

6 Bowdoin Square, 9th Floor
Boston, MA 02114
(857) 415-5130
alexander.w.moore@verizon.com

Alexander W. Moore
Associate General Counsel

RECEIVED



NOV 21 2019

Mass. Dept. of
Telecommunications & Cable

November 21, 2019

Shonda D. Green, Secretary
Department of Telecommunications and Cable
Commonwealth of Massachusetts
1000 Washington Street, Suite 600
Boston, MA 02118

**Re: Docket No. 18-3 – Investigation by the Department of
Telecommunications and Cable on its own Motion into Accounting
Practices and Recordkeeping of Telecommunications Carriers**

Dear Secretary Green:

Enclosed for filing in the above-referenced matter are the Further Comments of Verizon New England Inc.

Thank you for your attention to this matter.

Respectfully submitted,



Alexander W. Moore

cc: Service List

verizon✓

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND CABLE

Investigation by the Department of)	
Telecommunications and Cable on its own Motion)	
into Accounting Practices and Recordkeeping)	D.T.C. 18-3
of Telecommunications Carriers)	

FURTHER COMMENTS OF VERIZON NEW ENGLAND INC.

Verizon New England Inc., d/b/a Verizon Massachusetts (“Verizon MA”) submits these comments in response to the Further Request for Comment (“Further Request”) entered by the Department on October 22, 2019. The information provided below confirms that the use of cost data kept according to Generally Accepted Accounting Principles (“GAAP”) is fully compatible with the Massachusetts Formula for calculating pole attachment rates, would yield just and reasonable rates and would not cause “rate shock” or affect the public availability of the relevant data. Indeed, if Verizon MA’s pole attachment rates were calculated in the manner it has proposed – using GAAP-based cost data in the Massachusetts Formula and applying the FCC’s Implementation Rate Difference (“IRD”) – those rates would be *lower* than if they were calculated using data kept according to the FCC’s former Uniform System of Accounts (“USOA”). Thus, there is no basis for re-imposing outdated USOA requirements on Verizon MA and force it to incur the expense of maintaining two sets of books. Verizon MA’s responses to the Department’s questions follow.

How do the data items reported using FCC ARMIS Report 43-01 (or related FCC reporting tools) correspond to the components required to calculate pole attachment rates using the formula established in *Complaint & Request for Hearing of Cablevision of Boston Co.*, D.P.U./D.T.E. 97-82, Order at Table 1 (Apr. 15, 1998) ("Massachusetts Formula"), which is appended to this Request?

The data items reported by Verizon MA in FCC ARMIS Report 43-01, Table III, provide each of the components required to calculate Verizon MA's pole attachment rates using the Massachusetts Formula, other than those components that are subject to presumptions by the FCC. As explained in more detail below, Exhibits 1, 2, 4 and 5 attached hereto are sample calculations of the cable and telecom pole attachment rates pursuant to the Massachusetts Formula. All of the inputs in Exhibits 1 and 2 come from Verizon MA's Report 43-01, Table III, for Massachusetts for 2018, reporting GAAP-based data. The inputs in Exhibits 3 and 4 are the analogous data kept pursuant to USOA.

Which line items in FCC ARMIS Report 43-01 correspond to the specified line items from the defunct FCC Form M?

Exhibits 1, 2, 4 and 5 identify each line item in Report 43-01 that was used in the Massachusetts Formula in place of the old Form M inputs. So the exhibits show, for example, that line item 101 in Report 43-01 corresponds to line A, Total Gross Investment in Pole Plant, in the Massachusetts Formula. Likewise, line item 201 in Report 43-01 corresponds to line B, Accumulated Depreciation (Poles), in the Massachusetts Formula, and so on.

Is all necessary data for determining pole attachment rates using the Massachusetts Formula provided in FCC ARMIS Report 43-01, or is additional data necessary?

As noted above, Report 43-01, Table III, provides all of the necessary data for determining pole attachment rates using the Massachusetts Formula. The inputs for certain line items in the formula are supplied by standards or presumptions established by the FCC. These

include the five-percent multiplier for calculating the Net Investment in Appurtenance in line E,¹ the Rate of Return in line CC,² and the figures for Allocation of Usable Space (lines DD and EE in the cable formula and lines DD, EE, FF and GG in the telecom formula).³

What pole attachment rates are currently charged (if not uniform statewide, provide as much information as is feasible, such as the average, median, and range) by pole-owning telecommunications providers in Massachusetts?

Verizon MA currently charges \$6.32 annually for a cable attachment to a solely-owned pole and \$3.16 for a jointly-owned pole statewide. The current rate for a telecom attachment to a solely-owned pole is \$10.06 (\$5.03 for a jointly-owned pole) statewide.

What would these rates be if the pole-owning telecommunications providers used GAAP-derived inputs in the Massachusetts Formula? What would these rates be if the pole-owning telecommunications providers used Uniform System of Accounts ("USOA")-derived inputs in the Massachusetts Formula?

Verizon MA's current rates, above, were established in 2010 based on even older data. To provide a more timely and useful comparison, Verizon MA has calculated what its attachment rates for solely-owned poles would be if it used GAAP-based inputs from 2018, the most recent year for which data is available, in the Massachusetts Formula, adjusted by the IRD. Verizon MA also calculated what its rates would be if it used USOA-based inputs, also from

¹ See *Amendment of Rules and Policies Governing Pole Attachments*, FCC 00-116, CS Docket No. 97-98, Report and Order (rel. April 3, 2000), ¶¶ 31, 32. The 5% multiplier applies to LECs. The 15% figure used in Table 1 in DPU/DTE 97-82 applies to electric companies, such as the respondent in that case, Boston Edison Company. See *id.* and footnote 129 ("The two factors reflect the differences between LECs' and electric utilities' investment in crossarms and other non-pole investment that is recorded in the pole accounts.")

² See *In the Matter of: Connect America Fund, ETC Annual reports and Certifications and Developing a Unified Intercarrier Compensation Regime*, FCC 16-33, WC Docket No. 10-90, WC Docket No. 14-58, CC Docket No. 01-92, Report and Order, Order and Order on Reconsideration and Proposed Notice of Further Rulemaking (rel. March 3, 2016), ¶ 326 (establishing 5-year transition schedule reducing the rate of return for incumbent LECs by 25 basis points annually).

³ See 47 C.F.R. § 1.1409(c) (rebuttable presumption of five attaching entities, on average, on poles in urbanized service areas) and § 1.1410 (rebuttable presumptions regarding space used per attachment, the amount of usable space, the amount of unusable space and pole height).

2018, in the Massachusetts Formula. The resulting rates are shown below. (Rates for jointly-owned poles would be half as much in each case.)

Hypothetical Massachusetts Pole Attachment Rates using 2018 Data

<u>Accounting Methodology</u>	<u>Cable Rate</u>	<u>Telecom Rate</u>
GAAP (with IRD)	\$6.80	\$6.79
USOA	\$9.33	\$9.34

Notably, both the cable rate and the telecom rate calculated using GAAP-based inputs would be substantially lower than the hypothetical USOA-based rates.

The calculation of the cable rate using GAAP-based inputs in the Massachusetts Formula is shown in Exhibit 1. The calculation of the telecom rate using GAAP-based inputs is shown in Exhibit 2. Exhibit 3 shows the data used in the Report 43-01, Table III, for Massachusetts that Verizon MA filed with the FCC for 2018, reporting GAAP-based data. Exhibits 4 and 5 show calculation of the cable and telecom rates, respectively, using USOA-based inputs, and Exhibit 6 shows Report 43-01, Table III, for 2018 if completed using USOA-based data.⁴

The cable and telecom IRDs were calculated consistent with the *Accounting Order* and the FCC's regulation at 47 C.F.R. § 1.1409(g).⁵ For the cable rate IRD, Verizon MA calculated its cable rate using GAAP-based data for 2017, the last full year before Verizon MA opted out of USOA, in the Massachusetts Formula, and then did the same exercise using USOA-based inputs for that year.⁶ The difference between the 2017 GAAP-based cable rate and the 2017 USOA-

⁴ Exhibit 6 was created for this proceeding and was not filed with the FCC.

⁵ The regulation provides in part that, "The Implementation Rate Difference means the difference between attachment rates calculated by the price cap carrier under Part 32 and under GAAP as of the last full year preceding the carrier's initial opting-out of Part 32 USOA accounting requirements."

⁶ The GAAP-based calculation is shown in Exhibit 7, using inputs from Exhibit 8, which shows Report 43-01, Table III, completed using GAAP-based data for 2017. (Like Exhibit 6, Exhibit 8 was created for this proceeding and was not filed with the FCC.) The USOA-based calculation is shown in Exhibit 9, using inputs from Exhibit 10, which shows the (USOA-based) data included in the Report 43-01, Table III, for Massachusetts that Verizon MA filed with the FCC for 2017.

based cable rate – \$4.52 – is the cable IRD for Massachusetts. The telecom IRD of \$4.55 was determined in the same manner, except that the FCC’s space allocation rules for telecom attachment rates were used to determine the usage factor.

What would these rates be if the pole-owning telecommunications providers used the version of USOA accounting that the FCC required prior to the *Accounting Order* in the Massachusetts Formula?

The rates provided above were calculated using data kept according to the version of USOA that was in place prior to the *Accounting Order*. Having elected in 2018 to adopt GAAP for regulatory accounting purposes, Verizon MA continued to keep a second set of books under USOA for that year,⁷ but it had no need to implement the streamlined USOA allowed by the FCC and therefore does not have data kept in that manner from which to calculate pole attachment rates. In any event, the changes made to USOA in the *Accounting Order* – in which the FCC consolidated formerly separate accounts and aligned USOA more closely with GAAP in certain respects – would have little if any effect on pole attachment rates.

Conclusion

As demonstrated above, GAAP-based data is fully compatible with the Massachusetts Formula to determine pole attachment rates, and GAAP-based rates adjusted by the IRD would not only result in no rate shock but would be lower than attachment rates calculated using

⁷ As of 2019, Verizon MA no longer keeps its accounts pursuant to USOA.

USOA-based data. Accordingly, the Department should find that there is no basis for re-imposing USOA requirements on Verizon MA and close this investigation.

Respectfully submitted,

VERIZON NEW ENGLAND INC., d/b/a
VERIZON MASSACHUSETTS

By its attorney



Alexander W. Moore
6 Bowdoin Square, 9th Floor
Boston, MA 02114
(857) 415-5130

Dated: November 21, 2019

Exhibit 1

Cable Rate using GAAP-based, 2018 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 655,632	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 372,559	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ 9,470	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 273,603	(D) = (A) – (B) – (C)
E	Net Investment in Appurtenance	\$ 13,680	(E) = (D)*(0.05)
F	Net Investment in Bare Pole Plant	\$ 259,923	(F) = (D) – (E)
G	Number of Pole Equivalents	745,216	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 348.79	(H) = (F) / (G)
Carrying Charges			
I	Administrative Expense	\$ 210,537	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 11,292,482	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 8,137,083	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ 163,111	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 2,992,288	(M) = (J) – (K) – (L)
N	Administrative Carrying Charge	7.04%	(N) = (I) / (M)
Tax			
O	Normalized Tax Expense	\$ 125,238	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 11,292,482	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 8,137,083	(Q) = (K)
R	Accumulated Deferred Taxes	\$ 163,111	(R) = (L)
S	Net Plant in Service	\$ 2,992,288	(S) = (P) – (Q) – (R)
T	Tax Carrying Charge	4.19%	(T) = (O) / (S)
Maintenance			
U	Maintenance Expense	\$ 12,594	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 273,603	(V) = (D)
W	Maintenance Carrying Charge	4.60%	(W) = (U) / (V)
Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 655,632	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 273,603	(Z) = (D)
AA	Gross/Net Adjustment	239.63%	(AA) = (Y) / (Z)
BB	Depreciation Carrying Charge	17.49%	(BB) = (X) * (AA)

Return

CC Rate of Return

10.50%

FCC Standard - 0.25% decrease per year.

Allocation of Usable Space

DD Assumed Cable Attachment Space

1.00

FCC Rebuttable Presumption

EE Usable Space

13.50

FCC Rebuttable Presumption

FF Usage Factor

7.41%

 $(FF) = (DD) / (EE)$ **Pole Attachment Rate**

GG Net Investment Per Bare Pole

\$

348.79

 $(GG) = (H)$

HH Total Carrying Charge

43.82%

 $(HH) = (N) + (T) + (W) + (BB) + (CC)$

II Usage Factor

7.41%

 $(II) = (FF)$

JJ Calculated Rate

\$

11.32

 $(JJ) = (GG) * (HH) * (II)$

Exhibit 2

Telecom Rate using GAAP-based 2018 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 655,632	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 372,559	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ 9,470	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 273,603	(D) = (A) – (B) – (C)
E	Net Investment in Appurtenance	\$ 13,680	(E) = (D) * (0.05)
F	Net Investment in Bare Pole Plant	\$ 259,923	(F) = (D) – (E)
G	Number of Pole Equivalents	745,216	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 348.79	(H) = (F) / (G)
Carrying Charges			
I	Administrative Expense	\$ 210,537	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 11,292,482	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 8,137,083	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ 163,111	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 2,992,288	(M) = (J) – (K) – (L)
N	Administrative Carrying Charge	7.04%	(N) = (I) / (M)
Tax			
O	Normalized Tax Expense	\$ 125,238	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 11,292,482	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 8,137,083	(Q) = (K)
R	Accumulated Deferred Taxes	\$ 163,111	(R) = (L)
S	Net Plant in Service	\$ 2,992,288	(S) = (P) – (Q) – (R)
T	Tax Carrying Charge	4.19%	(T) = (O) / (S)
Maintenance			
U	Maintenance Expense	\$ 12,594	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 273,603	(V) = (D)
W	Maintenance Carrying Charge	4.60%	(W) = (U) / (V)
Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 655,632	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 273,603	(Z) = (D)
AA	Gross/Net Adjustment	239.63%	(AA) = (Y) / (Z)
BB	Depreciation Carrying Charge	17.49%	(BB) = (X) * (AA)
Return			
CC	Rate of Return	10.50%	FCC standard 0.25% decrease per year.

Allocation of Usable Space

DD	Assumed Telecom Attachment Space	1	FCC rebuttable presumption
EE	Unusable space	24	FCC rebuttable presumption
FF	Number of attachers	5	FCC rebuttable presumption
GG	Pole height	37.5	FCC rebuttable presumption
HH	Unusable space factor	3.22	$(HH) = (0.67) * (EE) / (FF)$
II	Usage Factor	7.42%	$(II) = [DD+HH] / (GG) * (0.66)$

Pole Attachment Rate

JJ	Net Investment per Bare Pole	\$	348.79	$(JJ) = (H)$
KK	Total Carrying Charge		43.82%	$(KK) = (N) + (T) + (W) + (BB) + (CC)$
LL	Usage Factor		7.42%	$(LL) = (II)$
MM	Calculated Rate		11.34	$(MM) = (JJ) * (KK) * (LL)$

Exhibit 3

GAAP-based 2018 data

FCC Report 43-01
ARMIS Annual Summary
Report

Company: VERIZON NEW ENGLAND INC.
Study Area: MASSACHUSETTS
Period: From: January 2018 To: December 2018
COSA: NEMA

Submission:
01

Page 1 of 1

Table III - Pole and Conduit Rental Calculation Information
(Dollars in thousands; Operating data in actual units)

Row	Row Title (a)	Amount (b)
Financial Information (\$000)		
100	Telecommunications Plant-in-Service	11,292,483
101	Gross Investment – Poles	655,632
102	Gross Investment – Conduit	870,148
200	Accumulated Depreciation – Total Plant-in-Service	8,137,083
201	Accumulated Depreciation – Poles	372,560
202	Accumulated Depreciation – Conduit	523,179
301	Depreciation Rate – Poles	7.30
302	Depreciation Rate – Conduit	2.20
401	Net Current Deferred Operating Income Taxes – Poles	-
402	Net Current Deferred Operating Income Taxes – Conduit	-
403	Net Current Deferred Operating Income Taxes – Total	-
404	Net Non-current Deferred Operating Income Taxes – Poles	9,470
405	Net Non-current Deferred Operating Income Taxes – Conduit	12,569
406	Net Non-current Deferred Operating Income Taxes – Total	163,111
501.1	Pole Maintenance Expense	12,595
501.2	Pole Rental Expense	560
501	Pole Expense	13,154

502.1	Conduit Maintenance Expense	7,773
502.2	Conduit Rental Expense	0
502	Conduit Expense	7,773

503	General & Administrative Expense	210,538
504	Operating Taxes	125,238

Operational Data (Actual)

601	Equivalent Number of Poles	745,216
602	Conduit System Trench Kilometers	13,133
603	Conduit System Duct Kilometers	63,067

700	Additional Rental Calculation Information	-
-----	---	---

Exhibit 4

Cable Rate using USOA-based 2018 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 650,731	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 590,892	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ -41,626	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 101,465	(D) = (A) - (B) - (C)
E	Net Investment in Appurtenance	\$ 5,073	(E) = (D) * (0.05)
F	Net Investment in Bare Pole Plant	\$ 96,392	(F) = (D) - (E)
G	Number of Pole Equivalents	745,216	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 129.35	(H) = (F) / (G)
Carrying Charges			
I	Administrative Expense	\$ 179,088	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 12,906,883	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 13,162,925	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ -825,646	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 569,604	(M) = (J) - (K) - (L)
N	Administrative Carrying Charge	31.44%	(N) = (I) / (M)
Tax			
O	Normalized Tax Expense	\$ 24,837	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 12,906,883	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 13,162,925	(Q) = (K)
R	Accumulated Deferred Taxes	\$ -825,646	(R) = (L)
S	Net Plant in Service	\$ 569,604	(S) = (P) - (Q) - (R)
T	Tax Carrying Charge	4.36%	(T) = (O) / (S)
Maintenance			
U	Maintenance Expense	\$ 4,298	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 101,465	(V) = (D)
W	Maintenance Carrying Charge	4.24%	(W) = (U) / (V)
Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 650,731	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 101,465	(Z) = (D)
AA	Gross/Net Adjustment	641.34%	(AA) = (Y) / (Z)
BB	Depreciation Carrying Charge	46.82%	(BB) = (X) * (AA)

Return

CC	Rate of Return	10.50%	FCC Standard - 0.25% decrease per year.
Allocation of Usable Space			
DD	Assumed Cable Attachment Space	1.00	FCC Rebuttable Presumption
EE	Usable Space	13.50	FCC Rebuttable Presumption
FF	Usage Factor	7.41%	$(FF) = (DD) / (EE)$
Pole Attachment Rate			
GG	Net Investment Per Bare Pole	\$ 129.35	$(GG) = (H)$
HH	Total Carrying Charge	97.35%	$(HH) = (N) + (T) + (W) + (BB) + (CC)$
II	Usage Factor	7.41%	$(II) = (FF)$
JJ	Calculated Rate	\$ 9.33	$(JJ) = (GG) * (HH) * (II)$

Exhibit 5

Telecom Rate using USOA-based 2018 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 650,731	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 590,892	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ -41,626	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 101,465	(D) = (A) – (B) – (C)
E	Net Investment in Appurtenance	\$ 5,073	(E) = (D) * (0.05)
F	Net Investment in Bare Pole Plant	\$ 96,392	(F) = (D) – (E)
G	Number of Pole Equivalents	745,216	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 129.35	(H) = (F) / (G)
Carrying Charges			
I	Administrative Expense	\$ 179,088	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 12,906,883	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 13,162,925	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ -825,646	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 569,604	(M) = (J) – (K) – (L)
N	Administrative Carrying Charge	31.44%	(N) = (I) / (M)
Tax			
O	Normalized Tax Expense	\$ 24,837	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 12,906,883	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 13,162,925	(Q) = (K)
R	Accumulated Deferred Taxes	\$ -825,646	(R) = (L)
S	Net Plant in Service	\$ 569,604	(S) = (P) – (Q) – (R)
T	Tax Carrying Charge	4.36%	(T) = (O) / (S)
Maintenance			
U	Maintenance Expense	\$ 4,298	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 101,465	(V) = (D)
W	Maintenance Carrying Charge	4.24%	(W) = (U) / (V)
Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 650,731	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 101,465	(Z) = (D)
AA	Gross/Net Adjustment	641.34%	(AA) = (Y) / (Z)
BB	Depreciation Carrying Charge	46.82%	(BB) = (X) * (AA)

Return

CC Rate of Return

10.50%

FCC Standard 0.25% decrease per year.

Allocation of Usable Space

DD Assumed Telecom Attachment Space

1

FCC rebuttable presumption

EE Unusable space

24

FCC rebuttable presumption

FF Number of attachers

5

FCC rebuttable presumption

GG Pole height

37.5

FCC rebuttable presumption

HH Unusable space factor

3.22

 $(HH) = (0.67) * (EE) / (FF)$

II Usage Factor

7.42%

 $(II) = [DD+HH] / (GG) * (0.66)$ **Pole Attachment Rate**

JJ Net Investment per Bare Pole

\$

129.35

 $(JJ) = (H)$

KK Total Carrying Charge

97.35%

 $(KK) = (N) + (T) + (W) + (BB) + (CC)$

LL Usage Factor

7.42%

 $(LL) = (II)$

MM Calculated Rate

9.34

 $(MM) = (JJ) * (KK) * (LL)$

Exhibit 6

USOA-based 2018 data

FCC Report 43-01
ARMIS Annual Summary
Report

Company: VERIZON NEW ENGLAND INC.
Study Area: MASSACHUSETTS
Period: From: January 2018 To: December 2018
COSA: NEMA

Submission: 01

Page 1 of 1

Table III - Pole and Conduit Rental Calculation Information
(Dollars in thousands; Operating data in actual units)

Row	Row Title (a)	Amount (b)
Financial Information (\$000)		
100	Telecommunications Plant-in-Service	12,906,883,001.77
101	Gross Investment – Poles	650,731,616.76
102	Gross Investment – Conduit	864,742,571.79
200	Accumulated Depreciation – Total Plant-in-Service	13,162,925,088.57
201	Accumulated Depreciation – Poles	590,892,631.16
202	Accumulated Depreciation – Conduit	541,147,396.67
301	Depreciation Rate – Poles	7.3
302	Depreciation Rate – Conduit	2.2
401	Net Current Deferred Operating Income Taxes – Poles	-
402	Net Current Deferred Operating Income Taxes – Conduit	-
403	Net Current Deferred Operating Income Taxes – Total	-
404	Net Non-current Deferred Operating Income Taxes – Poles	(41,626,946.48)
405	Net Non-current Deferred Operating Income Taxes – Conduit	(55,317,110.51)
406	Net Non-current Deferred Operating Income Taxes – Total	(825,646,263.52)
501.1	Pole Maintenance Expense	4,298
501.2	Pole Rental Expense	560

501	Pole Expense	4,858
-----	--------------	-------

502.1	Conduit Maintenance Expense	7,759
502.2	Conduit Rental Expense	0
502	Conduit Expense	7,759

503	General & Administrative Expense	179,088
504	Operating Taxes	24,838

Operational Data (Actual)

601	Equivalent Number of Poles	745,216
602	Conduit System Trench Kilometers	13,133
603	Conduit System Duct Kilometers	63,067

700	Additional Rental Calculation Information	-
-----	---	---

Exhibit 7

Cable Rate using GAAP-based 2017 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 551,436	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 330,186	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ 1,606	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 219,644	(D) = (A) – (B) – (C)
E	Net Investment in Appurtenance	\$ 10,982	(E) = (D)*(0.05)
F	Net Investment in Bare Pole Plant	\$ 208,662	(F) = (D) – (E)
G	Number of Pole Equivalents	742,456	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 281.04	(H) = (F) / (G)
Carrying Charges			
I	Administrative Expense	\$ 1,202,792	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 10,952,101	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 7,910,312	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ 31,900	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 3,009,889	(M) = (J) – (K) – (L)
N	Administrative Carrying Charge	39.96%	(N) = (I) / (M)
Tax			
O	Normalized Tax Expense	\$ -332,534	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 10,952,101	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 7,910,312	(Q) = (K)
R	Accumulated Deferred Taxes	\$ 31,900	(R) = (L)
S	Net Plant in Service	\$ 3,009,889	(S) = (P) – (Q) – (R)
T	Tax Carrying Charge	-11.05%	(T) = (O) / (S)
Maintenance			
U	Maintenance Expense	\$ 5,994	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 219,644	(V) = (V)
W	Maintenance Carrying Charge	2.73%	(W) = (U) / (V)
Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 551,436	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 219,644	(Z) = (D)
AA	Gross/Net Adjustment	251.06%	(AA) = (Y) / (Z)
BB	Depreciation Carrying Charge	18.33%	(BB) = (X) * (AA)

Return

CC	Rate of Return
----	----------------

10.75%

FCC Standard - 0.25% decrease per year.

Allocation of Usable Space

DD Assumed Cable Attachment Space

1.00

FCC Rebuttable Presumption

EE Usable Space

13.50

FCC Rebuttable Presumption

FF	Usage Factor
----	--------------

7.41%

 $(FF) = (DD) / (EE)$ **Pole Attachment Rate**

GG Net Investment Per Bare Pole

\$

281.04

 $(GG) = (H)$

HH Total Carrying Charge

60.72%

 $(HH) = (N) + (T) + (W) + (BB) + (CC)$

II Usage Factor

7.41%

 $(II) = (FF)$

JJ	Calculated Rate
----	-----------------

\$

12.64

 $(JJ) = (GG) * (HH) * (II)$

Exhibit 8

GAAP-based 2017 Data

FCC Report 43-01
ARMIS Annual Summary
Report

Company: VERIZON NEW ENGLAND INC.
Study Area: MASSACHUSETTS
Period: From: January 2017 To: December 2017
COSA: NEMA

Submission: 01

Page 1 of 1

Table III - Pole and Conduit Rental Calculation Information
(Dollars in thousands; Operating data in actual units)

Row	Row Title (a)	Amount (b)
Financial Information (\$000)		
100	Telecommunications Plant-in-Service	10,952,101
101	Gross Investment – Poles	551,436
102	Gross Investment – Conduit	870,136
200	Accumulated Depreciation – Total Plant-in-Service	7,910,312
201	Accumulated Depreciation – Poles	330,186
202	Accumulated Depreciation – Conduit	505,598
301	Depreciation Rate – Poles	7.3
302	Depreciation Rate – Conduit	2.2
401	Net Current Deferred Operating Income Taxes – Poles	-
402	Net Current Deferred Operating Income Taxes – Conduit	-
403	Net Current Deferred Operating Income Taxes – Total	-
404	Net Non-current Deferred Operating Income Taxes – Poles	1,606
405	Net Non-current Deferred Operating Income Taxes – Conduit	2,534
406	Net Non-current Deferred Operating Income Taxes – Total	31,900
501.1	Pole Maintenance Expense	5,994
501.2	Pole Rental Expense	564

501	Pole Expense	6,559
-----	--------------	-------

502.1	Conduit Maintenance Expense	9,244
502.2	Conduit Rental Expense	0
502	Conduit Expense	9,244

503	General & Administrative Expense	1,202,792
504	Operating Taxes	-332,534

Operational Data (Actual)

601	Equivalent Number of Poles	742,456
602	Conduit System Trench Kilometers	13,133
603	Conduit System Duct Kilometers	63,067

700	Additional Rental Calculation Information	-
-----	---	---

Exhibit 9

Cable Rate using USOA-based 2017 data

Net Investment Per Pole		Value	Source
A	Total Gross Investment in Pole Plant	\$ 546,536	FCC Report 43-01 - Line 101
B	Accumulated Depreciation (Poles)	\$ 557,760	FCC Report 43-01 - Line 201
C	Accumulated Deferred Taxes (Poles)	\$ -37,040	FCC Report 43-01 - Line 404
D	Net Investment in Pole Plant	\$ 25,816	(D) = (A) – (B) – (C)
E	Net Investment in Appurtenance	\$ 1,290	(E) = (D)*(0.05)
F	Net Investment in Bare Pole Plant	\$ 24,526	(F) = (D) – (E)
G	Number of Pole Equivalents	742,456	FCC Report 43-01 - Line 601
H	Net Investment Per Bare Pole	\$ 33.03	(H) = (F) / (G)

Carrying Charges			
I	Administrative Expense	\$ 1,170,973	FCC Report 43-01 - Line 503
J	Total Plant in Service	\$ 12,571,899	FCC Report 43-01 - Line 100
K	Depreciation Reserve for Total Plant in Service	\$ 12,686,005	FCC Report 43-01 - Line 200
L	Accumulated Deferred Taxes	\$ -852,032	FCC Report 43-01 - Line 406
M	Net Plant in Service	\$ 737,926	(M) = (J) – (K) – (L)
N	Administrative Carrying Charge	158.68%	(N) = (I) / (M)

Tax			
O	Normalized Tax Expense	\$ -111,761	FCC Report 43-01 - Line 504
P	Total Plant in Service	\$ 12,571,899	(P) = (J)
Q	Depreciation Reserve for Total Plant in Service	\$ 12,686,005	(Q) = (K)
R	Accumulated Deferred Taxes	\$ -852,032	(R) = (L)
S	Net Plant in Service	\$ 737,926	(S) = (P) – (Q) – (R)
T	Tax Carrying Charge	-15.15%	(T) = (O) / (S)

Maintenance			
U	Maintenance Expense	\$ 5,994	FCC Report 43-01 - Line 501.1
V	Net Investment in Poles	\$ 25,816	(V) = (D)
W	Maintenance Carrying Charge	23.22%	(W) = (U) / (V)

Depreciation			
X	Annual Depreciation for Poles	7.30%	FCC Report 43-01 - Line 301
Y	Gross Investment in Pole Plant	\$ 546,536	(Y) = (A)
Z	Net Investment in Pole Plant	\$ 25,816	(Z) = (D)

AA	Gross/Net Adjustment		2117.07%	$(AA) = (Y) / (Z)$
BB	Depreciation Carrying Charge		154.55%	$(BB) = (X) * (AA)$
Return				
CC	Rate of Return		10.75%	FCC Standard - 0.25% decrease per year.
Allocation of Usable Space				
DD	Assumed Cable Attachment Space		1.00	FCC Rebuttable Presumption
EE	Usable Space		13.50	FCC Rebuttable Presumption
FF	Usage Factor		7.41%	$(FF) = (DD) / (EE)$
Pole Attachment Rate				
GG	Net Investment Per Bare Pole	\$	33.03	$(GG) = (H)$
HH	Total Carrying Charge		332.06%	$(HH) = (N) + (T) + (W) + (BB) + (CC)$
II	Usage Factor		7.41%	$(II) = (FF)$
JJ	Calculated Rate	\$	8.12	$(JJ) = (GG) * (HH) * (II)$

Exhibit 10

USOA-based 2017 data

FCC Report 43-01
ARMIS Annual Summary
Report

Company: VERIZON NEW ENGLAND INC.
Study Area: MASSACHUSETTS
Period: From: January 2017 To: December 2017
COSA: NEMA

Submission: 01

Page 1 of 1

Table III - Pole and Conduit Rental Calculation Information
(Dollars in thousands; Operating data in actual units)

Row	Row Title (a)	Amount (b)
Financial Information (\$000)		
100	Telecommunications Plant-in-Service	12,571,899
101	Gross Investment – Poles	546,536
102	Gross Investment – Conduit	864,730
200	Accumulated Depreciation – Total Plant-in-Service	12,686,005
201	Accumulated Depreciation – Poles	557,760
202	Accumulated Depreciation – Conduit	523,722
301	Depreciation Rate – Poles	7.3
302	Depreciation Rate – Conduit	2.2
401	Net Current Deferred Operating Income Taxes – Poles	-
402	Net Current Deferred Operating Income Taxes – Conduit	-
403	Net Current Deferred Operating Income Taxes – Total	-
404	Net Non-current Deferred Operating Income Taxes – Poles	-37,040
405	Net Non-current Deferred Operating Income Taxes – Conduit	-58,605
406	Net Non-current Deferred Operating Income Taxes – Total	-852,032
501.1	Pole Maintenance Expense	5,994
501.2	Pole Rental Expense	564

501	Pole Expense	6,559
-----	--------------	-------

502.1	Conduit Maintenance Expense	9,245
502.2	Conduit Rental Expense	0
502	Conduit Expense	9,245

503	General & Administrative Expense	1,170,973
504	Operating Taxes	-111,761

Operational Data (Actual)

601	Equivalent Number of Poles	742,456
602	Conduit System Trench Kilometers	13,133
603	Conduit System Duct Kilometers	63,067

700	Additional Rental Calculation Information	-
-----	---	---