

Niagara Mohawk Power Corporation
d/b/a National Grid
Calculation of Pole Attachment Fee Pursuant to FCC Formula
Based Upon Year Ended December 31, 2018 Financial Information

	<u>Net Investment per Pole</u>	Actual FERC	Source
(1)	Total Gross Investment in Pole Plant	\$1,191,822,882	Page 3, Line (1)
(2)	Accumulated Depreciation (Pole)	\$405,755,036	Page 2, Line (9)
(3)	Accumulated Deferred Taxes (Poles)	\$209,669,318	Page 2, Line (11)
(4)	Net Investment in Pole Plant	\$576,398,528	Line (1) - Line (2) - Line (3)
(5)	Net Investment in Appurtenance	\$86,459,779	Line (4) x 15% (FCC presumption)
(6)	Net Investment in Bare Pole	\$489,938,749	Line (4) - Line (5)
(7)	Number of Pole Equivalents	979,498	Page 4, Line (7)
(8)	Net Investment per Bare Pole	\$500.19	Line (6) ÷ Line (7), rounded to 2 decimal places
	<u>Carrying Charges</u>		
	<u>Administrative</u>		
(9)	Administrative Expense	\$327,801,568	Page 3, Line (8)
(10)	Electric Plant in Service	\$9,806,610,376	Page 3, Line (18)
(11)	Depreciation Reserve for Electric Plant in Service	\$2,980,582,307	Page 3, Line (19)
(12)	Accumulated Deferred Income Taxes	\$1,696,525,123	Page 3, Sum of Lines (27) thru (29)
(13)	Net Electric Plant in Service	\$5,129,502,946	Line (10) - Line (11) - Line (12)
(14)	Administrative Carrying Charge	6.39%	Line (9) ÷ Line (13)
	<u>Tax</u>		
(15)	Normalized Tax Expense	\$352,732,957	Page 3, Sum of Lines (10) thru (15)
(16)	Total Plant in Service	\$12,564,596,482	Page 3, Line (16)
(17)	Depreciation Reserve for Total Plant in Service	\$3,964,093,617	Page 3, Line (17)
(18)	Accumulated Deferred Income Taxes	\$2,634,478,211	Page 3, Sum of Lines (24) thru (26)
(19)	Net Plant in Service	\$5,966,024,654	Line (16) - Line (17) - Line (18)
(20)	Tax Carrying Charge	5.91%	Line (15) ÷ Line (19)
	<u>Maintenance</u>		
(21)	Maintenance of Overhead Lines Expense	\$186,380,412	Page 3, Line (9)
(22)	Net Investment in Overhead Structures	\$1,463,929,864	Page 2, Line (6)
(23)	Maintenance Carrying Charge	12.73%	Line (21) ÷ Line (22)
	<u>Depreciation</u>		
(24)	Annual Depreciation for Poles	1.85%	Page 3, Line (6)
(25)	Gross Investment in Pole Plant	\$1,191,822,882	Line (1)
(26)	Net Investment in Pole Plant	\$576,398,528	Page 2, Line (12)
(27)	Gross / Net Adjustment	206.77%	Line (25) ÷ Line (26)
(28)	Depreciation Carrying Charge	3.83%	Line (24) x Line (27)
	<u>Return</u>		
(29)	Rate of Return	11.25%	Page 3, Line (7)
(30)	Total Carrying Charge	40.11%	Line (14) + Line (20) + Line (23) + Line (28) + Line (29)
	<u>Allocation of Usable Space</u>		
(31)	Assumed Cable Attachment Space (in feet)	1	47 CFR Ch. I, Subpart J, §1.1418
(32)	Usable Space (in feet)	13.5	47 CFR Ch. I, Subpart J, §1.1404(g)(1)(xi) & §1.1418
(33)	Usage Factor	7.41%	Line (31) ÷ Line (32)
	<u>Pole Attachment Rate</u>		
(34)	Net Investment per Bare Pole	\$500.19	Line (8)
(35)	Total Carrying Charge	40.11%	Line (30)
(36)	Usage Factor	7.41%	Line (33)
(37)	Pole Attachment Fee for Cable Attachments	\$14.86	Line (34) x Line (35) x Line (36), truncated after 2 decimal places

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Net Investment in Overhead Structures

(1)	Gross Investment in FERC Accounts 364, 365, 369	Page 3, Line (4)	\$3,026,977,038
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Depreciation Reserve Associated with Overhead Structures:

Percent of Distribution Plant Associated with Overhead Structures:

(2)	$\frac{\text{FERC Accounts 364, 365, 369}}{\text{Total Electric Distribution Plant (Excl Land \& Land Rights)}}$	=	$\frac{\text{Page 3, Line (4)}}{\text{Page 3, Lines (21) - (22)}}$	=	$\frac{\$3,026,977,038}{\$6,262,043,884}$	=	48.34%
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Amount of Accumulated Depreciation Associated with Overhead Structures:

(3)	Percent of Distribution Plant Assoc with Overhead Structures	x	Depreciation Reserve - Distribution	=	48.34%	x	\$2,131,907,250 Page 3, Line (20)	=	\$1,030,531,630

Accumulated Deferred Income Taxes Associated with Overhead Structures:

Percent of Electric Plant Associated with Overhead Structures:

(4)	$\frac{\text{FERC Accounts 364, 365, 369}}{\text{Total Electric Plant (Excl Land \& Land Rights)}}$	=	$\frac{\text{Page 3, Line (4)}}{\text{Page 3, Lines (18) - (22) - (23)}}$	=	$\frac{\$3,026,977,038}{\$9,643,554,352}$	=	31.39%
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Amount of Accumulated Deferred Income Taxes Associated with Overhead Structures:

(5)	Percent of Electric Plant Assoc with Overhead Structures	x	Accumulated Deferred Income Taxes (excl FAS 109)	=	31.39%	x	\$1,696,525,123 Page 3, Sum of Lines (27) thru (29)	=	\$532,515,544

(6)	Net Investment in Overhead Structures	Line (1) - Line (3) - Line (5)	\$1,463,929,864
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Net Investment in Pole Plant:

(7)	Gross Investment in FERC Account 364	Page 3, Line (1)	\$1,191,822,882
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Depreciation Reserve Associated with Pole Plant:

Percent of Distribution Plant Associated with Pole Plant:

(8)	$\frac{\text{FERC Account 364}}{\text{Total Distribution Plant (Excl Land \& Land Rights)}}$	=	$\frac{\text{Page 3, Line (1)}}{\text{Page 3, Lines (21) - (22)}}$	=	$\frac{\$1,191,822,882}{\$6,262,043,884}$	=	19.03%
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Amount of Accumulated Depreciation Associated with Pole Plant:

(9)	Percent of Distribution Plant Assoc with Poles	x	Depreciation Reserve - Distribution	=	19.03%	x	\$2,131,907,250 Page 3, Line (20)	=	\$405,755,036

Accumulated Deferred Income Taxes Associated with Pole Plant:

Percent of Overhead Structures Associated with Pole Plant:

(10)	$\frac{\text{FERC Account 364}}{\text{FERC Accounts 364, 365, 369}}$	=	$\frac{\text{Page 3, Line (1)}}{\text{Page 3, Line (4)}}$	=	$\frac{\$1,191,822,882}{\$3,026,977,038}$	=	39.37%
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Amount of Overhead Structures Deferred Income Taxes Associated with Pole Plant:

(11)	Percent of Overhead Structures Assoc with Pole Plant	x	Accumulated Deferred Income Taxes (excl FAS 109) Allocated to Overhead Structures	=	39.37%	x	\$532,515,544 Line (5)	=	\$209,669,318

(12)	Net Investment in Pole Plant	Line (7) - Line (9) - Line (11)	\$576,398,528
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Niagara Mohawk Power Corporation
d/b/a National Grid
Calculation of Pole Attachment Fee Pursuant to FCC Formula
2018 Data

<u>Components of Overhead Structures</u>		<u>Source</u>
(1)	Account 364 - Poles Towers and Fixtures	Form 1, Page 207, Line 66, Column (g)
(2)	Account 365 - Overhead Conductors and Devices	Form 1, Page 207, Line 67, Column (g)
(3)	Account 369 - Services	Form 1, Page 207, Line 71, Column (g)
(4)	Sum	
(5)	Number of Poles	Page 4, Line (7)
(6)	Depreciation Rate (Acct. 364)	Case 17-E-0238 -Depreciation Rate effective 4/1/2018
(7)	Rate of Return	Case 17-E-0238: 2017 NMPC Rate Case Pre-Tax WAC
(8)	Total Administrative & General Expense	Form 1, Page 323, Line 205, Column (b)
(9)	Account 593 - Maintenance of OH Lines	Form 1, Page 322, Line 156, Column (b)
(10)	Account 408.1 - Taxes other than income taxes, utility operating income	Form 1, Page 114, Line 14, Column (c)
(11)	Account 409.1 - Federal	Form 1, Page 114, Line 15, Column (c)
(12)	Account 409.1 - Other	Form 1, Page 114, Line 16, Column (c)
(13)	Account 410.1 - Provisions for deferred income taxes, utility opating income	Form 1, Page 114, Line 17, Column (c)
(14)	Account 411.1 - Provision for deferred income taxes - Credit, utility operating income	Form 1, Page 114, Line 18, Column (c)
(15)	Account 411.4 - Investment tax credit adjustments, utility operations	Form 1, Page 114, Line 19, Column (c)
(16)	Gross Utility Plant	Form 1, Page 200, Line 8, Column (b)
(17)	Depreciation Reserve	Form 1, Page 200, Line 33, Column (b)
(18)	Gross Electric Plant	Form 1, Page 200, Line 8, Column (c)
(19)	Depreciation Reserve for Electric Plant	Form 1, Page 200, Line 33, Column (c)
(20)	Depreciation Reserve - Distribution	Form 1, Page 219, Line 26, Column (c)
(21)	Total Distribution Plant	Form 1, Page 207, Line 77, Column (g)
(22)	Distribution Land & Land Rights	Form 1, Page 207, Line 62, Column (g)
(23)	Transmission Land & Land Rights	Form 1, Page 207, Line 49, Column (g)
(24)	Accum Deferred Income Taxes - 190	Form 1, Page 111, Line 72, Column (d)
		Form 1, Page 113, Lines 62, Column (d), less Page 275, Line 9, Column (k), plus Page 277, Line 19, Column (k)
(25)	Accum Deferred Income Taxes - 281/282/283	Form 1, Page 278, Line 1, Column (f) plus Page 278-A, Line 4 Column (f)
(26)	FAS 109	Form 1, Page 234, Line 9, Column (c)
(27)	Accum Deferred Income Taxes - 190 E	Form 1, Page 275, Line 2, Column (k) plus Page 277, Lines 3 through 7
(28)	Accum Deferred Income Taxes - 281/282/283 E	Form 1, Page 278, Line 1, Column (f) plus Page 278-A, Line 4 Column (f)
(29)	FAS 109 E	

Niagara Mohawk
2019 Pole Counts (Poles)

	<u>Description</u>	Jointly <u>Owned</u> (a)	Solely <u>Owned</u> (b)	Total NMPC <u>Number</u> (c)
(1)	Up to 30 ft.	47,957	64,615	112,572
(2)	31-40 ft.	542,496	373,566	916,061
(3)	41-50 ft.	168,139	97,001	265,140
(4)	51-60 ft.	3,351	4,953	8,304
(5)	Above 60 ft.	372	8,656	9,028
(6)	Total	762,315	548,790	1,311,105
(7)	Equivalent Number of Poles			979,498

Notes:

- (7) Column (a), Line (6) x 56.5% pole ownership + Column (b), Line (6)
56.5% from July 10, 1975 General Joint Use Pole Agreement between
NMPC and NY Telephone Company

Source: Plant Accounting

Wireless Attachment to Distribution Pole
Calculation of Wireless Attachment Fee consistent with PSC Order issued March 14, 2019 CASE 16-M-0330
Based Upon Year Ended December 31, 2018 Financial Information

(A) - Licensor annual carrying charge rate (Wireless)	36.88%	Page 1, (Line (14) + Line(20) + Line(23) + Line (28) + Page 3, Line (7))
(B) - Licensor net pole investment	\$576,398,528	Page 1, Line (4)
(C) - Licensor total number of equivalent poles	979,498	Page 4, Line (7)
(D) - Licensor net cost of bare pole [D = B/C]	\$588.46	
(E) - Licensor net cost of bare pole adjusted for appurtenances not usable [E = (.85)D]	\$500.19	Page 1, Line (8)
(F) - Pole Attachment Fee for Wireless Attachments, per foot	\$13.66	(E) * (A) * Page 1, Line 36