APPENDIX - A

Proposed Input Values

Part 1: Feeder and Distribution Module

**	Interface Options		
	Values	**Description**	**Comments**
	-s0.36	Clusintf Options	Determine microgrid size in kilofeet
	-v -p0	Feeddist Options	Determine output reporting and optimization in distribution plant*
	0	Plant Mix by Study Area	Requires file PlantMixByStudyArea.csv in Inputs Subdirectory
	0	Minimize Disk Usage	Runs each study area one wirecenter at a time
	1	Save Workfiles	Saves Cluster.zip and HM Worksheets
	3	HCPM Start With	
	1	HAI Start With	
	1	Output Reports	

**	Cluster Inputs		
	Values	**Description**	**Comments**
	500	Raster_Size	Initial value for rasterization process
	17000	Distance_Limit	
	1800	Line_Limit	
	80	Line_Fill	Determines cluster size before optimizaton
	36	Block_Divide_Factor	Used only with Census block data
	1	Cluster_Algorithm	
	4	Optimization_Method	
	1000	Maximum_populated_cells	Initial value for rasterization process
	1	Use_hcpm.mdb	
	1	True-up_line_counts	

**	Feeder / Distribution Inputs		
	Value	**Variable Name**	**Comments**
	0.5	max_drop_length	kilofeet
	0.5	user_lambda	kilofeet
	12	copper_gauge_xover	kilofeet
	18	max_copper_distance	kilofeet
	1.25	MaxCopperPenalty	
	18	copper_t1_xover	kilofeet
	0	t1_fiber_xover	kilofeet; Set this value to zero to turn off T1 technology for switched services
	1.25	t1_redundancy_factor	
	24	copper_placement_depth	inches
	36	fiber_placement_depth	inches
	3	CriticalWaterDepth	feet
	1.3	WaterFactor	
	12	MinSlopeTrigger	
	1.10	MinSlopeFactor	
	30	MaxSlopeTrigger	
	1.05	MaxSlopeFactor	
	1.20	CombSlopeFactor	
	35%	pct_ds1	
	50%	pct_lsa	
	10	lines_per_bus	
	10	SpclAccessLines_per_bus	
	1.00	DistRoadFactor	
	1.00	FiberFillFactor	
	1	DistanceType	
	1.00	FeederRoadFactor	
	2	Max_SAIs	Maximum number of SAI's placed in a cluster

*Notwithstanding our tentative conclusion in section V.B.2.a.i of this Further Notice, this value disables optimization in distribution plant in order to minimize run time.

24 Gauge Distribution Cable Costs				
Size	UG	Buried	Aerial	Comments
4200	$39.32	$46.25	$42.43	Price per foot for underground, buried and aerial copper
3600	$33.70	$39.78	$36.54	
3000	$28.09	$33.31	$30.66	
2400	$22.47	$26.84	$24.77	
2100	$19.66	$23.60	$21.83	
1800	$19.10	$20.37	$18.88	
1200	$16.02	$13.90	$13.00	
900	$13.51	$10.66	$10.05	
600	$10.35	$7.43	$7.11	
400	$7.88	$5.27	$5.15	
300	$6.53	$4.19	$4.16	
200	$5.11	$3.11	$3.18	
100	$3.63	$2.03	$2.20	
50	$2.86	$1.49	$1.71	
25	$2.46	$1.22	$1.47	
18	$2.35	$1.15	$1.40	
12	$2.26	$1.08	$1.34	
6	$2.16	$1.02	$1.28	
1	$2.06	$0.97	$1.23	

26 Guage Distribution Cable Costs				
Size	UG	Buried	Aerial	Comments
4200	$ 29.35	$ 45.55	$ 29.09	Price per foot for underground, buried and aerial copper
3600	$ 25.49	$ 35.18	$ 25.84	
3000	$ 21.54	$ 27.47	$ 22.37	
2400	$ 17.47	$ 21.29	$ 18.68	
2100	$ 15.39	$ 18.56	$ 16.74	
1800	$ 15.05	$ 15.98	$ 14.73	
1200	$ 12.80	$ 11.08	$ 10.50	
900	$ 10.88	$ 8.65	$ 8.27	
600	$ 9.53	$ 6.18	$ 6.47	
400	$ 7.30	$ 4.48	$ 4.74	
300	$ 6.06	$ 3.61	$ 3.87	
200	$ 4.76	$ 2.71	$ 2.98	
100	$ 3.39	$ 1.80	$ 2.07	
50	$ 2.67	$ 1.33	$ 1.62	
25	$ 2.30	$ 1.10	$ 1.39	
18	$ 2.20	$ 1.03	$ 1.32	
12	$ 2.12	$ 0.97	$ 1.27	
6	$ 2.02	$ 0.91	$ 1.21	
1	$ 1.93	$ 0.87	$ 1.17	

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1800	$19.10	$20.37	$18.88	
1200	$16.02	$13.90	$13.00	
900	$13.51	$10.66	$10.05	
600	$10.35	$7.43	$7.11	
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300	$6.53	$4.19	$4.16	
200	$5.11	$3.11	$3.18	
100	$3.63	$2.03	$2.20	
50	$2.86	$1.49	$1.71	
25	$2.46	$1.22	$1.47	
18	$2.35	$1.15	$1.40	
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100	$ 3.39	$ 1.80	$ 2.07	
50	$ 2.67	$ 1.33	$ 1.62	
25	$ 2.30	$ 1.10	$ 1.39	
18	$ 2.20	$ 1.03	$ 1.32	
12	$ 2.12	$ 0.97	$ 1.27	
6	$ 2.02	$ 0.91	$ 1.21	
1	$ 1.93	$ 0.87	$ 1.17	

T1 Feeder Costs				
Size	UG	Buried	Aerial	Comments
4200	$ 29.35	$ 45.55	$ 29.09	Price per foot for underground, buried and aerial copper
3600	$ 25.49	$ 35.18	$ 25.84	
3000	$ 21.54	$ 27.47	$ 22.37	
2400	$ 17.47	$ 21.29	$ 18.68	
2100	$ 15.39	$ 18.56	$ 16.74	
1800	$ 15.05	$ 15.98	$ 14.73	
1200	$ 12.80	$ 11.08	$ 10.50	
900	$ 10.88	$ 8.65	$ 8.27	
600	$ 9.53	$ 6.18	$ 6.47	
400	$ 7.30	$ 4.48	$ 4.74	
300	$ 6.06	$ 3.61	$ 3.87	
200	$ 4.76	$ 2.71	$ 2.98	
100	$ 3.39	$ 1.80	$ 2.07	
50	$ 2.67	$ 1.33	$ 1.62	
25	$ 2.30	$ 1.10	$ 1.39	
18	$ 2.20	$ 1.03	$ 1.32	
12	$ 2.12	$ 0.97	$ 1.27	
6	$ 2.02	$ 0.91	$ 1.21	
1	$ 1.93	$ 0.87	$ 1.17	

Fiber Cable Costs				
Size	UG	Buried	Aerial	Comments
288	$8.23	$9.73	$8.77	(Costs of underground,
144	$6.01	$5.21	$4.93	buried and aerial fiber
96	$4.91	$3.70	$3.66	cable)
72	$4.29	$2.95	$3.02	
60	$3.96	$2.57	$2.70	
48	$3.62	$2.19	$2.38	
36	$3.27	$1.82	$2.06	
24	$2.91	$1.44	$1.74	
18	$2.72	$1.25	$1.58	
12	$2.53	$1.06	$1.42	
1	$2.18	$0.72	$1.13	

Distribution Plant Mix

Density	UG	Buried	Aerial	Comments
0	0%	60%	40%	(These entries represent
5	1%	62%	37%	minimum placement percentages
100	2%	68%	30%	for underground, buried
200	4%	66%	30%	and aerial respectively.
650	8%	62%	30%	When they sum to less than 1,
850	20%	50%	30%	the model selects the residual
2550	40%	30%	30%	placement to minimize cost
5000	60%	10%	30%	for the particular terrain and
10000	90%	0%	10%	density.)

Copper Feeder Plant Mix

Density	UG	Buried	Aerial	Comments
0	5%	50%	45%	(Minimum placement percetages.
5	5%	50%	45%	See comment in distrmix
100	5%	50%	45%	for further explanation.)
200	20%	40%	40%	
650	40%	30%	30%	
850	60%	25%	15%	
2550	75%	15%	10%	
5000	90%	5%	5%	
10000	95%	0%	5%	

Fiber Feeder Plant Mix

Density	UG	Buried	Aerial	Comments
0	5%	50%	45%	Minimum placement percetages.
5	5%	50%	45%	See comment in distrmix
100	5%	50%	45%	for further explanation.
200	20%	40%	40%	
650	40%	30%	30%	
850	60%	25%	15%	
2550	75%	15%	10%	
5000	90%	5%	5%	
10000	95%	0%	5%	

Drop Terminal Costs

Size	Buried	Aerial	UG	Comments
1	$ 133.46	$ 70.44	$ 133.46	Drop terminal costs
6	$ 157.05	$ 95.98	$ 157.05	
12	$ 440.87	$ 131.81	$ 440.87	
25	$ 451.00	$ 216.00	$ 451.00	

	Feeder Distribution Interface Costs			
**	Lines	Outdoor	Indoor	Comments
	1	$ 150.78	$ 150.78	Costs of Outdoor and Indoor feeder/distribution
	50	$ 562.00	$ 220.00	interface devices
	100	$ 787.00	$ 333.00	
	200	$ 1,349.00	$ 665.00	
	400	$ 2,248.00	$ 1,331.00	
	600	$ 3,147.00	$ 1,996.00	
	900	$ 4,271.00	$ 2,770.00	
	1200	$ 5,395.00	$ 3,993.00	
	1800	$ 7,644.00	$ 5,539.00	
	2400	$ 9,667.00	$ 7,536.00	
	3600	$ 13,489.00	$ 11,079.00	
	5400	$ 18,434.00	$ 16,618.00	
	7200	$ 22,481.00	$ 21,708.00	

	Fill Factors			
**	Density	Feeder	Distr	Comments
	0	70.0%	50.0%	Utilization factors for feeder and distribution plant
	5	77.5%	55.0%	
	100	80.0%	55.0%	
	200	82.5%	60.0%	
	650	82.5%	70.0%	
	850	82.5%	75.0%	
	2550	82.5%	75.0%	
	5000	82.5%	75.0%	
	10000	82.5%	75.0%	

	Normal Terrain Costs						
	Underground		Buried		Aerial		
Density	Feeder	Distr.	Feeder	Distr.	Feeder	Distr.	Comments
0	$1.72	$1.72	$0.77	$0.77	$ 1.51	$ 1.51	Placement costs for normal terrain
5	$1.72	$1.72	$1.40	$1.40	$ 1.51	$ 1.51	
100	$1.97	$1.97	$1.60	$1.60	$ 1.98	$ 1.98	
200	$2.49	$2.49	$2.03	$2.03	$ 1.98	$ 1.98	
650	$2.84	$2.84	$2.31	$2.31	$ 2.27	$ 2.27	
850	$3.47	$3.47	$2.83	$2.83	$ 2.27	$ 2.27	
2550	$4.88	$4.88	$3.97	$3.97	$ 2.64	$ 2.64	
5000	$7.96	$7.96	$6.48	$6.48	$ 2.72	$ 2.72	
10000	$12.44	$12.44	$10.13	$10.13	$ 2.72	$ 2.72	

	SoftRock Costs						
	Underground		Buried		Aerial		
Density	Feeder	Distr.	Feeder	Distr.	Feeder	Distr.	Comments
0	$6.65	$6.65	$1.58	$1.58	$ 1.80	$ 1.80	Placement costs for soft rock terrain
5	$6.65	$6.65	$2.20	$2.20	$ 1.80	$ 1.80	
100	$7.49	$7.49	$2.48	$2.48	$ 2.35	$ 2.35	
200	$9.24	$9.24	$3.06	$3.06	$ 2.35	$ 2.35	
650	$10.60	$10.60	$3.51	$3.51	$ 2.68	$ 2.68	
850	$12.99	$12.99	$4.31	$4.31	$ 2.68	$ 2.68	
2550	$17.24	$17.24	$5.71	$5.71	$ 3.13	$ 3.13	
5000	$28.12	$28.12	$9.32	$9.32	$ 3.21	$ 3.21	
10000	$44.36	$44.36	$14.70	$14.70	$ 3.21	$ 3.21	

	HardRock Costs						
	Underground		Buried		Aerial		
Density	Feeder	Distr.	Feeder	Distr.	Feeder	Distr.	Comments
0	$11.59	$11.59	$2.38	$2.38	$ 2.09	$ 2.09	Placement costs for hard rock terrain
5	$11.59	$11.59	$3.01	$3.01	$ 2.09	$ 2.09	
100	$12.69	$12.69	$3.30	$3.30	$ 2.71	$ 2.71	
200	$15.21	$15.21	$3.95	$3.95	$ 2.71	$ 2.71	
650	$17.20	$17.20	$4.47	$4.47	$ 3.10	$ 3.10	
850	$21.07	$21.07	$5.48	$5.48	$ 3.10	$ 3.10	
2550	$27.80	$27.80	$7.22	$7.22	$ 3.61	$ 3.61	
5000	$45.34	$45.34	$11.78	$11.78	$ 3.69	$ 3.69	
10000	$70.67	$70.67	$18.36	$18.36	$ 3.69	$ 3.69	

Manhole Costs

Duct Capacity	Normal	SoftRock	HardRock	Comments
2	$ 1,436.50	$ 1,511.50	$ 1,586.50	Installed Cost for Manholes
4	$ 4,472.47	$ 4,652.47	$ 4,832.47	
9	$ 5,176.00	$ 5,336.00	$ 5,496.00	
99	$ 3,070.00	$ 3,150.00	$ 3,230.00	

Manhole Spacing

Density	Spacing(ft)	Comments
0	725	
5	725	
100	725	
200	725	
650	575	
850	575	
2550	575	
5000	400	
10000	400	

Sharing

Density	UG	Buried	Aerial	Comments
0	90%	90%	50%	Percentage of underground, buried and aerial structure used by telco
5	90%	90%	50%	
100	85%	85%	50%	
200	65%	65%	50%	
650	65%	65%	50%	
850	65%	65%	50%	
2550	55%	55%	35%	
5000	55%	55%	35%	
10000	55%	55%	35%	

Annual Charge Factors		
Annual Factors	**Variable**	**Comments**
0.171816	ac_ugd_cop	
0.197752	ac_bur_cop	
0.221667	ac_aer_cop	
0.157569	ac_ugd_fib	
0.156288	ac_bur_fib	
0.159396	ac_aer_fib	
0.157041	ac_ugd_struc	
0.177020	ac_bur_struc	
0.181854	ac_aer_struc	
0.157041	ac_manhole	
0.214219	ac_t1_term	
0.214219	ac_fib_term	
0.181228	ac_fdi	
0.250052	ac_fib_splice	

Value	Variable	Comments
$ 560.00	cost_per_drop_kf	Units are in kilofeet
$ 39.50	nid_cost	
$ 720.00	duct_cost_per_kf	Units are in kilofeet
$ 152,617.43	a2016	Fixed cost of size 2016 fiber terminal
$ 74.98	b2016	Variable cost of size 2016 fiber terminal
$ 107,224.92	a1344	
$ 74.98	b1344	
$ 102,660.64	a672	
$ 74.98	b672	
$ 23,848.20	a96	
$ 87.30	b96	
$ 19,881.39	a24	
$ 87.30	b24	
$ 23,848.20	ac96	Fixed cost of size 96 T1 (or HDSL) terminal
$ 87.30	bc96	Variable cost of size 96 T1 (or HDSL) terminal
$ 19,881.39	ac24	
$ 87.30	bc24	
$ 11,000.00	site_prep_cost	
$ -	fiber_splice_cost	

Soil Texture Table		
Soil Type	**Impact**	**Comments**
BY	1	Soil texture types and cost multipliers
BY-COS	1	
BY-FSL	1	
BY-L	1	
BY-LS	1	
BY-SICL	1	
BY-SL	1	
BYV	1	
BYV-FSL	1	
BYV-L	1	
BYV-LS	1	
BYV-SIL	1	
BYV-SL	1	
BYX	1	
BYX-FSL	1	
BYX-L	1	
BYX-SIL	1	
BYX-SL	1	
C	0	
CB	0	
CBA	1	
CBA-FSL	1	
CB-C	0	
CB-CL	0	
CB-COSL	0	
CB-FS	0	
CB-FSL	0	
CB-L	0	
CB-LCOS	0	
CB-LS	0	
CB-S	0	
CB-SCL	0	
CB-SICL	0	
CB-SIL	0	
CB-SL	1	
CBV	1	
CBV-C	1	
CBV-CL	1	
CBV-FSL	1	
CBV-L	1	
CBV-LFS	1	
CBV-LS	1	
CBV-MUCK	1	
CBV-SCL	1	
CBV-SIL	1	
CBV-SL	1	
CBV-VFS	1	

Soil Texture Table		
Soil Type	**Impact**	**Comments**
CBX	1	
CBX-L	1	
CBX-CL	1	
CBX-SIL	1	
CBX-SL	1	
CBX-VFSL	1	
CE	0	
CIND	0	
CL	0	
CM	1	
CN	0	
CN-CL	0	
CN-FSL	0	
CN-L	0	
CN-SICL	0	
CN-SIL	0	
CN-SL	0	
CNV	0	
CNV-CL	0	
CNV-L	0	
CNV-SCL	0	
CNV-SIL	0	
CNV-SL	0	
CNX	0	
CNX-SL	0	
COS	0	
COSL	0	
CR	0	
CRC	1	
CR-L	1	
CR-SICL	1	
CR-SIL	1	
CR-SL	1	
CRV	1	
CRV-L	1	
CRV-SIL	1	
CRX	1	
CRX-SIL	1	
DE	0	
FB	0	
FINE	0	
FL	0	
FL-FSL	0	
FL-L	0	
FL-SIC	0	
FL-SICL	0	
FL-SIL	0	

Soil Texture Table		
Soil Type	**Impact**	**Comments**
FL-SL	0	
FLV	1	
FLV-COSL	1	
FLV-L	1	
FLV-SICL	1	
FLV-SL	1	
FLX	1	
FLX-L	1	
FRAG	0	
FS	0	
FSL	0	
G	0	
GR	0	
GRC	0	
GR-C	0	
GR-CL	0	
GR-COS	0	
GR-COSL	0	
GRF	0	
GRF-SIL	0	
GR-FS	0	
GR-FSL	0	
GR-L	0	
GR-LCOS	0	
GR-LFS	0	
GR-LS	0	
GR-MUCK	0	
GR-S	0	
GR-SCL	0	
GR-SIC	0	
GR-SICL	0	
GR-SIL	0	
GR-SL	0	
GR-VFSL	0	
GRV	1	
GRV-CL	1	
GRV-COS	1	
GRV-COSL	1	
GRV-FSL	1	
GRV-L	1	
GRV-LCOS	1	
GRV-LS	1	
GRV-S	1	
GRV-SCL	1	
GRV-SICL	1	
GRV-SIL	1	
GRV-SL	1	

Soil Texture Table		
Soil Type	Impact	Comments
GRV-VFS	1	
GRV-VFSL	1	
GRX	1	
GRX-CL	1	
GRX-COS	1	
GRX-COSL	1	
GRX-FSL	1	
GRX-L	1	
GRX-LCOS	1	
GRX-LS	1	
GRX-S	1	
GRX-SIL	1	
GRX-SL	1	
GYP	1	
HM	0	
ICE	1	
IND	1	
L	0	
LCOS	0	
LFS	0	
LS	0	
LVFS	0	
MARL	0	
MK	0	
MK-C	0	
MK-CL	0	
MK-FS	0	
MK-FSL	0	
MK-L	0	
MK-LFS	0	
MK-LS	0	
MK-S	0	
MK-SI	0	
MK-SICL	0	
MK-SIL	0	
MK-SL	0	
MK-VFSL	0	
MPT	0	
MUCK	0	
PEAT	0	
PT	0	
RB	1	
RB-FSL	1	
S	0	
SC	0	
SCL	0	
SG	0	

Soil Texture Table		
Soil Type	**Impact**	**Comments**
SH	0	
SH-CL	0	
SH-L	0	
SH-SICL	0	
SH-SIL	0	
SHV	1	
SHV-CL	1	
SHX	1	
SI	0	
SIC	0	
SICL	0	
SIL	0	
SL	0	
SP	0	
SR	0	
ST	0	
ST-C	0	
ST-CL	0	
ST-COSL	0	
ST-FSL	0	
ST-L	0	
ST-LCOS	0	
ST-LFS	0	
ST-LS	0	
ST-SIC	0	
ST-SICL	0	
ST-SIL	0	
ST-SL	0	
ST-VFSL	0	
STV	1	
STV-C	1	
STV-CL	1	
STV-VFSL	1	
STV-FSL	1	
STV-L	1	
STV-LFS	1	
STV-LS	1	
STV-MPT	1	
STV-MUCK	1	
STV-SICL	1	
STV-SIL	1	
STV-SL	1	
STV-VFSL	1	
STX	1	
STX-C	1	
STX-CL	1	
STX-COS	1	

Soil Texture Table		
Soil Type	**Impact**	**Comments**
STX-COSL	1	
STX-FSL	1	
STX-L	1	
STX-LCOS	1	
STX-LS	1	
STX-MUCK	1	
STX-SIC	1	
STX-SICL	1	
STX-SIL	1	
STX-SL	1	
STX-VFSL	1	
SY	1	
SY-L	1	
SY-SIL	1	
SYV	1	
SYX	1	
UNK	0	
UWB	1	
VAR	0	
VFS	0	
VFSL	0	
WB	1	

APPENDIX A
Proposed Input Values
Part 2: Switching and Expense Modules

End Office Switching - Multi-Company - Multi-company

Switch Capacity Limits

Lines	Real-time (BHCA)	Traffic (BHCCS)
0	10,000	30,000
1,000	50,000	150,000
10,000	200,000	600,000
40,000	600,000	1,800,000

Switch maximum line size	80,000
Switch port administrative fill	94.00%
Switch maximum processor occupancy	90.00%

Investment Parameters

MDF/protector investment per line	$0.00
Analog line circuit offset of DLC per line	$0.00
Switch installation multiplier	1.00
EO Switching Investment constant term, small ICO	$416.11
EO Switching Investment constant term, BDC and large ICO	$242.73
EO Switching Investment slope term	-14.922

Processor feature loading multiplier

Normal	1.20
Heavy business	2.00
Business penetration threshold	0.30

Cancel | Reset Defaults | OK

Start | Novell-deliv... | HAI Model 5... | End Offic... | Exploring - ... | GroupWise -... | 11:34 AM

Wirecenter - Multi-Company - Multi-company

Lot size, multiplier of switch room size: 2.00

Tandem/ED common factor: 0.40

Served Lines	Power	Switch Room Size, sq ft	Construction, sq ft	Land, sq ft
0	$0.00	500	$75.00	$5.00
1,000	$0.00	1,000	$85.00	$8.00
5,000	$0.00	2,500	$100.00	$10.00
25,000	$0.00	5,500	$125.00	$15.00
50,000	$0.00	11,000	$150.00	$20.00

Cancel | Reset Defaults | OK

Start | Novell-deliv... | Exploring - ... | GroupWise -... | Microsoft Ex... | HAI Model 5... | Wirecent... | 2:14 PM

Traffic Parameters - Multi-Company - Multi-company

Local Call Attempts, thousands	0	Local Bus/Res DEMs	1.10
Call Completion Factor	0.00%	IntraState Bus/Res DEMs	2.00
IntraLATA Calls Completed, thousands	0	InterState Bus/Res DEMs	3.00
InterLATA IntraState Calls Completed, thousands	0	BH Fraction of Daily Usage	10.00%
InterLATA InterState Calls Completed, thousands	0	Annual to Daily Usage Reduction Factor	270
Local DEMs, thousands	0	Residential Holding Time Multiplier	1.00
IntraState DEMs, thousands	0	Business Holding Time Multiplier	1.00
InterState DEMs, thousands	0	Residential Call Attempts/ BH	1.30
		Business Call Attempts/ BH	3.50

Cancel | Reset Defaults | OK

Start | Novell-delivered Appl... | Exploring - Removable... | GroupWise - Mailbox | Traffic Parameter... | 11:41 AM

Interoffice Investment - Multi-Company - Multi-company

Transmission Terminal Investment

OC-48 ADM, installed, 48 DS-3s	$50,000.00
OC-48 ADM, installed, 12 DS-3s	$40,000.00
OC-3/DS-1 Terminal Multiplexer, installed, 84 DS-1s	$26,000.00
Investment per 7 DS-1s	$500.00
Number of Fibers	24
Pigtails, per strand	$60.00
Optical Distribution Panel	$1,000.00
EF&I, per hour	$55.00
EF&I, hours	32
Regenerator, installed	$15,000.00
Regenerator Spacing, mi	40
Channel Bank Investment/24 line	$5,000.00
Fraction of SA lines req. multiplex	0.00%
DCS installed, per DS-3	$30,000.00
Transmission Terminal Fill (DS0)	0.90

Fiber Investment per foot, installed

Fiber Cable	$3.50
Number of Strands per ADM	4
Buried Fraction	60.00%
Buried Placement	$1.77
Buried Sheath Addition	$0.20
Conduit	$0.60
Spare Tubes per route	1
Conduit Placement	$16.40
Pullbox Spacing	2,000
Pullbox Investment	$500.00
Aerial Fraction	20.00%
Pole Spacing, ft	150
Pole Material	$201.00
Labor (basic)	$216.00

Fraction of poles and buried/ug placement common with feeder	75.00%
Fraction of aerial structure assigned to telephone	50.00%
Fraction of buried structure assigned to telephone	78.00%
Fraction of underground structure assigned to telephone	73.00%

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Interoffice Invest... | 11:43 AM

Transmission Parameters - Multi-Company - Multi-company

Interoffice Parameters

Operator Traffic Fraction	2.00%
Total Interoffice Traffic Fraction	65.00%

Transmission Parameters

Maximum Trunk Occupancy, CCS	27.5
Trunk Port, per end	$100.00
Direct-Routed fraction of local interoffice	98.00%
Tandem-Routed fraction of intraLATA toll traffic	20.00%
Tandem-Routed fraction of interLATA traffic	20.00%
POPs per Tandem Location	5
Threshold for off-ring wirecenters, total lines	1
Remote-Host fraction of interoffice traffic - remote	0.10
Host-Remote fraction of interoffice-traffic - host	0.05
Maximum nodes per ring	16
Ring transiting traffic factor	0.40
Intertandem fraction of tandem trunks (additive)	0.10

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Transmission Para... | 11:45 AM

Tandem Switching - Multi-Company - Multi-company

Real Time Limit, BHCA	750,000
Port Limit, trunks	100,000
Common Equipment Investment	$1,000,000.00
Maximum Trunk Fill	90.00%
Maximum Real Time Occupancy	90.00%
Tandem Minimum Common Equipment Factor	50.00%
Entrance Facility Distance, miles	0.5

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Tandem Switchin... | 11:46 AM

Signaling - Multi-Company - Multi-company

STP Link Capacity	720
STP Maximum Fill	80.00%
STP investment, per pair, maximum	$5,000,000.00
STP investment, per pair, minimum	$1,000,000.00
Link Termination, both ends	$900.00
Signaling Bit Rate	56,000
Link Occupancy	40.00%
C Link Cross Section	24
ISUP Messages per interoffice BHCA	6
ISUP Messages length, bytes	25
TCAP Messages per transaction	2
TCAP Message Length, bytes	100
Fraction of BHCA requiring TCAP	10.00%
SCP investment/transaction/second	$20,000.00

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Signaling - Multi-... | 11:49 AM

OS and Public Telephone - Multi-Company - Multi-company

Investment per position	$6,400.00
Maximum Utilization per position, CCS	32
Operator Intervention Factor	10
Public Telephone Equipment Investment, per station	$760.00

Cancel | Reset Defaults | OK

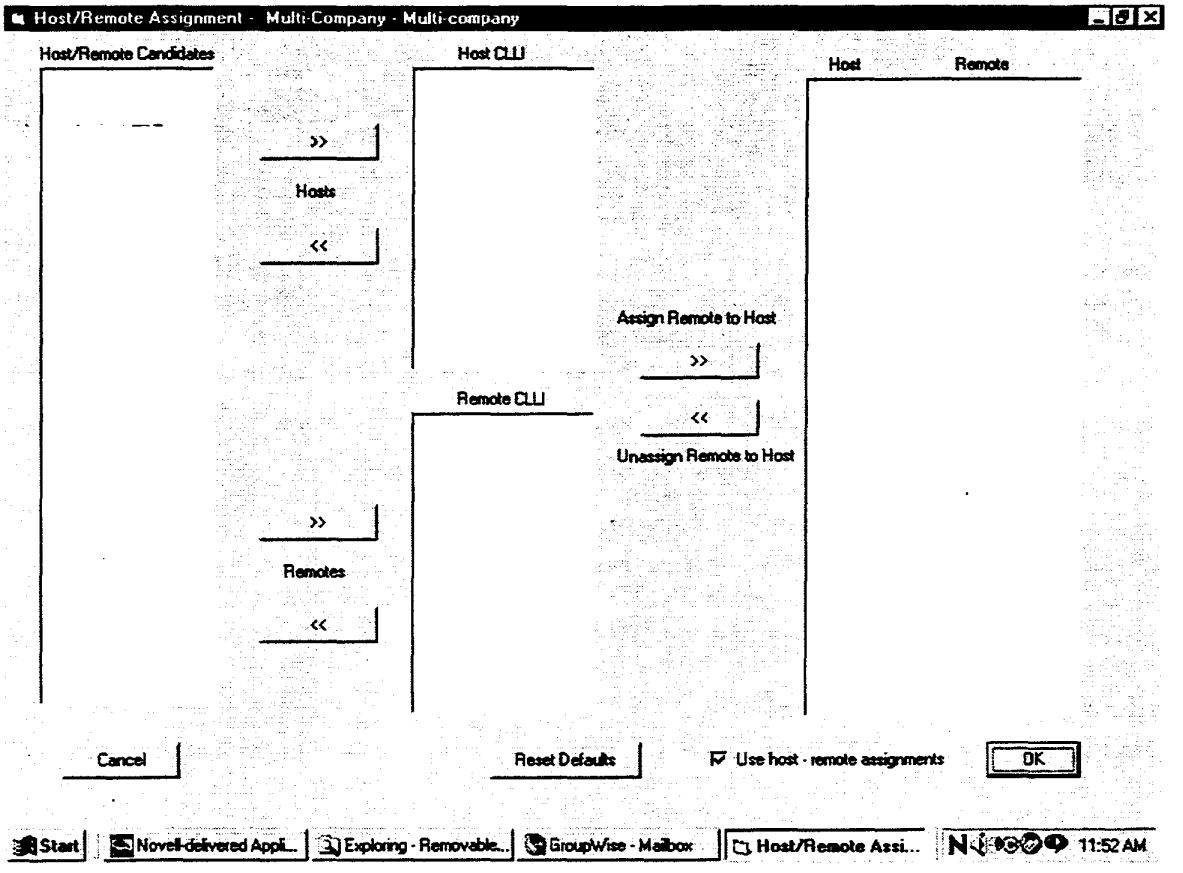
Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | OS and Public Tel... | 11:50 AM

ICD Parameters - Multi-Company - Multi-company

	Equipment	Wire Center
STP Investment per line / SCP-STP Wire Center	$5.50	$0.40
Local Tandem Investment per line	$1.90	$2.50
OS Tandem Investment per line	$0.80	$1.00
SCP Investment per line / Tandem A links and C links per line	$2.50	$0.30
Equivalent facility investment, per DS-0	$138.08	
Equivalent terminal investment, per DS-0	$111.62	

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | ICD Parameters - ... | 11:51 AM


Host/Remote Assignment - Multi-Company - Multi-company
Host/Remote Candidates
Host CLU
Host
Remote
>>
Hosts
<<
Assign Remote to Host
>>
Remote CLU
<<
Unassign Remote to Host
>>
Remotes
<<
Cancel
Reset Defaults
Use host - remote assignments
OK
Start
Novell-delivered Appli...
Exploring - Removable...
GroupWise - Mailbox
Host/Remote Assi...
11:52 AM

Host/Remote Investment - Multi-Company - Multi-company

BOCs and Large ICOs

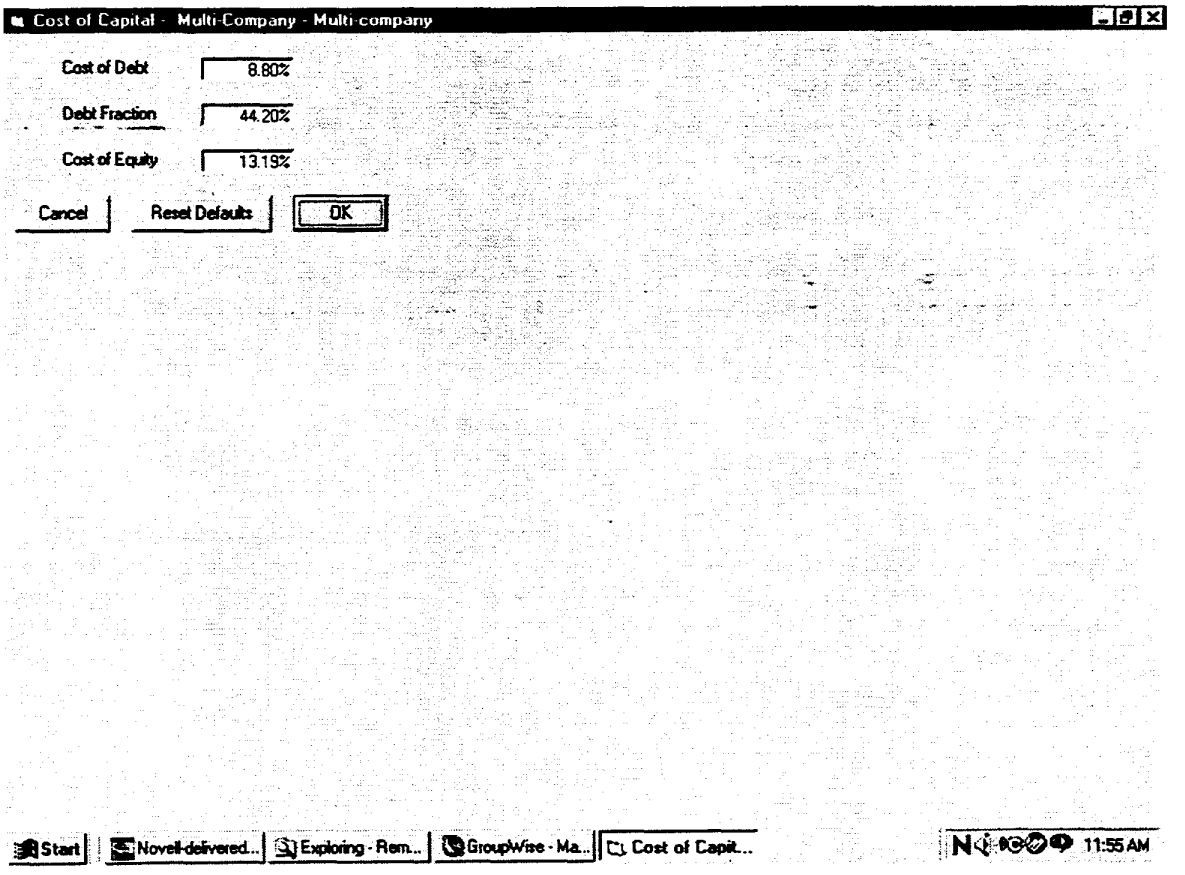
Line Size	Standalone fixed investment	Host fixed investment	Remote fixed investment	Standalone per line investment	Host per line investment	Remote per line investment
0	$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
640	$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
5,000	$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
10,000	$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00

Small ICOs

Standalone fixed investment	Host fixed investment	Remote fixed investment	Standalone per line investment	Host per line investment	Remote per line investment
$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00
$447,000.00	$447,000.00	$186,400.00	$83.00	$83.00	$83.00

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Host/Remote Inv... | 11:53 AM


Cost of Capital - Multi-Company - Multi-company
Cost of Debt
8.80%
Debt Fraction
44.20%
Cost of Equity
13.19%
Cancel
Reset Defaults
OK
Start
Novell-delivered...
Exploring - Rem...
GroupWise - Ma...
Cost of Capit...
11:55 AM

Depreciation - Multi-Company - Multi-company

Account	Description	Economic Life	Net Salvage %	Account	Description	Economic Life	Net Salvage %
2112	Motor Vehicles	8.24	10.38%	2351	Public Telephone Term. Equipment	7.60	5.12%
2115	Garage Work Equipment	12.22	-5.80%	2411	Poles	30.25	-89.98%
2116	Other Work Equipment	13.04	1.69%	2121.1	Aerial Cable - metallic	20.61	-23.03%
2121	Buildings	46.93	1.64%	2421.2	Aerial Cable - non metallic	26.14	-17.53%
2122	Furniture	15.92	4.02%	2422.1	Underground Cable - metallic	25.00	-17.97%
2123.1	Office Support Equipment	10.78	4.12%	2422.2	Underground Cable - non metallic	26.45	-14.58%
2123.2	Company Comm. Equipment	7.40	2.52%	2423.1	Buried Cable - metallic	21.57	-8.39%
2124	General Purpose Computer	6.12	2.29%	2423.2	Buried Cable - non metallic	25.91	-6.91%
2212	Digital Electronic Switching	16.17	1.57%	2426.1	Intrabuilding Cable - metallic	18.18	-15.69%
2220	Operator Systems	9.41	-0.41%	2426.2	Intrabuilding Cable - non metallic	26.11	-10.43%
2232.2	Digital Circuit Equipment	10.24	-0.62%	2442	Conduit Systems	56.19	-9.95%

Cancel | Reset Defaults | OK

Start | Novell-delivered Appli... | Exploring - Removable... | GroupWise - Mailbox | Depreciation - M... | 11:56 AM

Expense Assignment - Multi-Company - Multi-company

General Support Loops	Percent to be assigned per line
Furniture - Capital Costs	100.00%
Furniture - Expenses	100.00%
Office Equipment - Capital Costs	100.00%
Office Equipment - Expenses	100.00%
General Purpose Computer - Capital Costs	100.00%
General Purpose Computer - Expenses	100.00%
Motor Vehicles - Capital Costs	100.00%
Motor Vehicles - Expenses	100.00%
Buildings - Capital Costs	100.00%
Buildings - Expenses	100.00%
Garage Work Equipment - Capital Costs	100.00%
Garage Work Equipment - Expenses	100.00%
Other Work Equipment - Capital Costs	100.00%
Other Work Equipment - Expenses	100.00%
Network Operations	100.00%
Other Taxes	100.00%
Variable Overhead	100.00%

Cancel | Reset Defaults | OK

Start | Novell-deliv... | Exploring - ... | GroupWise -... | Microsoft Ex... | HAI Model 5... | Expense ... | 2:09 PM

Structure Fraction Assigned to Telephone - Multi-Company - Multi-company

Density	Dist Aerial	Dist Buried	Dist Underground	Feeder Aerial	Feeder Buried	Feeder Underground
0	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
5	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
200	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
650	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
850	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2550	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
5000	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
10000	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Cancel | Reset Defaults | OK

Start | Novell-delivered... | Exploring - Rem... | GroupWise - Ma... | Microsoft Excel -... | Structure Fra... | 2:11 PM

Other - Multi-Company - Multi-company

Tax Rate	39.25%	EO Non Line-Port Cost Fraction	70.00%
Corporate Overhead Factor	0.00%	Per line monthly LNP cost	$0.39
Other Taxes Factor	5.00%	Carrier-Carrier Customer Service, per line per year	$1.69
Billing/Bill Inquiry per line per month	$0.00	NID Expense per line per year	$1.00
Directory Listing per line per month	$0.00	DS-0/DS-1 Terminal Factor	12.4
Forward-looking Network Operations Factor	50.00%	DS-1/DS-3 Terminal Factor	9.9
Alternative CO Switching Factor	2.69%	Average Lines per business location	4.00
Alternative Circuit Equipment Factor	1.53%	Average Trunk Utilization	30.00%

Cancel | Reset Defaults | OK

Start | Novell-delivered... | Exploring - Rem... | GroupWise - Ma... | Microsoft Excel -... | Other - Multi... | 2:12 PM

APPENDIX B

DESCRIPTION OF PNR'S METHODOLOGY TO ESTIMATE THE NUMBER OF CUSTOMER LOCATIONS

1. PNR derives its estimate of the number of residential locations by first consulting both the Metromail and Claritas databases.[1] From the Metromail database, which contains addresses and other information created for direct marketing purposes, PNR selects all residences with both a "good" address and a phone number. A good address is one that can be geocoded. At this point, PNR has a preliminary estimate of the number of residences for each Census Block. By summing across blocks, PNR also has a preliminary estimate of residences for each defined group of Blocks, or Census Block Group.

2. Next, PNR compares its preliminary estimate at the Census Block Group level to the Claritas database. The Claritas database contains Census information at the Census Block Group level that has been updated from the 1990 Census. If PNR's preliminary estimate of the number of residences is greater than the Claritas estimate of the number of households, it uses the preliminary estimate. If its preliminary estimate is less than the Claritas estimate, then PNR increases its preliminary estimate.[2] Based upon the 1990 Census estimate of the number of households in each block, PNR allocates any additional households estimated by Claritas to each Census Block in the Block Group. These additional households are added to PNR's preliminary, Metromail-based estimate. After these steps, the PNR estimate of the number of residences by Census Block Group is greater than or equal to the Claritas estimate of the number of households, and PNR's estimate is disaggregated to the Census Block level.

3. PNR's next step is to estimate the number of lines demanded at each residence. PNR uses telephone penetration rates along with its National Access Line Model to estimate the probability that a residence will demand a second line based on demographic characteristics.[3] By applying these factors, PNR estimates the number of lines demanded in each Block. PNR assumes that each residence will demand the same number of lines and divides the demand equally between all residences in a particular Block. PNR's procedure spreads estimated demand in a Census Block over a number of residences that is greater than or equal to the number of households in that Census Block, regardless of current penetration rates.

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[1] HAI Dec. 11, 1997 submission, Model Description at 21.

[2] HAI Dec. 11, 1997 submission, Model Description at 21.

[3] The penetration rate is the number of households with telephones divided by the total number of households.

4. As a final validation for its estimate of the number of residences, PNR compares its estimate of demand at the company wide level to ARMIS residential line count data. PNR first sums the number of residential lines in each block to the wire center level. PNR relies on the BLR database, which contains electronic maps for each wire center, to identify the proper wire center for each Block.[4] PNR then identifies each wire center with a particular company using NECA data. After completing these steps, PNR can sum its estimate of residential lines demanded to the study area level.

5. If its estimate of residential lines is greater than the number of lines identified by ARMIS, PNR makes no further adjustments. If its estimate is less, however, PNR further increases the number of residences. PNR does this by creating a ratio or factor equal to the demand identified in ARMIS divided by PNR's estimate of demand. PNR then multiplies the number of residences in each block by this factor. Thus, for example, if the demand reported by ARMIS is ten percent greater than its estimate of demand, PNR increases the number of residences in each block by ten percent. PNR assigns the same block-wide demand to each new residence, so it also increases demand by ten percent.

6. PNR derives its estimate of the number of business locations in a similar manner. From Dun & Bradstreet database, PNR selects all businesses with a "good" address. PNR uses the address to assign the business to a particular Census Block. PNR estimates the demand for business lines using PNR's Access Line Model based on the businesses' characteristics. PNR sums the demand by study area, relying on the BLR database to associate Blocks with particular wire centers and study areas. PNR compares the estimated demand for business lines to the ARMIS demand. If PNR's estimate is less, PNR adds the appropriate number of additional businesses. Each additional business is a representative business based on national averages, and each is assigned the same demand. These additional businesses are allocated to Blocks based on the relative number of businesses in each Block according to Dun & Bradstreet.

[4] It should be noted that not all Census Blocks fall within a wire center. Some Census Blocks are located in unserved areas.

APPENDIX C

OUTSIDE PLANT STRUCTURE AND CABLE COSTS SURVEY

Introduction

1. The Commission's survey requested that respondents submit outside plant structure and cable cost data for "growth" projects on which they: (1) completed work on or after January 1, 1996; and (2) incurred total outside plant structure and cable costs of at least $50,000.[1] Working with the United States Telephone Association, Commission staff requested that incumbent LECs report either: (1) separate outside plant structure and cable costs for each different project, for a sample of projects, *i.e.*, on a project by project basis, or (2) outside plant structure and cable costs for all projects in the geographic region of a central office, for a sample of central offices, *i.e.*, on a central office by central office basis.[2] Staff requested that competitive LECs report separate outside plant structure and cable costs for each different project, for all projects.[3] For each incumbent LEC from which staff requested outside plant structure and cable cost data, staff developed a sample of central offices for which the carrier was reqested to report the cost data. Staff requested that incumbent LECs reporting for a sample of projects report separate outside plant structure and cable costs for the projects most recently completed in the geographic region of each of the incumbent LEC's central offices in the sample. Staff requested that incumbent LECs reporting for all projects report these costs for projects in the geographic region of each central office in the sample of central offices.

2. For each incumbent LEC, staff requested cost data for the central offices from

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[1] The survey defined growth projects as those that a company undertakes to construct new plant or to add capacity to existing plant, and specified that growth projects should exclude those that a company undertakes to maintain, rehabilitate, or remove existing plant. For purposes of determining whether a company incurred total outside plant structure and cable costs of at least $50,000 for a particular growth project, the survey stated that total outside plant structure and cable costs are for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable.

[2] Staff distributed the survey to 12 incumbent LECs: BellSouth Telecommunications, Inc. (BellSouth); Ameritech Operating Companies (Ameritech); U S West Communications, Inc.; Pacific Bell Telephone Company (Pacific Bell); Nevada Bell Telephone Company (Nevada Bell); Southwestern Bell Telephone Company (Southwestern Bell); Bell Atlantic Telephone Companies; Sprint Local Telephone Companies (Sprint); GTE System Telephone Companies and GTE Telephone Operating Companies (collectively GTE); Aliant Communications Company (Aliant); Cincinnati Bell Telephone Company ; Frontier Corporation; Southern New England Telephone Company (SNET); and Citizens Telecommunications Companies.

[3] Staff distributed the outside plant structure and cable cost survey to the following competitive LECs: ICG Communications, Inc., GST Telecom, Inc., MCI World Com, AT&T, Nextlink, E*spire, Cablevision Lightpath, RCN Corp, and Time Warner. Staff also distributed the outside plant structure and cable cost survey to Association for Local Telephone Services and the National Cable Television Association. These associations distributed the survey to members of their associations that operate as competitive LECs.

geographic regions with different density[4] and terrain characteristics.[5] More specifically, each such sample included central offices from each of the nine density zones.[6] Where possible, the offices in each density zone in each incumbent LEC sample of central offices include one office located within a geographic region where the soil surface texture is normal and bedrock is too deep to affect cable placement; one where the soil surface texture is soft or bedrock is of a depth to affect cable placement and is soft; one where the soil surface texture is hard or bedrock is of a depth to affect cable placement and is hard; and one where there is high water table.[7]

3. Staff randomly selected the central offices in the sample of central offices for each incumbent LEC for each combination of density and terrain characteristics Statistical analyses of outside plant structure and cable costs for a sample of central offices located within geographic regions that have different density and terrain characteristics may identify the effect of these characteristics on these costs. Statistical analyses of outside plant structure and cable costs for a sample of central offices that is otherwise random reduces the likelihood that these analyses are based on biased data.

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[4] Density refers to the number of lines per square mile in the geographic region in which a project is located.

[5] Terrain refers to the physical features of the geographic region in which a project is located.

[6] Staff requested that each incumbent LEC submit outside plant structure and cable cost data on 12 central offices in each of the nine density zones if it has at least 12 offices in each zone. The sample of central offices for an incumbent LEC that has at least 12 central offices in each of the nine density zones has 108 offices (12 offices times nine density zones). The lower and upper bounds for these nine density zones (measured in terms of the number of lines per square mile) are: (1) zero - 5; (2) 6 - 100; (3) 101 - 200; (4) 201 - 650; (5) 651 - 850; (6) 851 - 2,550; (7) 2,551 - 5,000; (8) 5,001 - 10,000; (9) 10,001 or a greater number.

[7] In many cases, the offices in each density zone in each incumbent LEC sample of central offices do not include one office for each of these four terrain categories because the incumbent LEC has no offices located in a geographic area that has precisely the terrain characteristics of each category.

Approved by OMB
3060-0870
Expires 06/30/99
Est. Average Burden Hours Per Response: 227.5 Hrs.

OUTSIDE PLANT STRUCTURE AND CABLE COSTS DATA COLLECTION

Pursuant to Congress's directive in the Telecommunications Act of 1996 that the Commission establish support mechanisms to ensure the delivery of affordable telecommunications service to all Americans, the Commission determined on May 8, 1997 that universal service support for rural, insular, and high cost areas should be based on forward-looking economic costs. The forward-looking cost methodology will calculate federal universal service support for non-rural carriers in four steps. First, we will develop a mechanism to estimate the forward-looking costs of providing universal service in rural, insular, and high cost areas. Second, we will use these forward looking costs to determine the amount of federal universal service support. The outside plant structure and cable cost data are integral to this methodology because estimates of these costs are needed to determine the overall size of the universal service fund. Your response is voluntary. The Commission is requesting that responses be received within 30 days.

We have estimated that each response to this collection of information will take, on average 227.5 hours. Our estimate includes the time to read the instructions, look through existing records, gather and maintain required data, and actually complete and review the form or response. If you have any comments on this estimate, or how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0870), Washington, D.C. 20554. We will also accept your comments via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0870.

The foregoing Notice is required by the Privacy Act of 1974, P.L. 93-579, December 31, 1974, 5 U.S.C. 552a(e)(3), and the Paperwork Reduction Act of 1995, P.L. 104-13, October 1, 1995, 44 U.S.C. 3507.

Request for Data on Outside Plant Structure and Cable

1. On October 28, 1998, the Commission selected a model platform for estimating forward-looking costs used in determining federal high cost universal service support for non-rural carriers.[1] The selection of the model platform, which are the fixed assumptions about the design of the network and network engineering and fixed characteristics such as soil and terrain, is the first of two stages in estimating such forward-looking costs. In the second stage, the Commission will select inputs for the model platform, including the cost of outside plant structure and cable. The Commission intends to issue an order on the input values in time to implement the federal universal service mechanism for non-rural carriers by July 1, 1999.[2]

2. Although we have received significant comment on input values in this proceeding, the record is more complete for some inputs than for others. In particular, as we have discussed with you, we believe that it would be very helpful to obtain additional data on the costs for underground and buried cable structure and copper and fiber cable. We request that you submit on the following four tables data on your company's costs for projects in the geographic regions of central offices identified in Section IV.B for the outside plant structure and cable described below.[3] Due to the tight deadlines under which we are operating, we ask you to submit the information that we request on or before January 14, 1999. Thank you for agreeing to try to provide this information. Section VII below provides general instructions for preparing and filing your response to this request. If you have any questions regarding the data that we request, please contact Richard J. Kwiatkowski of the Accounting Policy Division at (202) 418-1383.

I. Outside Plant Structure Cost Tables

3. In tables I and II, we request that you provide further information on costs of two types of outside plant structure. Table I, which is labeled "Underground Cable Structure Cost," focuses on conduit that houses underground feeder and distribution cable and on manholes that house underground feeder cable. Table II, which is labeled "Buried Cable Structure Cost," focuses on outside plant structure that houses buried feeder and distribution cable. Section III identifies the types of projects and particular wire centers for which we seek data. Sections IV.A and V provide detailed instructions for completing tables I and II.

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[1] Federal-State Joint Board on Universal Service, *Fifth Report and Order*, CC Docket Nos. 96-45, 97-160, FCC 98-279 (rel. Oct. 28, 1998).

[2] The Commission has referred to the Federal-State Joint Board on Universal Service several questions related to how non-rural carriers' high cost support should be determined once forward-looking costs have been estimated. *See* Federal-State Joint Board on Universal Service, *Order and Order on Reconsideration*, CC Docket No. 96-45, FCC 98-160 (rel. July 17, 1998) (*Referral Order*).

[3] We do not request that you submit cost data on poles, anchors and guys, handholes, pedestals, cross connect boxes, pullboxes, controlled environmental vaults (CEVs), huts, serving area interfaces (SAIs), digital loop carriers (DLCs), or punch down blocks.

II. Cable Cost Tables

4. In tables III and IV, we request that you provide further information on cable costs. Table III, which is labeled "Copper Cable Cost," focuses on the cost of copper feeder and distribution cable. Table IV, which is labeled "Fiber Cable Cost," focuses on the cost of fiber feeder and distribution cable. Section III identifies the types of projects and particular wire centers for which we seek data. Sections IV.B and VI provide detailed instructions for completing tables III and IV.

III. Reporting Basis for Outside Plant Structure and Cable Costs

5. We request that you submit outside plant structure and cable cost data for "growth" projects on which your company: (1) completed work on or after January 1, 1996; and (2) incurred total outside plant structure and cable costs of at least $50,000. Growth projects are those that a company undertakes to construct new plant or to add capacity to existing plant. Growth projects exclude those that a company undertakes to maintain, rehabilitate, or remove existing plant. For purposes of determining whether your company incurred total outside plant structure and cable costs of at least $50,000 for a particular growth project, total outside plant structure and cable costs are for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable. When we refer to a project in the instructions below for reporting outside plant structure and cable cost data, we mean a growth project that satisfies the criteria set forth in this paragraph.

6. We request that incumbent local exchange carriers (ILECs) report either: (1) separate outside plant structure and cable costs for each different project, for a sample of projects, *i.e.*, on a project by project basis, or (2) outside plant structure and cable costs for all projects in the geographic region of a central office, for a sample of central offices, *i.e.*, on a central office by central office basis.[4] We request that competitive local exchange carriers (CLECs) report separate outside plant structure and cable costs for each different project, for all projects.

7. We request that ILECs that report separate outside plant structure and cable costs for each different project report these separate costs for the project that is the most recently completed in the geographic region of each of the ILEC's central offices that are identified in Chart 1.[5] Chart 1 includes a sample of central offices of each ILEC participating in this survey for each of nine density

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[4] We request that the following ILECs submit data on outside plant structure and cable costs: BellSouth Telecommunications, Inc. (BellSouth); Ameritech Operating Companies (Ameritech); U S West Communications, Inc. (U S West); Pacific Bell Telephone Company and Nevada Bell Telephone Company (collectively Pacific Bell and Nevada Bell); Southwestern Bell Telephone Company (Southwestern Bell); Bell Atlantic Telephone Companies (Bell Atlantic) other than New York Telephone Company and New England Telephone and Telegraph Company, the former NYNEX Telephone Companies (NYNEX); NYNEX; Sprint Local Telephone Companies (Sprint); GTE System Telephone Companies and GTE Telephone Operating Companies (collectively GTE); Aliant Communications Company (Aliant); Cincinnati Bell Telephone Company (Cincinnati Bell); Frontier Corporation (Frontier); Southern New England Telephone Company (SNET); and Citizens Telecommunications Companies (Citizens).

[5] Common language location identifier (CLLI) codes on chart 1 identify the central offices in these samples.

zones.[6] The lower and upper bounds for these nine density zones (measured in terms of the number of lines per square mile) are: (1) zero - 5; (2) 6 - 100; (3) 101 - 200; (4) 201 - 650; (5) 651 - 850; (6) 851 - 2,550; (7) 2,551 - 5,000; (8) 5,001 - 10,000; (9) 10,001 or a greater number. If, for each of these nine density zones, the outside plant structure and cable costs that these ILECs report for these most recently completed projects do not include those for at least one buried cable project, one underground cable project, and one aerial cable project, then for each density zone we ask that these ILECs also report these costs for one buried cable project, one underground cable project, and one aerial cable project in the geographic region of a central office of their choice. For example, if an ILEC's reported outside plant structure and cable costs for the most recently completed projects in the geographic regions of the central offices identified in Chart 1 for the lowest density zone includes only costs for buried cable projects, then we request that the ILEC report for the lowest density zone the costs for one underground project and one aerial cable project in the geographic region of a central office of its choosing. In such cases, we request that these ILECs explain on a separate sheet of paper how they selected the projects on which they report these costs. We also request that these ILECs determine the density zone for the central offices that they choose by using the table of densities for central offices posted on the Commission's web site at http://www.fcc.gov/ccb/universal_service/highcost.html#determine.

8. We request that ILECs that report outside plant structure and cable costs for all projects in the geographic region of a central office report these costs for projects in the geographic region of each central office listed in the sample of central offices in Chart 1. If, for each of the nine density zones identified in the preceding paragraph, the outside plant structure and cable costs that these ILECs report for projects in the geographic regions of these central offices do not include those for buried cable projects, underground cable projects, and aerial cable projects, then for each density zone we request that these ILECs also report these costs for buried cable projects, underground cable projects, and aerial cable projects in the geographic region of a central office of their choice. For example, if an ILEC's reported outside plant structure and cable costs for projects in the geographic regions of the central offices identified in Chart 1 for the lowest density zone includes only costs for buried cable projects, then we request that the ILEC also report for the lowest density zone costs for underground projects and aerial cable projects in the geographic region of a central office of its choosing. In such cases, we request that these ILECs explain on a separate sheet of paper how they selected the central offices on which they report these costs. We also request that these ILECs determine the density zone for the central offices that they choose by using the table of densities for central offices posted on the Commission's web site at http://www.fcc.gov/ccb/universal_service/highcost.html#determine.

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[6] Density refers to the number of lines per square mile in the geographic region in which a project is located.

IV. Cost Definitions

9. We define in this section outside plant structure and cable costs. Please report your company's costs for outside plant structure and cable in accordance with these definitions.

A. Outside Plant Structure Costs

10. We request that you report outside plant structure costs separately for two categories of outside plant. These two categories of outside plant are: (1) buried[7] feeder[8] and distribution[9] cable; and (2) underground[10] feeder and distribution cable. Outside plant structure is the set of facilities that support, house, guide, or otherwise protect distribution and feeder cable. We define outside plant structure costs as the initial capital outlay for physical material associated with outside plant structure, including manholes, conduit, trenches, poles, anchors and guys, and other facilities, the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets, and the capitalized cost for the labor, engineering, and materials required to install these assets. These outside plant structure costs include capitalized labor, engineering, and material costs for such activities as plowing or trenching, backfilling, boring cable, and cutting and restoring asphalt, concrete, or sod, or any combination of such activities. For buried feeder and buried distribution cable only, outside plant structure costs also include the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run. The capitalized labor, engineering, and material costs associated with outside plant structure are for both contractor- and telephone company-provided labor, engineering, and materials. Outside plant structure costs exclude the cost of the cable itself.

11. Outside plant structure costs for your company are costs for outside plant structure that your company incurs exclusively. That is, your company's outside plant structure costs exclude any portion of the total cost for outside plant structure that represents costs that companies other than your company incur for use of the same outside plant structure as your company uses to support cable.

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[7] Buried cable comes into direct contact with the soil. It typically is placed in a trench or plowed directly into the earth.

[8] Copper feeder cables extend between the main distribution frame in the end central office (*i.e.*, the central office that serves the end user) and one or more SAIs in the serving area. The SAI cross-connects copper feeder cables to copper distribution cables. Fiber feeder cables extend between a fiber distribution frame in the end central office and a digital loop carrier remote terminal (DLC) in the serving area. The DLC demultiplexes optical digital signals and converts these signals to analog signals. An SAI that is adjacent to the DLC cross-connects individual circuits from the DLC to copper distribution cables. Feeder cable excludes cable that extends from an end central office to another end central office, to a tandem switch, to an interexchange carrier's point of presence, or to an operator tandem. It also excludes cable that extends between a CLEC's collocation arrangement inside an ILEC's end central office and another central office.

[9] Copper distribution cables extend from the SAI in the serving area and pass through block terminals serving one or more customer premises. The block terminal is where individual copper pairs in the distribution cable are spliced to drops that extend from the terminal to the customer's premises.

[10] Underground cable is placed in conduit.

Assume that your company is an ILEC, for example, and that your company, a CLEC, an electric power company, and a cable television company install underground cable in the same conduit. If the total cost to install all of the conduit that your company shares with these other companies is $100,000 and your company and these other companies share these conduit installation costs equally, then your company's conduit installation costs are 25 percent of $100,000, or $25,000. If any of the outside plant structure costs that you report do not represent costs that your company incurs exclusively, but total costs that your company shares with other companies, please submit a statement on a separate piece of paper that separately identifies the particular reported outside plant structure costs that represent costs that your company incurs exclusively and the particular reported outside plant structure costs that represent total costs that your company shares with other companies. Please also identify in this statement the table number and the column letter corresponding to the table and the column where you report the particular outside plant structure costs that represent costs that your company incurs exclusively and the particular reported outside plant structure costs that represent total costs that your company shares with other companies. Please do not submit such a statement if all of the outside plant structure costs that you report represent costs that your company incurs exclusively.

B. Cable Costs

12. We request that you report separate copper cable costs and fiber cable costs for three categories of outside plant. These three categories of outside plant are: (1) underground feeder and distribution cable; (2) aerial feeder and distribution cable; and (3) buried feeder and distribution cable. We define cable costs as the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except those specifically defined above as outside plant structure costs. For aerial feeder and distribution cable, cable costs include capitalized labor, engineering, and material costs associated with hanging cable and designing a cable run. Aerial feeder and distribution cable costs also include the initial capital outlay for the physical material of any messenger strand from which the aerial cable hangs and the capitalized cost for the labor, engineering, and material required to install and engineer messenger strand. Aerial feeder and distribution cable costs exclude the initial capital outlay for physical material associated with outside plant structure, including poles and anchors and guys, the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these structure assets, the capitalized cost for the labor, engineering, and materials required to install these structure assets. For underground feeder and distribution cable, cable costs include capitalized labor, engineering, and material costs associated with placing and pulling cable and designing a cable run. These labor, engineering, and material costs are for both contractor- and telephone company-provided labor, engineering, and materials.

V. Outside Plant Structure Cost Data

A. Underground Cable Structure Cost Data

13. We request that you report on table I, labeled "Underground Cable Structure Cost," cost data on conduit that houses underground feeder and distribution cable and on manholes that house underground feeder cable. We request that ILECs that report separate outside plant structure and cable costs for each different project and CLECs submit a separate table I for each project on which they report conduit and manhole cost data. We request that ILECs that report outside plant structure and

cable costs for all projects in the geographic region of a central office submit a separate table I for each central office on which they report conduit and manhole cost data.

14. In the space provided at the top of table I, please identify the name of your company.

15. In the space provided immediately below the space provided for the name of your company at the top of table I, please identify the specific authorization number or the project authorization number of the particular project(s) on which you report conduit and manhole cost data.

16. In the space provided immediately below the space provided for the specific or project authorization number on table I, please identify the cities or towns and the state(s) associated with the cities or towns that together make up the geographic region of the particular project(s) on which you report conduit and manhole cost data. For the particular project(s), in columns A-K on table I, please report the cost data that we describe below.

17. In column A on table I, please identify the CLLI codes for each ILEC switch located in the geographic region represented by the cities or towns that you identify on table I. If the respondent is an ILEC that reports separate outside plant structure and cable costs for each different project or a CLEC, and if the level of outside plant structure and cable costs varies within a geographic region, please identify on separate rows in column A the CLLI codes associated with each area within that region that has separately identifiable outside plant structure and cable costs.

18. In column B on table I, please indicate the total project outside plant structure and cable cost for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

19. In column C on table I, please identify the number of lines per square mile in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. The number of lines should reflect all lines that are in service, including those that ILECs use to provide service and those that CLECs use to provide service.

20. In column D on table I, please indicate the construction method that your company uses to place conduit in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. To indicate the conduit placement method in column D, on the numbered rows below table I, please describe briefly the different construction methods that your company uses to place conduit. The number of the row on which you describe a given construction method identifies that method for the purpose of completing table I. Please place in column D on table I the row number identified below this table that identifies the construction method that your company uses to place conduit in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

21. In column E on table I, please indicate the design depth at which your company installs conduit in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of design depth for conduit the number of inches below ground level.

22. In column F on table I, please indicate the per foot average cost for conduit that houses underground feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average cost for conduit the initial capital outlay for physical material associated with conduit, the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to conduit, and the capitalized cost for the labor, engineering, and materials required to install conduit. Please exclude from the per foot average cost for conduit the initial capital outlay for physical material associated with manholes, handholes, pullboxes, cross connect boxes, CEVs, and huts, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets, and the capitalized cost for the labor, engineering, and materials required to install these assets.[11]

23. In column G on table I, please indicate the frequency with which innerduct for fiber is installed with conduit that houses underground feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

24. In column H on table I, if innerduct for fiber is installed with conduit, but the per foot average material cost for conduit reported in column F excludes the material cost for innerduct, please indicate the per foot average material cost for innerduct in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average material cost for innerduct the initial capital outlay for physical material associated with innerduct and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to innerduct.

25. In column I on table I, please indicate the average capacity of the manholes that house underground feeder cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of manhole capacity the number of ducts per manhole.

26. In column J on table I, please indicate the per manhole average cost for the manholes in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average cost for manholes the initial capital outlay for physical material associated with manholes, the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to manholes, and the capitalized cost for the labor, engineering, and materials required to install manholes.

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[11] If you are unable to exclude from the per foot average conduit cost these costs for manholes, handholes, pullboxes, cross connect boxes, CEVs, or huts, however, please report the per foot average conduit cost inclusive of the costs for these assets. In this case, please submit a statement on a separate sheet of paper explaining that the per foot average conduit cost reported in column D on table I includes the cost for manholes, handholes, pullboxes, cross connect boxes, CEVs, or huts.

27. In column K on table I, please indicate the average number of feet between manholes in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

B. Buried Cable Structure Cost Data

28. We request that you report on table II, labeled "Buried Cable Structure Cost," outside plant structure cost data on buried feeder and distribution cable. We request that ILECs that report separate outside plant structure and cable costs for each different project and CLECs submit a separate table II for each project on which they report outside plant structure cost data on buried cable. We request that ILECs that report outside plant structure and cable costs for all projects in the geographic region of a central office submit a separate table II for each central office on which they report outside plant structure cost data on buried cable.

29. In the space provided at the top of table II, please identify the name of your company.

30. In the space provided immediately below the space provided for the name of your company at the top of table II, please identify the specific authorization number or the project authorization number of the particular project(s) on which you report outside plant structure cost data on buried cable.

31. In the space provided immediately below the space provided for the specific or project authorization number on table II, please identify the cities or towns and the state(s) associated with the cities or towns that together make up the geographic region of the particular project(s) on which you report conduit cost data. For the particular project(s), in columns A-G on table II, please report the cost data that we describe below.

32. In column A on table II, please identify the CLLI codes for each ILEC switch located in the geographic region represented by the cities or towns that you identify on table II. If the respondent is an ILEC that reports separate outside plant structure and cable costs for each different project or a CLEC, and if the level of outside plant structure and cable costs varies within a geographic region, please identify on separate rows in column A the CLLI codes associated with each area within that region that has separately identifiable outside plant structure and cable costs.

33. In column B on table II, please indicate the total project outside plant structure and cable cost for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

34. In column C on table II, please identify the number of lines per square mile in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. The number of lines should reflect all lines that are in service, including those that ILECs use to provide service and those that CLECs use to provide service.

35. In column D on table II, please indicate the design depth at which your company buries copper cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of design depth for

buried copper cable the number of inches below ground level.

36. In column E on table II, please indicate the design depth at which your company buries fiber cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of design depth for buried fiber cable the number of inches below ground level.

37. In column F on table II, please indicate the per foot average outside structure cost for buried cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average outside structure cost for buried cable the cost of placing one sheath of cable (by trenching, plowing, or whatever method is used). Please include in the per foot average outside structure cost for buried cable only the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run. The initial capital outlay for the physical material of the buried cable itself, the capitalized cost for the labor and material required for splicing, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to buried cable, except those specifically defined above as outside plant structure costs, are reported in columns H and G on tables III and IV, respectively.

38. In column G on table II, please indicate the per foot incremental cost for a second sheath of cable that is installed simultaneously with the first sheath of cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot incremental cost for buried cable only the capitalized incremental labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run. The initial capital outlay for the physical material of the buried cable itself, the capitalized cost for the labor and material required for splicing, the capitalized cost for supplies, delivery, provisioning, and any other capitalized costs directly attributable to buried cable, except those specifically defined above as outside plant structure costs, are reported in columns H and G on tables III and IV, respectively.

VI. Cable Cost Data

A. Copper Cable Cost Data

39. We request that you report on table III, labeled "Copper Cable Cost," cable cost data on copper feeder and distribution cable. We request that ILECs that report separate outside plant structure and cable costs for each different project and CLECs submit a separate table III for each project on which they report cost data on copper cable. We request that ILECs that report outside plant structure and cable costs for all projects in the geographic region of a central office submit a separate table III for each central office on which they report cost data on copper cable.

40. In the space provided at the top of table III, please identify the name of your company.

41. In the space provided immediately below the space provided for the name of your company at the top of table III, please identify the specific authorization number or the project authorization number of the particular project(s) on which you report cost data on copper cable.

42. In the space provided immediately below the space provided for the specific or project authorization number on table III, please identify the cities or towns and the state(s) associated with the cities or towns that together make up the geographic region of the particular project(s) on which you report copper cable cost data. For the particular project(s), in columns A-H on table III, please report the cost data that we describe below.

43. In column A on table III, please identify the CLLI codes for each ILEC switch located in the geographic region represented by the cities or towns that you identify on table III. If the respondent is an ILEC that reports separate outside plant structure and cable costs for each different project or a CLEC, and if the level of outside plant structure and cable costs varies within a geographic region, please identify on separate rows in column A the CLLI codes associated with each area within that region that has separately identifiable outside plant structure and cable costs. In columns F-H, we request that you report copper cable costs for each different feeder, distribution, or feeder and distribution cable size and cable gauge combination in the geographic region, or in each area within the geographic region. Accordingly, in column A, please set forth the CLLI codes for the geographic region, or for each area within the geographic region, on as many consecutive rows as the number of different copper feeder, copper distribution, or copper feeder and distribution cable size and gauge combinations in the region, or in each area. For example, if your company uses 600 pair of 26 gauge copper cable for feeder cable, 400 pair of 26 gauge copper cable for feeder and distribution cable, and 400 pair of 24 gauge copper cable for distribution cable in the area defined by CLLI codes 77777778 and 77777779, you enter "77777778, 77777779" on three consecutive rows in column A.

44. In column B on table III, please indicate the total project outside plant structure and cable cost for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A.

45. In column C on table III, please identify the number of lines per square mile in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. The number of lines should reflect all lines that are in service, including those that ILECs use to provide service and those that CLECs use to provide service.

46. In column D on table III, please identify the size of each copper distribution cable, feeder cable, or distribution and feeder cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of size for copper cable the number of pairs. Please set forth each copper cable size on as many consecutive rows in column B as the number of different gauges associated with that cable size in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. For example, if your company uses 600 pair of 26 gauge copper cable for feeder cable, 400 pair of 26 gauge copper cable for distribution and feeder cable, and 400 pair of 24 gauge copper for distribution cable in the area defined by CLLI codes 77777778 and 77777779, in column D you enter 400 on two consecutive rows and 600 on one row in the range of rows on which area "77777778, 77777779" is identified in column A.

47. In column E on table III, please identify the gauge of copper distribution cable, feeder cable, or distribution and feeder cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. If more than one gauge applies to

any of the copper cable sizes you identify in column D, please identify on separate rows in column E the gauges that apply to each cable size in column D. For example, if your company uses 400 pair of 26 gauge copper cable for distribution and feeder cable and 400 pair of 24 gauge copper cable for distribution cable in the area defined by CLLI codes 77777778 and 77777779, in column E you enter 24 and 26 on separate rows corresponding to those on which a cable size of 400 pairs is identified in column D and the area "77777778, 77777779" is identified in column A.

48. In column F on table III, please indicate the per foot average copper cable cost for each underground feeder, underground distribution, or underground feeder and distribution cable size and gauge combination in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average copper cable cost for underground cable the cost for one cable. Please include in the per foot average copper cable cost for underground cable the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing and placing and pulling cable, the capitalized cost for the engineering required to design a cable run, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except those specifically defined above as outside plant structure costs. Please exclude from the per foot average copper cable cost for underground cable the initial capital outlay for the physical material of SAIs, terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

49. In column G on table III, please indicate the per foot average copper cable cost for each aerial feeder, aerial distribution, or aerial feeder and distribution cable size and gauge combination in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average copper cable cost for aerial cable the cost for messenger strand. Please include in the per foot average copper cable cost for aerial cable the cost for one cable. Please include in the per foot average copper cable cost for aerial cable the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing and hanging cable, the capitalized cost for the engineering required to design a cable run, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except those specifically defined above as outside plant structure costs. Please exclude from the per foot average copper cable cost for aerial cable the initial capital outlay for the physical material of SAIs, terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

50. In column H on table III, please indicate the per foot average copper cable cost for each buried feeder, buried distribution, or buried feeder and distribution cable size and gauge combination in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average copper cable cost for buried cable the cost for one cable. Please include in the per foot average copper cable cost for buried cable the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run.

For buried cable, the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run are reported in column F on table II. Please exclude from the per foot average copper cable cost for buried cable the initial capital outlay for the physical material of SAIs, terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

B. Fiber Cable Cost Data

51. We request that you report on table IV, labeled "Fiber Cable Cost," cable cost data on fiber feeder and distribution cable. We request that ILECs that report separate outside plant structure and cable costs for each different project and CLECs submit a separate table V for each project on which they report cost data on fiber cable. We request that ILECs that report outside plant structure and cable costs for all projects in the geographic region of a central office submit a separate table IV for each central office on which they report cost data on fiber cable.

52. In the space provided at the top of table IV, please identify the name of your company.

53. In the space provided immediately below the space provided for the name of your company at the top of table IV, please identify the specific authorization number or the project authorization number of the particular project(s) on which you report cost data on fiber cable.

54. In the space provided immediately below the space provided for the specific or project authorization number on table IV, please identify the cities or towns and the state(s) associated with the cities or towns that together make up the geographic region of the particular project(s) on which you report fiber cable cost data. For the particular project(s), in columns A-G on table IV, please report the cost data that we describe below.

55. In column A on table IV, please identify the CLLI codes for each ILEC switch located in the geographic region represented by the cities or towns that you identify on table IV. If the respondent is an ILEC that reports separate outside plant structure and cable costs for each different project or a CLEC, and if the level of outside plant structure and cable costs varies within a geographic region, please identify on separate rows in column A the CLLI codes associated with each area within that region that has separately identifiable outside plant structure and cable costs. In columns E-G, we request that you report fiber cable costs for each different feeder, distribution, or feeder and distribution cable size in the geographic region, or in each area within the geographic region. Accordingly, in column A, please set forth the CLLI codes for the geographic region, or for each area within the geographic region, on as many consecutive rows as the number of different fiber feeder, distribution, or feeder and distribution cable sizes in the region, or in each area. For example, if your company uses 12 strand, 18 strand, and 24 strand fiber cable for feeder cable in the area defined by CLLI codes 77777778 and 77777779, you enter "77777778, 77777779" on three consecutive rows in column A.

56. In column B on table IV, please indicate the total project outside plant structure and cable cost for buried feeder and distribution cable, underground feeder and distribution cable, and aerial feeder and distribution cable in the geographic region, or in each area within the geographic

region for which you separately identify CLLI codes in column A.

57. In column C on table IV, please identify the number of lines per square mile in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. The number of lines should reflect all lines that are in service, including those that ILECs use to provide service and those that CLECs use to provide service.

58. In column D on table IV, please identify on separate rows the size of each fiber feeder, distribution, or feeder and distribution cable in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please use as the measure of size for fiber cable the number of strands.

59. In column E on table IV, please indicate the per foot average fiber cable cost for each underground feeder, underground distribution, or underground feeder and distribution cable size in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average fiber cable cost for underground cable the cost for one cable. Please include in the per foot average fiber cable cost for underground cable the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing and placing and pulling cable, the capitalized cost for the engineering required to design a cable run, and the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except those specifically defined above as outside plant structure costs. Please exclude from the per foot average fiber cable cost for underground cable the initial capital outlay for the physical material of SAIs, DLCs and other terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

60. In column F on table IV, please indicate the per foot average fiber cable cost for each aerial feeder, aerial distribution, or aerial feeder and distribution cable size in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average fiber cable cost for aerial cable the cost for messenger strand. Please include in the per foot fiber cable cost for aerial cable the cost for one cable. Please include in the per foot average fiber cable cost for aerial cable the initial capital outlay for the physical material of the cable itself, the capitalized cost for the labor and material required for splicing and hanging cable, the capitalized cost for the engineering required to design a cable run, and the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except those specifically defined above as outside plant structure costs. Please exclude from the per foot average fiber cable cost for aerial cable the initial capital outlay for the physical material of SAIs, DLCs and other terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

61. In column G on table IV, please indicate the per foot average fiber cable cost for each buried feeder, buried distribution, or buried feeder and distribution cable size in the geographic region, or in each area within the geographic region for which you separately identify CLLI codes in column A. Please include in the per foot average fiber cable cost for buried cable the cost for one cable. Please include in the per foot average fiber cable cost for buried cable the initial capital outlay for the

physical material of the cable itself, the capitalized cost for the labor and material required for splicing, the capitalized cost for supplies, delivery, provisioning, taxes, and any other capitalized costs directly attributable to cable, except the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling cable, and designing a cable run. For buried cable, the capitalized labor, engineering, and material costs for pushing pipe, placing and pulling buried cable, and designing a cable run are reported in column E on table II. Please exclude from the per foot average fiber cable cost for buried cable the initial capital outlay for the physical material of SAIs, DLCs and other terminals, and pedestals, the capitalized cost for the labor, material, and engineering required for installing these assets, and the capitalized cost for supplies, delivery, provisioning, right of way fees, taxes, and any other capitalized costs directly attributable to these assets.

VII. Submitting the Information

62. We request that you submit the outside plant structure and cable cost data on tables formatted identically to tables I through IV. Please submit these data on these tables in hard copy and on a 3.5" computer disk in Excel 4.0 or 5.0 format in accordance with the instructions that we set forth below. Please do not insert, delete, or move any rows, columns, or text other than those that are necessary for a complete response. Please do not enter dollar signs or the unit of measure. Please indicate dollar values by entering decimal numbers showing the number of dollars to the left of the decimal point and the number of cents to the right of the decimal point. For example, you indicate an average cost for conduit of five dollars and 25 cents per foot by entering "5.25." Please indicate values other than dollar values by entering whole numbers with all of the necessary digits. For example, you indicate the density for the geographic region of a central office that has 8,000 lines per square mile by entering "8000" (not "8" or "80" or "8000.00" or "8000 lines"). Please identify a "not applicable" response by entering "NA" in the appropriate row and column. Please explain each such response on a separate sheet of paper. You may obtain a complete set of these tables in Excel 4.0 format from the Commission's web site at http://www.fcc.gov/ccb/universal_service/highcost.html#determine. If you have questions regarding the data that we request, please contact Richard J. Kwiatkowski of the Accounting Policy Division at (202) 418-1383.

63. We also request that you explain and document fully the data, assumptions, and methodologies on which you base the costs set forth on the data tables for outside plant structure and cable. Please submit, as part of this documentation, worksheets showing the data and the calculations that underlie these estimates.

64. Please file a signed original and a complete paper copy of the information that we request and a complete copy of the information in electronic format with the Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W., Room TW-A325, Washington, DC 20554. Please submit two complete paper copies of the information, and two complete copies of the information in electronic format, to Sheryl Todd, Accounting Policy Division, Common Carrier Bureau, Federal Communications Commission, 2100 M Street, N.W., Room 8611, Washington, DC 20554. Please submit one paper copy and one copy of the information in electronic format to the Commission's copy contractor, International Transcription Service, 1231 20th Street, N.W., 8th Floor, Washington, DC 20036.

65. Confidential Information. If you consider a portion of the information that you submit

in response to this request confidential commercial or financial information, you should comply with section 0.459 of the Commission's rules[12] and should observe the following procedure: complete the entire request with the exception of the specific information that you consider confidential information. You should file and distribute this expurgated version in accordance with section 0.459 of the Commission's rules and the instructions set forth below for submitting the data. You then should duplicate the filed computer disks and paper copies, add the confidential data, and return one full confidential copy to Richard J. Kwiatkowski, Competitive Pricing Division, Common Carrier Bureau, Federal Communications Commission, 1919 M Street, NW, Room 518-H, Washington, DC 20554. You should mark "Confidential" each confidential disk and paper copy. In addition, you should file the confidential disks and paper copies together with a completed copy of the "Designation of Confidential Information" form set forth in Attachment 1. An authorized corporate officer or agent must sign the "Designation of Confidential Information" form. The "Designation of Confidential Information" form must list by paragraph number of this request all of the data responses considered confidential commercial or financial information. For each such response, indicate the reason for withholding the information from public inspection, and the facts on which those reasons are based. File and distribute copies of the "Designation of Confidential Information" form with the expurgated data response, in accordance with the instructions set forth below for submitting the data.

[12] *See* 47 C.F.R. § 0.459. *See also* Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, *Protective Order*, CC Docket Nos. 96-45, 97-160, DA 98-1490 (rel. July 27, 1998) (explaining the manner in which confidential information is treated in this proceeding).