLH	361	18.4983	40.92	41.63	
LAKE KATRINE	5,489	6887	LKKTNYLK	348	19.5744	280.42	351.84	
LAKE PLACID	4,424	5158	LKPCNYLA	463	171.657	25.77	30.05	
LANCASTER	34,885	38943	LNCSNYLC	718	52.0297	670.48	748.48	
LANSING	2,212	2377	LNNGNYLG	619	51.0164	43.36	46.59	
LARCHMONT	12,297	13774	LRMTNYLA	259	3.56507	3449.30	3863.60	
LATHAM	20,260	23527	LTHMNYTS	405	24.7205	819.56	951.72	
LAURELTON	75,642	82170	NYCQNYLN	089	9.19093	8230.07	8940.34	
LEVITTOWN	37,382	40554	LVTWNYLT	237	9.42078	3968.04	4304.74	
LEWISTON	4,357	4752	LSTNNYLW	656	17.816	244.56	266.73	
LEXINGTON	599	615	LXTNNYLX	338	46.3393	12.93	13.27	
LIBERTY	7,849	8775	LBRTNYLB	362	135.621	57.87	64.70	
LIBERTY AVE.	48,693	52306	NYCKNYLA	056	4.78121	10184.24	10939.91	
LIMESTONE	592	588	LMSTNYLM	709	37.0123	15.99	15.89	
LINDENHURST	39,665	43323	LHSTNYLH	228	8.0052	4954.90	5411.86	
LINDLEY	833	885	LNDYNYLN	604	46.5545	17.89	19.01	
LITTLE FALLS	4,684	4907	LTFLNYLS	433	115.016	40.72	42.66	
LITTLE VALLEY	1,368	1674	LTVYNYLI	711	60.7168	22.53	27.57	
LIVERPOOL CLAY	12,738	14025	CLAYNYOS	519	25.3847	501.80	552.50	
LIVINGSTON MANOR	2,284	2339	LVMNNYLV	363	131.314	17.39	17.81	
LOCKPORT	24,679	25978	LCPTNYLK	669	117.983	209.17	220.18	
LONG BEACH	31,617	34622	LNBHNYLB	249	7.13636	4430.41	4851.49	
LYNBROOK	91,552	101560	LYBRNYLB	246	24.5482	3729.48	4137.17	
LYNDONVILLE	1,557	1676	LYVLNYLL	671	54.9188	28.35	30.52	

LYON MOUNTAIN	391	392	LYMTNYLO	464	39.9012	9.80	9.82	
LYONS	3,376	3781	LYNSNYLY	569	63.6569	53.03	59.40	
MAC DOUGALL	864	906	MCDGNYMD	586	46.1755	18.71	19.62	
MACEDON	5,582	7449	MACDNYMC	570	41.5944	134.20	179.09	
MACHIAS	1,177	1333	MCHSNYMA	727	37.8637	31.09	35.21	
MADRID	1,002	1221	MDRDNYMK	545	80.4636	12.45	15.17	
MAHOPAC	12,316	13993	MHPCNYMP	274	24.2409	508.07	577.25	
MAINE	1,609	1665	MAINNYME	615	41.5685	38.71	40.05	
MALONE	8,973	10151	MALNNYMM	465	518.326	17.31	19.58	
MAMARONECK	22,479	26251	MMRNNYMA	267	8.20545	2739.52	3199.22	
MANHASSET	19,708	22296	MNHSNYMH	234	8.08103	2438.80	2759.05	
MANHATTAN AVE.	95,592	103537	NYCMNYMN	022	1.75316	54525.54	59057.36	X
MARIAVILLE	901	997	MARVNYMV	414	29.2362	30.82	34.10	
MARION	1,908	2067	MARNNYMR	571	23.6024	80.84	87.58	
MARLBORO	2,525	2843	MRBONYMB	325	6.02592	419.02	471.80	
MASSAPEQUA	44,595	48405	MSPQNYMP	241	18.0059	2476.69	2688.29	
MASSENA	10,742	12062	MSSNNYMQ	546	155.512	69.08	77.56	
MASTIC	30,171	34588	MSTCNYMC	214	45.3555	665.21	762.60	
MCGRAW	1,090	1122	MCGRNYMG	624	49.8715	21.86	22.50	
MCLEAN	671	692	MCLNNYMZ	623	17.403	38.56	39.76	
MECHANICVILLE	7,543	8192	MCHVNYMC	483	64.6913	116.60	126.63	
MEDINA	5,503	5854	MEDNNYPA	670	75.8362	72.56	77.19	
MEXICO	3,458	4050	MEXCNYMX	523	71.7157	48.22	56.47	
MIDDLEPORT	2,361	2406	MDPTNYMP	666	57.6834	40.93	41.71	
MID-NASSAU	34,909	46408	GRCYNYGC	245	5.58796	6247.18	8305.00	
MILFORD	1,161	1175	MLFRNYMU	389	48.0621	24.16	24.45	
MILLBROOK	4,394	5225	MLBKNYML	312	63.7975	68.87	81.90	
MILTON	1,539	1718	MLTNNYMN	328	13.8937	110.77	123.65	
MINEOLA	61,819	75968	MINLNYMI	243	11.1985	5520.29	6783.77	
MINEVILLE	818	868	MIVLNYNV	448	40.8241	20.04	21.26	
MINOA	5,076	5352	MINONYMI	505	21.5297	235.77	248.59	
MOIRA	1,427	1550	MOIRNYMY	466	71.6564	19.91	21.63	
MONTAUK	5,280	5930	MNTKNYMT	221	17.5659	300.58	337.59	
MONTICELLO	12,966	13846	MNTINYMT	354	106.505	121.74	130.00	
MORAVIA	3,648	3951	MORVNYMO	564	166.345	21.93	23.75	
MORRISTOWN	1,217	1279	MRTWNYMW	547	47.5495	25.59	26.90	
MT. KISCO	17,770	21504	MTKSNYMK	270	28.4609	624.37	755.56	
MT. VERNON	52,883	57645	MTVRNYMV	255	5.94933	8888.90	9689.33	
N STATEN ISLAND	79,088	92073	NYCRNYNS	063	15.7183	5031.59	5857.69	
N. GREENBUSH	9,569	11164	NGRNNYNG	402	57.7158	165.80	193.43	
N. JAMAICA	24,530	25733	NYCQNYNJ	093	2.16006	11356.17	11913.10	
NEW CITY	20,498	21810	NWCYNYNC	287	10.8068	1896.77	2018.17	
NEW DORP	37,528	42650	NYCRNYND	061	11.2025	3349.97	3807.19	
NEW PALTZ	8,873	10418	NWPLNYNP	313	92.5336	95.89	112.59	
NEW ROCHELLE	50,998	57179	NWRCNYNR	258	12.401	4112.41	4610.84	
NEW WINDSOR	4,831	6205	NWWNNYNW	329	17.8813	270.17	347.01	
NEWARK	8,106	8932	NWRKNYNK	572	56.9237	142.40	156.91	
NEWBURGH	29,102	33056	NWBRNYNW	322	34.2679	849.25	964.63	
NEWBURGH WEST	7,285	8591	NWBRNYWT	323	34.3172	212.28	250.34	
NEWFANE	3,556	3924	NWFNNYMA	667	43.1251	82.46	90.99	
NEWFIELD	2,068	2185	NWFDNYNF	625	65.9163	31.37	33.15	
NEWTOWN	155,119	170747	NYCQNYNW	084	8.92961	17371.31	19121.44	
NIAG FLS 76	7,358	7711	NGFLNY76	654	3.15506	2332.13	2444.01	
NIAG FLS PORT	21,931	22941	NGFLNYPO	653	13.3128	1647.36	1723.23	
NIAG FLS WOODL	11,633	12649	NGFLNYWO	655	27.8752	417.32	453.77	
NICHOLS	1,056	1141	NCHLNYNL	616	32.7799	32.21	34.81	

NORFOLK	1,373	1465	NRFLNYNO	548	49.127	27.95	29.82	
NORTH CLOVE	1,901	2224	NCLVNYNC	315	34.5005	55.10	64.46	
NORTH COLLINS	2,092	2232	NCLNNYNO	689	60.9068	34.35	36.65	
NORTH ROSE	1,436	1494	NROSNYNR	573	39.4983	36.36	37.82	
NORTH SYRACUSE	11,446	12761	NSYRNYNS	517	11.9389	958.71	1068.86	
NORWOOD	1,355	1460	NRWDNYND	552	33.4358	40.53	43.67	
NYACK	15,884	19269	NYACNYNK	288	12.9035	1230.98	1493.32	
OAK HILL	1,663	1764	OKHLNYOH	339	84.8083	19.61	20.80	
OAKFIELD	2,021	2139	OKFDNYOK	680	60.5931	33.35	35.30	
OGDENSBURG	8,475	9393	OGBGNYOG	549	115.273	73.52	81.48	
OLEAN	15,547	17309	OLENNYHA	701	142.552	109.06	121.42	
ONEIDA	11,314	12487	ONEDNYOD	420	89.5616	126.33	139.42	
ONEONTA	13,222	14867	ONNTNYOA	390	123.325	107.21	120.55	
ONTARIO	4,970	5553	ONTRNYON	574	46.6598	106.52	119.01	
ORANGEBURG	14,753	18416	ORBGNYOB	291	14.4086	1023.90	1278.13	
ORCHARD PARK	10,246	11902	ORPKNYST	729	32.8719	311.69	362.07	
OSSINING	23,137	27687	OSNGNYOS	302	27.1332	852.72	1020.41	
OSWEGO	20,701	22600	OSWGNYOS	522	93.1628	222.20	242.59	
OTEGO	1,483	1553	OTEGNYOT	391	50.4256	29.41	30.80	
OWASCO	487	482	OWSCNYOO	562	31.4189	15.50	15.34	
OWEGO	6,996	8198	OWEGNYOW	614	122.137	57.28	67.12	
OYSTER BAY	14,891	16417	OYBANYOY	233	15.5118	959.98	1058.36	
PALENVILLE	1,625	1729	PLVLNYPL	340	28.493	57.03	60.68	
PALMYRA	4,568	4934	PLMYNYPY	575	60.1386	75.96	82.04	
PARISH	1,636	1796	PRISNYPA	524	53.8843	30.36	33.33	
PATCHOGUE	48,692	56827	PCHGNYPH	208	39.4589	1233.99	1440.16	
PATTERSON	3,631	4245	PASNNYPN	280	40.407	89.86	105.06	
PAWLING	3,996	4033	PWNGNYSS	314	41.7216	95.78	96.66	
PEARL RIVER	26,260	31555	PRRVNYNP	296	15.5343	1690.45	2031.31	
PEEKSKILL	27,192	31328	PKSKNYPS	297	32.038	848.74	977.84	
PENN YAN	8,040	8564	PNYNNYPN	583	145.034	55.44	59.05	
PERU	3,284	3509	PERUNYPE	467	123.918	26.50	28.32	
PHILADELPHIA	978	1055	PHLANYPF	537	51.6207	18.95	20.44	
PHILMONT	1,631	1753	PHMTNYPM	341	28.6494	56.93	61.19	
PHOENICIA	2,248	2455	PHNCNYPH	349	128.295	17.52	19.14	
PITTSTOWN	1,150	1161	PTTWNYPI	403	36.1712	31.79	32.10	
PKP HAMILTON	42,758	48862	PGHKNYSH	306	53.3797	801.02	915.37	
PKP SPACKENKILL	9,989	12500	PGHKNYSP	321	14.6535	681.68	853.04	
PLAINVIEW	13,746	11928	PLVWNYPV	240	2.07836	6613.87	5739.14	
PLATTSBURGH	21,185	24238	PLBGNYPB	468	132.312	160.11	183.19	
PLEASANT VALLEY	4,237	4747	PVYDNYPD	316	22.0339	192.29	215.44	
PLEASANTVILLE	22,518	23914	PSVLNYPV	271	15.8125	1424.06	1512.35	
POMONA	15,193	17807	POMNNYPO	294	12.4845	1216.95	1426.33	
POPLAR RIDGE	2,198	2367	PPRGNYPP	560	106.264	20.68	22.27	
PORT HENRY	1,472	1536	PTHNNYPO	449	47.8455	30.77	32.10	
PORT JEFFERSON	35,470	41982	PJSTNYPJ	203	28.8083	1231.24	1457.29	
PORT WASHINGTON	19,323	21901	PTWANYPW	235	9.21597	2096.69	2376.42	
PORTCHESTER	30,404	35380	PTCHNYPC	266	11.954	2543.42	2959.68	
PORTVILLE	1,592	1695	PRTVNYPV	712	45.291	35.15	37.42	
POTSDAM	10,853	11603	PTSDNYPS	550	199.283	54.46	58.22	
PRATTSVILLE	519	558	PRVINYPR	342	31.0542	16.71	17.97	
PURDYS	8,068	9987	PRDYNYPD	281	33.9318	237.77	294.33	
PUTNAM	452	466	PTNMNYPX	454	35.415	12.76	13.16	
PUTNAM VALLEY	11,416	13121	PTVYNYPY	298	43.5201	262.32	301.49	
RANSOMVILLE	1,979	2114	RSVLNYRV	657	34.2848	57.72	61.66	
RED CREEK	957	1048	RDCKNYRC	576	27.4839	34.82	38.13	

RICHFIELD SPR	2,724	3111	RCSPNYRS	435	116.824	23.32	26.63	
RICHMOND HILL	43,925	46986	NYCQNYRH	087	3.46949	12660.36	13542.62	
RICHMONDVILLE	824	865	RCVLNYRH	392	32.8672	25.07	26.32	
RIVERHEAD	20,748	25022	RVHDNYRV	212	90.4144	229.48	276.75	
ROCKAWAY AVE.	81,809	88436	NYCKNYRA	055	5.48979	14902.03	16109.18	
ROME	24,853	26572	ROMENYRM	419	207.403	119.83	128.12	
RONKONKOMA	48,701	57333	RNKNNYRN	202	25.864	1882.96	2216.71	
ROSENDALE	2,529	2796	RODLNYRD	350	14.3193	176.61	195.26	
ROSLYN	28,228	32900	RSLNNYRO	231	20.9539	1347.15	1570.11	
ROUND LAKE	5,076	5756	RNLKNYRL	484	15.0667	336.90	382.03	
ROXBURY	1,531	1643	RXBYNYRX	393	68.8111	22.25	23.88	
RUSHFORD	1,068	1175	RSFRNYRF	715	42.4442	25.16	27.68	
RYE	13,494	16518	RYE-NYRY	268	8.46522	1594.05	1951.28	
S STATEN ISLAND	52,723	62399	NYCRNYSS	062	19.8665	2653.86	3140.92	
S. BETHLEHEM	2,389	2732	SBTHNYSB	373	33.5822	71.14	81.35	
SACKETS HARBOR	1,320	1414	SCHRNYQH	538	24.9604	52.88	56.65	
SAG HARBOR	12,169	14726	SGHRNYSG	219	40.6934	299.04	361.88	
SALAMANCA	4,778	5178	SLMNNYWW	713	115.755	41.28	44.73	
SALEM	2,149	2372	SALMNYSM	485	103.582	20.75	22.90	
SARANAC	1,880	2030	SRNCNYQC	470	160.533	11.71	12.65	
SARANAC LAKE	6,590	7724	SRLKNYQL	471	351.495	18.75	21.97	
SARATOGA	28,087	32255	SRSPNYSR	486	146.493	191.73	220.18	
SAUGERTIES	9,455	10656	SGRTNYSG	351	63.4226	149.08	168.02	
SAVONA	1,329	1361	SAVNNYSN	605	77.2688	17.20	17.61	
SAYVILLE	36,905	42874	SYVLNYSA	209	26.8088	1376.60	1599.25	
SCARSDALE	26,551	31242	SCDLNYSR	264	11.4694	2314.94	2723.94	
SCHDY CLINTON	67,691	71820	SCHNNYSC	407	62.1009	1090.02	1156.50	
SCHDY CURRY	17,271	19337	SSCHNYSO	409	47.6557	362.41	405.76	
SCHENEVUS	1,125	1197	SCHVNYQN	394	72.527	15.51	16.50	
SCHROON LAKE	1,879	1986	SCLKNYQX	450	307.41	6.11	6.46	
SCHUYLERVILLE	2,674	2891	SHVLNYSV	487	52.7156	50.73	54.84	
SECOND AVE.	167,075	189215	NYCMNY13	008	2.03922	81930.84	92787.93	X
SELDEN	33,746	38948	SLDNNYSE	210	24.8274	1359.22	1568.75	
SENECA FALLS	5,306	5754	SNFLNYSL	584	55.8306	95.04	103.06	
SETAUKET	16,910	20409	STKTNYSK	204	19.7152	857.71	1035.19	
SHARON SPRINGS	888	964	SHSPNYQS	395	41.3251	21.49	23.33	
SHOKAN	3,126	3604	SHKNNYSK	352	96.32	32.45	37.42	
SHOREHAM	21,284	24298	SHHMNYSH	213	34.2224	621.93	710.00	
SILVER CREEK	3,692	3883	SLCKNYSI	694	46.1837	79.94	84.08	
SKANEATELES	5,074	5727	SKNTNYSE	565	57.4171	88.37	99.74	
SLOATSBURG	2,017	2350	SLTSNYSL	286	19.2832	104.60	121.87	
SMITHTOWN	45,259	52001	SMTWNYSM	201	34.5484	1310.02	1505.16	
SODUS	4,699	4994	SODSNYSD	577	73.0641	64.31	68.35	
SOUTH DAYTON	899	969	SDTNNYPI	693	57.2751	15.70	16.92	
SOUTH SALEM	5,768	6989	SSLMNYSS	275	27.5064	209.70	254.09	
SOUTHAMPTON	15,697	18789	SATNNYSN	217	35.3531	444.01	531.47	
SPRING VALLEY	32,625	38144	SPVYNYSV	293	14.611	2232.91	2610.64	
SPRINGVILLE	4,794	5210	SPVLNYWM	690	104.15	46.03	50.02	
ST. REGIS FALLS	720	778	SRFLNYQR	469	105.473	6.83	7.38	
STAMFORD	2,604	2788	SMFRNYQM	396	106.305	24.50	26.23	
STANFORDVILLE	1,356	1377	STNVNYST	317	31.6678	42.82	43.48	
STAR LAKE	1,532	1689	SALKNYQT	539	344.631	4.45	4.90	
SUFFERN	15,042	17937	SFRNNYSU	292	17.8741	841.55	1003.52	
SYLVAN BEACH	1,356	1429	SYBHNYQY	425	4.91181	276.07	290.93	
SYOSSET	24,192	27368	SYOSNYSY	232	10.92	2215.38	2506.23	
SYRA DIPPOLD	8,879	11211	SYRCNYDD	514	6.93094	1281.07	1617.53	

SYRA E. GENESEE	15,330	17622	SYRCNYGS	497	31.5177	486.39	559.11	
SYRA FAIRMOUNT	23,978	25708	CMLSNYON	518	43.1192	556.09	596.21	
SYRA JAMES	22,431	26388	SYRCNYJS	498	15.5153	1445.73	1700.77	
SYRA S. SALINA	15,233	16635	SYRCNYSA	499	9.6037	1586.16	1732.14	
SYRA STATE	86,485	94376	SYRCNYSU	496	18.9439	4565.32	4981.87	
SYRC ELEC. PARK	22,229	25927	SYRCNYEP	515	12.2485	1814.83	2116.75	
TANNERSVILLE	1,997	2077	TNVLNYTN	343	69.9903	28.53	29.68	
TARRYTOWN	17,114	21157	TRTWNYTT	262	10.6586	1605.65	1984.97	
THAYER ST.	31,986	37110	NYCMNYTH	025	1.19684	26725.38	31006.65	X
THERESA	1,098	1115	THRSNYTH	540	81.2167	13.52	13.73	
TICONDEROGA	3,195	3574	TCNDNYTI	451	109.57	29.16	32.62	
TIEBOUT AVE.	82,187	85262	NYCXNYTB	034	3.68934	22276.88	23110.37	
TONAWANDA	35,325	37562	TNWNNYTW	661	33.6013	1051.30	1117.87	
TRATMAN AVE.	129,773	116164	NYCXNYTR	038	9.52506	13624.38	12195.62	
TROY 3RD AVE	21,223	22375	TROYNY03	399	36.0861	588.12	620.04	
TROY 4TH ST.	31,607	33979	TROYNY04	400	19.2921	1638.34	1761.29	
TROY AVE.	115,601	90404	NYCKNYTY	071	3.12606	36979.78	28919.47	
TUCKAHOE	36,781	40872	TKHONYTU	256	8.85708	4152.72	4614.61	
TULLY	2,486	2682	TLLYNYTY	506	60.2129	41.29	44.54	
TUPPER LAKE	3,753	3982	TPLKNYTL	472	648.264	5.79	6.14	
TUXEDO	2,286	2713	TUXDNYTX	284	74.0255	30.88	36.65	
UNION SPRINGS	1,264	1298	UNSPNYUS	563	37.7832	33.45	34.35	
UTICA	52,195	58862	UTICNYUT	428	115.982	450.03	507.51	
VALLEY FALLS	2,127	2271	VLFLNYVF	488	66.1292	32.16	34.34	
VARICK ST.	60,259	69984	NYCMNYVS	007	0.73218	82300.46	95582.66	X
VARYSBURG	1,202	1293	VRBGNYVB	681	62.8844	19.11	20.56	
VOORHEESVILLE	2,739	3101	VRHVNYVR	374	18.8982	144.93	164.09	
W SENECA UNION	18,476	20398	WSNCNYUN	730	19.7384	936.04	1033.42	
W STATEN ISLAND	40,474	46918	NYCRNYWS	064	11.7648	3440.26	3988.00	
W. 176TH ST.	56,912	63470	NYCMNYWA	024	1.73223	32854.76	36640.63	X
W. 36TH ST.	100,946	143616	NYCMNY36	011	0.83219	121301.77	172576.18	X
W. 42ND ST.	109,093	180709	NYCMNY42	013	0.28905	377424.35	625191.15	X
W. 50TH ST.	143,544	204661	NYCMNY50	015	1.00613	142669.44	203414.07	X
W. 73RD ST.	110,279	127877	NYCMNY73	019	1.11462	98938.65	114726.99	X
W. HAMPTON	13,681	16244	WHBHNYWB	222	46.025	297.25	352.94	
W.18TH ST	142,278	177762	NYCMNY18	009	1.44101	98734.92	123359.31	X
WADDINGTON	823	869	WDTNNYWY	551	33.4186	24.63	26.00	
WANAKAH	5,750	6097	WNKHNYWK	691	13.2842	432.85	458.97	
WANTAGH	49,007	55052	WNTGNYWT	242	26.7077	1834.94	2061.28	
WAPPINGERS FLS	13,938	15826	WPFLNYWF	319	19.749	705.76	801.36	
WARRENSBURG	2,864	3136	WRBGNYWU	452	109.811	26.08	28.56	
WATERLOO	4,704	5332	WTRLNYWT	585	49.6816	94.68	107.32	
WATERPORT	1,550	1649	WTPTNYWR	682	56.9088	27.24	28.98	
WATERTOWN	22,534	25969	WTTWNYUN	541	148.516	151.73	174.86	
WATKINS GLEN	4,165	4673	WTGLNYWG	594	77.759	53.56	60.10	
WAVERLY	4,058	4486	WVRLNYWV	593	59.0401	68.73	75.98	
WEEDSPORT	1,790	1928	WDPTNYWT	561	28.5228	62.76	67.60	
WELLSVILLE	6,322	7101	WLVLNYNM	716	166.243	38.03	42.71	
WEST HAVERSTRAW	18,315	21058	WHVRNYWH	290	54.4829	336.16	386.51	
WEST ST.	197,956	292038	NYCMNYWS	004	0.93687	211295.51	311717.34	X
WESTBURY	32,635	36516	WBYNNYWE	244	9.38131	3478.73	3892.42	
WESTERLO	1,147	1230	WERLNYWL	378	52.9906	21.65	23.21	
WHITE LAKE	3,019	3165	WHLKNYWH	364	77.5939	38.91	40.79	
WHITE PLAINS	88,407	108489	WHPLNYWP	260	27.8617	3173.07	3893.84	
WHITEHALL	2,792	2979	WHTHNYUH	453	113.26	24.65	26.30	
WHITESBORO	12,465	13686	WHBONYWP	429	38.5061	323.71	355.42	

WHITESTONE	22,921	25815	NYCQNYWS	083	2.93	7822.87	8810.58	
WILLIAMSBURG	52,694	56751	NYCKNYWM	065	2.99543	17591.46	18945.86	
WILLIAMSON	3,176	3513	WMSNNYWN	578	41.0319	77.40	85.62	
WILLIAMSVILLE	43,486	49981	WSVLNYNC	640	26.5416	1638.41	1883.12	
WILLOWVALE	3,431	3851	WWVLNYWW	430	38.2534	89.69	100.67	
WILLSBORO	1,812	1993	WLBONYUB	473	62.959	28.78	31.66	
WILSON	2,013	2167	WLSNNYME	668	39.2312	51.31	55.24	
WINDHAM	3,275	3545	WNHMNYWM	344	91.9115	35.63	38.57	
WINGDALE	2,219	2523	WNDLNYWD	320	33.8404	65.57	74.56	
WOLCOTT	2,818	3119	WLCTNYWC	579	79.3647	35.51	39.30	
WOODSTOCK	6,313	6988	WDSTNYWS	353	66.6774	94.68	104.80	
WORCESTER	1,489	1640	WRCSNYUC	397	89.5362	16.63	18.32	
WORLD TRADE C	35,475	62496	NYCMNYST	003	0.33	107500.00	189381.82	X
YAPHANK	13,766	16742	YPHNNYYA	211	42.4549	324.25	394.35	
YONKERS	69,844	78833	YNKRNYYN	257	11.3662	6144.89	6935.74	
YORKTOWN	21,714	25729	YRTWNYYT	304	36.5224	594.54	704.47	
YOUNGSTOWN	2,217	2360	YNTWNYYT	658	14.4631	153.29	163.17	
	10,853,864	12,390,267			27,270	398.02	454.36	

The ECRIS system is located on 9 database servers in NY using the following geographic breakdown:

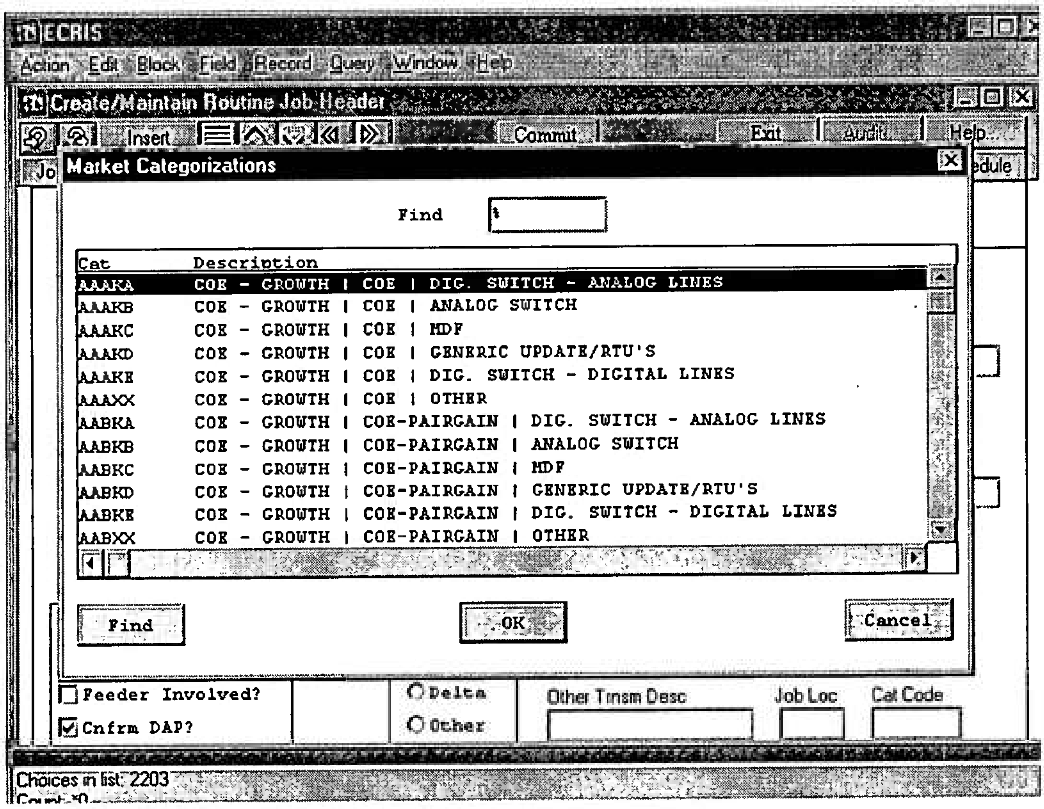
BOX	AREA
GM01	BRONX/NO MANHATTAN
GM02	QUEENS
GM03	BROOKLYN/STATEN ISLAND
MH01	MANHATTAN
ST01	NASSAU/SUFFOLK
ST02	NORTHEAST
ST03	WESTERN
ST04	CENTRAL
ST05	MIDSTATE

The following is the file description for the ECRIS wkop files: (Filenames are xxxxW)

FIELD /NAME	NO	START	END	LENGTH
JOB-NO	1	1	10	10
JOB_JTYP_CD	2	11	11	1
JOB_CAT_CD	3	12	16	5
PRT_NO	4	17	26	10
WKOP_WOT_CD	5	27	27	1
WKOP_NO	6	28	31	4
WKOP_WCM_WC_CD	7	32	35	4
WC_NM	8	36	60	25
WKOP_WCM_MUNI_CD	9	61	70	10
MUNI_NM	10	71	95	25
FRC_CD	11	96	101	6
SI_DESC	12	102	141	40
WKOP_CALC_TIME	13	142	153	12
WKOP_CALC_PRICE	14	154	165	12
WKOP_QTY	15	166	175	10
MAT_DESC	16	176	215	40
WC_SWP_FAC	17	216	220	5
JOB_AUTH_DT	18	221	228	8
JOB_COMPL_DT	19	229	236	8
WKOP_END_DT	20	237	244	8
WKOP_CALC_DT	21	245	252	8
RTL_HRS	22	253	260	8
LBR_RT_PRICED	23	261	270	10
LBR_RT_TODAY	24	271	280	10
MULTI_STI_HRS	25	281	290	10
MULTI_STI_DLRS	26	291	300	10
STI_VARIABLE_HRS	27	301	310	10
STI_VARIABLE_DLRS	28	311	320	10
ADDER_HRS	29	321	330	10
ADDER_STI_DLRS	30	331	340	10
MATERIAL_DLRS	31	341	350	10

DESCRIPTION OF WHAT THE FIELDS ARE

JOB-NO	The number of the job, in ECRIS 1st position is a letter followed by 5 numbers. The letter matches the type of job. DOPAC will only have the job number as the 5 numbers.
JOB_JTYP_CD	The type of the job: E - estimate R - routine C - custom work order D - damage job M - memo
JOB_CAT_CD	5 character field to identify why the job is being done



PRT_NO	The print number
WKOP_WOT_CD	The type of wkop: P - pole S - splice R - recon E - electronic C - cable
WKOP_NO	The wkop number, sequence number within the print

WKOP_WCM_WC_CD	The wkop wire center code, for NY a 3 digit number
WC_NM	The wkop wire center name.
WKOP_WCM_MUNI_CD	The wkop muni/tax district code. For NY 6 digits.
MUNI_NM	The wkops municipality name.
FRC_CD	The wkop field reporting code
SI_DESC	The wkop work task description
WKOP_CALC_TIME	The amount of time ECRIS calculated that the work should take.
WKOP_CALC_PRICE	The labor and material cost of doing the wkop
WKOP_QTY	The wkop qty. If the wkop calls for material it it the amount of the material. If the wkop doesn't have material for example 'join pairs' it is the number of pairs being joined.
MAT_DESC	Description of the material being placed or removed
WC_SWP_FAC	A multiplier used in the Metro area to inflate the hours required Based on past work performance. (The value on the day the wkop was priced – see wkop_calc_dt)
JOB_AUTH_DT	Date the job was marked as authorized in ECRIS
JOB_COMPL_DT	Date the job was marked as complete in ECRIS
WKOP_END_DT	The date the wkop was reported as finished.
WKOP_CALC_DT	The date the wkop_calc_price was computed (Would be either the job submit date or the wkop revision date)
RTL_HRS	Total hours reported on timesheets against the wkop.
LBR_RT_PRICED	The labor rate used to compute the wkop_calc_price. (The value on the day the wkop was priced – see wkop_calc_dt)
LBR_RT_TODAY	The latest months labor rate in the ECRIS system. (The value used for wkops entered today)
MULTI_STI_HRS	Wkop hours from multi-stis
MULTI_STI_DLRS	Wkop dollars from multi-stis
STI_VARIABLE_HRS	Wkop hours from sti-variables
STI_VARIABLE_DLRS	Wkop dollars from sti-variables
ADDER_HRS	Wkop hours from adders

ADDER_STI_DLRS	Wkop dollars from adders
MATERIAL_DLRS	The cost of material

Exhibit 375 - See Confidential Exhibits.

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Exhibit 135

Cases 95-C-0657
94-C-0095
91-C-1174
ATT-NYT-255
Frederick C. Pappalardo
Witness: C. Curbelo
Date of Request: 10/4/96

ATT-NYT-255

Is NYT's TELRIC cost methodology "forward looking" in ways that the incremental cost methodology employed in the loop and port cost studies it submitted in the earlier phase of this proceeding were not? If so, describe each respect in which NYT's current TELRIC methodology is more forward-looking than its prior incremental cost methodology.

RESPONSE:

Both methodologies are forward looking. The TELRIC methodology differs from the prior methodologies in the following ways, among others:

1) Economic lives of plant assets were used to calculate carrying charge factors which are a more accurate portrayal of depreciation that regulatory prescribed lives.

2) A market based cost of money was used to calculate carrying charge factors which is a more accutrate forward looking expression of the cost of capital used in the carrying charge factors.

3) ECRIS standard time increments were used in calculating the cost of installing outside plant. The standard time increments assume forward looking efficiencies in labor that have not been achieved in actual experience.

4) The TELRIC study for Links assumed a digital hand-off at the Central Office; whereas the prior study assumed an analog hand-off. Correspondingly, port costs were developed to match the new outside plant assumption.

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CASE 95-C-0657
CASE 94-C-0095
CASE 91-C-1174

SUPPLEMENTAL TESTIMONY OF
C. R. CURBELO

Q. Please state your name and business address.

A. My name is Carmelo R. Curbelo. My address is 1095 Avenue of the Americas, New York, New York.

Q. Have you previously testified in this proceeding?

A. Yes. I presented testimony in support of the Resale Avoided Cost Study and the Unbundled Link and Port Cost Studies that were filed by the Company in the previous phase of this case. My background and experience are described in that testimony.

PURPOSE OF TESTIMONY

Q. What is the purpose of this testimony?

A. The purpose of my testimony is to describe the study methodology employed by the Company to develop the Total Element Long-Run Incremental Cost (TELRIC) investments and expenses associated with the following network elements, as defined by the Federal Communications Commission (FCC) in its First Report and Order in CC Docket 96-98 (the "Local Competition Order", or "LCO"):

(1) Links (referred to in the LCO as "Local Loops")

(2) Local Switching

(3) Tandem Switching

(4) Dedicated Transport

(5) Common Transport

(6) Signaling Networks

(7) Call-Related Databases - Switch Query.

Q. Is the Company developing cost studies for any other unbundled network elements?

A. Yes. Cost studies are also being developed for Operator Services/Directory Assistance, Service Management Systems (SMS), Operational Support Systems (OSSs), and the Network Interface Device (NID). Studies for these services will be completed, by December 31, 1996. The Company was not able to carry out, by September 30, the conceptual cost study design work, input data gathering, and data analysis necessary to calculate the TELRIC for each of these network elements.

Q. A Commission order of September 13, 1996 refers to this proceeding costing and pricing questions related to Extended Switched Voice Grade Analog Link Service, Premium Link Service, and House and Riser Cable Service. Have you performed cost studies for those services?

A. My link cost study encompasses the TELRIC forward-looking cost of premium links, as discussed below. The investment required for extended links can be determined as a combination of the investments needed for links and interoffice transport, as discussed below. The Company could not complete cost studies for House and Riser Cable Service by the date on which this testimony was filed; however, we expect to be able to complete such studies by December 31.

Q. Did you rely on the testimony of any other NYT witnesses in carrying out your analysis?

A. Yes. The forward-looking technology model described in the testimony of Mr. Joseph Gansert determined the specifications of the network elements whose investments I studied. In determining NYT's forward-looking cost of capital, I relied on the testimony of Dr.

James Vander Weide, and in determining its depreciation costs, I relied on the testimony of Dr. Lawrence Vanston.

Q. Is there an exhibit associated with your testimony?

A. Yes, it is labeled "Exhibit Referred to in the Direct Testimony of C. R. Curbelo," and consists of five parts:

Part A Links

Part B Switching

Part C Transport

Part D Signaling Systems

Part E Annual Carrying Charge Factors

Q. Was this Exhibit prepared under your direction?

A. Yes, it was.

DEFINITION OF TOTAL ELEMENT LONG-RUN INCREMENTAL COST

Q. What definition of TELRIC did you apply in performing these studies?

A. I used the definitions and methodology described in the LCO and the associated FCC regulations. Also, to the extent that they are consistent with the LCO, I applied the principles set forth in this Commission's Subscriber Loop Services Incremental Cost Study Manual (the "Loop Manual") and in its Toll and Carrier Access Service Incremental Cost Study Manual (the "Toll Manual").

Q. What factors should be considered in the development of a TELRIC study?

A. The FCC has set forth the following requirements concerning TELRIC studies:

(a) The increment that forms the basis for a TELRIC study shall be the entire quantity of the network element provided;

(b) All costs associated with providing the element shall be included

(c) Only forward-looking, long-run incremental costs shall be included; and

(d) Costs must be based on the incumbent LEC's existing wire center locations and most efficient technology available.

Furthermore, a TELRIC study is to be based on a forward-looking cost of capital and economic depreciation rates.

Finally, the LCO and associated regulations require that the price of unbundled network elements include a reasonable portion of forward-looking common costs.

Q. Does the long-run, forward-looking cost construct imply that costs are to be determined as of some particular point in the future?

A. No. The LCO emphasizes that cost analyses are to be based on the most efficient network technologies currently available (assuming current wire center locations). This is directly contrary to the notion that TELRIC must be determined based on speculative determinations as to what technologies or costs may exist at some point in the future. I did not seek in my analysis to project costs forward into any particular "test year", or to analyze costs over any specific future period. Rather, my analysis attempted to determine what the Company's annual TELRIC costs would be for provisioning the network elements in question using the most efficient technologies *currently* available.

Q. The LCO calls for the State commissions to establish geographically-deaveraged rates for at least three cost-related rate zones. Have you provided deaveraged cost information that can be used for this purpose?

A. Yes. Where appropriate, investments have been developed for four density zones. The zones were determined by the number of loops per square miles. They are:

ZONE	DESCRIPTION	DENSITY (LOOPS/SQ. MI.)
1	Major Cities	≥ 1500
2	Urban	≥ 500 and < 1500
3	Suburban	≥ 150 and < 500
4	Rural	< 150

Q. Why did you establish more than the minimum three zones?

A. New York's diverse geographical make-up warrants four density zones, in order to reflect cost differences resulting from the diverse nature and characteristics of the State. Its major cities, including New York City, have a high degree of access line concentration, giving them unique cost characteristics. Therefore, in our judgment, the major cities comprise a separate zone. The other three density zones have been designated Urban, Suburban and Rural. All the zones reflect cost differences resulting from their different densities.

Q. Mr. Curbelo, what increment of demand provides the basis for your calculation of the TELRIC for the network elements you studied?

A. The TELRIC studies performed by NYT examined and calculated the total investment necessary to meet the total demand for network elements. This total demand is based on the sum of the total number of units that the Company will provide to requesting telecommunications carriers and the total number of units that the Company will use in providing its own services.

For the purposes of the Company's TELRIC study, it was assumed that the Company's currently anticipated demand provides the best estimate of this total increment of demand. (The Toll Manual, Page 10, states that the starting point for the determination of demand should be the actual, current levels for the service.)

Q. How did the Company calculate the necessary investment to meet this level of demand?

A. In the telecommunications industry, the investments associated with central office switching systems and outside plant facilities are relatively large expenditures which are incurred in discrete or "lumpy" blocks. The long-run cost estimates required to meet the Company's demand over time must reflect these lumpy investments in a way that spreads them over the full increment of demand that will make use of the investment. Thus, a unit investment for each network element was calculated using the capacity cost approach. A capacity cost is calculated by spreading all required investments over the full increment of demand for a network element in order to generate a levelized unit investment or capacity cost. This capacity cost methodology is also endorsed by both the Loop Manual (Pages 4-5) and the Toll Manual (Page 4) for the calculation of long-run incremental costs.

Q. How did you insure that the NYT TELRIC studies would include "all costs associated with the element"?

A. The investments associated with a particular element in our study include the cost of every function required to produce the element, including the depreciation and cost of capital associated with the required physical investment. In addition, the TELRIC Carrying Charge Factors (CCFs) identify all expense directly associated with each element as well as joint and common costs. All of these costs have been taken into account in my analysis, as discussed in more detail in this testimony and in the additional testimony being submitted by NYT witnesses Dr. Lawrence Vanston and Dr. James Vander Weide.

Q. Does the NYT TELRIC study include "only forward-looking, incremental costs" for the network elements?

A. Yes. As discussed in more detail below and in the accompanying testimony of Mr. Joseph Gansert, the calculation of the costs associated with each network element was based on the latest technology currently available to the Company. This is consistent with the Toll Manual (Page 11). TELRIC study is based on the most current vendor material prices which reflect the latest vendor discounts realized by the Company.

Q. Did you use loading factors in your TELRIC study?

A. Yes. We applied loading factors, developed by class of plant, to the material investment to arrive at a total investment. How these factors were applied will be discussed later in my testimony.

Q. How did you develop these loading factors?

A. We analyzed the most recent jobs that installed the particular equipment type being studied, and developed ratios between material investment and total investment for each class of plant.

The material prices, which are the basis of the TELRIC study, reflect the most recent vendor discounts that the Company has experienced. These loading factors, which are based on the Company's 1995 equipment installations, were applied to the lower TELRIC identified material prices. The product of the TELRIC material price and the 1995 installation loading factor will result in the Company's best estimate of its forward-looking installation costs. These loading factors can be found in the workpapers for each of the TELRIC elements.

Q. Is the NYT TELRIC study based on the "most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the [Company's] wire centers"?

A. Yes. The Company's TELRIC study is based on NYT's current wire center locations and employs the "most efficient technology" for "reasonably foreseeable capacity requirements" consistent with the future network plans which have been designed by the Company's Engineering Department. The locations of the wire centers remain the same but the technology used to provision the full complement of network elements is assumed to be based on the latest, most efficient technology available to the Company. For example, the link investment is based on the forward-looking technology (e.g., Integrated Digital Loop Carrier) for which the Company will expend its future capital resources. This network architecture does not reflect the Company's current subscriber plant infrastructure but rather the Company's best estimate of the future cost of the network based on the most efficient, currently available technology. This approach is consistent with the Toll Manual (Page 6), which recognizes that it would be "impractical in most cases to attempt to estimate changes in cost that would result from changes in the entire structure of an LEC's network".

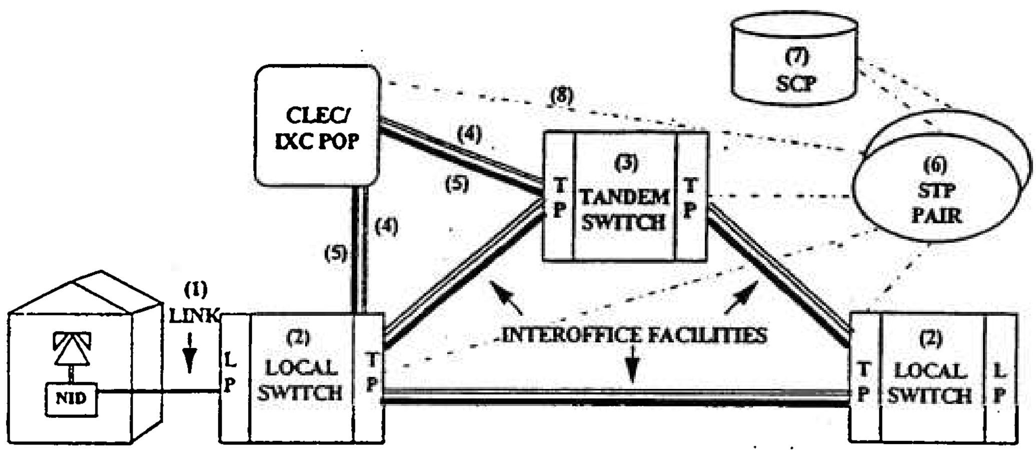
Q. How did the Company's TELRIC study reflect the "lowest cost network configuration" given existing wire center locations?

A. Existing feeder and distribution routes were used in our study because those routes were designed to be the shortest and most economical routes between existing wire centers and customer locations, based on the existing topography, taking into account rivers, highways, and rights-of-way.

Q. Mr. Curbelo, would you please provide a brief description of the unbundled network elements studied by you?

A. TELRIC studies were done for each of the eight unbundled network elements depicted in the Figure below. These elements are discussed in greater detail in Mr. Gansert's testimony.

UNBUNDLED NETWORK ELEMENTS



LP Link Port
TP Trunk Port
NID Network Interface Device
SCP Service Control Point
STP Signal Transfer Point
═ Common Transport
▬ Dedicated Transport
- - Signaling Link (SS7)

(1) LINK
(2) LOCAL SWITCH
(3) TANDEM SWITCH
(4) COMMON TRANSPORT
(5) DEDICATED TRANSPORT
(6) SIGNAL TRANSFER POINT
(7) SERVICE CONTROL POINT
(8) SIGNALING LINK (SS7)

Each of the Parts A through D of my Exhibit relates to a particular element or set of elements. Part E contains a general description of the methodology used to develop the Annual Carrying Charge Factors (CCFs).

<u>LINK INVESTMENTS</u>

Q. Please define the link network element you used in your TELRIC study.

A. The link network element is defined as a transmission facility between a distribution frame (or its equivalent) in a wire center and an end user customer premises. Physically, this element includes cable (either copper and/or fiber-optic), digital loop carrier equipment, and support structures such as poles and conduit.

Q. What is the technological basis for the link construct used in your study?

A. The construct used for determining the TELRIC of the unbundled link reflects the Company's forward-looking technology in accordance with the latest designs of the Company's Engineering Department. This network follows the existing feeder and distribution routes, as well as existing structure architecture. Using this existing network layout, investments were identified using the latest available prices and forward-looking fill factors, which we refer to in this testimony as utilization factors, in each density based zone. This technology is described and explained in greater detail in the accompanying testimony of Joseph Gansert.

Q. How did the company determine the "most efficient [link] technology"?

A. Based on the unique characteristics of the particular serving area, a typical link design was chosen based on the latest technology available and current plans of the Company's Engineering Department which would meet the reasonably foreseeable capacity requirements for that serving area.

Q. Is the link design the same for each density zone?

A. No. TELRIC methodology for links is based on two link types:

1) 100% fiber link

2) Hybrid fiber/copper link

Design No. 1 will be deployed primarily in high demand, high density zones (for example, single location areas such as office buildings or large apartment complexes. This design has been incorporated in each of the four density zones, in a proportion based on input from the Company's Engineering Department. The remainder of links utilize Design No. 2. The percentages of each of the two link designs, by density zone, are summarized in the Workpapers associated with Part A of my Exhibit.

Q. Is Integrated Digital Loop Carrier the current design for provisioning links used by NYT today?

A. No. The Company uses Universal Digital Loop Carrier (or its equivalent) in the provision of DS-0 level voice grade links today. Because the LCO requires the TELRIC link investment for a link to be based on the most efficient forward-looking technology currently available, the Company has incorporated the Integrated DLC (IDLC) link design as the basis for its TELRIC study. However, basic-rate Integrated Services Digital Network (ISDN - BRI), can only be efficiently provided using Universal DLC (UDLC). Accordingly, our technology model utilizes UDLC for "premium-basic" (ISDN-BRI capable) links and IDLC for all other links. For the same reason, DS0 switching ports have been identified separately in the Company's presentation of its local switching element.

Q. What structures are associated with the provision of links?

A. Link structures (i.e., support facilities) include underground conduit, manholes, and poles.

Q. Were structure investments included in your TELRIC study for links?

A. Yes. As stated in Paragraph 682 of the LCO, "Directly attributable forward-looking costs include the incremental costs of facilities and operations dedicated to that element. Such costs typically include investment costs and expenses related to primary plant used to provide that element."

Q. What assumptions were made concerning structure in the forward-looking technology model that underlies your cost analysis?

A. It was assumed that outside loop plant facilities that are currently aerial (i.e., supported by poles) would remain aerial, and plant that is currently underground would remain underground. We believe that our current plant design is the most economical and efficient based on specific area topography, access, and obtainable rights-of-ways necessary for remote electronic equipment. This construct reflects the most efficient layout for provisioning links to our current customers. Given current zoning laws, environmental regulations, and related restrictions, a forward-looking engineering design would likely entail the construction of predominantly underground outside plant facilities and structures. Therefore, the Company's TELRIC link study is a conservative underestimate of the cost of these facilities.

Q. How did you determine the structure investments directly attributable to the local link?

A. Outside plant link structure investments were determined on a per foot of conduit (underground) and per pole (aerial) basis. Conduit investment is composed of a fixed trench investment plus a variable duct investment. The attribution of the fixed investment to a per duct investment is dependent on the number of ducts placed. The conduit investment includes the investment of the manholes. The manhole investment, divided by the average distance (total duct feet) between manholes, plus the per foot conduit investment, results in the conduit investment per foot. This conduit investment was applied to those link investments which utilize underground facilities.

The pole investment is determined by considering the percentage of poles used jointly with other utility companies. Only the investment of those poles owned by NYT was considered in the study. The average number of poles required per link was identified. The pole investments attributable to the link investment were reduced to account for multiple cables on a pole. The assignment of structure investment was based on the replacement investment per pole multiplied by the average number of poles per link.

Q. How did you determine the material and installation prices for link components?

A. The most current vendor material prices and their installation prices, which reflect the latest vendor discounts realized by the Company, were the basis of the input prices to the cost study. Material prices for electronic equipment and cables reflect the latest negotiated contract prices NYT has with the manufacturers of the circuit equipment and cable facilities. Fiber cable, copper cable, Serving Area Interface (SAI), service wire, distribution terminals, poles, and installation and engineering costs were obtained from the Outside Plant Planner's Costing Tool and the Engineering & Construction Records Information System (ECRIS).

Q. What are the Outside Plant Planner's Costing Tool and ECRIS?

A. The Outside Plant Planner's Costing Tool (Costing Tool) is a server-based system developed to provide the Company's Outside Plant (OSP) Planners with the ability to compile material and labor costs for an internal project or external customer sales request. The prevailing material and labor costs are picked up by the Costing Tool from the Engineering & Construction Records Information System (ECRIS). ECRIS is a separate system used by OSP Project Engineers to automate the pricing, scheduling, tracking and construction management of OSP facilities. The Costing Tool retrieves additional cost information from other internal sources for plug-ins, central office terminal electronics, remote terminal electronics, contract costs, outside plant materials, and all associated labor costs. The plug-in and electronics costs reflect recent contract costs negotiated with vendors.

The Costing Tool provides common electronic configurations at a planning level, and associates the configurations with cabling, material, equipment engineering, equipment installation, and CO technician hours and dollars. This includes common plug-in packages and individual channel units.

Another important feature of the Costing Tool is the automatic splice generation for a cable placement operation. Taking into consideration the wire center geography type and the footage of copper or fiber cable placed, splice costs are automatically calculated. This allows for the development of contract costs that truly reflect the costs specific to that area.

Q. How were the investments converted to monthly costs for the link element?

A. As discussed in greater detail later in my testimony, the investment associated with the link element was converted to a monthly cost through the application of the annual CCFs.

Q. Explain how you used utilization factors to calculate the per-unit investments of the unbundled link network elements in your TELRIC study.

A. As stated in Paragraph 682 of the LCO, "under a TELRIC methodology, ...[p]er-unit costs shall be derived from total costs using reasonably accurate 'fill factors' (estimates of the proportion of a facility that will be 'filled' with network usage); that is, the per-unit costs associated with a particular element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual usage of the element."

Q. What is your definition of a "reasonably accurate" utilization factor and how did you determine it?

A. A utilization factor for a particular element is the portion of the element (or facility) that will be filled with network usage. The method by which the Company calculated utilization factors for the network elements being studied is described in Mr. Gansert's testimony. The utilization factors used the TELRIC studies can be found in Mr. Gansert's Exhibit.

Q. How did you calculate the per-unit investment of the unbundled link network elements?

A. Per-unit investments were calculated by dividing the total investment associated with the element by a reasonably accurate projection of actual usage for that element within each density zone, reflecting the utilization factors identified by Mr. Gansert.

Q. Did you geographically deaverage link investments in your study?

A. Yes. Investments were deaveraged into the four density zones which I identified earlier in my testimony.

Q. Did you limit your study to the average investment of all links, or did you determine separate investments for different types of links?

A. We have developed separate investments for the following four types of links:

1) *Two wire analog voice grade.* A two-wire analog voice grade link is a transmission circuit composed of two-wires - signal and ground - used to both send and receive voice conversation in the range of 300 Hertz (Hz) to 3000 Hz.

2) *Four wire analog voice grade.* A four-wire analog voice grade link is a transmission circuit composed of four-wires. One pair is used to send and the other is used to receive.

3) *Two wire conditioned digital.* A two-wire conditioned digital link is a transmission circuit composed of two-wires which have been conditioned to improve the transmission characteristics of a leased voice-grade link so that it meets the specifications for higher-speed data transmission. This link will be offered as Premium Link - Basic. This link will support Basic Integrated Services Digital Network (ISDN-BRI) service.

4) *Four-wire conditioned digital.* A four-wire conditioned digital link is a transmission circuit composed of four-wires which have been conditioned to improve the transmission characteristics of a leased voice-grade link so that it meets the specifications for higher-speed data transmission. This link will be offered as Premium Link - Primary. This link will support Primary Rate ISDN service.

Q. Please summarize the results of your link cost study.

found in Part A, Pages 2-3 of my Exhibit and also summarized below:

	Monthly Cost			
	2 Wire Analog	2-Wire Conditioned	4-Wire Analog	4-Wire Conditioned
	$16.75	$31.34	$49.36	$125.55
	$20.26	$36.17	$57.00	$125.13
	$27.22	$42.04	$70.26	$138.26
	$30.48	$45.02	$74.96	$176.98
	$19.37	$34.14	$54.51	$131.01

CURRING COST STUDIES

ng costs included in your TELRIC link study?

costs were identified for three categories of activities: (1) Service

installation, Dispatch and Completion and (3) Trouble Dispatches.

g covers the activities from the initial customer (i.e., CLEC) contact to

A compete list of these activities (functions) is provided in Part A,

Installation, Dispatch and Completion covers the field dispatch of a

perform installation work. These functions are listed on Part A, Page

rouble Dispatch covers the dispatch of a service technician to perform

the Central Office and the field. This function is listed on Part A, Page

nstances under which NYT currently provides Links, and do these

on-recurring costs?

al circumstances encountered in provisioning Links: (1) provisioning

existing NYT subscriber to a CLEC (referred to a "Hotcut") and (2) provisioning for a new customer ("New"). The service provisioning activities for a Hotcut customer is more expensive than a New customer because of additional work required on the Recent Change Memory Administration Center (RCMAC) and in the central office. However, the overall cost is higher for a New Link because an installation dispatch is usually required.

Q. Please describe how the Link Non-Recurring Costs were developed.

A. The specific work functions that are involved in providing the Link were identified. Estimates of average work time required by each work function for both types of Links (i.e., Hotcut and New) were developed through discussions with Company experts. Using the fully assigned hourly rate for the personnel performing the work in each function, the cost attributable to that function was calculated. The costs for all functions were added to obtain the total non-recurring costs for both Hotcuts and New Links.

Using recent historical Hotcut and New Link provisioning data, a ratio was developed which represents the percentage of Hotcut Links versus New Links. Using this ratio, the weighted average Link Non-Recurring Cost associated with service provisioning, excluding the dispatch function, was obtained.

As shown in Part A, Page 7 of my Exhibit, the weighted average non-recurring cost for the Service Provisioning of a Link is $126.22.

Q. What is the non-recurring cost associated with an installation dispatch for a Link?

A. When an installation dispatch is required to provision a Link, the non-recurring cost of the dispatch is $149.35 as shown in Part A, Page 7.

Q. What trouble-related non-recurring Link cost have you identified?

A. I have identified the costs associated with misdirected dispatches (e.g., a service technician dispatched, by a CLEC tester, out to the customer's premises when the trouble is in the central office) and when a trouble is found not to be with NYT facilities (e.g., trouble caused by end-user equipment or CLEC switch).

Q. How did you identify the non-recurring costs associated with these two trouble-related activities?

A. While there are four different repair scenarios: (1) misdirected dispatch-in, (2) misdirected dispatch-out, (3) dispatch-in, trouble in CLEC switch, and (4) dispatch-out, trouble in end user's equipment; there are only two distinct costs. Whether the dispatch-in is the result of a misdirected dispatch or the trouble is found to be in the CLEC's switch, the functions performed and the cost incurred will be the same. Likewise, whether the dispatch-out is the result of a misdirected dispatch or the trouble is found to be in the end user's equipment, the functions performed and the cost incurred will be the same. Therefore, as shown in Part A, Page 7, of my Exhibit, there are only two trouble-related non-recurring costs: $58.76 for a dispatch-in and $157.06 for a dispatch-out. The development of the misdirected dispatch cost is similar to the development of non-recurring costs for service order and installation dispatch. Work centers included in providing trouble clearance and the associated work center work time were provided by Company experts. The cost of a misdirected dispatch was calculated by multiplying the New York fully assigned labor rate by the associated work time to arrive at the work center cost. The total cost is the sum of the appropriate work center costs.

LOCAL SWITCHING

Q. Please define the Local Switching element you used in your TELRIC study.

A. The Local Switching element used in our TELRIC study is made up of the following:

1) line-side facilities, which include, but are not limited to, the connection between a link termination at a main distribution frame and a switch port;

2) trunk-side facilities, which include, but are not limited to, the connection between the trunk termination at a trunk-side cross-connect panel and a switch trunk port; and

3) all features, functions, and capabilities of the switch.

Q. What assumptions concerning the use of the most efficient forward-looking technology were incorporated into the development of the Local Switching element?

A. The construct used for the development of Local Switching investments reflects the Company's future planned deployment of an equal split of 5ESS and DMS-100 digital switches. These are the most advanced switch types currently used for switching voice traffic in the Company's network, and are the switch types that are incorporated in the latest forward-looking designs of the Company's Engineering Department. In the TELRIC analysis, these switches were placed at the existing central office locations. Investments were identified for four density based zones, using the latest available switch-vendor prices, including appropriate discounts, utilization factor, and loading factors for power and installation.

Q. How were the investments of Local Switching developed?

A. The investments of Local Switching were developed by the following steps:

1) Material investments for each switch type were developed for each of four density zones. Three separate components (Line Ports, Trunk Ports, and Usage) were identified. In that process, the investments for the 5ESS and the DMS-100 digital switches were combined, using weighting factors based on the projected mix of switch types. The line and trunk port investments were adjusted for utilization.

2) Material investments for the identified Line and Trunk features that require special hardware, including memory, were separately developed.

3) These material investments were converted to total investment by the application of loading factors that capture the capital investments of power and switch installation.

4) Associated software Right-To-Use (RTU) fees for basic and special features and functions were identified and then added to the appropriate total investment for each component of Local Switching.

5) Annual CCFs were applied to the resultant investment totals, to arrive at annual investments.

Q. What features are included in the Local Switching element?

A. All features that can be provisioned through the switch processor are included in the Local Switching element. In addition, Three-Way Calling and Speed Calling, switch-related features that require special hardware, have been identified and included in the TELRIC for Local Switching.

Q. What features are not included in the Local Switching element?

A. Those features provisioned through adjunct equipment, such as Voice Dialing and Voice Messaging, that are not within the definition of the Local Switching network element, are not included. In addition, those features whose cost are highly dependent upon customer usage characteristics, such as switch based Advanced Intelligent Network (AIN) features and packet-switching have not been, included. However, the Local Switching element will provide access to these feature functions.

Q. What components of Local Switching reflect the investments associated with features?

A. Switch processor based features were assigned to the Usage component of Local Switching. Features that require special switch hardware or memory were assigned to the port component. Investments for software RTU fees are provided in two general forms: per switch and per line/trunk port. The per switch investments were included in the Usage component of Local Switching, and the per line/trunk investments were used as additives to the appropriate port components.

Q. How were the material investments developed for Local Switching?

A. The material investments for the switches were developed using Bellcore's Switching Cost Information System (SCIS). SCIS is a computer system that determines the basic switching material investments of switches. It includes basic switching investments and the processor related investments associated with features.

Q. How did you utilize SCIS in your study?

A. SCIS lets the user "build" (i.e., specify) a Model Office, which is representative of a typical office in the network, for the development of basic switching investments, including main frame distribution investments. Model offices were built for each density group, and for each of the two switch technologies (5ESS and DMS-100), using current lines in service and typical switch traffic characteristics, based on Engineering design criteria. Using these models, unit and total material investments (with current applicable NYNEX discounts) for Local Switching were developed for each technology, by density group. The Feature module of SCIS was used to separately develop the material investments of special hardware, including memory required for features, since they are not included in the basic investments produced by the Model Office portion of SCIS.

Q. What features investments were developed using the SCIS Feature module?

A. Investments were developed for Three-Way Calling and Speed Calling. These features require special hardware. For example, Three-Way Calling requires three-port conference circuits and Speed Calling requires memory, each required on a per line basis.

Q. What type of switching equipment is represented in the model offices?

A. The model offices were built to represent the existing switch configurations of the four density zones. Thus, the switching equipment included in the model offices consist of "host" switches, and, if appropriate, their associated "remote" switches.

Q. What are "host" and "remote" switches and how are they treated in your study?

A. The Company's serving area is divided into exchanges. Each exchange is generally served by its own switch, sized according to the number of lines within the exchange. However, it is more economical to serve small exchanges (i.e., less than a few thousand lines) by means of a "remote" switch, an extension of a much larger, "host" switch. With such an arrangement, the remote switch is dependent on and therefore, an integral part of, the host switch. Umbilicals are used to connect remote switches to their host switch. The umbilical investments are developed outside the SCIS process and are included in the Usage component of the Local Switching element.

Q. How are the density zones for Local Switching defined?

A. The density zones for Local Switching are defined in the same manner as those for the Link. However, since remote switches are an integral part of the host switch, they are included in the same density zone as the host.

Q. What components are included in the investment of Local Switching and how were they determined?

A. The material investments for Local Switching and, thereby, the resulting total investment, were broken into three components: Line Termination, Trunk Termination, and Usage. These were determined using the SCIS output report.

Q. How were the material investments converted to unit material investment?

A. Unit material investments for the Line and Trunk Port components were obtained directly from the SCIS model office outputs, and were adjusted for average utilization. Unit material investments were developed for analog, digital, and Basic - ISDN (ISDN - BRI) line ports, and for digital and ISDN Primary (ISDN - PRI) trunk ports. The Usage component was obtained from the Total Costs output of SCIS, by subtracting the Line and Trunk Port total investments from the total office investments. The Usage component was divided by the total busy hour minutes of use served by the switches in order to arrive at a busy hour per-minute-of-use investment.

The investment of the Trunk Termination was also expressed on a per-minute-of-use basis, by dividing the trunk port investment by the busy hour minutes of use that it serves, to arrive at a busy hour quantity. These busy hour unit investments then were converted to day, evening, and night quantities.

Q. Why did you determine separate unit investments for the day, evening, and night periods?

A. Peak-period demand determines the size of the investment required for a local switch. Therefore, calculating per-unit costs separately for time periods with different peak demand characteristics better reflects the cost causative nature of the demand. A rate structure reflecting these differing demand characteristics promotes allocative efficiency.

Q. How were the busy hour usage and trunk component converted to day, evening, and night quantities?

A. The busy hour investments were converted using a methodology that is consistent with that employed in the development of usage investments in the Toll Manual (Pages 41-46).

Q. How were the material investments converted to total investment?

A. The material investments were converted to total investment by the use of loading factors for power and installation. The material investments were multiplied by the installation loading factor, and that result was multiplied by the power loading factor, to arrive at total investment.

Q. What are software RTU fees?

A. Software RTU fees are payments made to the switch vendors for use of their software in their switches.

Q. Did you treat the RTU fees as a part of the investment or as an expense?

A. Since our study looks at replacement switch investments, all initial RTU costs are considered to be a part of the original purchase of the switch, and, therefore, part of the capitalized investment being added to the total investments for Local Switching. As described earlier, per switch RTU fees were added to the Usage component of Local Switching. Per-line RTU fees, as incurred for Ringmate, Centrex, and ISDN (Basic and Primary), were developed as additives to the line/trunk port investments.

RTU fees incurred subsequent to the installation of the switch are expensed. As discussed later in my testimony, subsequent RTU fees are reflected through the use of annual CCFs.

Q. How were the investments converted to monthly costs for the Local Switching element?

A. As discussed in greater detail later in my testimony, the investment associated with the Local Switching element was converted to a monthly cost through the application of the Annual CCFs.

Q. Please summarize the results of your study of Local Switching investments.

A. The results can be found in Part B, Pages 3 - 6 of my Exhibit and also summarized below:

	Monthly Costs			
	Major	Urban	Suburban	Rural
Analog Line Port	$6.46	$5.75	$4.38	$4.71
Digital Port	$6.10	$6.04	$5.51	$5.87
ISDN - BRI Port	$27.34	$27.47	$27.17	$27.64
Dedicated Digital Trunk	$17.03	$15.80	$13.46	$14.02
ISDN - PRI	$430.84	$449.86	$445.19	$452.74

	Per Minute of Use Cost			
	Major	Urban	Suburban	Rural
Common Trunk - Day	$0.000238	$0.000243	$0.000215	$0.000460
Common Trunk - Evening	$0.000058	$0.000058	$0.000053	$0.000112
Common Trunk - Night	$0.000028	$0.000029	$0.000025	$0.000054
Usage - Day	$0.000634	$0.000784	$0.00094[illegible]	$0.000789
Usage - Evening	$0.000268	$0.000398	$0.000566	$0.000440
Usage - Night	$0.000199	$0.000323	$0.000494	$0.000373

	Port Additives			
	Major	Urban	Suburban	Rural
CENTREX	$0.94	$0.92	$0.93	$0.94
Ringmate®	$1.07	$1.05	$1.06	$1.07
Three-Way Calling	$0.41	$0.40	$0.41	$0.41
Speed Calling	$0.0039	$0.0038	$0.0039	$0.0039
Call Waiting	$0.0018	$0.00178	$0.00178	$0.00178
Call Forwarding -D/A	$0.00036	$0.00036	$0.00036	$0.00036
Call Forwarding - Busy	$0.00036	$0.00036	$0.00036	$0.00036
Call Forwarding - Var.	$0.00094	$0.00094	$0.00094	$0.00094

TANDEM SWITCHING

Q. Please define the tandem switching element you used in your TELRIC study.

A. The tandem switching element includes:

(a) trunk facilities, including but not limited to the connection between the trunk termination at a cross-connect panel and a switch trunk port;

(b) basic tandem switching function of connecting incoming trunks to outgoing trunks; and

(c) functions that are centralized in tandem switches (as distinguished from separate end-office switches), including but not limited to call recording, and signaling conversion features.

Q. What assumptions concerning the use of the most efficient forward-looking technology were incorporated into the development of the tandem switching element?

A. The construct used for the development of tandem switching investments reflects the Company's deployment of only the 5ESS digital switch, as incorporated in the latest designs of the Company's Engineering Department. It was assumed that the Tandem switches are placed at the existing locations because these locations are the most economical and efficient locations in the network. Investments were identified using the latest available switch-vendor prices, including appropriate discounts, utilization factors, and loading factors for power and installation.

Q How were the investments of tandem switching developed?

A. The investments of tandem switching were developed using the same five step approach previously described for Local Switching.

Q. How were the material investments developed for tandem switching?

A. The material investments for the tandem switches were developed using SCIS. As with Local Switching, using the Model Office portion of SCIS for basic switching investments, a tandem model office was built using current trunks in service and typical tandem traffic characteristics, based on engineering design criteria. The Feature module of SCIS was not required because the Trunk features are provided solely by software and the processor.

Q. What components of the investment of tandem switching were included and how were they determined?

A. The material investments for tandem switching, and, thereby, the resulting total investments, were broken into two components: Trunk Termination and Usage. These were determined from the SCIS output reports.

Q. How were the two components of tandem switching converted to unit material investments?

A. As was done for Local Switching, the unit material investment for the Trunk Port component was obtained directly from the SCIS model office outputs, and was adjusted for utilization. The Usage component was obtained from the Total Cost output of SCIS by subtracting the Trunk Port total investments from the total office investments. This was then divided by the minutes of use served by the tandem switch, to arrive at a busy hour per minute of use investment. In addition, the investment of the Trunk Port was also expressed on a busy hour per-minute-of-use basis in a manner identical to that described for Local Switching. These investments were converted to day, evening, and night quantities in the same manner as utilized for Local Switching.

Q. How were the material investments converted to total investment?

A. The material investments were converted to total investment using the same method described above for Local Switching.

Q. How were the investments converted to monthly costs for the tandem switching element?

A. As discussed in greater detail later in my testimony, the investment associated with the tandem switching element was converted to a monthly cost through the application of the Annual CCFs.

Q. Please summarize the results of your study of tandem switching investments.

A. The results can be found in Part B, Page 11 of my Exhibit and also summarized below:

Element	Monthly Cost
Digital Dedicated	$16.83

Element	Cost Per Minute
Common Trunk - Day	$0.000830
Common Trunk - Eve	$0.000203
Common Trunk - Night	$0.000097
Usage - Day	$0.000082
Usage - Eve	$0.000051
Usage - Night	$0.000044

DEDICATED TRANSPORT

Q. Define the Dedicated Transport network element for which the Company performed a TELRIC study.

A. The Dedicated Transport network element is defined as the transmission facilities dedicated to a particular customer. These may provide telecommunications between wire centers owned by NYT and those owned by requesting telecommunications carriers, or between wire centers owned by NYT, or between wire centers owned by requesting telecommunications carriers.

Q. Please describe the Interoffice Network architecture utilized in developing investments for the Dedicated Transport network element.

A. NYT is using Synchronous Optical Network (SONET) transport equipment for all new growth applications in the interoffice network. This technology selection for Interoffice Facilities (IOF) is discussed in greater length in the testimony of Company witness Mr. Joseph Gansert.

Q. Describe how the investments for Dedicated Transport were developed.

A. The Dedicated Transport investments, which we also refer to as Interoffice (IOF) Network investments, were developed on a fixed and variable basis. The fixed investments, which were identified at the originating and terminating NYT serving wire centers, include electronic equipment such as multiplexers, digital cross connect frames, and fiber termination frames. The variable investments, which were developed on a per mile basis, are those that vary with the length of facility and contain the interoffice fiber cable, structure, and any electronics necessary at intermediate NYT serving wire centers.

Q. What type of facilities were utilized in the IOF Network to develop your unit investments?

A. The Dedicated Transport unit investments reflect a 100% fiber facility network.

Q. Did you include interoffice structure investments in your TELRIC study?

A. Yes. Outside plant interoffice structure investments were determined using the same methodology as previously described to determine outside plant link structure investments.

Q. On what basis were the material and installation prices in your TELRIC study determined for the interoffice network?

A. Material prices for electronic equipment and cables reflect the latest negotiated contract prices NYT has with the manufacturers of the circuit equipment and interoffice cable facilities. Circuit equipment installation and engineering loading factors were multiplied by the material prices to arrive at a total investment. Fiber cable installation and engineering costs were obtained from the Outside Plant Planner's Costing Tool.

Q. What utilization factor was used for the unbundled Dedicated Transport network element?

A. As discussed in Mr. Gansert's testimony and reflected in my Workpapers, the utilization factor for interoffice fiber facilities in NYT's TELRIC study was 50%.

Q. Did the Company's cost study deaverage the Dedicated Transport investments by density zones?

A. No. Neither the "fixed or "variable" cost components are density sensitive.

Q. How were the Dedicated Transport unit investments converted to monthly costs?

A. As discussed later in my testimony, the investments associated with Dedicated Transport were converted to monthly costs through the application of annual CCFs.

Q. Please explain how the non-recurring costs for Dedicated Transport were developed?

A. The non-recurring costs identified expenses associated with the installation and removal of the network element . To determine work time associated with each network element, Task Oriented Costing (TOC) and time and motion studies were used in the development of what are, essentially, service provisioning costs. These costs include work associated with the service order, circuit design, performing cross connections, assignment of facilities, testing, acceptance and finally disconnection. Fully distributed labor rates were applied to the appropriate field job functions to derive unit labor costs by function. These various costs were combined into the final non-recurring costs.

Q. Please summarize the results of your study of Dedicated Transport investments.

A. The results can be found in Part C, Pages 8-10 of my Exhibit and also summarized below:

	Monthly Recurring		Non-Recurring
Element	**Fixed**	**Per Mile**	**Fixed**
OC-48	$12,167.38	$470.84	$1,135.02
OC-12	$5,163.06	$301.15	$1,001.61

OC-3	$1,700.76	$75.29	$863.21
DS-3	$1,134.70	$25.09	$863.21
DS-1	$136.73	$0.90	$634.17
CO Muxing 3/1	$278.42	N/A	N/A

COMMON TRANSPORT

Q. Define the Common Transport network element for which the Company performed a TELRIC study.

A. The Common Transport network element is defined as the transmission facilities shared by more than one customer or carrier that provide telecommunications between wire centers owned by NYT or requesting telecommunications carriers, or between switches owned by NYT or requesting telecommunications carriers.

Q. Describe how the TELRIC investment for the Common Transport network element was developed.

A. The investment of the Common Transport network element was developed by dividing the Dedicated Transport investments, calculated in the manner previously described, by the annual minutes of usage that would be transported by those investments. This is a reasonable approach because Common Transport uses the same physical interoffice facility as Dedicated Transport.

Q. How were the investments converted to monthly costs for the Common Transport element?

A. As discussed in greater detail later in my testimony, the investment associated with the Common Transport element was converted to a monthly cost through the application of the annual CCFs.

Q. Please describe the methodology used to calculate the usage minutes.

A. The usage was obtained by analyzing all recorded network traffic for a recent one month period and adjusting for the relationship between Busy Hour traffic volumes and day, evening, and night volumes. This methodology is consistent with that employed in the development of transport investments in the Toll Manual.

Q. Please summarize the results of your Common Transport element investment study.

A. The results can be found in Part C, Page 11 of my Exhibit and also summarized below:

ELEMENT	COST/MINUTE
Usage - Day	$0.00096
Usage-Evening	$0.00051
Usage - Night	$0.00000

SIGNALING NETWORKS

Q. Define the signaling network elements for which the Company performed a TELRIC study.

A. Modern telecommunications networks transmit signaling information over communications paths separate from those used to transmit the voice traffic itself. Signaling information is switched at Signaling Transfer Points (STPs), and is carried between STPs and local and tandem switches over Signaling Links. Routing and other information used by the signaling network is stored in call-related databases known as Service Control Points (SCPs). The protocol used for signaling information is known as Signaling System 7 (SS7).

Q. What technology assumptions were used in the development of the costs for the STP port element?

A. The construct used for the development of the costs of the STP port element reflects the Company's deployment of forward-looking STP equipment, as incorporated in the latest designs of the Company's Engineering Department. In the analysis, the STPs are placed at the existing locations. Costs were identified using the latest available vendor material prices, including appropriate discounts and utilization factors, and factors for power and installation. It would not be meaningful to calculate these costs by density zone since the STP equipment does not vary by density zone.

Q. How were the TELRIC investments for the STP port element developed?

A. With the exception of the material investments, the investments for the STP port element were developed in the same manner as that used for Local Switching.

Q. How were the material investments developed for the STP port element?

A. The material investments, including discounts for the STP port element were obtained from information on the latest contracts with the vendor from which the STP was purchased.

Q. How were the material investments converted to total investment?

A. The material investments were converted to total investment using the same installation loading factors as described in the development of the Local Switching investment. The total investment for the STP was divided by the estimated actual number of ports to be utilized, to arrive at a unit investment for the STP port element.

Q. How were the investments converted to monthly costs for the STP port element?

A. As discussed in greater detail later in my testimony, the investment associated with the STP port element was converted to a monthly cost through the application of the annual CCFs.

Q. Please describe how the investment for the Signaling Link element was developed.

A. The investment of the Signaling Link element was developed by taking the investments previously developed for the Dedicated Transport "fixed" and "variable" elements. These figures to reflect the investment associated with the DS-0 level facility which comprises the Signaling Link.

Q. Please summarize the results of your signaling network investment study.

A. The results can be found in Part D, Page 1 of my Exhibit and also summarized below:

STP Port	Monthly Cost
Per Port	$1,523.22

CALL-RELATED DATABASES - SWITCH QUERY

Q. Please define Call-Related database switch query element for which the Company performed a TELRIC study.

A. A Call-Related database query is a switch query and database response through the signaling network, which provides access to NYT's Line Information Database (LIDB) and Toll Free Calling (800) database by means of physical access at the STP. These are the only Call-Related databases that the Company currently has in its network. In the future, as the Company deploys other databases, such as number portability and Advance Intelligent Network databases, NYT will provide access to them. NYT will provide this access in the same manner as the Company itself accesses these databases; through the Service Control Point (SCP) via Signaling Links. This is referred to as the Signaling Query element in our TELRIC study.

Q. What technology was incorporated into the development of the investments for the Signaling Query element?

A. The construct used for the development of Signaling Query investments reflects the Company's deployment of the SCP technology incorporated in the latest designs of the Company's Engineering Department. In the analysis, the SCPs are placed at the existing locations. Investments were identified using the latest available vendor prices, including appropriate discounts and utilization factors, and loading factors for power installation. It is not meaningful to calculate these investments by density zone since the relevant costs are not density-sensitive.

Q How were the investments for the Signaling Query element developed?

A. The methodology to determine the investments for the Signaling Query element was the same as that used for the signaling port.

Q. How were the material investments developed for the Signaling Query element?

A. The material investments, including discounts for the Signaling Query element, were obtained from information on the latest contracts with the vendor from which an SCP was purchased.

Q. How were the material investments converted to total investment?

A. The material investments were converted to total investment using the same method described for the signaling port element.

Q. How were the investments or total investment converted to monthly costs per Signaling Query?

A. As discussed in greater detail later in my testimony, the investment associated with the Signaling Query element was converted to a monthly cost through the application of the annual CCFs.

Q. Please summarize the results of your Signaling Query cost study.

A. The results can be found in Part D, Page 1 of my Exhibit and also summarized below:

Signaling Query Element	Cost Per Transaction
800 Service	$0.001286060
LIDB Service	$0.001576396

COSTS OF EXTENDED LINK SERVICE

Q. What is extended link service?

A. Link service may be extended (Extended Switched Voice Grade Analog Link Service) from the Company's normal central office to a point of termination at the customer's collocation multiplexing node in another Company central office in the same LATA. The Service is subject to the availability of facilities and is only available when the customer is not collocated in the Company's normal central office serving the customer's end user.

Q. What is the TELRIC cost of an extended link and how is such cost calculated?

An extended Link would consist of a two-wire analog Link and a Foreign Exchange DSO interoffice facility. The follow table summarizes the cost of Extended Links by density zone:

Extended Link

Density Zones	2-Wire Analog Link	Source	FX IOF	Source	Monthly Cost
Major Cities	$16.75	Part A, P2, L1	$52.71	Part C, WP1.1, P4	$69.46
Urban	$20.26	Part A, P2, L2	$52.71	Part C, WP1.1, P4	$72.97
Suburban	$27.22	Part A, P2, L3	$52.71	Part C, WP1.1, P4	$79.93
Rural	$30.48	Part A, P2, L4	$52.71	Part C, WP1.1, P4	$83.19
Average	$19.37	Part A, P2, L5	$52.71	Part C, WP1.1, P4	$72.08

ANNUAL CARRYING CHARGE FACTORS

Q. What are Annual Carrying Charge Factors ?

A. An Annual Carrying Charge Factor is the relationship between the expenses and the plant investments for a given network element. This ratio is used to estimate the level of expenses that the Company can expect to incur for any network element on the basis of the element's investments. Expenses that are incurred for specific plant accounts are directly attributed only to those investments, while expenses that are not specific to plant accounts are spread equally across all investments. This approach ensures that the expenses for each network element are attributed to the greatest extent possible on a cost-causative basis, and non-specific costs are allocated in reasonable proportions.

Q. What expenses are captured in the calculation of the annual CCFs?

A. The CCF captures the capital and investment related costs (i.e., depreciation, cost of money, and ad valorem taxes), the operating costs related to the maintenance of the network, and certain administrative costs.

Maintenance

Q. Please describe the methodology that the Company employed to develop the maintenance carrying charge factor.

A. The starting point for the maintenance factor is the set of expenses that have been incurred in 1995 for repairing and rearranging our plant and equipment. It includes the costs associated with responding to subscriber trouble reports ("R" dollars) as well as the costs associated with moves, changes and upgrades to our network ("M" dollars). These expenses, which are captured by plant account, are divided by the investments in the associated plant accounts to calculate the maintenance CCF for each plant account.

Q. Besides plant-specific expenses, what other expenses have been included in the maintenance carrying charge factors?

A. There are two additional loadings which comprise the maintenance CCF. The Specific Loading Factor accounts for those expenses which can be directly assigned to either the central office or outside plant asset accounts. For example, central office engineering expense is applied to all central office switching and circuit investments. The second factor, Common Loading Factor, accounts for those network expenses which cannot be solely assigned to either outside plant or central office accounts.

Q. Did you adjust the base year 1995 maintenance expenses in the calculation of the CCFs?

A. For copper outside plant facilities, newly placed cables may experience fewer troubles related to equipment deterioration over the life of the plant. In order to reflect this potential reduction in subscriber troubles due to newly placed copper plant, we have adjusted the forward-looking assessment of "R" dollars by removing 60% of deteriorated plant troubles and the associated repair expenses from the outside facility accounts (outside plant and drop wire). The estimate of a 60% reduction is based on the Company's experiences over the past five years after totally rehabilitating deteriorated areas of the network.

Q. Are the maintenance expenses you used in your TELRIC study forward-looking?

A. Yes. The maintenance (and administrative) carrying charge factors represent a historic ratio of expenses to investment. In developing the TELRIC investment in the manner I described earlier, the incorporation of the costs associated with the latest technology, which are in most instances lower than the Company's embedded costs, created a lower on-going expense identification after the application of the annual CCF. The lower projected requirement for on-going maintenance and administrative expenses addresses the potential efficiencies that the Company may realize in the future telecommunications marketplace.

Q. How did the Company treat the costs related to testing expenses in the maintenance carrying charge factors?

A. It is assumed that a purchaser of network elements will perform their own subscriber trouble testing. Therefore, the expenses associated with this activity have been removed from the overall testing expense. The remaining testing expenses are spread over the revenue producing investment base. In addition, investments associated with the testing equipment needed to test the network elements have been identified. CCFs (without the testing component included) are applied to the investments to estimate the annual costs associated with this testing equipment. These annual costs are then reduced to reflect the elimination of the subscriber trouble testing activity. The resultant amount is then combined with the annual projected testing expenses to derive the basis of the forward-looking estimation of testing that will be required for unbundled elements.

Q. Did you deaverage the maintenance carrying charge factors in your TELRIC study?

A. We deaveraged the maintenance carrying charge factors in order to address the difference in maintenance expenses across the four density zones.

Attributable Administration

Q. What expenses were included as directly attributable administration CCF in your TELRIC study?

A. The calculation of the directly attributable administration CCF includes the following expenses:

(a) Wholesale costs associated with product management, sales, service order processing, and customer accounting;

(b) The capital requirements associated with investments that are not directly used to provide network elements; and,

(c) General and Administrative expenses.

Q. Mr. Curbelo, have you made adjustments to the directly attributable administration factor to remove Retailing Costs?

A. Yes. The LCO states that retailing costs, such as consumer billing costs associated with retail services, may not be attributed to network elements that are offered to interconnecting carriers.

Q. What wholesale "customer care" costs are included in the directly attributable administrative expenses?

A. Directly attributable administration associated with the wholesale "customer care" function captures the product management, advertising, sales, and customer accounting accounts. Product management expenses will continue to be incurred by a strictly-wholesale provider to identify the needs in the marketplace, enable selection of network technology, and develop usable products/elements for the network elements. Product Management expense which is strictly retail in nature has been removed from the CCF development.

Advertising expenses (except for public telephone advertising) that the Company currently incurs are included in the directly attributable administration expenses category. These advertising costs are the expenses the Company will incur as a wholesale provider of network elements. The Company's reasons for believing that advertising expense will continue in a wholesale environment are set forth in pleadings filed by the Company in the resale phase of this case. In addition, the Company reviewed the advertising expense incurred by six major wholesalers. On the basis of that analysis, contained in my Workpapers, the Company fully expects to incur advertising expenses of the same order of magnitude it incurs today.

The expenses included from the sales and service order account are those which would be directly incurred by a wholesale marketing organization. These forward-looking expenses were estimated on the basis of the number of "customer care" personnel that would be required to support the wholesale service network elements multiplied by appropriate wage rates. Directly attributable administration expenses in the Customer Accounting account are those expenses incurred by organizations other than wholesale marketing but whose functions are essential to the operation of a wholesale company (i.e., Carrier Access Billing System (CABS) (as a surrogate for a wholesale billing system), Service and Equipment Database, and rating and recording of toll/local message).

Q. Please describe the directly attributable administration expenses associated with the capital requirements for investments other than the facilities used in providing the network elements.

A. The administration CCF includes expenses that will be incurred for capital requirements associated with land, leases, furniture, general purpose computers, vehicles, work and office equipment, and official communications investments. As discussed, the directly attributable expense CCF assigns certain of these expenses to a particular class of plant (e.g., Motor Vehicle expense to subscriber link facilities). Other expenses, which are incurred in support of all classes of plant, are attributed to all investment categories. These allocations are detailed in my Workpapers.

Q. Please discuss how you treated the expenses associated with the General and Administration functions.

A. The directly attributable CCF also includes those expenses associated with the Company's General and Administration functions. Accidents, Damages and Settlements have been assigned to the outside plant accounts because virtually all of these expenses are associated with the outside plant field forces or outside plant facilities. The remainder of the G&A

functions have been analyzed to distinguish between those functions which are sensitive to the number of employees versus those which are insensitive to the Company's employee base. The functions which have been identified as insensitive to employee size, and for the most part fixed relative to changes in volume of business, have been designated as "Common" and are discussed below. The remaining G&A functions, whose level of on-going expense can be considered to be a function of the size of the employee base, have been assigned to either the central office operations, outside plant operations, or other, based on employee headcount. These expenses are then reduced by 10% to reflect the reduction in G&A expenses that would be expected if the Company were to shift to being a 100% wholesale company.

Q. Did you make any adjustment for inflation in computing CCFs?

A. No. This is one of the reasons that my analysis is conservative.

Common Costs

Q. What is included in the Common costs CCF in your TELRIC study?

A. Common costs are comprised of Executive, Planning, Legal, General Accounting and Finance, Interconnecting Company Relations, Regulatory and Government Relations, and Research and Development.

Ad Valorem Taxes

Q. What is included in Ad Valorem taxes and how did you account for them in your TELRIC study?

A. Ad Valorem taxes include special franchise taxes, property taxes on the taxable plant, and other miscellaneous taxes imposed upon the company by the various municipalities, counties, etc. in the state. The CCF is based on the assignment of the ad valorem tax expense to the class of plant which is being taxed.

Q. Did you deaverage the Ad Valorem carrying charge factors in your TELRIC study?

A. We deaveraged the ad valorem carrying charge factors in order to address the differences across the four density zones.

Depreciation

Q. How did you calculate depreciation in your TELRIC study?

A. As discussed in the testimony of Company witness Dr. Lawrence Vanston, economic lives are used for calculating the forward-looking depreciation expense, not the regulated prescribed lives nor the remaining lives of the assets. The economic lives used in the Company's TELRIC studies are based on economic lives used when the Company discontinued the use of FASB 71 accounting and moved to FASB 101 and are consistent with the economic lives used in preparing the financial statements that the Company has filed with the Securities and Exchange Commission. These economic lives selected have a direct impact on capital recovery calculations, and an indirect impact on the Return and Income tax values due to the levelized Net-to-Book determinations. Depreciation rates also take into consideration the future net salvage (Cost of Removal minus gross salvage) of the plant account. Consistent with the concept that all plant Is being placed new, there is no depreciation reserve for each of the plant accounts in the TELRIC study.

Cost of Capital

Q. Did you use a risk adjusted cost of capital in your TELRIC study?

A. Yes.

Q. What value did you use and how was it calculated?

A. As discussed in the testimony of Company witness Dr. James Vander Weide, the Cost of Equity is set to 14.8% while Cost of Debt is set at 7.9%. The capital structure of the firm is set to 23.51% Debt and 76.49% Equity. This calculation results in a 13.178% Cost of Capital. This risk-adjusted cost of capital is used in determining the return component of the central office and outside plant investments as well as in the levelizing algorithms for the Net-to-Book values.

Gross Revenue Loading

Q. What is Gross Revenue Loading?

A. Gross Revenue Loading is a factor that is applied against the Company revenue to account for the PSC assessment and uncollectibles. Both of these expenses are associated with the level of revenues that the company actually receives. As set forth in the pleadings filed by the Company in the resale phase on this case, the Company believes that its wholesale uncollectibles, such as negotiated bill adjustments, will equal or exceed its current retail uncollectibles. As such, we continue to use the current level of uncollectibles in the development of the Gross Revenue Loading factor.

Loop and Toll Cost Manuals

Q. How is the methodology for the development of the annual CCFs for the TELRIC cost studies the same as or different from the methodologies addressed in the Loop and Toll Manuals?

A. In order to conform to the various provisions of the LCO, the CCF methodology that has been developed for TELRIC studies contrasts from those previously approved in the Loop and Toll Manuals in the following manner:

Depreciation. The TELRIC CCF is based on the forward-looking economic lives associated with the individual classes of plant. The CCFs described in the Manuals are generally based on the average depreciation lives prescribed by the Public Service Commission, although the Toll Manual also permits depreciation based upon estimates of the economic value of investments (Page 30).

Cost of Capital. The TELRIC CCF requires a forward-looking cost of capital which reflects the risk premium facing the Company in the provision of the network elements. The cost of capital methodology prescribed by the Loop and Toll Manuals is based on PSC-authorized rates of return.

Ad Valorem Taxes. The methodology for the calculation of Ad Valorem Taxes is the same for the TELRIC CCFs as that described in the Loop Manual and the Toll Manual with one exception. In the calculation of the TELRIC CCFs, these property tax expenses have been deaveraged by the density zones.

Q. How does the TELRIC CCF methodology for maintenance compare with that set forth in the Loop and Toll Manuals?

A. The calculation of maintenance expense factor for the TELRIC CCF utilizes the same general methodology as that described in the Loop Manual and the Toll Manual. However, the TELRIC CCFs incorporate the previously discussed density zone deaveraging as well as a potential reduction in the future maintenance costs associated with new copper cable plant.

Q. How does the TELRIC methodology for computing an administration CCF compare with the approach of the Toll Manual?

A. The Manual recommends the allocation of administration expenses on the basis of relative investments unless separately identified. It goes on to state that service specific CCFs should be developed for different services, if feasible, where certain services impose different costs per unit of investments. The Company addressed this recommendation in its estimate of the number of employees who will be performing wholesale customer care functions in support of network elements in the future.

Q. Are common costs addressed in either the Loop Manual or the Toll Manual?

A. Common costs are not specifically addressed in either of these previously approved cost manuals. However, the LCO specifically addressed the incumbent LEC's right to recover common costs.

Q. What are the CCFs used in your TELRIC studies?

A. Please see my Exhibit E, Pages 2-5.

Q. Please summarize the differences in the major CCF categories between the embedded link study filed by the Company on May 31, 1996 and the TELRIC link studies performed for this proceeding.

A. The following is a summary of the percent differences between the results of the TELRIC link study and the previously filed embedded link study. (A positive percentage indicates that the TELRIC CCF is higher than the embedded CCF; a negative percentage indicates that the embedded CCF is higher.) See Workpapers associated with Exhibit E, Pages 175-81.

Investment	(25.71%)
Depreciation	21.08%
Return Interest and Taxes	11.93%
Ad Valorem Taxes	(49.01%)
Maintenance	(56.85%)
Administration/Common	(46.01%)
Total Cost	(28.52%)

The TELRIC study reflects a lower unit investment. Therefore, when the CCFs are applied to the TELRIC investments, the result is a lower attribution of maintenance and administration expenses on a forward-looking basis.

Q. Mr. Curbelo, does this conclude your testimony?

A. Yes.

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ATT-BA-5	Please provide all supporting documentation for each of the unit prices (i.e., all material and labor costs) set forth in the spreadsheet tab "Cable cost" of the Bell Atlantic Link Cost Model Link_L2K.xls.

RESPONSE:

The source of the material and labor costs used in the "Cable cost" tab is the ECRIS database used in BA-NY. Several steps were taken to produce the cable cost table in this tab.

1. Average material prices per foot for each cable size (e.g. 1200 pair copper cable, 24 strands fiber cable, etc.) and type (copper or fiber) were collected for nine areas in BA-NY based on a 13 month rolling average of the disbursed cable prices in ECRIS. For copper cables, this is an average cost of the three possible gauges of cable used, 22, 24 and 26 gauge. Ultimately, in developing the cable cost table for each of the field reporting code (FRC – for example, 2C for aerial and 5C for underground), the material price per foot for a particular size cable for every FRC in an area is the same. For example, in Manhattan, the material price for a 100 pair cable, whether it is 2C or 5C, is $0.77. There is no mechanism in place to differentiate the slight per foot cost differences of cable, if any, for the many different sheath types purchased and installed in the OSP network. For fiber cables, ribbon cable costs were used exclusively because of the operational efficiencies gained by the use of mass fusion splicing of ribbon cables.
   The results of these operations are two material price tables, one for copper and one for fiber.

The copper cable material price table:

Avg./ft.	Area								
Size	1	2	3	4	5	6	7	8	9
25	$ 0.31	$ 0.31	$ 0.36	$ 0.33	$ 0.28	$ 0.33	$ 0.31	$ 0.31	$ 0.31
50	$ 0.50	$ 0.50	$ 1.19	$ 24.69	$ 0.50	$ 24.69	$ 0.42	$ 0.42	$ 0.42
100	$ 0.77	$ 0.77	$ 0.78	$ 0.94	$ 0.88	$ 0.94	$ 0.81	$ 0.81	$ 0.81
200	$ 1.13	$ 1.13	$ 1.49	$ 1.99	$ 1.75	$ 1.99	$ 1.47	$ 1.47	$ 1.47
300	$ 1.91	$ 1.91	$ 2.49	$ 2.20	$ 2.58	$ 2.20	$ 2.16	$ 2.16	$ 2.16
400	$ 2.16	$ 2.16	$ 4.43	$ 2.31	$ 3.18	$ 2.31	$ 3.79	$ 3.79	$ 3.79
600	$ 5.35	$ 5.35	$ 4.19	$ 4.24	$ 4.24	$ 4.24	$ 4.01	$ 4.01	$ 4.01
900	$ 8.59	$ 8.59	$ 6.52	$ 5.83	$ 6.21	$ 5.83	$ 6.01	$ 6.01	$ 6.01
1200	$ 10.37	$ 10.37	$ 8.02	$ 6.29	$ 6.40	$ 6.29	$ 8.99	$ 8.99	$ 8.99
1500	$ 8.84	$ 8.84	$ 6.82	$ 7.59	$ 7.45	$ 7.59	$ 8.12	$ 8.12	$ 8.12
1800	$ 9.96	$ 9.96	$ 9.72	$ 9.36	$ 9.50	$ 9.36	$ 9.45	$ 9.45	$ 9.45
2700			$ 13.58	$ 12.43		$ 12.43	$ 11.79	$ 11.79	$ 11.79
3000	$ 12.79	$ 12.79	$ 13.57	$ 14.39	$ 13.60	$ 14.39	$ 13.71	$ 13.71	$ 13.71

3600	$ 17.17	$ 17.17	$ 15.87	$ 16.88	$ 17.21	$ 16.88	$ 14.87	$ 14.87	$ 14.87
4200			$ 17.12						

The fiber cable material price table:

Avg./ft.	Area								
Size	1	2	3	4	5	6	7	8	9
12	$ 1.43	$ 1.43	$ 0.72	$ 0.58	$ 0.67	$ 0.58	$ 0.55	$ 0.55	$ 0.55
24	$ 2.63	$ 2.63	$ 0.79	$ 0.99	$ 1.44	$ 0.99	$ 0.76	$ 0.76	$ 0.76
48	$ 3.56	$ 3.56	$ 1.13	$ 1.31	$ 1.36	$ 1.31	$ 1.12	$ 1.12	$ 1.12
72	$ 5.06	$ 5.06	$ 2.34	$ 1.87	$ 1.63	$ 1.87	$ 1.48	$ 1.48	$ 1.48
96	$ 3.24	$ 3.24	$ 2.07	$ 2.48	$ 2.22	$ 2.48	$ 2.10	$ 2.10	$ 2.10
144	$ 27.55	$ 27.55	$ 10.06	$ 3.51	$ 2.84	$ 3.51	$ 3.09	$ 3.09	$ 3.09
216	$ 313.97	$ 313.97	$ 4.74	$ 5.03	$ 4.95	$ 5.03	$ 4.71	$ 4.71	$ 4.71

2. These cable cost tables were "smoothed" to remove any cost outliers. For a small number of cable sizes, the ECRIS material and labor costs were outliers with respect to the overall relationship between cost and size indicated by the bulk of the data. In these cases, a regression analyses was performed to establish the relationship between cost and size. There were also missing values for certain size cables in an area. For the outlying and missing material costs, the predicted values from the estimated regression relationship were used in lieu of the ECRIS costs.

These are the cost tables after substituting the outliers with the predicted values from the regression analysis:

The copper cable material price table:

Avg./ft.	AREA								
Size	1	2	3	4	5	6	7	8	9
25	$ 0.31	$ 0.31	$ 0.36	$ 0.33	$ 0.28	$ 0.33	$ 0.31	$ 0.31	$ 0.31
50	$ 0.50	$ 0.50	$ 1.19	$ 0.56	$ 0.50	$ 0.56	$ 0.42	$ 0.42	$ 0.42
100	$ 0.77	$ 0.77	$ 0.78	$ 0.94	$ 0.88	$ 0.94	$ 0.81	$ 0.81	$ 0.81
200	$ 1.13	$ 1.13	$ 1.49	$ 1.99	$ 1.75	$ 1.99	$ 1.47	$ 1.47	$ 1.47
300	$ 1.91	$ 1.91	$ 2.49	$ 2.20	$ 2.58	$ 2.20	$ 2.16	$ 2.16	$ 2.16
400	$ 2.16	$ 2.16	$ 4.43	$ 2.31	$ 3.18	$ 2.31	$ 3.79	$ 3.79	$ 3.79
600	$ 5.35	$ 5.35	$ 4.19	$ 4.24	$ 4.24	$ 4.24	$ 4.01	$ 4.01	$ 4.01
900	$ 8.59	$ 8.59	$ 6.52	$ 5.83	$ 6.21	$ 5.83	$ 6.01	$ 6.01	$ 6.01
1200	$ 10.37	$ 10.37	$ 8.02	$ 6.29	$ 6.40	$ 6.29	$ 8.99	$ 8.99	$ 8.99
1500	$ 8.84	$ 8.84	$ 6.82	$ 7.59	$ 7.45	$ 7.59	$ 8.12	$ 8.12	$ 8.12
1800	$ 9.96	$ 9.96	$ 9.72	$ 9.36	$ 9.50	$ 9.36	$ 9.45	$ 9.45	$ 9.45
2700	$ 12.20	$ 12.20	$ 13.58	$ 12.43	$ 12.34	$ 12.43	$ 11.79	$ 11.79	$ 11.79
3000	$ 12.79	$ 12.79	$ 13.57	$ 14.39	$ 13.60	$ 14.39	$ 13.71	$ 13.71	$ 13.71
3600	$ 17.17	$ 17.17	$ 15.87	$ 16.88	$ 17.21	$ 16.88	$ 14.87	$ 14.87	$ 14.87
4200	$ 19.17	$ 19.17	$ 17.12	$ 18.76	$ 18.98	$ 18.76	$ 15.56	$ 15.56	$ 15.56

The fiber cable material price table:

Avg./ft.	AREA								
Size	1	2	3	4	5	6	7	8	9
12	$ 1.16	$ 1.16	$ 0.72	$ 0.58	$ 0.67	$ 0.58	$ 0.55	$ 0.55	$ 0.55
24	$ 1.97	$ 1.97	$ 0.79	$ 0.99	$ 1.44	$ 0.99	$ 0.76	$ 0.76	$ 0.76

48	$ 3.56	$ 3.56	$ 1.13	$ 1.31	$ 1.36	$ 1.31	$ 1.12	$ 1.12	$ 1.12
72	$ 5.06	$ 5.06	$ 2.34	$ 1.87	$ 1.63	$ 1.87	$ 1.48	$ 1.48	$ 1.48
96	$ 3.24	$ 3.24	$ 2.07	$ 2.48	$ 2.22	$ 2.48	$ 2.10	$ 2.10	$ 2.10
144	$ 9.97	$ 9.97	$ 3.27	$ 3.51	$ 2.84	$ 3.51	$ 3.09	$ 3.09	$ 3.09
216	$ 14.71	$ 14.71	$ 4.74	$ 5.03	$ 4.95	$ 5.03	$ 4.71	$ 4.71	$ 4.71

3. Labor cost per foot
   Unit labor costs for construction and engineering was developed using Costing Tool. Costing Tool was developed for analyzing data residing in ECRIS, without disrupting the live data needed for provisioning actual jobs. Jobs were built using Costing Tool for each work operation (such as joining copper pairs or placing fiber cables) based on default cable section lengths defined by the tool for each FRC, cable type, cable size and area. Costing tool then provide estimates of total cost to engineer, place and splice these cables in the OSP network of BA-NY. Per foot labor costs were developed by dividing the total labor costs by the default cable section lengths.

   The result of these operations is the labor cost table shown below:

		Area								
FRC	SIZE	1	2	3	4	5	6	7	8	9
2C	25	$0.68	$0.63	$0.65	$0.86	$0.73	$0.72	$0.73	$0.76	$0.75
	50	$0.78	$0.73	$0.72	$0.93	$0.81	$0.77	$0.80	$0.83	$0.82
	100	$0.86	$0.81	$0.76	$0.79	$0.85	$0.81	$0.84	$0.88	$0.86
	200	$0.92	$0.87	$0.92	$0.97	$1.02	$0.96	$1.00	$1.04	$1.02
	300	$1.08	$1.03	$1.08	$1.17	$1.18	$1.12	$1.16	$1.20	$1.18
	400	$1.26	$1.20	$1.26	$1.35	$1.36	$1.31	$1.35	$1.39	$1.37
	600	$1.51	$1.44	$1.56	$1.71	$1.68	$1.61	$1.66	$1.70	$1.68
	900	$2.27	$2.19	$2.03	$2.23	$2.16	$2.06	$2.14	$2.19	$2.17
	1200	$2.26	$2.17	$2.43	$2.69	$2.60	$2.51	$2.58	$2.64	$2.61
	1500	$2.91	$2.81	$2.84	$3.15	$3.03	$2.96	$3.00	$3.07	$3.04
	1800	$3.53	$3.40	$3.36	$3.75	$3.52	$3.41	$3.59	$3.68	$3.64
	2700	$6.97	$6.63	$6.47	$7.97	$6.84	$7.14	$7.00	$7.22	$7.10
	3000	$6.99	$6.63	$7.10	$8.80	$7.66	$8.90	$7.72	$7.96	$7.84
	3600	$5.51	$5.31	$5.41	$6.19	$5.74	$5.44	$5.59	$5.73	$5.67
32C	25	$3.33	$3.10	$3.31	$4.11	$3.40	$3.20	$3.49	$3.85	$3.64
	50	$3.54	$3.30	$3.49	$4.32	$3.58	$3.35	$3.67	$4.04	$3.81
	200	$3.64	$3.40	$3.64	$3.77	$3.75	$3.50	$3.83	$4.20	$3.98
	300	$4.30	$4.02	$4.30	$4.67	$4.42	$4.12	$4.51	$4.95	$4.69
	400	$4.76	$4.46	$4.78	$5.13	$4.89	$4.58	$5.01	$5.48	$5.19
	600	$5.46	$5.11	$5.53	$6.13	$5.66	$5.30	$5.78	$6.32	$5.99
	900	$6.96	$6.55	$6.74	$7.48	$6.88	$6.44	$7.04	$7.68	$7.28
	1200	$7.68	$7.21	$7.88	$8.86	$8.07	$7.57	$8.26	$9.01	$8.53
	1500	$9.07	$8.53	$9.03	$10.24	$9.24	$8.71	$9.45	$10.30	$9.76
	1800	$10.42	$9.74	$10.22	$11.75	$10.40	$9.78	$10.73	$11.78	$11.18
	2700	$21.75	$20.32	$21.33	$26.44	$21.63	$20.80	$22.41	$24.70	$23.28
	3000	$23.16	$21.61	$23.37	$28.97	$23.85	$23.85	$24.60	$27.09	$25.54
	3600	$16.74	$15.69	$16.65	$19.67	$17.00	$15.86	$17.31	$18.98	$17.96
45C	25	$1.07	$1.02	$3.66	$4.61	$2.29	$4.15	$2.85	$2.92	$2.76
	50	$1.21	$1.16	$3.77	$4.73	$2.41	$4.24	$2.95	$3.02	$2.86
	100	$1.43	$1.38	$3.96	$4.65	$2.62	$4.43	$3.18	$3.25	$3.07
	200	$1.71	$1.64	$4.34	$5.15	$3.03	$4.81	$3.60	$3.67	$3.46
	300	$2.09	$2.01	$4.74	$5.75	$3.44	$5.20	$4.02	$4.09	$3.85

	400	$2.54	$2.46	$5.22	$6.24	$3.94	$5.69	$4.56	$4.62	$4.34
	600	$3.22	$3.12	$5.98	$7.32	$4.76	$6.46	$5.39	$5.46	$5.12
	900	$4.71	$4.57	$7.22	$8.79	$6.04	$7.67	$6.75	$6.81	$6.37
	1200	$5.41	$5.24	$8.38	$10.28	$7.30	$8.88	$8.07	$8.13	$7.59
	1500	$6.77	$6.58	$9.55	$11.78	$8.55	$10.10	$9.37	$9.42	$8.79
	1800	$8.11	$7.80	$10.76	$13.42	$9.77	$11.24	$10.74	$10.90	$10.16
	2700	$11.27	$10.95	$13.91	$17.78	$12.97	$14.84	$14.19	$14.24	$13.21
	3000	$11.75	$11.40	$15.06	$19.29	$14.32	$17.09	$15.51	$15.55	$14.42
	3600	$14.31	$13.82	$17.32	$22.06	$16.79	$17.78	$17.92	$18.06	$16.73
5C	25	$0.73	$0.68	$0.71	$0.90	$0.85	$0.71	$0.75	$0.83	$0.79
	50	$0.92	$0.85	$0.86	$1.07	$1.03	$0.84	$0.90	$0.99	$0.94
	100	$1.09	$1.02	$0.99	$1.12	$1.18	$0.96	$1.04	$1.14	$1.09
	200	$1.40	$1.30	$1.39	$1.61	$1.66	$1.35	$1.46	$1.60	$1.52
	300	$1.95	$1.84	$1.95	$2.26	$2.30	$1.87	$2.04	$2.21	$2.11
	400	$2.36	$2.23	$2.36	$2.76	$2.77	$2.28	$2.46	$2.67	$2.55
	600	$3.26	$2.93	$3.16	$3.88	$3.71	$3.05	$3.30	$3.73	$3.56
	900	$4.91	$4.51	$4.50	$5.49	$5.27	$4.32	$4.70	$5.24	$5.00
	1200	$5.78	$5.31	$5.78	$7.03	$6.79	$5.58	$6.06	$6.72	$6.41
	1500	$7.31	$6.78	$7.05	$8.57	$8.30	$6.85	$7.40	$8.16	$7.79
	1800	$8.81	$8.21	$8.46	$10.24	$9.89	$8.15	$8.92	$9.80	$9.35
	2700	$17.26	$16.12	$16.56	$20.45	$19.55	$16.35	$17.43	$19.13	$18.17
	3000	$18.37	$17.13	$18.27	$22.74	$21.71	$19.10	$19.28	$21.14	$20.07
	3600	$15.97	$14.94	$15.62	$19.29	$18.44	$14.98	$16.30	$17.84	$16.98
632C	25	$3.85	$3.56	$3.71	$4.67	$4.05	$3.68	$3.90	$4.30	$4.12
	50	$4.26	$3.94	$4.07	$5.11	$4.44	$4.01	$4.27	$4.71	$4.51
	100	$5.02	$4.65	$4.78	$5.28	$5.22	$4.70	$5.02	$5.53	$5.30
	200	$6.36	$5.89	$6.17	$7.03	$6.74	$6.07	$6.49	$7.16	$6.85
	300	$7.81	$7.24	$7.59	$9.23	$8.27	$7.45	$7.96	$8.77	$8.39
	400	$9.65	$8.98	$9.41	$10.98	$10.26	$9.25	$9.89	$10.85	$10.37
	600	$12.47	$11.59	$12.20	$14.92	$13.31	$11.99	$12.82	$14.08	$13.45
	900	$17.48	$16.30	$16.82	$20.17	$18.32	$16.50	$17.67	$19.37	$18.51
	1200	$21.70	$20.22	$21.35	$25.78	$23.30	$20.99	$22.48	$24.62	$23.52
	1500	$26.59	$24.80	$25.90	$31.40	$28.27	$25.49	$27.26	$29.85	$28.51
	1800	$31.45	$28.96	$30.16	$37.15	$32.85	$29.61	$31.79	$35.27	$33.69
	2700	$44.87	$41.86	$43.44	$54.26	$47.22	$43.07	$45.70	$50.07	$47.79
	3000	$48.87	$45.56	$47.96	$59.89	$52.29	$48.61	$50.51	$55.32	$52.80
	3600	$58.48	$54.16	$56.64	$70.50	$61.84	$55.55	$59.56	$65.70	$62.70
732C	12	$10.70	$9.92	$7.89	$12.66	$8.50	$6.51	$6.63	$7.48	$5.82
	24	$13.06	$12.22	$9.43	$15.63	$10.56	$7.78	$7.97	$8.55	$6.63
	48	$17.13	$16.17	$12.11	$21.17	$13.75	$9.76	$9.98	$11.04	$8.28
	72	$21.50	$20.06	$15.17	$26.75	$16.98	$12.30	$12.33	$13.53	$9.92
	96	$25.45	$23.89	$17.91	$32.34	$20.53	$14.03	$14.37	$16.05	$11.59
	144	$34.10	$31.93	$23.67	$43.16	$27.19	$18.65	$19.10	$20.72	$14.58
	216	$46.42	$43.53	$32.11	$59.83	$37.39	$24.87	$25.45	$28.17	$19.48
82C	12	$1.19	$1.68	$1.06	$1.15	$1.02	$1.11	$1.18	$1.14	$1.23
	24	$1.43	$1.90	$1.21	$1.40	$1.24	$1.19	$1.30	$1.33	$1.43
	48	$1.98	$2.62	$1.56	$1.84	$1.52	$1.58	$1.70	$1.72	$1.84
	72	$2.41	$3.28	$1.96	$2.31	$1.83	$2.20	$2.11	$2.03	$2.18
	96	$2.48	$3.52	$2.37	$2.79	$2.15	$2.34	$2.54	$2.45	$2.62
	144	$3.73	$5.00	$3.07	$3.72	$2.92	$3.06	$3.31	$3.26	$3.48
	216	$4.77	$6.45	$4.12	$5.14	$3.99	$4.11	$4.43	$4.39	$4.69
832C	12	$8.81	$8.30	$5.51	$6.35	$6.01	$6.21	$6.38	$7.79	$7.01
	24	$11.62	$10.98	$7.28	$9.04	$8.03	$8.14	$8.40	$10.24	$9.20

	48	$17.81	$16.42	$10.75	$13.97	$11.76	$12.08	$12.47	$15.62	$14.02
	72	$23.95	$22.30	$14.59	$18.94	$15.91	$16.64	$16.92	$21.00	$18.83
	96	$29.66	$27.25	$18.11	$24.32	$19.69	$20.33	$21.02	$26.41	$23.67
	144	$41.69	$38.77	$25.45	$34.24	$27.81	$28.61	$29.57	$36.76	$32.93
	216	$59.16	$54.97	$36.24	$49.47	$39.70	$40.78	$42.13	$52.42	$46.94
845C	12	$1.36	$1.92	$3.95	$4.76	$2.32	$4.35	$3.05	$3.31	$3.15
	24	$1.67	$2.19	$4.15	$5.09	$2.58	$4.48	$3.22	$3.64	$3.46
	48	$2.38	$3.13	$4.72	$5.74	$3.00	$5.04	$3.82	$4.31	$4.09
	72	$2.92	$4.00	$5.32	$6.40	$3.46	$5.83	$4.42	$4.85	$4.60
	96	$3.14	$4.45	$5.94	$7.09	$3.92	$6.14	$5.04	$5.55	$5.26
	144	$4.68	$6.31	$7.01	$8.44	$4.95	$7.17	$6.16	$6.93	$6.56
	216	$6.17	$8.34	$8.64	$10.50	$6.43	$8.69	$7.81	$8.93	$8.42
85C	12	$1.19	$1.14	$1.03	$1.15	$1.15	$1.02	$1.09	$1.19	$1.13
	24	$1.59	$1.40	$1.25	$1.57	$1.48	$1.18	$1.29	$1.57	$1.49
	48	$2.46	$2.24	$1.91	$2.34	$2.14	$1.84	$1.99	$2.33	$2.21
	72	$3.14	$3.03	$2.61	$3.14	$2.86	$2.74	$2.70	$2.95	$2.80
	96	$3.53	$3.39	$3.31	$3.96	$3.57	$3.15	$3.43	$3.75	$3.55
	144	$5.41	$5.09	$4.55	$5.55	$5.04	$4.36	$4.74	$5.32	$5.04
	216	$7.41	$6.88	$6.43	$8.03	$7.21	$6.17	$6.68	$7.60	$7.19

4. The same smoothing regression analysis used on the cable material price tables was also used to eliminate outliers in the labor cost table. Additionally, missing labor cost values for the 4200 pair copper cables were created.

These are the labor cost tables after substituting the outliers with the predicted values from the regression analysis:

		Area								
FRC	SIZE	1	2	3	4	5	6	7	8	9
2	25	$0.62	$0.58	$0.61	$0.62	$0.69	$0.66	$0.69	$0.72	$0.71
	50	$0.67	$0.62	$0.65	$0.67	$0.74	$0.70	$0.74	$0.77	$0.75
	100	$0.76	$0.71	$0.74	$0.77	$0.82	$0.79	$0.83	$0.86	$0.84
	200	$0.93	$0.88	$0.91	$0.96	$1.00	$0.96	$1.00	$1.03	$1.02
	300	$1.10	$1.04	$1.07	$1.15	$1.17	$1.13	$1.17	$1.21	$1.19
	400	$1.27	$1.21	$1.24	$1.33	$1.35	$1.29	$1.34	$1.38	$1.36
	600	$1.60	$1.53	$1.56	$1.70	$1.68	$1.62	$1.67	$1.72	$1.70
	900	$2.07	$1.99	$2.03	$2.23	$2.17	$2.09	$2.15	$2.21	$2.18
	1200	$2.53	$2.44	$2.48	$2.75	$2.64	$2.54	$2.61	$2.68	$2.65
	1500	$2.97	$2.86	$2.91	$3.24	$3.09	$2.97	$3.06	$3.13	$3.10
	1800	$3.39	$3.27	$3.32	$3.71	$3.52	$3.38	$3.48	$3.56	$3.52
	2700	$4.53	$4.37	$4.44	$5.02	$4.70	$4.50	$4.63	$4.74	$4.69
	3000	$4.88	$4.70	$4.78	$5.42	$5.05	$4.83	$4.98	$5.10	$5.04
	3600	$5.50	$5.29	$5.39	$6.15	$5.70	$5.44	$5.61	$5.75	$5.68
	4200	$6.05	$5.81	$5.92	$6.81	$6.27	$5.97	$6.16	$6.32	$6.25
32	25	$3.11	$2.90	$3.12	$3.17	$3.21	$3.01	$3.31	$3.63	$3.43
	50	$3.21	$3.00	$3.23	$3.30	$3.32	$3.11	$3.41	$3.75	$3.54
	100	$3.42	$3.20	$3.43	$3.55	$3.53	$3.31	$3.63	$3.98	$3.76
	200	$3.84	$3.59	$3.85	$4.05	$3.95	$3.70	$4.06	$4.45	$4.21
	300	$4.26	$3.99	$4.26	$4.54	$4.37	$4.10	$4.49	$4.91	$4.65
	400	$4.67	$4.38	$4.67	$5.03	$4.79	$4.49	$4.91	$5.38	$5.09

	600	$5.49	$5.15	$5.49	$6.01	$5.62	$5.27	$5.76	$6.30	$5.96
	900	$6.71	$6.30	$6.69	$7.47	$6.85	$6.42	$7.01	$7.66	$7.26
	1200	$7.91	$7.42	$7.88	$8.90	$8.05	$7.55	$8.24	$9.00	$8.53
	1500	$9.09	$8.53	$9.05	$10.32	$9.24	$8.66	$9.45	$10.33	$9.79
	1800	$10.25	$9.62	$10.19	$11.71	$10.41	$9.76	$10.64	$11.63	$11.03
	2700	$13.61	$12.77	$13.52	$15.78	$13.80	$12.92	$14.10	$15.43	$14.62
	3000	$14.69	$13.77	$14.59	$17.10	$14.89	$13.94	$15.21	$16.66	$15.78
	3600	$16.80	$15.74	$16.67	$19.67	$17.02	$15.91	$17.38	$19.05	$18.04
	4200	$18.82	$17.62	$18.67	$22.17	$19.06	$17.80	$19.47	$21.37	$20.22
45	25	$1.00	$0.97	$1.05	$1.10	$1.13	$1.08	$1.20	$1.20	$1.10
	50	$1.11	$1.07	$1.15	$1.23	$1.25	$1.18	$1.31	$1.31	$1.21
	100	$1.31	$1.27	$1.37	$1.50	$1.47	$1.39	$1.54	$1.54	$1.42
	200	$1.72	$1.66	$1.78	$2.03	$1.91	$1.81	$2.00	$2.01	$1.85
	300	$2.13	$2.05	$2.20	$2.56	$2.35	$2.23	$2.46	$2.46	$2.28
	400	$2.53	$2.45	$2.61	$3.09	$2.79	$2.64	$2.91	$2.92	$2.70
	600	$3.33	$3.22	$3.44	$4.14	$3.65	$3.47	$3.82	$3.83	$3.54
	900	$4.52	$4.37	$4.65	$5.71	$4.94	$4.68	$5.16	$5.18	$4.79
	1200	$5.68	$5.49	$5.85	$7.25	$6.21	$5.88	$6.48	$6.50	$6.02
	1500	$6.83	$6.60	$7.03	$8.77	$7.46	$7.06	$7.78	$7.81	$7.23
	1800	$7.95	$7.69	$8.19	$10.27	$8.68	$8.22	$9.06	$9.10	$8.42
	2700	$11.22	$10.84	$11.55	$14.66	$12.25	$11.59	$12.78	$12.85	$11.87
	3000	$12.27	$11.85	$12.63	$16.09	$13.40	$12.67	$13.99	$14.06	$12.98
	3600	$14.30	$13.81	$14.73	$18.88	$15.64	$14.78	$16.34	$16.42	$15.14
	4200	$16.27	$15.69	$16.76	$21.59	$17.81	$16.81	$18.61	$18.70	$17.23
5	25	$0.66	$0.58	$0.61	$0.67	$0.75	$0.60	$0.66	$0.77	$0.74
	50	$0.78	$0.69	$0.73	$0.81	$0.88	$0.71	$0.78	$0.90	$0.86
	100	$1.01	$0.91	$0.96	$1.09	$1.15	$0.93	$1.02	$1.16	$1.11
	200	$1.48	$1.34	$1.41	$1.65	$1.68	$1.37	$1.49	$1.68	$1.60
	300	$1.94	$1.78	$1.86	$2.20	$2.20	$1.81	$1.96	$2.19	$2.09
	400	$2.40	$2.21	$2.32	$2.75	$2.73	$2.24	$2.43	$2.70	$2.58
	600	$3.32	$3.07	$3.21	$3.85	$3.77	$3.10	$3.36	$3.72	$3.55
	900	$4.68	$4.34	$4.54	$5.47	$5.32	$4.38	$4.75	$5.22	$4.99
	1200	$6.01	$5.60	$5.84	$7.08	$6.85	$5.63	$6.11	$6.71	$6.40
	1500	$7.33	$6.83	$7.13	$8.67	$8.37	$6.87	$7.46	$8.18	$7.80
	1800	$8.63	$8.05	$8.40	$10.24	$9.86	$8.08	$8.78	$9.63	$9.18
	2700	$12.41	$11.57	$12.08	$14.83	$14.22	$11.62	$12.64	$13.86	$13.21
	3000	$13.63	$12.71	$13.27	$16.32	$15.63	$12.75	$13.88	$15.23	$14.51
	3600	$16.02	$14.93	$15.60	$19.24	$18.40	$14.97	$16.32	$17.91	$17.06
	4200	$18.32	$17.06	$17.84	$22.08	$21.10	$17.11	$18.68	$20.52	$19.52
632	25	$3.65	$3.41	$3.56	$3.80	$3.89	$3.51	$3.75	$4.09	$3.92
	50	$4.04	$3.77	$3.94	$4.28	$4.30	$3.89	$4.15	$4.53	$4.34
	100	$4.83	$4.50	$4.70	$5.23	$5.13	$4.63	$4.95	$5.42	$5.19
	200	$6.40	$5.96	$6.22	$7.12	$6.79	$6.13	$6.55	$7.18	$6.87
	300	$7.97	$7.41	$7.74	$9.02	$8.44	$7.62	$8.14	$8.93	$8.55
	400	$9.53	$8.86	$9.26	$10.91	$10.10	$9.11	$9.74	$10.69	$10.22
	600	$12.66	$11.76	$12.28	$14.69	$13.40	$12.07	$12.92	$14.20	$13.57
	900	$17.33	$16.09	$16.81	$20.35	$18.33	$16.51	$17.68	$19.44	$18.58
	1200	$21.98	$20.40	$21.31	$25.98	$23.24	$20.93	$22.41	$24.66	$23.56

	1500	$26.61	$24.69	$25.79	$31.59	$28.13	$25.33	$27.13	$29.87	$28.53
	1800	$31.23	$28.96	$30.26	$37.19	$33.00	$29.71	$31.83	$35.05	$33.48
	2700	$44.95	$41.66	$43.54	$53.86	$47.50	$42.73	$45.80	$50.49	$48.20
	3000	$49.49	$45.85	$47.92	$59.37	$52.30	$47.03	$50.42	$55.60	$53.07
	3600	$58.50	$54.18	$56.64	$70.35	$61.83	$55.58	$59.60	$65.75	$62.75
	4200	$67.44	$62.43	$65.28	$81.25	$71.28	$64.04	$68.70	$75.83	$72.35
732C	12	$10.70	$9.92	$7.89	$12.66	$8.50	$6.51	$6.63	$7.48	$5.82
	24	$13.06	$12.22	$9.43	$15.63	$10.56	$7.78	$7.97	$8.55	$6.63
	48	$17.13	$16.17	$12.11	$21.17	$13.75	$9.76	$9.98	$11.04	$8.28
	72	$21.50	$20.06	$15.17	$26.75	$16.98	$12.30	$12.33	$13.53	$9.92
	96	$25.45	$23.89	$17.91	$32.34	$20.53	$14.03	$14.37	$16.05	$11.59
	144	$34.10	$31.93	$23.67	$43.16	$27.19	$18.65	$19.10	$20.72	$14.58
	216	$46.42	$43.53	$32.11	$59.83	$37.39	$24.87	$25.45	$28.17	$19.48
82C	12	$1.19	$1.68	$1.06	$1.15	$1.02	$1.11	$1.18	$1.14	$1.23
	24	$1.43	$1.90	$1.21	$1.40	$1.24	$1.19	$1.30	$1.33	$1.43
	48	$1.98	$2.62	$1.56	$1.84	$1.52	$1.58	$1.70	$1.72	$1.84
	72	$2.41	$3.28	$1.96	$2.31	$1.83	$2.20	$2.11	$2.03	$2.18
	96	$2.48	$3.52	$2.37	$2.79	$2.15	$2.34	$2.54	$2.45	$2.62
	144	$3.73	$5.00	$3.07	$3.72	$2.92	$3.06	$3.31	$3.26	$3.48
	216	$4.77	$6.45	$4.12	$5.14	$3.99	$4.11	$4.43	$4.39	$4.69
832C	12	$8.81	$8.30	$5.51	$6.35	$6.01	$6.21	$6.38	$7.79	$7.01
	24	$11.62	$10.98	$7.28	$9.04	$8.03	$8.14	$8.40	$10.24	$9.20
	48	$17.81	$16.42	$10.75	$13.97	$11.76	$12.08	$12.47	$15.62	$14.02
	72	$23.95	$22.30	$14.59	$18.94	$15.91	$16.64	$16.92	$21.00	$18.83
	96	$29.66	$27.25	$18.11	$24.32	$19.69	$20.33	$21.02	$26.41	$23.67
	144	$41.69	$38.77	$25.45	$34.24	$27.81	$28.61	$29.57	$36.76	$32.93
	216	$59.16	$54.97	$36.24	$49.47	$39.70	$40.78	$42.13	$52.42	$46.94
845C	12	$1.36	$1.92	$3.95	$4.76	$2.32	$4.35	$3.05	$3.31	$3.15
	24	$1.67	$2.19	$4.15	$5.09	$2.58	$4.48	$3.22	$3.64	$3.46
	48	$2.38	$3.13	$4.72	$5.74	$3.00	$5.04	$3.82	$4.31	$4.09
	72	$2.92	$4.00	$5.32	$6.40	$3.46	$5.83	$4.42	$4.85	$4.60
	96	$3.14	$4.45	$5.94	$7.09	$3.92	$6.14	$5.04	$5.55	$5.26
	144	$4.68	$6.31	$7.01	$8.44	$4.95	$7.17	$6.16	$6.93	$6.56
	216	$6.17	$8.34	$8.64	$10.50	$6.43	$8.69	$7.81	$8.93	$8.42
85C	12	$1.19	$1.14	$1.03	$1.15	$1.15	$1.02	$1.09	$1.19	$1.13
	24	$1.59	$1.40	$1.25	$1.57	$1.48	$1.18	$1.29	$1.57	$1.49
	48	$2.46	$2.24	$1.91	$2.34	$2.14	$1.84	$1.99	$2.33	$2.21
	72	$3.14	$3.03	$2.61	$3.14	$2.86	$2.74	$2.70	$2.95	$2.80
	96	$3.53	$3.39	$3.31	$3.96	$3.57	$3.15	$3.43	$3.75	$3.55
	144	$5.41	$5.09	$4.55	$5.55	$5.04	$4.36	$4.74	$5.32	$5.04
	216	$7.41	$6.88	$6.43	$8.03	$7.21	$6.17	$6.68	$7.60	$7.19

The "smoothed" material and labor costs were then used to populate the lookup table shown in the "Cable cost" tab.

Case: 98-C-1357
Bell Atlantic
Date of Request: April 20, 2000
Respondent: BA Panel

CA-BA-80	Refer to Docket No. 98-C-1357, Exhibit to Bell Atlantic-New York's Initial Testimony, February 7, 2000. Please provide the "Analysis of ECRIS Data" (Section 10 of Exhibit Part A-1).

RESPONSE:

The attached file, "CA-BA-80.PDF", contains the NERA report titled "Environmental Costs of Bell-Atlantic New York's Loop Plant". This report includes a technical appendix and methodology describing the development of the Environmental Factors.

The attached file "CA-BA-80.zip", containing the datasets and STATA program files underlying the development of the ECRIS environmental factors and statistical test shown in Exhibit Part A-1 Section 10.

1. New_wcs.dta – STATA dataset with wire center numbers and associated density zone assignments.

2. Zero.dta – STATA dataset with Wkops whose total actual hours = 0 for the entire job, and therefore no work was done.

3. Multareaden.dta – STATA dataset with Wkops in a job that spans more than one area or density zone.

4. 7-2-99c.do – STATA "do" file that manipulates All_wkops.dta in order to create multiplicative factors.

5. 7-22-99.do – STATA "do" file that manipulates All_wkops.dta to create zero.dta.

6. Part I 7-22-99.do – STATA "do" file that manipulates All_wkops.dta to create multareaden.dta.

The database of ECRIS work operations is contained in the attached file CA-BA-80_db.ZIP.

ENVIRONMENTAL COSTS OF BELL ATLANTIC-NEW YORK'S LOOP PLANT

July, 1999

NATIONAL ECONOMIC RESEARCH ASSOCIATES

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I. BACKGROUND AND SUMMARY

This study investigates the time and cost incurred to construct and rearrange the Company's outside plant (OSP). This construction and rearrangement includes, for instance, placing underground cable, placing aerial cable on utility poles, and/or connecting cable at junctions in the network. In general, OSP-related work is the activity required to make loops available as unbundled network elements as required by the Telecommunications Act of 1996. The objective of the study is to determine if the cost to provision and maintain OSP differs across the Company's service territory.[1]

Broadly speaking, the overall cost of provisioning and maintaining loop plant falls into two categories: standard engineering and construction ("standard") costs and costs related to environmental or locale-specific conditions ("environmental"). Standard costs are those costs related to the physical structure of loop plant and are specifically measured in the Company's loop TELRIC analysis. Standard costs of the Company's loop plant are well defined, and the cost drivers that affect these costs are understood and measurable.

Environmental costs are less well-defined. Unlike standard costs, they occur for reasons that are not directly associated with the normal physical structure of loop plant. Environmental costs occur because of work site or other environmental conditions—*e.g.*, the cost to add additional field crew because of terrain, automobile traffic or other environmental conditions that vary across the Company's service territory.[2] Environmental cost drivers are difficult to systematically identify by name. Unlike standard cost drivers (*e.g.*, loop length, the

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[1] For purposes of this study, the Company's service territory is divided into nine strategic business unit areas: Bronx, Queens, Brooklyn/Staten Island, Manhattan/No. Manhattan, Nassau/Suffolk, Northeast, Western, Central and Midstate. In addition, the company identified three density zones to which all wire centers are assigned. They are DZ1 comprised of all Manhattan/No. Manhattan wire centers; DZ2 comprised of all wire centers where the number of links per square mile exceeds 1,500; and, DZ3 comprised of all wire centers where the number of links per square mile is less than or equal to 1,500.

[2] Examples include: the cost of additional technicians, for instance, to hand carry tools, equipment and/or material to a work location because of right of way restrictions; the cost incurred because traffic conditions and/or safety considerations dictate the need for additional personnel; the cost to have a technician at a work location around the clock even while no construction work is being done, *e.g.*, maintaining pump and blower operations or blocking and maintaining access to work areas in congested areas; or the cost of additional technicians required to hand pass cable during placing operations through ceilings, under sub-floors or over fencing or other obstacles during cable placement operations.

proportion of aerial compared with underground plant and other factors relating to the structural nature of a loop), environmental costs are likely to depend upon a wide variety of circumstances.

While difficult to identify by name, the effect of environmental cost drivers on total overall loop cost can nonetheless be identified by systematically comparing the estimated and actual cost of OSP activity across different regions of the Company's service territory. In such a comparison, the standard cost components of OSP activity fall away providing an opportunity to investigate environmental cost differences.

Our analysis uses such an approach to investigate environmental costs. The analysis reported upon in this study identifies the effects of environmental costs on the overall cost of providing and maintaining the Company's loop plant. In addition, we test the hypothesis that the level of environmental costs differs across the Company's service territory. As reported in more detail below, we find that there are significant differences in the levels of environmental costs across the different geographic regions and density zones of the Company's service territory. We derive a set of multiplicative factors which can be used to adjust the labor component of the Company's link cost calculator to account for the differences in the level of environmental hours across the Company's service territory.

II. METHODOLOGY

Our study method is straightforward. We derive a measure of the relative effect of environmental costs from a comparison of the estimated expected hours to complete OSP work with the actual (booked on time-sheet) hours to complete the work. Our analysis looks at such comparisons across different regions of the Company's service territory. Specifically, in our study we (i) obtain systematic estimates of the expected time required to complete OSP jobs, (ii) stratify the data by area and density zone and (iii) compare the Estimated Expected Time with the actual time required to complete the work. As we explain in more detail below, the greater the difference between estimated expected and actual time, the greater the level of environmental costs.

Following is an overview of the construct of OSP jobs, a description of the data available for analysis and our results. A detailed discussion of the methodology is presented in the Technical Appendix at the end of this document.[3]

A. An Overview of the ECRIS Data and OSP Jobs

Our primary source of data is the Engineering Construction Record Information System (ECRIS). ECRIS is a Bell Atlantic work administration and planning tool which (i) is used to develop systematic time and cost estimates to perform OSP work and (ii) houses a database of information for every OSP job the Company performs. Each OSP job requires that an engineer review the job schematics and enter pertinent data into ECRIS.[4] In addition to labor time and cost estimates, ECRIS retains detailed information about the material required to complete each OSP job, a detailed description of the job's structural characteristics, and also a record of the time it takes to actually complete each job. These data are generally used by the Company to manage its large projects, evaluate productivity and manage its work load as well as provide supporting data for the design of future jobs.[5]

1. The Elements of OSP Jobs

Every OSP job the Company performs can be viewed as a collection of activities and sub-activities. Specifically, each job is a collection of activities (each referred to by an FRC or Field Reporting Code) and, in turn, each FRC is a collection of sub-activities (each referred to as a WKOP or work operation).

To illustrate, consider an OSP job to provision a cable between Schenectady and Albany. The job might consist of placing aerial cable on a pole line for part of the distance, placing a buried cable and then pulling underground cable through ducts and manholes for the remainder of the distance. Since these three activities (placing aerial cable, placing buried cable

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[3] The Technical Appendix and Methodology shows the derivation of the multiplicative environmental adjustment factors.

[4] The process of entering data into ECRIS is described in detail in ECRIS Definition Document, Draft Issued: September 1, 1993; and ECRIS Helpful Hints, Second Release, August 15, 1997.

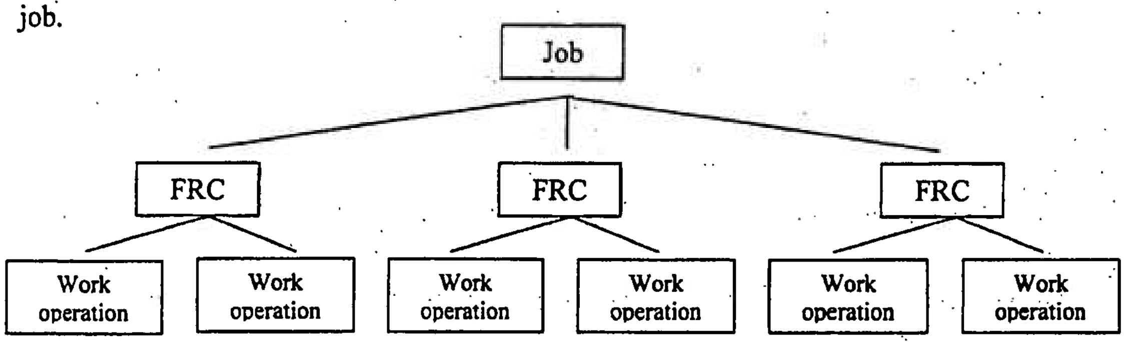
[5] As the Company's central repository of material cost and labor time and cost data related to OSP activity, data from ECRIS are used as input to the Company's evaluation of standard costs to provision loops—*i.e.*, the Company's TELRIC analysis.

and placing underground cable) are physically different (and have different structural cost components) ECRIS requires that they be differentiated from one another in order to estimate the time and cost for the entire job (provisioning a cable between Schenectady and Albany). Each activity is associated with a different FRC. Engineers are then required to identify each WKOP and associate it with the appropriate FRC as the job is entered in the ECRIS system. There are ninety different FRCs included in the data we studied.[6]

a) Work Operations

Each FRC is made up of one or more work operations. Continuing with the previous example, the FRC for installing a buried cable may consist of placing the new buried cable in the trench (WKOP #1), splicing the cable (WKOP #2) and testing the cable (WKOP #3).

The ECRIS database contains all of the WKOPs associated with the Company's OSP activity. The following illustration shows the relationship between WKOPs, FRCs and an OSP job.



b) Time and Cost Estimates

Time and cost estimates are made at the WKOP level in ECRIS. Algorithms in ECRIS estimate (in hours) how long each WKOP will take and this estimate—based on the engineer's input—is by design consistent throughout BA-NY's operating service territory. That is to say, ECRIS's time estimate of a given WKOP in Buffalo will be identical to the time estimate to

[6] The FRCs in our data do not represent the complete set of FRCs. Some FRCs are absent due to the absence of that type of OSP field work. Also, one category of OSP field work has purposefully been omitted. Conduit work is not included in the data we analyzed. While the cost of conduit work is generally high and likely to vary substantially across the Company's service territory, ECRIS does not contain the requisite data to include conduit work in our analysis.

perform the same WKOP in Ithaca so long as the work operations themselves (including factors like quantities of materials and description of materials) are in fact identical.[7] Time estimates are in turn the basis for the cost estimate.[8]

B. The ECRIS Database

Bell Atlantic – New York extracted data from ECRIS and provided NERA with a database spanning the period between January 1, 1997 to October 20, 1998. In addition to information about the material required to complete each OSP job and a detailed description of the job's structural characteristics the record of each WKOP included the following information:

- Job Number – indicating the overall job the WKOP is associated with
- Field Reporting Code (FRC) – indicating the particular FRC the WKOP is associated with
- Wire Center – the wire center in which the WKOP was performed
- Estimated Expected Time - the amount of time ECRIS calculated a WKOP should take (including the engineers' modifications as described below)
- Adder Hours[9] - the number of adder hours entered by the engineer
- Variable-Standard Time Increment (STI) Hours - the number of Variable-STI hours entered by the engineer
- Actual Hours – the actual hours reported on time sheets to complete the WKOP

1. The development of base hours.

As recorded in ECRIS, the Estimated Expected Time can include up to two adjustments: an Adder Hours adjustment and a Variable STI Hours adjustment. If, beyond the basic and structural engineering aspects of the job, the engineer is sufficiently familiar with the

[7] Small differences sometimes occur because of differences in the time required to travel from the Company's garages to a work site. The location of garages in each area are taken into account when ECRIS estimates the time required to complete an activity.

[8] Insofar as time estimates are the seed of cost estimates in ECRIS we confine our analysis to a comparison of the estimate and actual time to complete a WKOP.

[9] If used, Adder and Variable-STI Hours contain adjustments to Estimated Expected Time and can be used to reflect an engineer's specific knowledge of the work site's environmental conditions. The use of such adjustments is left to the discretion of the engineer.

job site and other environmental conditions specific to the job, either or both adjustments could be used to account for the time required to accommodate *environmental* cost elements of the job. In reality, different engineers have different levels of knowledge about such issues and thus not every Estimated Expected Time is so adjusted.

Since our objective is to determine if the effect of environmental cost elements are different across the Company's service territory we adjust the amount of time ECRIS calculates a work operation should take (the Estimated Expected Time) to remove any adjustments (*i.e.*, Adder or Variable STI Hours) made during the estimating process. Only then are we assured that the estimate of time required to complete a work operation is systematically and uniformly measured[10] across every WKOP in every area of the Company's service territory. We calculate Estimated Base Hours for each WKOP as the amount of time ECRIS calculated a work operation should take (Estimated Expected Time) less the number of Adder Hours, and Variable-STI Hours.

C. The Methodology[11]

Our measure of environmental cost hours is based on the calculated difference between recorded Actual Hours and Estimated Base Hours. Recall that by construction, Estimated Base Hours for a WKOP in Area *A* is identical to the measure of base hours for the same WKOP in Area *B*. Also, recall that all OSP activity is made up of both standard cost elements and environmental cost elements. Since the record of Actual Hours captures all time spent in the field to complete a WKOP it includes time to accomplish both standard cost related hours and environmental cost related hours. Since by construction the measure of Estimated Base Hours only includes the time required to accomplish standard cost related activity, the difference between Actual and Estimated Base Hours is a measure of the time required to accomplish the environmental cost element of the WKOP. This is the basis of our analysis and the means by which we explore the relationship between environmental cost elements and different areas of the Company's service territory.

[10] Except for small differences in travel time discussed earlier.

[11] A more detailed explanation of the methodology is presented in the Technical Appendix & Methodology.

Broadly speaking, the study uses ECRIS data to measure the way in which environmental cost hours varies across the Company's service territory. Following is a description of the data used in our analysis and then our findings.

III. THE DATA

The distribution of WKOP and FRC data across the Company's service territory stratified by area is shown in Table 1. Table 2 shows the distribution of WKOP level data stratified by density zone and area—*i.e.*, the twenty-seven cells that constitute the intersection of the Company's nine strategic business unit areas and three density zones.[12]

For review purposes we grouped like-FRC codes together and obtained nine 'activity' categories shown in Table 3. Counting the number of FRC activities performed within each activity category reveals that aerial cable, pole lines, and underground cable are the most common OSP activities. Table 3a shows the distribution of FRC activities performed by activity, and Table 3b shows the distribution by area-density cell.[13] As can be seen in Table 3, OSP activity in each category occur, for the most part, throughout the Company's service territory. Notable and understandable exceptions include: the absence of pole lines or tree trimming in Manhattan/North Manhattan and only a small amount of intrabuilding network cable outside of the metro area.[14]

Table 4 shows average Actual Hours and Estimated Base Hours in the fourteen area-density cells at the WKOP, FRC and overall job level.

IV. FINDINGS

Table 5 shows average environmental cost hours for WKOP, FRC and overall Job level OSP activity by the fourteen area-density cells. Inspection of Table 5 shows that there are clear

[12] Note that only fourteen cells are populated. This is because not all of the Company's nine strategic business unit areas contain wire centers in each of the three density zones. The Manhattan/North Manhattan area, for instance, only contains wire centers in density zone 1. Similarly, the Midstate area contains only wire centers in density zones two and three.

[13] The cells are labeled as Area (Density Zone) so, for instance, Midstate (3) is the label for the Midstate area and density zone 3.

[14] The metro area is made up of Bronx, Queens, Brooklyn/Staten Island and Manhattan/North Manhattan.

differences in the level of environmental cost hours across different areas of the Company's service territory. The differences are evident by comparing the relative number of hours required to accommodate environmental cost related OSP activity at any level—*i.e.*, WKOP, FRC and overall Job—of data.

At the WKOP level, environmental cost elements in *Manhattan/North Manhattan (1)* require an average of 5.35 hours to perform while in *Northeast (3)* they only require .77 hours and in *Western (3)* and *Central (3)* there appear to be none at all.[15] The same relative ordering of hours is apparent when FRC or Job level data are analyzed.[16] More significantly, at the FRC and Job level, *Manhattan/North Manhattan (1)* is shown to have the highest level of environmental hours (143.99 and 673.39 respectively) of any area-density cell in the Company's service territory. We find this a most significant result because Job level data in particular is the highest aggregation of OSP activity. A conclusion we can draw from our analysis is that environmental hours associated with OSP jobs in the *Manhattan/North Manhattan (1)* area-density cell exceed environmental hours associated with OSP jobs in any other area of the Company's service territory.

Table 6 shows the multiplicative factors derived using WKOP level data in Tables 4 and 5. The multiplicative factors for each area-density cell (c) are defined as:

$$Factor^{c} = 1 + \frac{NEH^{c}}{EH^{c}}$$

where NEH represents environmental hours and EH represents standard hours. As is more fully explained in the Technical Appendix, these factors are derived as multiplicative adjustments to the labor hours in the Company's link cost calculator. Labor hours in the

[15] This result is obtained when the measure of Actual Hours is less than Estimated Base Hours. This can happen, for instance, when the time required to complete a particular WKOP is less than the ECRJS standard time (*i.e.*, Estimated Base Hours) for that WKOP activity. Using the notation in equation (2) of the Technical Appendix we conclude that in *Western (3)* and *Central (3)* that $EH_{i,j,k} - \widetilde{EH}_k < 0$.

[16] These results are obtained by simply taking the difference between Actual Hours (a measure of both standard and environmental hours) and Estimated Base Hours (a measure of only standard hours). We also performed Ordinary Least Squares (OLS) regression analysis to test the hypotheses that the relative amount of time required to accommodate environmental OSP activity in the metro areas is greater than in the non-metro areas. The OLS model results confirm the hypothesis that a significantly greater number of hours are required to accommodate environmental cost-related OSP activity in the metro area compared with the non-metro area.

Company's link cost calculator are by definition only standard cost hours. Using the multiplicative factors derived here, the measure of standard hours required to accommodate a particular engineering construct can be adjusted to also include the measure of environmental hours required to provision and maintain the Company's OSP.

V. CONCLUSIONS

The environmental hours, and thus the cost, to construct and rearrange the Company's outside plant does vary significantly by area. The level of environmental cost is greatest in the *Manhattan/North Manhattan (1)* area-density cell and lowest in *Central (3)*.[17] In addition to the results shown in Tables 5 and 6, we also conclude that costs are significantly higher in the general metro region (Bronx, Queens, Brooklyn/Staten Island and Manhattan/North Manhattan) than in the non-metro region (Nassau/Suffolk, Northeast, Western, Central and Midstate).

The multiplicative factors shown in Table 6 are suitable to adjust the labor hours of the Company's link cost calculator to reflect an appropriate adjustment for our estimate of environmental hours.

[17] Indeed, as described in an earlier footnote, in the Central area it may be that the level of standard costs are lower than would be allowed by ECRIS estimates.

Table 1: Count of WKOPs, FRCs, and Jobs by Area

Area	WKOPs	FRCs	Jobs
Bronx	21,465	1,423	323
Queens	42,421	2,287	473
Brooklyn/Staten Island	47,411	3,672	624
Manhattan/No. Manhattan	78,456	2,913	623
Nassau/Suffolk	58,841	3,424	576
Northeast	41,769	2,908	365
Western	21,713	1,958	368
Central	37,236	2,940	354
Midstate	39,662	2,243	378
Total	388,974	23,768	4,084

Table 2: Count of WKOPs by Density Zone and Area

Area	Density Zone 1	Density Zone 2	Density Zone 3	Total
Bronx	-	21,465	-	21,465
Queens	-	42,421	-	42,421
Brooklyn/Staten Island	-	47,411	-	47,411
Manhattan/No. Manhattan	78,456	-	-	78,456
Nassau/Suffolk	-	44,557	14,284	58,841
Northeast	-	2,248	39,521	41,769
Western	-	4,065	17,648	21,713
Central	-	2,613	34,623	37,236
Midstate	-	20,664	18,998	39,662
Total	78,456	185,444	125,074	388,974

Table 3: Activity Count of WKOPs by Area/Density Zone

Area(Density Zone)	Aerial Cable	Aerial Wire	Buried Cable	Equipment	Intrabuilding Network Cable	Pole Lines	Subscriber Pair-Gain	Tree Trimming	Underground Cable	Total
Bronx(2)	845	-	17	16	46	114	20	6	356	1,423
Queens(2)	1,192	-	1	68	24	289	13	49	651	2,287
Brooklyn/ Staten Island(2)	2,075	-	9	35	64	489	4	44	952	3,672
Manhattan/No Manhattan	1,241	-	-	293	622	-	151	-	606	2,913
Nassau/ Suffolk(2)	991	-	95	60	5	610	3	155	563	2,486
Nassau/ Suffolk(3)	375	-	81	10	-	236	4	76	154	938
Northeast(2)	98	2	25	7	7	47	5	10	59	260
Northeast(3)	1,006	62	336	102	8	776	8	124	226	2,648
Western(2)	197	-	28	15	7	85	15	20	107	474
Western(3)	631	6	220	29	9	351	45	55	130	1,484
Central(2)	146	3	28	7	4	65	-	20	45	318
Central(3)	1,005	78	357	67	15	781	8	138	172	2,622
Midstate(2)	420	-	28	46	11	271	5	61	164	1,010
Midstate(3)	536	-	70	80	8	370	13	54	102	1,233
Total	10,759	151	1,295	835	830	4,484	302	822	4,290	23,768

Table 3a: Distribution of FRC Activity Performed By Activity

Area(Density Zone)	Aerial Cable	Aerial Wire	Buried Cable	Equipment	Intrabuilding Network Cable	Pole Lines	Subscriber Pair-Gain	Tree Trimming	Underground Cable	Total
Bronx(2)	7.9%	0.0%	1.3%	1.9%	5.5%	2.5%	6.6%	0.7%	8.4%	6.0%
Queens(2)	11.1%	0.0%	0.1%	8.1%	2.9%	6.4%	4.3%	6.0%	15.2%	9.6%
Brooklyn/ Staten Island(2)	19.3%	0.0%	0.7%	4.2%	7.7%	10.9%	1.3%	5.4%	22.2%	15.4%
Manhattan/No. Manhattan	11.5%	0.0%	0.0%	35.1%	74.9%	0.0%	50.0%	0.0%	14.1%	12.3%
Nassau/ Suffolk(2)	9.2%	0.0%	7.3%	7.2%	0.6%	13.6%	1.0%	19.3%	13.1%	10.5%
Nassau/ Suffolk(3)	3.5%	0.0%	6.3%	1.2%	0.0%	5.3%	1.3%	9.5%	3.6%	3.9%
Northeast(2)	0.9%	1.3%	1.9%	0.8%	0.8%	1.0%	1.7%	1.2%	1.4%	1.1%
Northeast(3)	9.4%	41.1%	25.9%	12.2%	1.0%	17.3%	2.6%	15.1%	5.3%	11.1%
Western(2)	1.8%	0.0%	2.2%	1.8%	0.8%	1.9%	5.0%	2.4%	2.5%	2.0%
Western(3)	5.9%	4.0%	17.0%	3.5%	1.1%	7.8%	16.2%	7.2%	3.0%	6.2%
Central(2)	1.4%	2.0%	2.2%	0.8%	0.5%	1.4%	0.0%	2.4%	1.0%	1.3%
Central(3)	9.4%	51.7%	27.6%	8.0%	1.8%	17.4%	2.6%	16.8%	4.0%	11.0%
Midstate(2)	3.9%	0.0%	2.2%	5.5%	1.3%	6.0%	3.0%	7.4%	3.8%	4.2%
Midstate(3)	5.0%	0.0%	5.4%	9.6%	1.0%	8.3%	4.3%	6.6%	2.4%	5.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3b: Distribution of FRC Activity Performed by Area/Density

Area(Density Zone)	Aerial Cable	Aerial Wire	Buried Cable	Equipment	Intrabuilding Network Cable	Pole Lines	Subscriber Pair-Gain	Tree Trimming	Underground Cable	Total
Bronx(2)	59.4%	0.0%	1.2%	1.1%	3.2%	8.0%	1.4%	0.4%	25.2%	100.0%
Queens(2)	52.1%	0.0%	0.0%	3.0%	1.0%	12.6%	0.6%	2.1%	28.5%	100.0%
Brooklyn/ Staten Island(2)	56.5%	0.0%	0.2%	1.0%	1.7%	13.3%	0.1%	1.2%	25.9%	100.0%
Manhattan/No. Manhattan	42.6%	0.0%	0.0%	10.1%	21.4%	0.0%	5.2%	0.0%	20.8%	100.0%
Nassau/ Suffolk(2)	39.9%	0.0%	3.8%	2.4%	0.2%	24.5%	0.1%	6.4%	22.6%	100.0%
Nassau/ Suffolk(3)	40.0%	0.0%	8.6%	1.1%	0.0%	25.2%	0.4%	8.3%	16.4%	100.0%
Northeast(2)	37.7%	0.8%	9.6%	2.7%	2.7%	18.1%	1.9%	3.8%	22.7%	100.0%
Northeast(3)	38.0%	2.3%	12.7%	3.9%	0.3%	29.3%	0.3%	4.7%	8.5%	100.0%
Western(2)	41.6%	0.0%	5.9%	3.2%	1.5%	17.9%	3.2%	4.2%	22.6%	100.0%
Western(3)	42.5%	0.4%	14.8%	2.0%	0.6%	23.7%	3.3%	4.0%	8.8%	100.0%
Central(2)	45.9%	0.9%	8.8%	2.2%	1.3%	20.4%	0.0%	6.3%	14.2%	100.0%
Central(3)	38.4%	3.0%	13.6%	2.6%	0.6%	29.8%	0.3%	5.3%	6.6%	100.0%
Midstate(2)	41.6%	0.0%	2.8%	4.6%	1.1%	26.8%	0.9%	6.0%	16.2%	100.0%
Midstate(3)	43.5%	0.0%	5.7%	6.5%	0.6%	30.0%	1.1%	4.4%	8.3%	100.0%
Total	45.3%	0.6%	5.4%	3.5%	3.5%	18.9%	1.3%	3.5%	18.0%	100.0%

Table 4: Average Actual Hours & Est. Base Hours by Area/Density Zone

	WKOP LEVEL		FRC LEVEL		JOB LEVEL	
Area(Density Zone)	Avg Actual Hrs	Avg Est Base Hrs	Avg Actual Hrs	Avg Est Base Hrs	Avg Actual Hrs	Avg Est Base Hrs
Bronx(2)	23.84	16.09	359.68	242.77	1,584.62	1,069.56
Queens(2)	16.46	13.13	305.26	243.54	1,475.98	1,177.56
Brooklyn/Staten Island(2)	25.88	17.83	334.18	230.18	1,966.54	1,354.50
Manhattan/No. Manhattan(1)	14.43	9.09	388.75	244.76	1,817.32	1,143.93
Nassau/Suffolk(2)	14.17	10.46	254.02	187.48	1,489.59	1,099.64
Nassau/Suffolk(3)	11.63	8.09	177.10	123.20	1,093.24	760.22
Northeast(2)	7.24	6.17	62.58	53.38	403.26	341.68
Northeast(3)	6.26	5.49	93.43	81.98	763.59	670.41
Western(2)	7.41	7.40	63.57	63.43	308.34	316.30
Western(3)	5.99	6.58	71.26	78.25	394.04	431.83
Central(2)	5.77	5.58	47.44	45.84	306.58	296.42
Central(3)	4.21	4.96	55.62	65.57	477.50	560.97
Midstate(2)	17.62	11.93	360.59	244.05	2,020.35	1,365.71
Midstate(3)	13.76	10.57	211.97	162.89	1,322.71	1,017.71

Table 5: Average Non-Engineering Cost Hours at the WKOP, FRC, and Job levels by Area/Density Zone

Area(Density Zone)	WKOP Level	FRC Level	Job Level
Bronx(2)	7.75	116.91	515.06
Queens(2)	3.33	61.72	298.42
Brooklyn/Staten Island(2)	8.06	104.01	612.04
Manhattan/No. Manhattan(1)	5.35	143.99	673.39
Nassau/Suffolk(2)	3.71	66.54	389.96
Nassau/Suffolk(3)	3.54	53.91	333.03
Northeast(2)	1.06	9.20	61.58
Northeast(3)	0.77	11.45	92.73
Western(2)	0.02	0.14	(8.38)
Western(3)	(0.59)	(6.99)	(37.98)
Central(2)	0.20	1.61	11.37
Central(3)	(0.75)	(9.95)	(83.25)
Midstate(2)	5.70	116.54	654.64
Midstate(3)	3.19	49.08	304.99

Table 6: Multiplicative Factors by Area/Density Zone

Area(Density Zone)	Multiplicative Factor
Bronx(2)	1.48
Queens(2)	1.25
Brooklyn/Staten Island(2)	1.45
Manhattan/No. Manhattan(1)	1.59
Nassau/Suffolk(2)	1.35
Nassau/Suffolk(3)	1.44
Northeast(2)	1.17
Northeast(3)	1.14
Western(2)	1.00
Western(3)	0.91
Central(2)	1.04
Central(3)	0.85
Midstate(2)	1.48
Midstate(3)	1.30

Technical Appendix & Methodology

Outside plant (OSP) activity to build and maintain the Company's loop distribution facilities is made up of OSP Jobs. Each OSP Job is made up of a collection of activities and each activity is classified as a Field Reporting Code or FRC. Each FRC, in turn, is comprised of a collection of work operations or WKOP-level activities. Using *Job*, *FRC* and *WKOP* to represent the number of hours required at each level, we can show that the number of hours required to complete a Job is the sum of hours required to complete the FRCs that make up that Job. Similarly, the number of hours required to complete an FRC is the sum of hours required to complete the WKOPs that make up that FRC. In algebraic notation, we can write:

$$Job_i = \sum_j FRC_{i,j} = \sum_j \sum_k WKOP_{i,j,k} \tag{1}$$

where i indexes Jobs, j indexes the job reporting codes and k indexes the different work operations.

The ECRIS data are reported at the WKOP level and constitute the universe of OSP job activities undertaken by the Company between January 1, 1997 and October 20, 1998. For each observation of WKOP-level data in ECRIS we are provided with (i) the actual hours required to complete the WKOP and (ii) the estimate of standard hours that are assigned to the WKOP.

> Actual hours are recorded as the amount of time it takes the Company's OSP field personnel to complete the k^{th} WKOP of the j^{th} FRC in the i^{th} Job. We denote actual hours as: $AH_{i,j,k}$.
>
> The Company determines the appropriate estimate of standard hours required to perform a work operation.[18] Given a particular WKOP (*i.e.*, dig a ditch 3 feet deep and 12 feet long) the standard estimate of hours required would be the same regardless of the work operation's Job or FRC association. We define $\widetilde{EH}_k$ as the standardized estimate of hours allotted to the performance of $WKOP_k$ anywhere in the Company's service territory.

[18] This is done using time and motion studies as well as by monitoring the time it takes to perform work operations.

Although $\tilde{\tilde{EH}}_k$ is a Company-wide standardized estimate of hours allotted to the performance of a work operation, we recognize the possibility that the actual time required to complete the work operation may differ in any particular Job-FRC combination. Thus, for the estimate of standard hours associated with the k^{th} work operation of the j^{th} FRC in the i^{th} Job ($EH_{i,j,k}$) we write:

$$EH_{i,j,k} = \tilde{\tilde{EH}}_k + (EH_{i,j,k} - \tilde{\tilde{EH}}_k) \tag{2}$$

which shows that the standard hours to perform the k^{th} work operation may deviate from EH_k by either a positive or negative amount (*i.e.*, $(EH_{i,j,k} - \tilde{\tilde{EH}}_k) \lesseqgtr 0$)

The relationship between actual and estimated hours to complete a work operation is written as:

$$AH_{i,j,k} = EH_{i,j,k} + NEH_{i,j,k} \tag{3}$$

where AH and EH are as previously defined and $NEH_{i,j,k}$ represents the environmental hours required to complete the k^{th} work operation of the j^{th} FRC in the i^{th} Job. Environmental hours are different from standard hours and occur because of environmental and/or job site differences.[19]

Rearranging terms we obtain the basis for the dependent variable of our analysis.

$$NEH_{i,j,k} = AH_{i,j,k} - EH_{i,j,k} \tag{4}$$

In simple terms, our analysis compares the average level of $NEH_{i,j,k}$ in different area-density cells of the Company's service territory.[20] Since all ECRJS records contain sufficient information to assign each WKOP to its area-density cell we make a notation change to obtain:

[19] See the earlier comments in this report about environmental hours.

[20] For purposes of this study, the Company's service territory is divided into nine strategic business unit areas: Bronx, Queens, Brooklyn/Staten Island, Manhattan/No. Manhattan, Nassau/Suffolk, Northeast, Western, Central and Midstate. In addition, the company identified three density zones to which all wire centers are assigned. They are DZ1 comprised of all Manhattan/No. Manhattan wire centers: DZ2 comprised of all wire centers where the number of links per square mile exceeds 1,500; and, DZ3 comprised of all wire centers where the number of links per square mile is less than or equal to 1,500.

$$NEH_{i,j,k}^{c} = AH_{i,j,k}^{c} - EH_{i,j,k}^{c} \quad (5)$$

where the superscript c denotes area-density cell. In addition, with no loss of generality, we drop the Job and FRC (i and j) subscripts to obtain:

$$NEH_{k}^{c} = AH_{k}^{c} - EH_{k}^{c} \quad (6)$$

which shows that the environmental hours of the k^{th} work operation in area-density cell c are equal to the actual hours less the standard hours associated with that work operation.

We then calculate average environmental hours (over all Job-FRC combinations) in a given area-density cell c as:

$$\overline{NEH}^{c} = \frac{1}{K^{c}} \sum_{k} NEH_{k}^{c} \quad (7)$$

where K^{c} denotes the number of work operation records in ECRIS associated with area-density cell c. Our measure of average environmental hours in each area-density cell is a measure of the population average because it is measured over all the recent OSP activity undertaken by the Company to support its loop plant. As such it represents average actual environmental hours required to perform the actual mix of work operations in each area-density cell.

Our study objective is to obtain multiplicative factors that can be used to adjust the standard hours assigned to the work operation activity in the Company's link cost calculator. The Company's link cost calculator is used to derive link cost estimates for a given area-density cell of the Company's service territory. Currently, the Company's link cost calculator is used to determine the cost of standard hours plus the cost of material required to provide a link. That is to say, by design, the Company's link cost calculator only accounts directly for standard hours (it does not account for environmental hours) associated with the required work operations. The area-density specific multiplicative factors we derive will be used to adjust the estimate of standard hours in the Company's link cost calculator for the average level of environmental hours that actually characterizes the mix of work operations in the OSP job activity in the area-density cell pertinent to a particular link cost calculation. Continuing our notation, we seek to derive individual area-density factors such that:

$$EH^{c}_{Link\,Cost} \times Factor^{c} = \overline{AH}^{c} = (\overline{EH}^{c} + \overline{NEH}^{c}) \tag{8}$$

where $EC^{c}_{Linc\,Cost}$ represents the count of standard hours of the work operations required to complete the construction of a particular OSP design pertinent to area-density cell c and $\overline{AH}^{c}$, $\overline{EH}^{c}$ and $\overline{NEH}^{c}$ represent the average actual, standard and environmental hours calculated over all work operations in area-density cell c in ECRJS.[21] In words, we want to adjust the standard hours used by the link cost calculator in a given area-density cell to account for environmental hours. Since ECRJS data constitutes the universe of OSP activity for a representative current time period, it also represents the mix of work operations in each area-density cell and thus is a good approximation of the mix of work operations underlying $EH^{c}_{Link\,Cost}$. Thus, we can substitute $\overline{EH}^{c}$ for $EH^{c}_{Link\,Cost}$ and derive our factors as:

$$Factor^{c} = \frac{\overline{EH}^{c} + \overline{NEH}^{c}}{\overline{EH}^{c}} = 1 + \frac{\overline{NEH}^{c}}{\overline{EH}^{c}} \tag{9}$$

---

[21] Specifically, $\overline{AH}^{c} = \frac{1}{K^{c}}\sum_{k} AH^{c}_{k}$ *and* $\overline{EH}^{c} = \frac{1}{K^{c}}\sum_{k} EH^{c}_{k}$ where K^{c} is the number of work operations in area-density c and where $\overline{NEH}^{c}$ is previously defined.

Attachment 2 to CA-Ba-80 is a Zip file attached to the E-Mail message.

Attachment 3 to CA-BA-80 is a CD titled BA's response to ATT-BA-114.

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0 E4653045C
0 E465375TX
0 E46538257C
0 E46540758C
0 E46549345C
0 E4654945M
0 E46549845TC
0 E46572345C
0 E465723X

0 E46575257C
0 E46575257X
0 E465752X
0 E4658785C
0 E4659032C
0 E46592345C
0 E466035C
0 E466151X
0 E4662745TX
0 E466275TX
0 E46627845X
0 E4662785X
0 E4663845X
0 E466431X
0 E46648301X
0 E4665485C
0 E466662X
0 E466792M
0 E46688301X
0 E4669485TC
0 E46698257C
0 E4669885M
0 E4672421R
0 E467255TX
0 E467271M
0 E46727845TC
0 E46748457X
0 E467492X
0 E4674932X
0 E46750102C
0 E4675645C
0 E4675682M
0 E46762501X
0 E46765301X
0 E467751M
0 E46785501X
0 E46785845C
0 E46788257C
0 E46791632X
0 E467942C
0 E467965C
0 E468001X
0 E4680045X
0 E4685945X
0 E46867377C
0 E4687032C
0 E46874132C
0 E468742M
0 E4688532X
0 E46885632X

0 E4688582M
0 E46928257C
0 E4693232X
0 E469325M
0 E4694245X
0 E469672M
0 E4696782M
0 E46991257C
0 E4699345R
0 E47009157C
0 E47009357C
0 E470202M
0 E47038832C
0 E4705245C
0 E470691R
0 E47077832C
0 E47094257C
0 E471025X
0 E471081C
0 E4711332C
0 E47130132C
0 E471312C
0 E471402X
0 E47166758C
0 E4718885C
0 E471921M
0 E47192345C
0 E4719945C
0 E4721845X
0 E472285C
0 E472302C
0 E472335X
0 E47243301X
0 E47243457X
0 E472655X
0 E472842C
0 E473111X
0 E4734532X
0 E4735045C
0 E4735045X
0 E4735245M
0 E47352845TC
0 E473641C
0 E473642C
0 E473642X
0 E4736432X
0 E4736545X
0 E473802X
0 E4738032X
0 E47381832C

0 E47381845C
0 E473825X
0 E4738282C
0 E4740521R
0 E47406102C
0 E474092C
0 E4741245X
0 E4741345X
0 E47416501C
0 E474235C
0 E474235M
0 E4742757C
0 E4743745X
0 E47441257C
0 E474412X
0 E47443257C
0 E474665X
0 E4747045C
0 E47481345C
0 E474841R
0 E474861X
0 E47491345C
0 E475095X
0 E47515858C
0 E4752132C
0 E475255X
0 E4753045C
0 E4753245X
0 E47538257C
0 E475561M
0 E4755645X
0 E4756845X
0 E47573357C
0 E47575845C
0 E475882X
0 E475932M
0 E47593501C
0 E475942X
0 E476012C
0 E476052C
0 E47605758C
0 E4760885C
0 E476325X
0 E47643257X
0 E476432X
0 E4764332X
0 E47643632X
0 E47643732X
0 E47643832X
0 E476481M

0 E476481X
0 E47648301X
0 E476875X
0 E4769545C
0 E47748732C
0 E477515X
0 E4776045C
0 E477641C
0 E4776545C
0 E47773301C
0 E477745C
0 E4779332C
0 E47809345C
0 E4780945X
0 E4787245M
0 E4788045X
0 E478932M
0 E478935C
0 E478935M
0 E47906832C
0 E479595C
0 E479605C
0 E4796145X
0 E4796245X
0 E479901X
0 E480075C
0 E48009301X
0 E4802845X
0 E4804332C
0 E48062357C
0 E48063301X
0 E4807232C
0 E48072632C
0 E4807345X
0 E4811045R
0 E4811145C
0 E481132X
0 E481185X
0 E48118845C
0 E4811885C
0 E481275X
0 E48129102C
0 E481291X
0 E481295C
0 E481295M
0 E48137758X
0 E48142758C
0 E48150345C
0 E481512M
0 E4816632C

0 E4816632X
0 E48166632X
0 E481721R
0 E481721X
0 E48172357C
0 E48172758C
0 E482052C
0 E48221758C
0 E482225TC
0 E48241845C
0 E482422M
0 E48242832C
0 E48246257X
0 E482465TX
0 E4825132C
0 E48258257C
0 E4826445C
0 E482701M
0 E483155X
0 E4831585TX
0 E4831585X
0 E4832357X
0 E4832382C
0 E48323845TX
0 E483251X
0 E483252M
0 E483252X
0 E48325301X
0 E483255X
0 E4834045X
0 E48347758C
0 E4840045X
0 E484405C
0 E484685X
0 E4847882C
0 E48487301X
0 E4853945C
0 E4854832C
0 E4854945X
0 E48556832X
0 E4857532C
0 E4858432C
0 E485995X
0 E4861545X
0 E486261R
0 E486262R
0 E486512C
0 E486512X
0 E4866045M
0 E48684758C

0 E4869632C
0 E487252C
0 E487481X
0 E487503C
0 E487503X
0 E4875045M
0 E4875385C
0 E4875385TC
0 E487745C
0 E48778345C
0 E4878345C
0 E487961C
0 E487962C
0 E487962X
0 E48806758C
0 E488192C
0 E488552C
0 E48860257C
0 E488652C
0 E489121X
0 E489181X
0 E489571X
0 E48976832C
0 E4904785TC
0 E490491C
0 E49076758C
0 E490825C
0 E490845TX
0 E4909132C
0 E4909132X
0 E490915C
0 E491652C
0 E49199257C
0 E49215257C
0 E4925245X
0 E49321632C
0 E4933332C
0 E49344257C
0 E49357832C
0 E4946145X
0 E4947585C
0 E4947585TC
0 E4951121R
0 E495132C
0 E495135C
0 E495312C
0 E495541C
0 E4955421R
0 E49569832C
0 E4958645C

0 E49605357C
0 E4963232X
0 E49683758C
0 E4979145C
0 E4980045X
0 E4983545C
0 E498961X
0 E498962X
0 E4989632X
0 E499092C
0 E4993345X
0 E49986345C
0 E49986845C
0 E49987257X
0 E7473282C
0 E74732832C

```
log using "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\A-B-C Work\7-2-99c.log"

************
* Does WKOP level analysis to obtain mlt_fctr directly from means
**************

set memory 90m
use "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\all_wkops.dta", clear
drop  calcprce m_hrs_t
gen bh =  (calctime- s_hrs_t- a_hrs_t)/swp
drop calctime s_hrs_t a_hrs_t
drop if area>20
count
count if wkcy==1996
drop if wkcy==1996
count if wkey<1997
drop if wkey<1997
drop if  frc_cd=="4M"
drop if  frc_cd=="4R"
tab frc_cd if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
drop if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
tab frc_cd if substr(frc_cd,1,2)=="34"
drop if  frc_cd=="34C"
count if  wc_cd==39
drop if  wc_cd==39
rename  wc_cd wc
sort wc
merge wc using "q:\user\telco\bell atlantic\ba-north\state-ny\loop_cost\Ecris
analysis\new_wcs.dta"
count if  _merge==2
drop if  _merge==2
count
tab area density
replace area=4 if wc>18 & wc<26
tab area density
*egen adfactor=group(area density)
*count if adfactor==.
*drop if adfactor==.
*count

gen neh= rtl_h - bh

*xi:reg neh i.adfactor
*char adfactor[omit]9
*xi:reg neh i.adfactor
*drop adfactor

**************************************************
*  REMOVE THE WKOPs associated with Job/FRC combos
*  that don't have any booked hours
**************************************************

gen str12 jobfrc = job_no+frc_cd
sort jobfrc
drop _merge
```

```
merge jobfrc using "q:\user\telco\bell atlantic\ba-north\state-
ny\loop_cost\Ecris analysis\Zero work\zero.dta"
count
count if _merge ==3
drop if _merge ==3
count

************************************************
*  REMOVE THE WKOPs associated with Job/FRC combos
*  that span two area/densities
*************************************************

drop _merge
sort jobfrc
merge jobfrc using "q:\user\telco\bell atlantic\ba-north\state-
ny\loop_cost\Ecris analysis\area-den work\multareaden.dta"
count
count if _merge ==3
drop if _merge ==3
count


egen adfactor=group(area density)
count if adfactor==.
drop if adfactor==.
count
xi:reg neh i.adfactor
char adfactor[omit]9
xi:reg neh i.adfactor


***********************************************
*  Calculate Multiplicative Factors
**********************************************

collapse (mean) rtl_h bh neh, by(adfactor)
list adfactor rtl_h bh neh
gen mlt_fctr=(neh/bh)+1
list adfactor mlt_fctr


****************************************
*  AGGREGATE TO JOB/FRC and do analysis
****************************************

*drop adfactor
*drop totalrh
*gsort  job_no frc_cd -printnum
*qui by  job_no frc_cd: gen totalrh=sum(rtl_hrs)
*qui by  job_no frc_cd: gen totalbh=sum(bh)
*qui by  job_no frc_cd: keep if _n==_N
*egen adfactor=group(area density)
```

```
*count if adfactor==.
*drop if adfactor==.
*count
*count if totalrh==0
*drop if totalrh==0
*count
*drop neh
*gen neh= totalrh- totalbh
*xi:reg neh i.adfactor
*char adfactor[omit]9
*xi:reg neh i.adfactor


log close
```

```
log using "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\zero work\7-2-99.log"
set memory 100m
use "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\all_wkops.dta", clear
keep rtl_hrs wc_cd calctime s_hrs_t a_hrs_t swp area wkcy wkey job_no frc_cd
printnum
gen bh =  (calctime- s_hrs_t- a_hrs_t)/swp
drop calctime s_hrs_t a_hrs_t
drop if area>20
count
count if wkcy==1996
drop if wkcy==1996
count if wkey<1997
drop if wkey<1997
drop if  frc_cd=="4M"
drop if  frc_cd=="4R"
tab frc_cd if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
drop if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
tab frc_cd if substr(frc_cd,1,2)=="34"
drop if  frc_cd=="34C"
count if  wc_cd==39
drop if  wc_cd==39
rename  wc_cd wc
sort wc
merge wc using "q:\user\telco\bell atlantic\ba-north\state-ny\loop_cost\Ecris
analysis\new_wcs.dta"
count if  _merge==2
drop if  _merge==2
gsort  job_no frc_cd -printnum
qui by  job_no frc_cd: gen totalrh=sum(rtl_hrs)
qui by  job_no frc_cd: gen totalbh=sum(bh)
qui by  job_no frc_cd: keep if _n==_N
count
replace area=4 if wc>18 & wc<26
keep if totalrh == 0
gen str12 jobfrc = job_no + frc_cd
keep totalrh jobfrc
sort jobfrc
save "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\zero work\zero"
clear all


*************************************************************
*
*  Sum real hours of zero WKOPs by area/density
*
**********************************************************

use "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\all_wkops.dta", clear
drop  calcprce m_hrs_t
keep rtl_hrs job_no frc_cd area wkcy wkey wc_cd
drop if area>20
```

```
count
drop if wkcy==1996
drop if wkey<1997
drop if  frc_cd=="4M"
drop if  frc_cd=="4R"
drop if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
drop if  frc_cd=="34C"
drop if  wc_cd==39
rename  wc_cd wc
sort wc
merge wc using "q:\user\telco\bell atlantic\ba-north\state-ny\loop_cost\Ecris
analysis\new_wcs.dta"
drop if  _merge==2
drop _merge
gen str12 jobfrc = job_no + frc_cd
sort jobfrc
merge jobfrc using "q:\user\telco\bell atlantic\ba-north\state-
ny\loop_cost\Ecris analysis\zero work\zero.dta"
keep if _merge==3
drop totalrh
replace area=4 if wc>18 & wc<26
egen adfactor=group(area density)
gsort  job_no frc_cd adfactor
qui by  job_no frc_cd adfactor: gen totalrh=sum(rtl_hrs)
qui by  job_no frc_cd adfactor: keep if _n==_N
```

```
log using "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\area-den work\Part I 7-2-99.log"
set memory 100m

use "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\all_wkops.dta", clear
drop if area>9
drop if wkcy==1996
drop if wkey<1997
drop if  frc_cd=="4M"
drop if  frc_cd=="4R"
drop if substr(frc_cd,1,2)=="14" | substr( frc_cd,1,2)=="24"
drop if  frc_cd=="34C"
drop if  wc_cd==39
rename  wc_cd wc
sort wc
merge wc using "q:\user\telco\bell atlantic\ba-north\state-ny\loop_cost\Ecris
analysis\new_wcs.dta"
drop if  _merge==2


sort  job_no frc_cd
collapse (sd) area density (sum) rtl_hrs a_hrs_t s_hrs_t calctime, by (job_no
frc_cd)
drop if area==.&density==.
keep if area>0|density>0
gen str12 jobfrc = job_no+frc_cd
keep jobfrc area density
sort jobfrc
save "Q:\USER\TELCO\Bell Atlantic\BA-north\STATE-NY\Loop_cost\Ecris
Analysis\area-den work\multareaden"
log close
```

Exhibit 370 - See Confidential Exhibits.

370

Exhibits 98-C-1357
12-7/8-00

369-397

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of:

Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.	)	Case 98-C-1357

CITY OF WASHINGTON	)	
	)	ss.
DISTRICT OF COLUMBIA	)	

HARRY GILDEA, being first duly sworn, on his oath States:

My name is Harry Gildea. My principal place of business is 1220 L Street, NW, Washington, District of Columbia.

Attached hereto and made a part hereof is my Responsive Testimony, dated June 26, 2000, and my Rebuttal Testimony, dated October 19, 2000 which has been prepared in written form for introduction into evidence in Case 98-C-1357.

I hereby swear and affirm that my answers contained in the testimony, to the best of my knowledge, information and belief, are true and correct.

Harry Gildea

Subscribed and sworn before me this 5th day of December, 2000.

Notary Public

My Comm exp 6/30/2003

Public Service Commission
Case No. 98-C-1357
Date 12-08-00
Ex. No. 369

368

Supplemental
EXHIBIT 3

Atlantic - Legal Department
1095 Avenue of the Americas
New York, NY 10036
37th Floor
Tel 212 395 6509
Fax 212 768-7568

Joseph A. Post
Regulatory Counsel

Bell Atlantic

July 7, 2000

VIA OVERNIGHT DELIVERY

John Black
Cable Television & Telecommunications of New York
80 State Street
Albany, New York 12207

Re: Case 98-C-1357

Dear Mr.Black:

Attached is BA-NY's supplemental response to the following interrogatories:

Date	Interrogatory Number	Witness
March 14, 2000	CTTANY-BA-2(b), 22, and 42	BA Panel

Very truly yours,

Joe Post (cs)

Attachments

cc: "Me too" parties (Via E-Mail w/out attachments)

CTTANY-BA-2(b), 22 and 42 (excerpts)

REGULATORY MATTERS
STRATEGIC DOCKET COSTING

April 7, 1992

MR. HOPLEY:
MS. PORTI:

I wrote to you on February 14, 1992 stating that I was going to review the costs and rental practices associated with both pole attachments and conduit space rentals. The attached white paper outlines the results of Tom Carroll's study efforts. The salient points are as follows:

1. The current rental rates for conduit space appear to be adequate, given "fiber" provisioning on a going forward basis (e.g., sub-ducts within a duct).

2. While "pole attachment fee" costs are less than those costs that we impute into our own rate structure, for a number of reasons we should remain silent on this issue until the current legal action between the CATV industry and the PSC is settled (e.g., our most recent pole attachment study shows costs that are less than those presently being argued in the case).

3. In addition to simply filing new rates, PSC Law changes would be required.

In conclusion, it would appear that the most appropriate course of action is to maintain the status quo for the immediate future. However, I plan to revisit these issues in a couple of months.

Cat Sardella

Attachment

cc: B. Geeslin
R. Anderson
T. Carroll ⟵
L. Maese

1865r 8

4/14

I. GENERAL

The purpose of this paper is to outline various items of interest concerning two areas of telephone plant; telephone poles and related issues such as construction, attachments, and moving of poles; and conduit space rental issues. Both of these areas will be of increasing importance in the future as competition within the telecommunications and cable television industries increase. Companies that are presently categorized as "Licensees", and who are given what appear to be special discounts for use of telephone facilities, may soon be in direct competition with New York Telephone for local telephone service. An understanding of both historic events as well as the present environment is essential in order to discuss possible strategies to deal with these potential competitive threats.

II. PRESENT RATE STRUCTURE

A. Pole Attachments

Pole attachment rates are found under Section 14 of the PSC 900 Tariff and are as follows:

- CATV, Other Licenses (Such as Power Companies), and Municipalities (non-Public Safety) — Annual Rate = $ 8.97
- Municipalities (Public Safety) — Annual Rate = $ 5.19

"Make Ready" work, such as surveys, inspections, and engineering, are based on the full cost (including general overheads) if NYT performs the work or all fees plus a 10% premium if an outside contractor hired by NYT performs the work.

Prior to the Commission's 1991 Opinion and Order in Case 90-C-0191, CATV companies were given a 25% discount on the normal tariff rate. PSC Staff's proposal in 90-C-0191 to eliminate this discount was approved by the Commission. CATV's Petition for Reconsideration of this decision was granted and at present is under review by the Commission. It is unlikely, however, that the Commission will reinstate the discount.

There are approximately 345 Pole Attachment agreements currently in effect, generating annual revenues of $5.8M.

B. NYT Conduit Space Rentals (Outside Manhattan and Bronx)

	Annual Fee Per Duct Foot	
	Main Conduit	Subsidiary
Single Cable, Less Than 1.1" Diameter	$ .45	$ .85
Single Cable, More Than 1.1" Diameter or Two or More Cables Regardless of Size	$ .75	$ 1.40

These rates are fixed and are included in all Conduit Occupancy Agreements. On average, customers are presently paying NYT about $.70 per duct foot. "Make Ready" work, such as surveys, inspections, and engineering, are based on the full cost to NYT (including general overheads) plus a premium of 35%. If such work is performed by a contractor hired by NYT, the customer is billed the full cost of the Contractor's fee plus a 10% premium. The costs for periodic inspections are billed to the customer at full cost.

There are approximately 40 Conduit Rental Agreements currently in effect, generating annual revenues of $1.46M.

C. ECS Conduit Space Rentals (Manhattan & Bronx)

Conduit space rental rates are set by Empire City Subway Company and are the same for all potential occupants.

	Annual Fee Per Duct Foot
2" or 2 1/2" Trunk or Or Distribution Cable	$ .6909091
3" Trunk or Distribution Cable	$ .7931818
4" Trunk Cable	$ 1.1045455

III. PRESENT COST METHODOLOGIES

A. Pole Attachments

Pole attachment costs are calculated by first determining the total average investment per pole. Total Pole Telephone Plant in Service (TPIS) is divided by the total number of poles to calculate a unit investment cost. From this unit investment cost is subtracted that portion of the pole investment such as anchors, appurtenances, etc. which are normally paid for separately by the connecting party (The % used in this calculation is .29%). The remaining unit investment is then multiplied by the "usable space allocation" % to identify that portion of the pole costs that will be paid for by the connecting party (The % used in this calculation is 9.43%). This investment is then multiplied by an annual Carrying Charge Factor (CCF) to calculate the annual attachment rate for connecting parties. The actual calculation used in the development of the 1991 attachment cost is as follows:

A. Total Pole TPIS	335,545,507
B. Total Number of Poles	1,115,417
C. Investment per Pole (A/B)	300.83
D. Appurtenances Not Usable (C*.0029) or Paid for Separately.	.87
E. Remaining Pole Investment (C-D)	299.95
F. Usable Space Allocation (E*.0943)	28.29
G. Annual Carrying Charge Factor	.2825
H. Annual Pole Attachment Cost (F*G)	7.99

Based on the above calculation and the present tariff rate of $8.97, it was determined that no change to the existing rate would be filed in 1991.

B. Conduit Space Costs

The current rates for conduit are based upon pre-divestiture cost data that at the present time is not available.

The most recent conduit study (1990) identifies an annual conduit space cost of $1.87 per duct foot using actual fill ratios of 58% for main conduit and 80% for subsidiary conduit. If 100% fill is assumed, the cost decreases to $1.15 per duct foot.

IV. "JOINTLY USED" POLES VS. "JOINTLY OWNED" POLES

"Jointly Used" poles are poles that have some shared usage between NYT and another utility (e.g., a local power company). Ownership of the pole resides with either of the two parties. Attachment rates for the "non-owner" are either set by Joint Use Agreements between the parties or by directly referencing the tariff rates. Attachment rates for third parties (e.g., CATV) are the same as the normal tariff rate and are paid to the company who owns the pole.

"Jointly owned" poles are poles where both NYT and the local power company each have more than two wire strands occupying the same pole. Agreements are signed designating which party shall have the majority share of ownership, and hence, "custodianship" of these poles. For example, the agreement between NYT and Central Hudson Gas and Electricity (CHG&E) states that NYT shall assume 46% ownership and CHG&E shall assume 54% ownership of all jointly owned poles within their service areas (These percentages are frequently based upon the ratio of solely owned poles of each utility). In addition, attachment fees for third parties, such as CATV companies, are paid to CHG&E as the custodian of the poles.

In some areas of the state there are no joint ownership agreements in force. As an example, NYT and Orange and Rockland Utilities do not have such an agreement. Each party owns their own poles and each pays the other party attachment fees set by contract and based on each parties percentage of ownership of all poles in the area. Third parties pay tariff attachment fees to the owner of each pole.

V. POLE RELOCATIONS

As a result of municipal road widening and/or repair projects (State, City, or local), NYT is frequently required to either move or replace existing poles that run along the road. If the property onto which the pole is to be moved is owned by the municipality, then NYT assumes all costs for the relocation. If the property is privately owned, and the municipality receives an easement for that property, then the municipality assumes all cost responsibility including pole relocation costs. Most pole relocations are performed within municipal property boundaries requiring NYT to absorb the costs.

Costs to move poles along Federal highways are compensated by the Government.

Pole relocations are normally booked as a retirement of the existing pole investment and capitalization of the new pole costs. The estimated cost for pole relocations in 1992, as identified in the Fall Construction program, is approximately $2.7M.

VI. COMPETITIVE ISSUES

A. Pole Attachments

The question has arisen that, based upon the existing formula for the development of pole attachment rates for third parties, potential competitors for telecommunications services, such as CATV companies, only compensate us for approximately 9.43% of the total costs of the poles to which they may wish to attach (this is the usable space % as shown previously).

NYT is left to recover the remaining 90.57% of the costs from its own products and services (However, if it is a pole that is jointly occupied by another utility, some of these costs will be shared). On the surface, it appears that NYT may be placed at a significant competitive disadvantage if CATV companies are allowed to provide telecommunications services using NYT poles at tariffed attachment rates. The obvious solution would be to allocate a portion of the "non-usable" space (such as below ground and from ground level to 15 feet up the pole, the minimum clearance required before any connection is made to a pole) to the competitive connector's cost responsibility.

It is difficult to predict how such a position would be received by the Commission. CATV rates were only recently increased by the elimination of the 25% discount in Case 90-C-0191 (which is still being adjudicated on an appeal by the CATV industry). Additionally, there is no immediate need for them to explore such a proposition because at the present time there is no perceived competition between CATV and the Telcos for either cable television or telecommunications services.

The CATV industry would no doubt react extremely negatively to any proposition to increase their rates. In their opposition filing to the 90-C-0191 decision eliminating the 25% discount, CATV (through Lee Selwyn) argue that current NYT rates are more than adequate to cover its <u>incremental</u> costs to attach a CATV line and, in fact, provide a significant level of contribution above such costs. While their position may be valid, it is put forth in the context of an non-telephone industry group arguing for access to monopoly <u>telecommunications</u> facilities for the provision of <u>cable television</u> services. The social and economic benefits underlying their position are fairly obvious.

In 1985, the Company filed to increase conduit rental rates based on a revised study methodology and was met with strong opposition from CATV. As support for their position, CATV cited Section 119-a of the New York State Public Service Law which reads as follows:

"The commission shall prescribe just and reasonable rates, terms, and conditions for attachments to utility poles and the use of utility ducts, trenches, and conduits. A just and reasonable rate shall assure the utility of the recovery of not less than the additional cost of providing a pole attachment or of using a trench, duct, or conduit nor not more than the actual operating expenses and return on capital of the utility attributed to that portion of the pole, duct, trench, or conduit used. With respect to cable television attachments and use, such portion shall be the percentage of total usable space on a pole or the total capacity of the duct, or conduit that is occupied by the facilities of the user. Usable space shall be the space on a utility pole above the minimum grade level which can be used for the attachment of wires and cables".

It would appear that, absent the convincing establishment of a competitive environment between NYT and the CATV industry, any attempt to establish a tiered rate structure for CATV connections would not be possible. However, such a concept may be viable for connections by other communications carriers, such as AT&T, who at present pay the same rates as the CATV companies. Connections by carriers are presently de minimus but as IntraLata Presubscription approaches, we may wish to explore this position in further detail.

B. Conduit Space Rentals

As mentioned above, Public Service Law limits our cost recovery of both pole and conduit space to only that portion which is actually occupied by the Licensee. In the 1985 conduit rental filing, the Company attempted to introduce the concept of a fill factor and how such a factor results in a higher cost per foot of occupied conduit. The CATV intervenors cited the law as written to exclude fill loadings. No definitive ruling was issued by the PSC because the Company withdrew its application in the face of the CATV opposition. Assuming no fill loading, the most recent cost study (as previously mentioned) identifies a cost of approximately $1.15 annually per conduit foot ($1.87 using actual fill ratios).

The question that has been raised is "are the existing NYT conduit rental rates compensatory?" The answer to such a question is not as easy as it seems because of the following:

> Copper and Coaxial cables of both other communications companies and CATV providers are generally placed in conduit ducts separate from NYT facilities. As previously mentioned, the rates charged for these cables average about $.70 per duct foot. Matching the

$.70 revenue against the $1.15 cost (w/o fill) results in a shortfall for NYT.

However, on a going forward basis the majority of new rental agreements will be for the placing of fiber optic cable in NYT conduits. The normal procedure for provisioning fiber optic cable is to sub-divide a single duct into a number of "inner" ducts (up to eight). Inner ducts are used for the protection of individual fiber cables and they allow for the joint occupancy of a single duct by a number of inner ducts, carrying both NYT and other users within the individual inner ducts. Inner ducts, however, are not considered in the quantification of total duct feet costs, which are based on the single duct as the unit of measurement. Utilizing a hypothetical scenario, if two inner ducts in a single conduit were occupied separately by CATV and NYT, based on average rental rates the annual rental fee would be approximately $.70 per duct foot for CATV. Matched against a cost of $.63 (the "no fill" cost of $1.15 divided by 2), the CATV revenue results in a contribution to NYT.

C. Incremental Costs

Another important consideration is the fact that NYT is not obligated to provide either pole attachments or conduit space. If a pre-provisioning engineering study determines that existing space is not available, the request may be rejected. These engineering studies examine both the present and future requirements of NYT. Consequently, NYT is offering space that would essential remain vacant were it not for the Licensee's request. In addition, the Licensee is responsible for all incremental "make ready" work, effectively reducing NYT's economic costs close to zero. This fact is not lost on intervenor parties, as witnessed by Mr. Selwyn's comments in the current pole attachment proceeding.

T. CARROLL
3/31/92

CONDUIT RATES

For the past two years, the Customer Services Staff and Regulatory organizations have been attempting to gain PSC approval of revised conduit rates. The initial attempt was based on a current cost study and resulted in a proposed rate of $3.57/foot/year. This rate, if accepted and approved by the PSC, would have placed New York Telephone in the middle of rates charged by other RBOC's $2.50-$7.50).

The Company was successful in selling the current cost concept to members of the PSC Staff, however politically the rate was not acceptable to senior PSC Staff. In addition, the PSC Staff Legal Counsel determined the rate was not in accordance with the provisions of Public Service Law, Section 119(a) (PSL, 119-a). This law implies that the conduit rates (and pole attachment rates) must be based on embedded cost.

In December 1984 and again in November, 1985, the Company filed conduit rates in the $1.50 to $1.60 range based on embedded costs. Several intervenors challenged the initial filing and the PSC Legal Staff challenged the second filing as not in compliance with PSL-119(a) because a "fill factor" was used to develop the rates. Both filings were withdrawn because of these challenges. If the "fill factor" is omitted from the embedded cost rate calculation, the resultant rate increase would be insignificant (about $.05/foot/year).

At present, an impasse exists between the Company and the PSC Staff. The Staff undoubtedly does not wish to tackle this issue. This may leave two alternatives open to the Company: 1) to challenge PSL-119(a) by filing rates based on costs well above the embedded cost or 2) to lobby for the repeal of that portion of PSL-119(a) that deals with setting rates using embedded cost. Neither of these courses of action hold much promise since it is doubtful the Company would want to openly challenge the PSC or the Legislature with a rate increase of $274M currently pending before the Commission.

POLE ATTACHMENT RATES

The Pole Attachment Rate issue is basically identical to the conduit issue because both involve PSL-119(a). At present the CATV pole attachment rate calculations are dictated by PSC Opinion and Order 83-4 issued January 31, 1983. The rates were increased at that time from $5.00/pole attachment/year to $5.89. The current rate of $6.22 was set in 1985. A new rate of $6.77 will be filed in the 3Q-1986.

In addition we have explored the possibility of a tiered charge -- one for CATV, a second for municipal governments, and a third for all other users. This third rate would be 1 1/2 - 3 times the CATV rates. However, no legal determination has been made on this approach, which might be considered discriminatory pricing.

CURRENT ACTIVITY AFFECTING RATES

Recently, a Federal law similar to PSL-119(a) was found to be unconstitutional by a U. S. District Court (the law was challenged in Florida by a power Company). This federal law passed in 1978, gives the FCC the power to regulate rates that electric companies charge CATV operators for pole attachments. The court ruled that the cable company's use of the electric poles was a "taking" of property that the Constitution says requires "just compensation." The appeals court stated the 1978 law is unconstitutional because it is the responsibility of the federal courts, and not the FCC, to determine what is "just compensation." Currently, this decision has been appealed and the case is being reviewed by the United States Supreme Court. There is every expectation that the court will find the law unconstitutional. A decision should be forthcoming by 12/31/86.

However, even if the Federal law is found to be unconstitutional, it may be several years before such a decision would impact PSL-119(a). In the interim, the PSC is almost certain to continue to regulate conduit and pole attachment rates through the requirement to establish tariffs (this was done in 1985 for pole attachments). Ultimately, the Company may be able to raise these rates, but it is doubtful we could ever move the rates to reflect current costs.

POLITICAL CONSIDERATIONS

Political pressure, brought about by the IEC's, CATV Association, and municipalities has caused the PSC Staff to quickly back away from supporting our requests for conduit rate increases. Pole attachment rates however are dictated by the Order and Opinion and the PSC Staff has readily accepted these increases, [illegible]

There is little doubt pressure will continue to be exerted by the interested parties to keep rates low. For this reason, it is doubtful the Company will ever obtain current or marginal cost based rates. However, we should continue to press for increased rates even after the Supreme Court reaches a decision.