=Net Plant in Service		$4,000,000,000.00	$4,000,000,000.00
Tax Carrying Charge		6.25%	6.25%
Return			
Return Authorized		11.25%	11.25%
Total Carrying Charges		42.50%	35.00%
Allocation of Annual Carrying Costs			
Space Occupied by Cable		1.0	1.0
/Total Useable Space		13.50	13.50
Charge Factor		7.41%	7.41%
Maximum Rate			
Net Investment Per Bare Pole		$76.00	$76.00
*Carrying Charges		42.50%	35.00%
Carrying Cost	$	32.30	$ 26.60
*Charge Factor		7.41%	7.41%
=MAXIMUM RATE		**$2.39**	**$1.97**

DATA ENTRY AND SOURCE (ARMIS)		
Gross Investment in Pole Plant	$100,000,000.00	$100,000,000.00
Gross Investment in Total Plant	$10,000,000,000.00	$10,000,000,000.00
Depreciation Reserve for Pole Plant	$50,000,000.00	$50,000,000.00
Depreciation Reserve for TPIS	$5,000,000,000.00	$5,000,000,000.00
Pole Maintenance Expense	$1,000,000.00	$1,000,000.00
Depreciation Rate for Poles	5.00%	5.00%
Administrative Expense	$400,000,000.00	$400,000,000.00
Taxes	$250,000,000.00	$250,000,000.00
Accumulated Deferred Taxes	$1,000,000,000.00	$1,000,000,000.00
Accumulated Deferred Taxes (Internal Record Proffer)		
Accumulated Deferred Taxes (Prorated to Poles)	$10,000,000.00	$10,000,000.00
Overall Rate of Return (Last Rate Case)	11.25%	11.25%
Number of Poles	500,000	500,000

EXHIBIT 4

Depreciation Rate

Introduction

The FCC pole formula is most often applied by "grossing" up the pole depreciation rate (by the ratio of gross to net pole investment) for application to net. This is appropriate if the applied depreciation rate has been derived on whole plant.

Where, however, the applied depreciation rate has been developed through remaining life and remaining cost, the applied depreciation rate should not be grossed up.

Demonstration

An example from Entergy is offered:

In the attached derivation of a 3.428% EGS-proposed applied rate for Account 364, the calculation is:

[Gross Plant -(Depreciation Reserve/Gross Plant)-Net Salvage]/Remaining Life=Rate
where all figures in numerator are stated as percentages.

Depreciation Reserve/Gross Plant, stated as percentage is:
117,972,407/249,952,372=47.2%

[100%-(47.2%)-(-30%)]/241.5]=3.428%

The derived figure 3.428% when applied to the net plant balance (249,952,372-117,972,407) will yield the permitted depreciation expense ($4,524,273) on remaining cost.

However, if the 3.428% figure is grossed up by the ratio of gross to net pole investment (1/.528), the grossed up amount of 6.49% will yield a depreciation expense ($8,565,500) which is above the authorized amount.

Conclusion

The proper application of the formula requires that depreciation rates derived on remaining life and remaining cost must be applied directly to net investment in poles, without being grossed up.

Depreciation rates developed on whole life and original cost would continue to be grossed up for application to net investment in poles.

Comparison of Proposals for Curve Shape, Life, and Net Salvage Parameters for EGS Mass Property Accounts

	Acct.	Description	Dec. 31, 1995 Balance	Dec. 31, 1995 Book Reserve	Current				EGS-Proposed				Staff-Proposed						
					Curve	NS %	ARL	Rate	Curve	NS %	ARL	Rate	Curve	NS %	ELG ARL.	ALG ARL.	ELG	ALG	Rate
	350.2	Land Rights	61,184,224	19,267,677	Forecst	0%	30.80	2.170%	R5-65	0%	48.15	1.422%	R3-65	0%	43.999	50.192		x	1.364%
	352	Struct. and Improv.	8,637,662	4,710,625	S6-33	0%	24.00	3.130%	R3-45	-5%	25.62	1.970%	R3-45	-5%	25.620	28.560		x	1.767%
T	353	Station Equipment	409,400,556	210,913,942	R4-37	-5%	26.50	2.850%	R2.5-43	-5%	23.45	2.281%	S1-45	5%	24.068	29.358		x	1.481%
R	354	Towers and Fixtures	80,300,632	48,807,753	R5-33	0%	22.70	3.080%	R5-45	-5%	24.53	1.803%	S2-45	-5%	23.233	26.978		x	1.599%
A	355	Poles and Fixtures	135,343,158	61,798,957	S6-45	-15%	34.80	2.600%	R4-50	-25%	31.06	2.554%	R2-50	-25%	29.361	35.514		x	2.234%
N	356	OH Conductors/Dev.	137,135,446	74,102,015	S6-40	5%	40.00	2.210%	R4-55	-20%	33.91	1.945%	R3-60	-20%	37.221	41.771		x	1.579%
S	357	UG Conduit	7,647	7,482	R3-20	0%	15.10	2.540%	R3-60	0%	40.38	0.053%	R3-60	0%	40.380	46.020		x	0.047%
	358	UG Conductors/Dev.	248,527	251,965	R3-20	0%	9.60	4.430%	R2.5-40	-5%	18.77	0.206%	OVERRECOVERY OF INVESTMENT						0.000%
	359	Roads and Trails	363,682	311,624	Forecst	0%	30.80	1.310%	R5-65	0%	32.50	0.440%	R5-65	0%	32.500	33.750		x	0.424%
	360.2	Land Rights	14,338,541	4,014,852	Forecst	0%	24.10	2.060%	R5-50	0%	33.04	2.179%	R3-50	0%	31.008	35.147		x	2.049%
	361	Struct. and Improv.	1,066,840	761,131	R5-45	0%	23.40	1.480%	S2-45	-5%	21.63	1.556%	S2-45	-5%	21.630	23.330	x		1.556%
	362	Station Equipment	108,730,486	50,371,848	S6-34	25%	22.00	1.690%	R2-34	15%	17.31	2.234%	S1-35	15%	17.644	20.612	x		2.192%
D	364	Poles, Towers, Fixt	249,852,372	117,972,407	R2.5-32	-25%	24.10	4.160%	R2.5-40	-30%	24.15	3.428%	S1-44	-30%	26.135	31.983	x		3.168%
I	365	OH Conductors/Dev.	214,815,402	95,897,415	R2.5-32	-10%	25.10	3.550%	S1-40	10%	23.32	1.945%	S1-44	10%	26.061	32.008	x		1.740%
S	366	UG Conduit	40,184,316	9,264,229	R3-55	-5%	49.20	1.810%	R3-60	0%	43.88	1.754%	R3-60	0%	43.880	50.060		x	1.587%
T	367	UG Conductors/Dev.	117,775,787	28,971,293	R4-31	0%	26.40	3.110%	R2.5-40	-5%	26.33	3.054%	S1-40	-5%	25.084	31.418		x	2.559%
R	368	Line Transformers	231,640,408	77,550,811	R2.5-36	25%	28.00	1.570%	S0-39	0%	21.86	3.043%	S0-39	0%	21.860	28.750	x		3.043%
I	369	Services	104,944,659	44,980,666	R4-34	-20%	24.50	3.690%	R5-36	-10%	23.10	2.931%	S4-36	-10%	22.834	23.702	x		2.965%
B	370	Meters	64,456,010	27,365,508	S2-30	0%	21.80	3.100%	R2.5-33	0%	18.42	3.124%	R2.5-33	0%	18.420	20.850	x		3.124%
	371	Inst. on. Cus. Premises	2,028,065	146,082	R2.5-36	0%		2.080%	S0-39	0%	23.94	3.876%	S0-39	0%	23.940	36.140		x	2.568%
	372	Leased Property	382,533	316,714	R2.5-36	25%		2.080%	S0-39	0%	18.18	0.946%	S0-39	0%	18.180	21.490		x	0.801%
	373	Street Lights/ Signals	61,633,218	31,386,676	R1.5-29	-25%	21.20	4.750%	R2.5-40	20%	23.74	1.225%	R1.5-40	20%	22.710	29.039		x	1.001%
	390	Struct. and Improv.	49,252,846	17,772,944	R3-33	0%	25.30	2.620%	R4-40	0%	26.83	2.382%	S3-40	0%	26.488	28.234	x		2.413%
	391.1	Office Furn./Equip.	7,359,903	2,158,398	S0.5-26	5%	22.20	3.920%	R2.5-26	5%	13.39	4.905%	R2.5-26	5%	13.390	15.010		x	4.575%
G	391.2	Info. Sys. Equip.	5,314,598	1,047,301	-----	---		---	R2.5-10	0%	6.57	12.221%	R2.5-10	0%	6.570	7.250		x	11.075%
E	391.3	Data Handling Equip.	2,991,321	1,678,825	-----	---		---	R4-5	0%	1.79	24.512%	R4-5	0%	1.790	0.700		x	62.681%
N	392	Transportation Equip.	1,252,456	988,118	R3-25	10%	22.50	3.920%	R5-20	0%	11.32	1.864%	R5-20	0%	11.320	11.610	x		1.864%
E	393	Stores Equip.	1,830,561	609,158	R3-24	0%	19.40	4.280%	R3-25	0%	14.30	4.666%	R3-25	0%	14.300	15.740	x		4.666%
R	394	Tools, Shop, Gg. Equip	4,120,116	1,159,341	R2-22	0%	16.30	4.810%	R5-20	0%	10.42	6.896%	R5-20	0%	10.420	10.590	x		6.896%
A	395	Lab Equipment	9,116,563	2,413,382	R3-26	0%	21.70	4.180%	R5-22	0%	14.77	4.978%	R5-22	0%	14.720	15.090	x		4.998%
L	396	Power Oper. Equip.	2,017,954	1,222,845	R4-15	5%	12.00	7.700%	R3-16	0%	6.91	5.702%	R3-16	0%	6.910	7.340	x		5.702%
	397	Comm. Equipment	59,913,598	24,640,353	S4-26	0%	21.70	3.430%	S3-19	0%	9.27	6.351%	S3-19	0%	9.270	9.930	x		6.351%
	398	Misc. Equipment	1,210,922	476,686	R3-28	0%	23.20	3.400%	R5-24	0%	12.72	4.767%	R5-24	0%	12.720	13.090	x		4.767%

Attachment CHG - 1
Page 1 of 1

EXHIBIT 5

Case No.: U-10831
Witness: G.R. Spence/Legal
Requestor: MCTA
Question No.: MTDE1.32/32

Question: 32. Describe fully the methodology by which all rental rates for street lights, alarm system equipment or any other that is neither yours, nor cable television operator equipment attached to poles owned or jointly used was calculated or determined. Please identify and provide with your answer all data and documents of any kind relied upon in supplying your answer to this request.

Answer: The rental rates for non-attaching parties are negotiated on a case-by-case basis. Charges for street lights and traffic signals are billed pursuant to MPSC approved tariffs and under municipal agreements. Rental rates for attaching parties referred to in Question 32 are based on the MPSC approved attachment rate.

Objection: Detroit Edison objects to the production of the requested information on the grounds that it is not relevant and will not reasonably lead to the discovery of admissible evidence and/that such information is confidential and proprietary business information.

EXHIBIT 6

10831-MCTA-CP-32 Supplement #1

Question:

32. Describe fully the methodology by which all rental rates for street lights, alarm system equipment or any other that is neither yours, nor cable television operator equipment attached to poles owned or jointly used was calculated or determined. Please identify and provide with your answer all data and documents of any kind relied upon in supplying your answer to this request.

Response:

32. The rental rates for the items described were in most instances determined at the headquarters where the attachment was to take place and would be very hard to locate among the records that would still be available.

31. Amended. As stated in the original response, these systems were handled at the local level. Therefore, they do not follow the same methodology for billing. I would say they are not cost-based rates; rather they would be described as market-based rates.

William C. Bigcraft, being first duly sworn, states that the above response is true and correct to the best of his knowledge, information or belief.

William C. Bigcraft

Sworn before me and subscribed in my presence this 28th day of June, 1995.

Margaret A Prestler

Margaret A. Prestler
Notary Public, Jackson County, MI
My Commission Expires:
3/31/97

EXHIBIT 7

Case No.: 10831
Exhibit No: A-9 KER-2
Page No.: 1 of 1
Witness: K.E. Roehrig

Illustrative

Line No.

Annual Conduit Rental Rate

Conduit Rental Rate = {(Investment * Carrying Charge) + Depreciation Expense} / Fill Factor

Investment = Reproduction Cost Depreciated
= Reproduction Cost * Remaining Life / (Age + Remaining Life)

		Source	
Reproduction Cost ($/ft.)		KER-2WP1	$15.09
Remaining Life		U-10348	42.00
Avg. Age (yrs.)		KER-2WP1	24.20
Investment ($/ft.)		(Line 6* Line 7)/ (Line 7+Line 8)	$9.57
Carrying Charge		Exhibit KER-3	12.628%
Conduit Fill Factor = Total Occupancy in Duct / Total Duct Capacity			
Total Occupancy in Duct (miles)			
Miles of Subtrans Conductors			1,777.9
Miles of Distribution Conductors			2,218.1
Miles of Duct Leased to Others			24.5
Total Occupancy			4,020.5
Total Duct Capacity (miles)			9,246.0
Conduit Fill Factor		(Line 19/21)	43.48%

Annual Rental Rate Computation

Investment ($/ft.)	Line 9	$9.57
Carrying Charge	Exhibit KER-3	12.628%
Depreciation ($/ft)	U-10348 (Line 6 * 1.64%)	$0.25
Annual Cost of Conduit	(Line 26 * Line 27) + Line 28	$1.46
Conduit Fill Factor	Line 23	43.48%
Annual Rental Rate ($/ft.)	Line 29 / Line 30	$3.36

EXHIBIT 8

Sample Conduit Rate Calculation: Quarter-Duct Convention

MAX.CONDUIT RATE	
Net Investment Per Conduit Foot	
Gross Investment in Conduit	$189,043,000.00
-Depreciation Reserve for Conduit	$42,852,401.00
-Accumulated Deferred Taxes	($4,054,675.72)
=Net Investment in Conduit	$150,245,274.72
/Conduit Feet (see Data Entry for Calc)	10,095,612
=Net Investment per Conduit Foot	$14.88
Carrying Charges	
Maintenance	
Conduit Expenses Chargeable to Maintenance	$551,000.00
/Net Investment in Conduit Plant	$150,245,274.72
=Maintenance Carrying Charge	0.37%
Depreciation	
Annual Depreciation Rate for Conduit	1.70%
Gross Investment in Conduit	$189,043,000.00
/Net Investment in Conduit	$150,245,274.72
=Gross/Net Adjustment	125.82%
Deprec Rate Applied to Net Conduit	2.14%
Administrative (6710 and 6720 Only)	
Administrative Expenses	$163,706,000.00
Total Plant In Service	$4,699,681,000.00
-Depreciation Reserve for TPIS	$2,133,143,576.00
-Accumulated Deferred Taxes	($100,800,783.00)
=Net Plant in Service	$2,667,338,207.00
Administrative Carrying Charge	6.14%
Taxes	
Normalized Tax Expense	$205,692,000.00
Total Plant In Service	$4,699,681,000.00
-Depreciation Reserve for TPIS	$2,133,143,576.00
-Accumulated Deferred Taxes	($100,800,783.00)
=Net Plant in Service	$2,667,338,207.00
Tax Carrying Charge	7.71%
Return	
Authorized Return	11.25%
Total Carrying Charges (6710 and 6720 Admin Only)	27.60%
Allocation of Annual Carrying Costs	
Average Number Of Ducts per KM/Mile/Foot	6.44
Space Occupied by Cable	1
Less Maintenance and/or Municipal Set Aside	0
Adjusted Average of Ducts Available For Use	6.44
Full Duct Charge Factor	0.1552551
Half Duct Convention	0.25
Charge Factor	3.88%

Sample Conduit Rate Calculation: Quarter-Duct Convention

Maximum Rate (Current Formula)	
Net Investment per Conduit Foot	$14.88
*Carrying Charges	27.60%
=Annual Carrying Cost	$4.11
*Charge Factor	3.88%
=MAXIMUM RATE	**$0.16**
DATA ENTRY AND SOURCE	
Gross Investment in Conduit	$189,043,000.00
Gross Investment in Total Plant	$4,699,681,000.00
Depreciation Reserve for Conduit	$42,852,401.00
Depreciation Reserve for TPIS	$2,133,143,576.00
Conduit Maintenance Expense	$551,000.00
Administrative Expenses	
6710 (Executive and Planning)	$6,661,000.00
6720 (General and Administrative)	$163,706,000.00
Total Administrative Expense (6710 and 6720)	$170,367,000.00
Annual Depreciation Rate for Conduit	1.70%
Taxes	$205,692,000.00
Accumulated Deferred Taxes	($100,800,783.00)
Acc. Def. Taxes for Conduit (Pro Rata)	($4,054,675.72)
Overall Rate of Return	11.25%
Duct/Conduit Plant In Service	
Conduit Trench KM	3,077.00
Total Duct Km	19,819.00
Total Conduit Miles	1,912.05
Total Duct Miles	12,315.53
Total Conduit Feet	10,095,612.38
Total Duct Feet	65,025,980.45
Duct Per Km/Mile/Foot	6.44

EXHIBIT 9

Proposed Revisions To Commission's Pole Attachment Rules

§1.1401 Purpose. - The rules and regulations contained in Subpart J of this part provide complaint and enforcement procedures to ensure that telecommunications carriers and cable system operators have nondiscriminatory access to utility poles, ducts, conduits, and rights-of-way on rates, terms, and conditions that are just and reasonable.

§1.1402 Definitions.

(a) The term "utility" means any person that is a local exchange carrier or an electric, gas, water, steam, or other public utility, and who owns or controls poles, ducts, conduits, or rights-of-way used, in whole or in part, for any wire communications. Such term does not include any railroad, any person that is cooperatively organized, or any person owned by the Federal Government or any State.

(b) The term "pole attachment" means any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility.

(c) The term "usable space" means the space on a utility pole above the minimum grade level which can be used for the attachment of wires, cables, and associated equipment.

(d) The term "complaint" means a filing by a cable television system operator, a cable television system association, a utility, an association of utilities, a telecommunications carrier, or an association of telecommunications carriers alleging that it has been denied access to a utility pole, duct, conduit, or right-of-way in violation of this subpart and/or that a rate, term, or condition for a pole attachment is not just and reasonable.

(e) The term "complainant" means a cable television system operator, a cable television system association, a utility, an association of utilities, a telecommunications carrier, or an association of telecommunications carriers who files a complaint.

(f) The term "respondent" means a cable television system operator, a utility, or a telecommunications carrier against whom a complaint is filed.

(g) The term "conduit" shall refer to an underground enclosure, installed for the principal purpose of containing and protecting multiple ducts used for wire communications and other purpose.

(h) The term "duct" shall refer to the tubular enclosures used to contain and protect conductors used communications and other purposes placed within underground conduits.

(~~g~~i) The term "State" means any state, territory, or possession of the United States, the District of Columbia, or any political subdivision, agency, or instrumentality thereof.

(~~h~~j) For purposes of this subpart, the term "telecommunications carrier" means any provider of telecommunications services, except that the term does not include aggregators of telecommunications services (as defined in 47 USC §226) or incumbent local exchange carriers (as defined in 47 USC §251(h)).

* * *

§1.1404 Complaint.

(a) The complaint shall contain the name and address of the complainant, name and address of the respondent, and shall contain a verification (in the form in §1.721(b)), signed by the complainant or officer thereof if complainant is a corporation, showing complainant's direct interest in the matter complained of. Counsel for the complainant may sign the complaint. Complainants may join together to file a joint complaint. Complaints filed by associations shall specifically identify each utility, cable television system operator, or telecommunications carrier who is a party to the complaint and shall be accompanied by a document from each identified member certifying that the complaint is being filed on its behalf.

(b) The complaint shall be accompanied by a certification of service on the named respondent, and each of the Federal, State, and local governmental agencies that regulate any aspect of the services provided by the complainant or respondent.

(c) In a case where it is claimed that a rate, term, or condition is unjust or unreasonable, the complaint shall contain a statement that the State has not certified to the Commission that it regulates the rates, terms and conditions for pole attachments. The complaint shall include a statement that the utility is not owned by any railroad, any person who is cooperatively organized or any person owned by the Federal Government or any State.

(d) The complaint shall be accompanied by a copy of the pole attachment agreement, if any, between the cable system operator or telecommunications carrier and the utility. If there is no present pole attachment agreement, the complaint shall contain:

(1) a statement that the utility uses or controls poles, ducts or conduits used or designated, in whole or in part, for wire communication; and

(2) a statement that the cable television system operator or telecommunications carrier currently has attachments on the poles, ducts, conduits, or rights-of-way.

(e) The complaint shall state with specificity the pole attachment rate, term or condition which is claimed to be unjust or unreasonable.

(f) In any case, where it is claimed that a term or condition is unjust or unreasonable, the claim shall specify all information and argument relied upon to justify said claim.

(g) In a case where it is claimed that either a rate is unjust or unreasonable, or a term or condition is unjust or unreasonable and examination of such term or condition requires review of the associated rate, the complaint shall provide data and information in support of said claim. The data and information shall include, where applicable:

(1) The gross investment by the utility for pole lines or duct and conduit systems;

(2) The investment in crossarms and other items which do not reflect the cost of owning and maintaining poles, if available;

(3) The depreciation reserve from the gross pole line investment or gross duct and conduit system investment;

(4) The depreciation reserve from the investment in crossarms and other items which do not reflect the cost of owning and maintaining poles or duct and conduit systems, if available;

(5) The total number of poles, or total linear feet of duct and conduit systems: (i) owned; and (ii) controlled or used by the utility. If any of these poles are jointly owned, the complaint shall specify the number of such jointly owned poles and the percentage of each joint pole or the number of equivalent poles owned by the subject utility;

(6) The total number of poles or linear feet of duct and conduit which are the subject of the complaint;

(7) The number of poles or linear feet of duct and conduit included in (g)(6) of this section that are controlled or used by the utility through lease between the utility and other owner(s), and the annual amounts paid by the utility for such rental;

(8) The number of poles or linear feet of duct and conduit systems included in (g)(6) of this section that are owned by the utility and that are leased to other users by the utility, and the annual amounts paid to the utility for such rental;

(9) The annual carrying charges attributable to the cost of owning a pole or duct and conduit systems. These charges may be expressed as a percentage of the net pole or duct and conduit investment. With its pleading, the utility shall file a copy of the latest decision of the state regulatory body or state court which determines the treatment of accumulated deferred taxes if it is at issue in the proceeding and shall note the section which specifically determines the treatment and amount of accumulated deferred taxes;

(10) The rate of return authorized for the utility for intrastate service. With its pleading, the utility shall file a copy of the latest decision of the state regulatory body or state court which establishes this authorized rate of return if the rate of return is at issue in the proceeding and shall note the section which specifically establishes this authorized rate and whether the decision is subject to further proceedings before the state regulatory body or a court;

(11) The average amount of usable space per pole for those poles used for pole attachments (13.5 feet may be used for telephone company-owned poles and 16 feet may be used for electric utility poles in lieu of actual measurement, but may be rebutted). With respect to the average amount of usable space contained in a duct and conduit system, the attaching party shall be presumed to occupy one-fourth of one duct, but this presumption may be rebutted);

(12) Reimbursements received from CATV operators for nonrecurring costs; and

Data and information should be based upon historical or original cost methodology, insofar as possible. Data should be derived from ~~Form M~~ ARMIS, FERC 1, or other reports filed with state or federal regulatory agencies (identify source). Calculations made in connection with these figures should be provided to the complainant. Where the attachments involve ducts, conduits, or rights-of-way, in whole or in part, appropriate and equivalent data and information should be filed. The complainant shall also specify any other information and argument relied upon to attempt to establish that a rate, term, or condition is not just and reasonable.

(h) If any of the information required in (g) of this section is not provided to the cable television operator by the utility upon reasonable request, the cable television operator shall include a statement indicating the steps taken to obtain the information from the utility, including the dates of all requests. No complaint filed by a cable television operator shall be dismissed where the utility has failed to provide the information in (g) of this section after such reasonable request. A utility should supply a cable television system operator the information required in paragraph (g) of this section, along with the supporting pages from its FERC Form 1, ~~FCC Form M~~ ARMIS, or other report to a regulatory body, within 30 days of the request by the cable operator. (The cable operator, in turn, shall submit these pages with its complaint.) If the utility did not supply these pages to the cable operator in response to the information request, it shall supply this information in its response to the complaint.

(i) In cases where the utility's net investment in pole lines is negative (where the depreciation reserve from such investments exceeds gross investment), and where the Commission determines that the applicable pole attachment rate should not be set at the level at which the net pole investment was last at positive levels, it shall be incumbent upon the utility to show with credible evidence the portion of the depreciation reserve for pole line investment is attributable to the future costs of removal. In such cases, the applicable pole attachment rate shall be calculated by adjusting the depreciation reserve for pole line investment by (1) extracting the future costs of removal; (2) calculating the return element of the carrying charges on the pre-adjustment (net negative) pole-line investment; (3) eliminating the tax carrying charge component of the calculation.

(~~i~~j) The complaint shall include a brief summary of all steps taken to resolve the problem prior to filing. If no such steps were taken, the complaint shall state the reason(s) why it believed such steps were fruitless.

(~~j~~k) Factual allegations shall be supported by affidavit of a person or persons with actual knowledge of the facts, and exhibits shall be verified by the person who prepares them.

(~~k~~l) In a case where a cable television system operator or telecommunications carrier claims that it has been denied access to a pole, duct, conduit or right-of-way despite a request made pursuant to section 47 USC §224(f), the complaint shall be filed within 30 days of such denial. In addition to meeting the other requirements of this section, the complaint shall include the data and information necessary to support the claim, including:

(1) The reasons given for the denial of access to the utility's poles, ducts, conduits and rights-of-way;

(2) The basis for the complainant's claim that the denial of access is improper;

(3) The remedy sought by the complainant;

(4) A copy of the written request to the utility for access to its poles, ducts, conduits or rights-of-way; and

(5) A copy of the utility's response to the written request including all information given by the utility to support its denial of access. A complaint alleging improper denial of access will not be dismissed if the complainant is unable to obtain a utility's written response, or if the utility denies the complainant any other information needed to establish a prima facie case.

SUPPLEMENTAL DECLARATION OF NICHOLAS THEROUX

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Amendment of Rules and Policies Governing Pole Attachments	CS Docket No. 97-98

SUPPLEMENTAL DECLARATION OF NICHOLAS THEROUX

I Nicholas Theroux do hereby state:

1. I am Director of Network Development for Marcus Cable Operating Company ("Marcus"). Marcus, together with its affiliated companies and partnerships is the tenth largest cable television operator in the United States, operating in 18 states and serving approximately 1.2 million customers nationally. I have served in my present capacity at Marcus for 4-1/2 years, and have worked in the area of cable television engineering and construction for 27 years. I have participated in the design and construction of cable television and communications systems in more than 20 states. I submitted a Declaration in connection with the initial Comments of the National Cable Television Association and other cable television industry commenters in this proceeding concerning industry construction practices for the installation of underground communications facilities in conduits and ducts.

2. I understand that some of the utilities in this proceeding have stated that rates for duct/conduit occupancy should be priced on the basis of the utility's cost to replace or reproduce their conduit networks. In my experience, (which was set forth in detail in my initial Declaration), utilities very rarely replace ducts or conduit systems, and that this is not a reasonable basis on which to set prices for conduit occupancy. This is not to say that duct and

conduit capacity is static; it is not. The virtually ubiquitous use of multi-port innerduct in underground plant construction today has allowed for very dramatic expansion of duct capacity at a very low incremental cost.

3. Multi-chamber inner duct can be installed either in empty or occupied ducts. Where a lessee or owner of duct capacity wishes to replace existing communications conductors with new conductors, and to increase duct capacity in a given conduit system, one common industry construction practice is to use the conductors to be replaced to pull through new multi-chamber innerduct. This procedure is accomplished by tying the new innerduct to one end of the conductor that is to be removed in one manhole, while pulling the old cable conductor out of the duct from the other end. As the old cables are removed, in their place is inserted new multi-chamber innerduct, greatly expanding the capacity of that duct, in some cases by five- or six- fold.

4. I also understand that some members of the electric utility industry have asserted that fiber optic cable is heavier and implies that such conductors place a greater strain on the pole. Specifically, I understand that they have stated that fiber optic cable "weighs far more" than a 300-pound electric transformer can. I do not believe this to be the case.

5. Cable television attachments, particularly fiber conductors are by far the lightest attachments to the pole. Fiber conductors most commonly used in cable television construction today (96-strand fiber and smaller) is .59" in diameter and weighs 150 pounds per 1000 feet. (Even the largest fiber optic trunking cables typically used by cable (216-strand fiber) weigh only 200 pounds per 1000 feet.) I believe that a conservative estimate of the average span length for cable television facilities between utilities poles is 130 feet. Accordingly, the total

weight of a 96-strand .59" 130-foot fiber span is approximately 19 pounds, or less than ***one-fifteenth*** of the weight of the 300-pound transformer can in the electric industry's example.

6. Stated another way, 300 pounds of 96-strand .59" fiber (assuming a 130-foot span length) is distributed across between seven and eight poles, while the 300-pound electric transformer is attached to a single pole.

7. I have also learned that a number of utility pole owners are asking the Commission to adopt a rule that requires overlashed attachments to be subject to the same permitting requirements as initial contacts. This mirrors my experience. Even though some electric utilities (who themselves are telecommunications competitors) are now routinely requiring cable operators to follow this unreasonable procedure, I do not believe that there is any legitimate engineering or administrative need to do so. I believe that the purpose of this requirement is to delay the deployment of independently owned fiber optic networks. Indeed my company is currently upgrading its cable television system in a very large metropolitan area, primarily through overlashing fiber to existing strand and conductors connected to the poles of a large electric utility that is also a competitor in the market for telecommunications services.

8. While overlashes are routinely allowed in many areas without additional permits, the electric utility where this upgrade is taking place is requiring new permits for every pole to which Marcus currently is attached. Marcus, therefore, will be required to secure permits not only for the poles to which it seeks to overlash new conductors, but on every pole to which any modification of its facilities (necessitated by the fiber upgrade) will occur. In this regard, Marcus estimates that it will be forced to submit permit applications, and to pay for the associated engineering work, for approximately 144,000 poles over a 24-month period. The

electric industry never showed a concern for overlashes until cable operators began overlashing *fiber* instead of coaxial cable, and until electric companies set their sights on the commercial telecommunications market. Only then did pole owners find "problems" with overlashing practices that had been followed since the inception of the cable industry

9. As I have already pointed out, cable television conductors, particularly fiber conductors, are the lightest, smallest attachments on the pole. Any increased load that they bring to the pole is minimal, and as a practical matter, virtually never is the "straw that breaks the camel's back" by pushing an otherwise compliant pole into violation of applicable loading criteria. In other words, if a pole is already in compliance, only in the very rarest of circumstances will the cable television attachment push the pole into violation. Nonetheless, in connection with each overlash, Marcus is required to perform detailed and expensive engineering work prior to receiving utility clearance to attach to the pole.

10. While I believe that advance permitting for overlashes is unnecessary and wasteful as a general rule, the attachment practices of some electric utilities for their electrical facilities make it particularly so.

11. In a very large number of cases, after the cable operator has performed the pre-engineering work that the electric utility requires, and after the cable operator has been given permission to attach its facilities, and, finally after the cable operator has attached its facilities, the electric company will place additional attachments on the pole. While the pole remains in compliance with applicable loading requirements up to and through the attachment of the cable facilities, very frequently the subsequent attachment of ***electric*** facilities ***does*** "break the camel's

back" and push to pole into violation. Moreover, in addition to violating pole-loading criteria, these subsequently attached electric facilities likewise violate clearance requirements.

12. Even where there is no subsequent utility attachment that puts a pole into violation, I do not believe that there is any reason to require detailed engineering studies and advance permitting for overlashed attachments. The fact that electric utilities as a matter of course subsequently attach and place the poles into violation make all this work performed at the cable operator's expense at best a useless undertaking, and at worst a deliberate utility effort to delay the deployment of independently owned fiber optic networks and drive up the costs of their actual and potential competitors.

I declare under the penalty of perjury of the laws of the United States that the foregoing is true and correct.