EXHIBIT PDK 15

BEFORE THE STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

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TIME WARNER CABLE SOUTHEAST LLC, Complainant,

v.

CARTERET-CRAVEN ELECTRIC MEMBERSHIP CORPORATION, Respondent.

TIME WARNER CABLE SOUTHEAST LLC,

Complainant,

v.

JONES-ONSLOW ELECTRIC MEMBERSHIP CORPORATION, Respondent.

TIME WARNER CABLE SOUTHEAST LLC, Complainant,

v.

SURRY-YADKIN ELECTRIC MEMBERSHIP CORPORATION, Respondent.

UNION ELECTRIC MEMBERSHIP CORPORATION d/b/a UNION POWER COOPERATIVE, Complainant-Petitioner,

v.

TIME WARNER CABLE SOUTHEAST LLC Respondent-Petitioner DOCKET NO. EC-55, SUB 70 DOCKET NO. EC-43, SUB 88 DOCKET NO. EC-49, SUB 55 DOCKET NO. EC-39, SUB 44

)

DECLARATION OF J. AARON GEORGE

I, James Aaron George, pursuant to 28 U.S.C. § 1746, declare as follows:

I am an attorney admitted pro hac vice to practice before this Commission.
 I am an associate with Sheppard Mullin Richter & Hampton LLP, attorney of record for
 Time Warner Cable Southeast, LLC in the above-captioned dockets. I have personal
 knowledge of the information set forth in this Declaration.

2. I submitted a request on January 13, 2017 to the Tennessee Valley Authority ("TVA") under the Freedom of Information Act, 5 U.S.C. § 552 ("FOIA"), for documents related to the February 11, 2016, resolution of the TVA Board of Directors regarding pole attachments.

3. The documents attached to this declaration are true and correct copies of documents provided to me by the TVA in response to my FOIA request.

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

Executed June 14, 2017, in Washington, DC.

J. Aaron George





LPC Pole Attachment Rate Regulation

Lunch & Learn January 15, 2016

Docket No. EC-23, Sub 50 Kravtin Testimony, Exhibit 15 Rates Impact Under Proposed Methodology

New mid-point ~ \$30 vs. \$18 today Minimum rate \$7.60 Maximum rate \$85.50 30% LPCs are within \$5 of new rate

50% LPCs are within \$10 of new rate



The new rate for each LPC is based on three attaching parties using a 37.5' pole height and a 15% discount factor for cross arms and other appurtenances. When LPCs use system-specific data and reconcile pole accounting data, rate impacts may change.

Rates Impact Under Proposed Methodology



Docket No. EC-23, Sub 50

TVA Restricted Information - Deliberative and Pre-Decisional Privileged

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POLE ATTACHMENT RATE TEMPLATE WORKSHOP APRIL - MAY 2016

Barry Barnett, Regulatory Assurance

Calculating the Number of Attachers

Docket No. EC-23. Sub 50 Kravtin Testimony, Exhibit 15

For purposes of calculating the space allocation component of the pole attachment rate methodology, TVA has established standard assumptions for the number of attachers based on rural and urban classifications.

LPC's should use this Standard Assumption unless the LPC provides sufficient justification to TVA that it has readily available actual data for calculating the number of attachers.

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Under the Standard Assumption, each pole is presumed to have:

- 3 attaching entities for RURAL (<= 40 customers per mile)
- 5 attaching entities for URBAN (> 40 customers per mile)

Customers per mile is calculated by:

- Total number of customers divided by the total miles of line

Standard Assumption - Rural

126 TVA LPCs fall into the Rural category*

Standard Assumption - Urban

28 TVA LPCs fall into the Urban category*

*Source: DARS Database (Data as of June 2015)



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Docket No. EC-23, Sub 50

Kravtin Testimony, Exhibit 15

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				E) (3 A	ample ttachers)	Example (5 Attachers
			Space Allocation - Pole Attachmen	t Templa	te	
					Rural	Urban
Total poles in Sample	10		(A) Number of Attaching Parties		3.00	5.00
			(B) Space Occupied by Attaching Part	:y	1	1
Total noles used by Communication Attacher	N/A		(C) Safety Space		3.33	3.33
Total poles used by communication Actacher	n j n		(D) Total Usable Space		13.5	13.5
			(E) Total Support Space		24.0	24.0
System Average # of Attaching Parties		3 or 5				
			Space Allocation (% of Total Pole)			
			Fully Allocated Cost Formula		28.44%	17.69%
# of cable attachments	N/A		Net Cost of a Bare Pole	\$	400.00	400.00
			Carrying Charge Rate		25.00%	25.00%
# of telecom attachments	N/A		Annual Cost of Ownership	\$	100.00	100.00
Total number of comm. attachments	NI /A					
	IN/A		Maximum Rate per Pole (Space Allocat	tion ¹ 3.0 I	Party, 1 Foot	5.0 Party, 1 Foot
			Fully Allocated Cost Formula	\$	28.44	\$ 17.69

* Based on \$100 pole ownership cost times space allocation for 1' of space occupied using an average number of attachers with 37.5' pole height per option above.



Docket No. EC-23. Sub 50

Kravtin Testimony, Exhibit 15

Actual System Data Approach

LPCs may use actual system data with sufficient justification and TVA approval. There are two potential approaches.

Approach 1 – LPC Known System Data

- Other considerations in calculating average number of attaching parties:
 - Data needed to calculate average number of attaching parties
 - Number of poles without communication attachers
 - Number of communication attaching parties
 - Number of attachments
 - Some LPCs calculate the number using their mapping system software or engineering estimates (e.g., GIS)

Approach 2 – Probability Method (Template Provided)

- Known: number of communication attaching parties
- Known: number of attachments
- Unknown: number of poles without communication attachers
 - Uses probability to estimate system average number of attaching parties

Docket No. EC-23, Sub 50

Kravtin Testimony, Exhibit 15



Approach 1 – LPC Known System Data Docket No. EC -23, Sub 50

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				Space A	llocation - Pole	Attachment	Template		
Total noles in Sample	10		(A) Number of	Attaching Parti	es				2.50
	10		(B) Space Occu	pied by Attachi	ng Party				1
Total palacy used by Communication Attacher	o		(C) Safety Space	е					3.33
Total poles used by communication Attacher	0		(D) Total Usab	e Space					13.5
			(E) Total Suppo	rt Space (Grou	nd: 2' + 10% total	height; Clearar	nce: 18';		24.0
System Average # of Attaching Parties		2.50	rounded to	nearest foot)					
, , , , , , , , , , , , , , , , , , , ,			Space Allocation	n (% of Total F	Pole)				
			Fully Alloca	ed Cost Formu	ıla (B+(1/(A-1)*C)+	(1/A)*E)/(D+E			34.19%
# of cable attachments	8								
			Net Cost of a Bar	Pole (Breakdo	wn below)			\$	400.00
# of telecom attachments	4		Carrying Charge R	ate (Breakdow	n below)				25. <mark>0</mark> 0%
			Annual Cost of	Ownership				\$	100.00
Total number of comm. attachments	12								
			Maximum Rate p	er Pole (Space	Allocation % x An	nual Cost)		2.5 Pa	arty, 1 Foot
			Fully Allocated	Cost Formula		,		Ś	34.19

* Based on \$100 pole ownership cost times space allocation for 1' of space occupied using an average number of attachers with 37.5' pole height per option above.



Approach 2 - Probability Method Templatestimony, Exhibit 15

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		Enter data	in blue
POLE ATTACHMENT - AVERAGE NUMBER Pre-decisional / deliberative process privilege	COFATTACHING PARTIES	onl	y a a cas
Number of Attachments on Electric Owned P	oles		
Total Number of Distribution Poles		10	
Total Number of Distribution Poles With Com	munication Attachments	9	1/
Total Number of Distribution Poles With Electr	ic Attachments (Only)	1	
Cable / Broadband / Eiber Attaching Parties:			
Attaching Party # 1	8	20%	
Attaching Party # 2		0%	
Attaching Party # 3	_	0%	
Attaching Party # 4	_	0%	
Attaching Party # 5	_	0%	
Total Cable /BB/ Fiber Attaching Parties	8	20%	
		/	Y .
		/	ί
Telephone Attaching Parties:			
Attaching Party # 1	4	60%	
Attaching Party # 2	-	0%	
Attaching Party # 3	-	0%	
Attaching Party # 4	-	0%	
Attaching Party # 5	-	0%	
Total Telephone Attaching Parties	4	60%	
Probability of Electric Poles Only		12%	\leq
			a
Number of Average Attaching Parties on Elec	tric Owned Pole:		
Total Cable /BB / Fiber Attachments	8		
Total Telephone Attachments	4		
Total Electric Attachments	9		
Total of All Attachments	21		
Divide By Actual Poles With Attachments	9		
Average Number of Attaching Parties:	2.36		

1-(8 divided by 10)= 20% probability of something other than cable is on the pole.

1-(4 divided by 10)= 60% probability of something other than telephone is on the pole.

Probability in the sample of poles with electric attachments only of 12% is derived by multiplying 20% by 60%.

TVA

Approach 2 – Probability Method

Docket No. EC-23, Sub 50 Kravtin Testimony, Exhibit 15

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The 1	ΓVΑ	Templat	e Pro	bability	Method	require	s the	LPC to	provide	e and i	nput
data	to c	alculate	their	average	e number	r of reta	ail co	mmuni	cation a	ittache	rs.

Average number of attaching parties		Pole Attachment Rate Template
Total poles in sample	10	Space Allocation - Pole Attachment Template
		(A) Number of Attaching Parties 2.36
Total poles used by Communication Attacher	?	(B) Space Occupied by Attaching Party 1
		(C) Safety Space 3.33
		(D) Total Usable Space 13.5
System Average # of Attaching Parties		2.36 E) Total Support Space Carta 24.0
		Space Allocation (% of Total Pole)
		Fully Allocated Cost Formula 36.31%
# of cable attachments	8	Net Cost of a Bare Pole \$ 400.00
# of telecom attachments	4	Annual Cost of Ownership\$100.00
Total number of comm. attachments	12	Maximum Rate per Pole (Space Allocation (2.4 Party, 1 Foot
		Fully Allocated Cost Formula \$ 36.31

* Based on \$100 pole ownership cost times space allocation for 1' of space occupied using an average number of attachers with 37.5' pole height per option above.



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Method	# of Attaching Parties	Rate (\$)
Standard Assumption – Rural	3.00	28.44
Standard Assumption – Urban	5.00	17.69
LPC Known System Data	2.50	34.19
Probability Method	2.36	36.31

- Based on \$100 pole ownership cost times space allocation for 1' of space occupied using an average number of attachers with 37.5' pole height per option above.
- Note: The number of attaching parties for the probability approach may not always be less than known system data approach.



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From: Magee, Thomas Sent: Tuesday, June 02, 2015 11:08 AM To: Brogdon, Jennifer N

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Cc: Hallam, Mary Elizabeth; Richards, Jack B. **Subject:** RE: TVA Pole Attachment Questions

Jennifer:

Following up on our call in March about pole attachment regulation, we were wondering whether there have been any developments at TVA?

Please let us know if you have questions or if we can be of further assistance.

Thanks, Tom/Jack

Thomas B. Magee, Partner tel: 202.434.4128 | fax: 202.434.4646 | <u>magee@khlaw.com</u> 1001 G Street, N.W., Suite 500 West | Washington, D.C. 20001



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From: Brogdon, Jennifer N [mailto:jnbrogdon@tva.gov]
Sent: Friday, March 13, 2015 5:00 PM
To: Magee, Thomas; Hallam, Mary Elizabeth
Cc: Richards, Jack B.
Subject: Re: TVA Pole Attachment Questions

Let's plan on it.

I'll be driving and available at 423/653-3246.

Sent from my iPad

On Mar 13, 2015, at 4:46 PM, Magee, Thomas <<u>Magee@khlaw.com</u>> wrote:

TVA External Message. Please use caution when opening.

Ms. Brogdon:

Wednesday from 3:00-5:00 p.m. works for me. Not sure about Jack who is tied up in a meeting.

Shall we pencil in Wednesday at 3:00 p.m.?

Tx, Tom

From: Brogdon, Jennifer N [mailto:jnbrogdon@tva.gov] Sent: Friday, March 13, 2015 2:58 PM To: Magee, Thomas **Cc:** Richards, Jack B. **Subject:** Re: TVA Pole Attachment Questions

Thank you! I'd like to set some time up for us to chat soon. I am looking forward to talking with you. Do you have some availability next Wednesday afternoon, late? I'm available from 3E until late.

Sent from my iPhone

On Mar 13, 2015, at 2:52 PM, Magee, Thomas <<u>Magee@khlaw.com</u>> wrote:

TVA External Message. Please use caution when opening.

Ms. Brogden:

The FCC's municipal broadband order affecting the Chattanooga EPB was released today:

FCC RELEASES MEMORANDUM OPINION AND ORDER PREEMPTING CERTAIN CHALLENGED PROVISIONS OF TENNESSEE AND NORTH CAROLINA LAW RESTRICTING MUNICIPAL PROVISION OF BROADBAND SERVICE. Granted the preemption petition of the Electric Power Board of Chattanooga, TN, and granted in part the preemption petition of the City of Wilson, NC, finding that they are barriers to broadband infrastructure investment and thwart competition. (Dkt No. 14-116 14-115). Action by: the Commission. Adopted: 02/26/2015 by MO&O. (FCC No. 15-

25). WCB <u>https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-</u>25A1.docx

https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A2.docx https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A3.docx https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A4.docx https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A5.docx https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A6.docx https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A1.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A2.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A3.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A3.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A4.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A5.pdf https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A5.pdf

Regards, Tom Magee

From: Magee, Thomas
Sent: Thursday, February 26, 2015 5:51 PM
To: Jennifer Brogden (jnbrogdon@tva.gov)
Cc: Richards, Jack B.
Subject: RE: TVA Pole Attachment Questions

Ms. Brogden:

In advance of our discussion about TVA pole attachment issues, we thought you'd be interested in today's FCC decisions (i) to regulate the Internet, and (ii) to preempt Tennessee from limiting the broadband service of Chattanooga's Electric Power Board.

The FCC's Public Notices are attached.

Please let us know if you have any questions.

Best regards, Tom

From: Magee, Thomas
Sent: Friday, February 20, 2015 4:09 PM
To: Jennifer Brogden (<u>inbrogdon@tva.gov</u>)
Cc: Richards, Jack B.
Subject: TVA Pole Attachment Questions

Ms. Brogden:

We understand from Mike Knotts that TVA may have questions about pole attachments that we can answer for you.

Are you available for a call (no charge, of course) with my partner Jack Richards and me on Monday? We're available Monday from 11:00–12:00 or any time after 2:00 p.m.

We're also available later in the week if Monday doesn't work.

We look forward to talking with you.

Best Regards, Tom Magee

Thomas B. Magee, Partner tel: 202.434.4128 | fax: 202.434.4646 | <u>magee@khlaw.com</u> 1001 G Street, N.W., Suite 500 West | Washington, D.C. 20001



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 From:
 Matt Bernauer

 To:
 Holt. Tiffany Sheree

 Cc:
 "Dan Burns - Muscle Shoals EB"; South, Alan C

 Subject:
 Pole Attach Spreadsheet

 Date:
 Monday, March 07, 2016 11:13:22 AM

 Attachments:
 image001.png Pole Attachment Calculation - Muscle Shoals.xlsx

TVA External Message. Please use caution when opening.

Tiffany,

Attached is our preliminary pole attach worksheet. I believe the rate is too high and the 15% discount factor on account 364 is not high enough for our system to accurately reflect our true cost of a bare pole. I just want to be clear that we do not intend to use this as our rate "as is."

As you know we have seen a lot of growth and have installed a lot of new facilities in the past 10-15 years which drives up our un-depreciated plant value but we also have done a lot of cross-arm only change-outs, and we almost exclusively use expensive fiberglass cross-arms and triple helix anchors as well as a lot of expensive insulated guy links since many of our facilities are located in tight spaces in town. All of these items are captured in 364, and from a very preliminary review of our annual material capitalized summaries, I feel certain that we need to use a custom discount factor.

I would like to talk sometime soon and discuss what TVA would consider as "proper" justification for changing the 85/15 split before I spend a lot more time on this. I am specifically interested in what other utilities across that valley have done to justify changing this discount factor.

Thanks,

Matt

Matt Bernauer, PE

General Manager



Muscle Shoals Electric Board 1015 Avalon Avenue PO Box 2547 Muscle Shoals, AL 35662 256-386-9290 - Office 256-386-9293 - Fax

mbernauer@mseb.net

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POLE ATTACHMENT FEE CALCULATION

FISCAL YEAR ENDED JUNE 30, 2015

Muscle Shoals	155		Input Fiscal Year of Data
	and the second s		2015
This template is a tool to calculate pole attach To use, input data specific to the local power of the required data are noted in blue. For any questions or help populating the requ	ment rates under TVA's prope company for the gray sections ired data, please contact Laur	osed pole attachment recomm only. All other numbers calcu a McDade at (423) 751-2474 o	endation. late automatically. Source locations fc r ldmcdade@tva.gov.
Data re	quired for aray sections onl	ν.	
Plant Account Data			
Total Plant	2015		
Item 1 - Gross Plant S	41,800,418	ANNUAL REPORT, PAGE 1	
Item 2 - Depreciation	18,701,091	ANNUAL REPORT, PAGE 1	
Net Plant \$	23,099,326		
		2015	
	Gross Plant	Depreciation	Net Plant
Plant Related to Poles	ANNUAL REPO	RT, PAGES 9 & 11	
Account 364 - Poles, Towers, and S	8,370,070	3,428	3,231 \$ 4,941,789
Account 365 - Overhead Conduct S	4,787,878	1,888	5,774 \$ 2,899,104
Account 369 - Services	3,808,314	1,614	\$ 2,193,840
Total 5	16,966,262	\$ 6,931	1,529 \$ 10,034,733
Account 364 Data	2015		
Number of Poles	6,988	LPC INTERNAL POLE COUNT	RECORDS
Pole Depreciation Rate	3.00%	ANNUAL REPORT, PAGE 11	
Expense Data	2015		
Item 625 + Account 935 - Administra S	863,674	ANNUAL REPORT, PAGE 6	
Account 408.1 - Property Taxes S	831,890	ANNUAL REPORT, PAGE 29	
Net Current Deferred Operating Income T	axes, if any	LPC INTERNAL ACCOUNTING	RECORDS
Net Noncurrent Deferred Operating Incon	ne Taxes, if any	LPC INTERNAL ACCOUNTING	RECORDS
Account 593 - Overhead Lines Distribution	Maintenance	ANNUAL REPORT, PAGE 6	
2013 \$	780,592	Note: Confirm that account	nt 593 contures
2014 \$	784,406	maintenance expenses for	r accounts 364, 365 & 369
2015 \$	1,065,601		
3 Year Average \$	876,866		
Space Allocation Data			
Average Number of Attaching Partie	3.0	Use actual average for LPC.	
Pole Height (ft)	37.5	Default: 37.5 ft. Can change	e with proper documentation.
Discount Factor for Pole			
Discount Factor for Cross Arms and	15%	Default: 15%. Can change v	with proper documentation.
Rate of Return			
Authorized by Regulatory Authority	8.5%		

POLE ATTACHMENT FEE CALCULATION

FISCAL YEAR ENDED JUNE 30, 2015

CALCULATIONS

Space Allocation				
(A) Number of Attaching Parties		3.0		3.0
(B) Space Occupied by Attaching Pa	r	1		2
(C) Safety Space		3.33		3.33
(D) Total Usable Space		13.5		13.5
(E) Total Support Space (Ground: 2' rounded to nearest foot)	• :	24.0		24.0
Space Allocation (% of Total Pole)				
Fully Allocated Cost Formula (B+	(28.44%		31.11%
Net Cost of a Bare Pole (Breakdown be	1 \$	601.10	\$	601.10
Carrying Charge Rate (Breakdown belo	v	29.66%	6	29.66%
Annual Cost of Ownership	\$	178.29	\$	178.29

Maximum Rate per Pole (Space Allocat		3.0 Party, 1 Foot	3.0 Party, 2 Foot		
Fully Allocated Cost Formula	\$	50.70	\$		55.46

Breakdown of Inputs

Net Cost of a Bare Pole		
(1) Gross Pole Investment	\$	8,370,070
(2) Depreciation Reserve	\$	3,428,281
(3) Net Current Deferred Operating Income Taxes	s	-
(4) Net Noncurrent Deferred Operating Income Taxes	\$	-
(5) Net Deferred Operating Income Taxes (L(3)+L(4))	\$	
(6) Gross Plant Investment	\$	16,966,262
(7) Net Deferred Operating Income Taxes (Poles) ((L(1)/L(6) x L(5)) \$	-
(8) Net Investment (Poles) (L(1)-L(2)-L(7))	\$	4,941,789
(9) Net Investment (Bare Pole) (L(8) x (1 - Discount Factor see abo	ve) \$	4,200,521
(10) Number of Poles		6,988
(11) Net Cost of a Bare Pole (L(9)/L(10))	\$	601.10
Carrying Charge Rate		
Carrying Charge		
(1) Administrative Charge		3.74%
(2) Maintenance Charge		8.74%
(3) Depreciation Charge		5.08%
(4) Taxes		3.60%
(5) Return on Investment		8.5%
(6) Total Carrying Charge Rate (L(1)+L(2)+L(3)+L(4)+L(5))		29.66%
Administrative Charge		
(1) A&G Expense (625 + 935)	s	863.674
(2) Net Plant Investment	s	23,099,326
(3) Administrative Charge (L(1)/L(2))	-	3.74%
Maintenance Charge		
(1) Average Maintenance Expense (593)	s	876.866
(2) Net Investment (Pole Accounts 364, 365 & 369)	ŝ	10.034.733
(3) Maintenance Charge (L(1)/L(2))	-	8.74%
Depreciation Charge		
(1) Depreciation Bate		3.00%
(2) Gross Pole Investment (Account 364)	s	8.370.070
(3) Net Pole Investment (Account 364)	Ś	4.941.789
(4) Depreciation Charge $(L(1) \times (L(2)/L(3))$	-	5.08%
	<u>F</u>	
(1) Total Current and Deferred Taxes	\$	831 890
(2) Net Plant Investment	s	23,099,326
(3) Taxes $(1(1)/(2))$	<u> </u>	3 60%
Poture on Investment		5.0078
Authorized by Regulatory Authority		8.5%
Harmonized of negatatory national		0.570

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From: Elizabeth Bowman [mailto:Elizabeth.Bowman@kub.org]
Sent: Tuesday, February 09, 2016 12:17 PM
To: Barnett, J Barry
Cc: Brogdon, Jennifer N; John Gresham; Rick Powers; Sam Smiddy
Subject: Re: optional method of calculating "average number of attaching parties"

TVA External Message. Please use caution when opening.

Hi Barry,

As per our discussion, I've recalculated KUB's "average number of attaching parties" excluding only poles with KUB alone attached. The results are as follows:

This is the relevant data as of 2/8/16 from our mapping records which are digital and updated daily:

- 1. Number of KUB owned poles with only KUB on the pole = 25,759
- 2. Number of KUB owned poles with communication companies (incl AT&T) attached (#3 minus #1)

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attached = 95,958

- 3. Total number of KUB owned poles = 121,717
- 4. Total number of times any company (including KUB) is attached to a KUB owned pole = 297,033

Using this data to calculate an "average number of attaching parties" only on poles with attachments other than KUB, we subtract (1) from (4) to derive the total number of attachments associated with this subset of our poles:

A) 297,033 - 25,759 = 271,274.

To calculate the average number of parties attached on a KUB owned pole which has attachments other than KUB, we divide the result from 'A' by #2.

271,274 / 95,958 = 2.83

After we spoke, I checked the total number of KUB owned poles with AT&T attachments and that value is only 68,764 which explains why the value calculated in our original proposal is less than 3.

Per your request, I've attached TVA's revised model with our 2015 accounting and pole count data and the value calculated as above for "average number of attaching parties". As we discussed, KUB does not have the accounting data to support a pole discount factor and thus we are using the default values for pole height and pole discount factor. The resulting rate is \$49.45.

We would be in favor of an option to use a default value of 3 for average number of attaching parties, which you mentioned is under discussion.

Let me know if you have any questions.

Thanks for your help! Beth

Elizabeth Bowman | Business Management Analyst | Knoxville Utilities Board 445 S. Gay Street | Knoxville TN 37902 (865) 594-7361 Office | (865) 594-7408 Fax www.kub.org Your Source for Energy and Water Services

 From:
 Elizabeth Bowman/RAS/KUB

 To:
 "Jennifer Brogdon" <<u>JNBrogdon@lva.gov</u>>

 Cc:
 John Gresham/PLT/KUB@KUB, Rick Powers/ENS/EAO/KUB@KUB, Sam Smiddy/ENS/EAO/KUB@KUB

 Date:
 02/08/2016 03:08 PM

 Subject:
 optional method of calculating "average number of attaching parties"

Hi Jennifer,

We have a question concerning determination of the "average number of attaching parties." Would it be acceptable to calculate this value based on only the pool of KUB owned poles with any communications company attached (other than AT&T)? This would exclude poles with only KUB attached and poles with only KUB and AT&T attached.

Oct 31 2017

Our concern with using a system wide average for all KUB owned poles and connections is that the proposed method is directed at communication companies other than those in reciprocal agreements (AT&T by far the largest of this group for KUB). KUB has a significant number of poles without attachments by parties other than KUB and AT&T and this decreases our system "average number of attaching parties" to 2.44. That value yields a pole rental rate of about \$58 in the new model which would be very difficult to defend and implement.

This is the relevant data as of 2/8/16 from our mapping records which are digital and updated daily:

- 1. Number of KUB owned poles with only KUB on the pole = 25,759
- 2. Number of KUB owned poles with only KUB and AT&T on the pole = 15,171
- Number of KUB owned poles with communication companies (excl AT&T) attached (#4 minus #1 minus #2) attached = 80,787
- 4. Total number of KUB owned poles = 121,717
- 5. Total number of times any company (including KUB) is attached to a KUB owned pole = 297,033

Using this data to calculate an "average number of attaching parties" only on poles with attachments other than KUB and AT&T, we subtract (1) and two times (2) from (5) to derive the total number of attachments associated with this subset of our poles:

A) 297,033 - 25,759 - 30,342 = 240,932.

To calculate the average number of parties attached on a KUB owned pole which has attachments other than KUB and AT&T, we divide the result from 'A' by #3.

240,932 / 80,787 = 2.98

As you know, the model calculates the average cost of a bare pole on our system. We feel it is appropriate to allocate that cost based on the average number of parties on a pole occupied by the type of entity to be charged the derived rate (in general, communication companies not in reciprocal agreements with KUB).

Would this method be acceptable?

Thank you, Beth

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