Electronically Filed in TPUC Docket Room on April 20, 2022 at 1:36 p.m.

# IN THE TENNESSEE PUBLIC UTILITY COMMISSION AT NASHVILLE, TENNESSEE

IN RE:	)	
	)	
PETITION OF KINGSPORT POWER	)	
COMPANY d/b/a AEP APPALACHIAN	)	<b>DOCKET NO. 21-00107</b>
POWER COMPANY FOR A GENERAL	)	
RATE INCREASE	)	
	)	

# CONSUMER ADVOCATE'S MOTION FOR LEAVE TO FILE SUPPLEMENTAL TESTIMONY OF WILLIAM H. NOVAK

Comes the Consumer Advocate Unit in the Financial Division of the Office of the Attorney General ("Consumer Advocate"), and hereby moves for leave to file the Supplemental Testimony of William H. Novak, attached hereto.

The purpose of the Supplemental Testimony is to address revisions to the Consumer Advocates' recommended revenue deficiency and the related rate design due to the calculation errors. The Supplemental Testimony also addresses certain new LED rates proposed by the Company for its Outdoor Lighting and Street Lighting customers.

Thus, the attached Supplemental Testimony will provide a more accurate presentation of the Consumer Advocate's position, and avoid later revisions of Mr. Novaks' Testimony.

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# RESPECTFULLY SUBMITTED,

VANCE L. BROEMEL (BPR No. 011421)

Senior Assistant Attorney General

KAREN H. STACHOWSKI (BPR No. 019607)

Assistant Attorney General

Office of the Tennessee Attorney General

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TPUC Docket No. 21-00107

Motion for Leave to file Supplemental Testimony

# **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing was served via electronic mail, with a courtesy copy by U.S. Mail, upon:

William C. Bovender Joseph B. Harvey Hunter, Smith & Davis, LLP P.O. Box 3704 Kingsport, TN 37664 Phone: (423) 378-8800

Email: <a href="mailto:bovender@hsdlaw.com">bovender@hsdlaw.com</a>
Email: <a href="mailto:jharvey@hsdlaw.com">jharvey@hsdlaw.com</a>

Noelle J. Coates American Electric Power Service Three James Center 1051 E. Cary Street – Suite 1100 Richmond, VA 23219-4029

Phone: (804) 698-5541 Email: njcoates@aep.com

This the 20th day of April, 2022.

William K. Castle
American Electric Power Service
Three James Center
1051 E. Cary Street – Suite 1100
Richmond, VA 23219-4029

Phone: (804) 698-5540 Email: wkcastle@aep.com

James R. Bacha American Electric Power Service 1 Riverside Plaza Columbus, OH 43215 Phone: (614) 716-1615 Email: jrbacha@aep.com

VANCE L. BROEMEL

Senior Assistant Attorney General

# BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

PETITION OF KINGSPORT POWER COMPANY D/B/A AEP APPALACHIAN POWER FOR A GENERAL RATE CASE	) ) ) ) ) )	Docket No. 21-00107
	)	

# SUPPLEMENTAL TESTIMONY of WILLIAM H. NOVAK

ON BEHALF OF

THE CONSUMER ADVOCATE UNIT
OF THE
FINANCIAL DIVISION
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL

# **ATTACHMENTS**

Supplemental Attachment WHN-1	Consumer Advocate Supplemental Exhibit
Supplemental Attachment WHN-2	Consumer Advocate Supplemental Proposed Rate Design
Supplemental Attachment WHN-3	Kingsport Power Company Responses to Consumer Advocate Informal Data Request 3b

2		OCCUPATION FOR THE RECORD.
3	A1.	My name is William H. Novak. My business address is 19 Morning Arbor Place,
4		The Woodlands, TX, 77381. I am the President of WHN Consulting, a utility
5		consulting and expert witness services company.
6		
7	<i>Q2.</i>	ARE YOU THE SAME WILLIAM H. NOVAK WHO PRESENTED PRE-
8		FILED TESTIMONY IN THIS DOCKET?
9	A2.	Yes.
10		
11	<i>Q3.</i>	WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?
12	A3.	The purpose of my supplemental testimony is to address revisions to the
13		Consumer Advocate's recommended revenue deficiency and the related rate
14		design due to calculation errors. My supplemental testimony also addresses
15		certain new LED rates proposed by the Company for its Outdoor Lighting and
16		Street Lighting customers.
17		
18	Q4.	PLEASE DESCRIBE THE REVISIONS YOU'VE MADE TO THE
19		CONSUMER ADVOCATE'S REVENUE DEFICIENCY CALCULATION.
20	A4.	There are three revisions to the Consumer Advocate's original revenue deficiency
21		calculation. The first revision relates to the Forfeited Discount Ratio calculation.
22		Specifically, I had failed to update the Consumer Advocate's Attrition Period
23		Base Revenues from an earlier draft in this calculation. This revision adjusts the

Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND

1

I		Forfeited Discount Ratio from -0.011691 to -0.011315 as shown on Supplemental
2		Attachment WHN-1, Schedule 11.1
3		
4		The second revision relates to the appropriate Federal Income Tax Rate in the
5		Excise and Income Tax calculation. Specifically, I had used an incorrect federal
6		tax rate of 28.00% instead of the current rate of 21.00% in this calculation. This
7		revision reduces Federal Income Tax Expense from \$566,130 to \$361,127 as
8		shown on Supplemental Attachment WHN-1, Schedule 8.2
9		
10		The third revision relates to the appropriate calculation of Payroll Taxes. This
11		revision increases Payroll Taxes from \$67,781 to \$107,194 as shown on
12		Supplemental Attachment WHN-1, Schedule 7.3
13		
14	Q5.	WHAT IS THE IMPACT FROM THESE REVISIONS ON THE
15		CONSUMER ADVOCATE'S RECOMMENDED REVENUE
16		DEFICIENCY?
17	A5.	As shown on Supplemental Attachment WHN-1, Schedule 1, the Consumer
18		Advocate's recommended Revenue Deficiency has been reduced from \$3,169,10

<sup>1</sup> See also Consumer Advocate's Responses to Kingsport's First Set of Discovery Requests, Item No. 2, April 20, 2022, for a further discussion of this revision.

<sup>&</sup>lt;sup>2</sup> See also Consumer Advocate's Responses to Kingsport's First Set of Discovery Requests, Item No. 3, April 20, 2022, for a further discussion of this revision. Also note that the \$361,127 revision shown on Supplemental Attachment WHN, Schedule 8 represents the consolidated adjustment to income taxes from all adjustments, while the \$368,866 adjustment shown on Item No. 3 of the Consumer Advocate's Responses to Kingsport's First Set of Discovery Requests, represents the tax rate change in isolation of any other adjustments.

<sup>&</sup>lt;sup>3</sup> See also Consumer Advocate's Responses to Kingsport's First Set of Discovery Requests, Item No. 7, April 20, 2022, for a further discussion of this revision.

1		to \$2,944,892 to take these three revisions into account. This new \$2,944,892
2		Revenue Deficiency recommendation results in an across-the-board increase in
3		rates of 12.25% as shown on Supplemental Attachment WHN-1, Schedule 12.
4		
5	Q6.	HAVE YOU ALSO UPDATED THE CONSUMER ADVOCATE'S
6		PROPOSED RATE DESIGN TO REFLECT THE NEW RECOMMENDED
7		REVENUE DEFICIENCY OF \$2,944,892?
8	A6.	Yes. My proposed rate design to produce a revenue increase of \$2,944,892 is
9		shown on Supplemental Attachment WHN-2.
10		
11	Q7.	MR. NOVAK, WHY ARE YOU ADDRESSING NEW LED RATE
12		OFFERINGS FOR OUTDOOR LIGHTING AND STREET LIGHTING
12 13		OFFERINGS FOR OUTDOOR LIGHTING AND STREET LIGHTING CUSTOMERS AT THIS TIME?
	A7.	
13	A7.	CUSTOMERS AT THIS TIME?
13 14	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its
13 14 15	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its  Outdoor Lighting and Street Lighting tariffs. There is no impact to the revenue
13 14 15 16	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its  Outdoor Lighting and Street Lighting tariffs. There is no impact to the revenue requirement in this rate case from these LED rate proposals since no customers
13 14 15 16	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its  Outdoor Lighting and Street Lighting tariffs. There is no impact to the revenue requirement in this rate case from these LED rate proposals since no customers are presently taking this type of service. However, the rates being proposed by
113 114 115 116 117	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its  Outdoor Lighting and Street Lighting tariffs. There is no impact to the revenue requirement in this rate case from these LED rate proposals since no customers are presently taking this type of service. However, the rates being proposed by the Company for LED lighting should be based on the expected costs of providing
113 114 115 116 117 118	A7.	CUSTOMERS AT THIS TIME?  The Company is proposing to add several new choices for LED service to its  Outdoor Lighting and Street Lighting tariffs. There is no impact to the revenue requirement in this rate case from these LED rate proposals since no customers are presently taking this type of service. However, the rates being proposed by the Company for LED lighting should be based on the expected costs of providing this service. As I mentioned in my direct testimony, I intended to provide

<sup>4</sup> Direct testimony of William H. Novak at 37:4-5.

1	<i>Q8.</i>	HAVE YOU NOW REVIEWED THE COMPANY'S COST DATA
2		ASSOCIATED WITH PROVIDING LED LIGHTING SERVICE?
3	A8.	Yes. A copy of the Consumer Advocate's discovery requests and the Company's
4		responses to these requests that are all related to the costs of providing LED
5		lighting service is included on Supplemental Attachment WHN-3.
6		
7	Q9.	WHAT CONCLUSIONS HAVE YOU DRAWN FROM THE COMPANY'S
8		RESPONSES FOR THE COSTS OF PROVIDING LED LIGHTING
9		SERVICE?
10	A9.	At this time, it does not appear that the Company has adequate cost data to
11		support its proposed rates for LED lighting service for the Outdoor Lighting and
12		Street Lighting tariffs. <sup>5</sup> In addition, I disagree with the Company's proposed use
13		of installation and removal costs for LED lighting service as a surrogate for LED
14		maintenance costs. <sup>6</sup>
15		
16	Q10.	WHAT ACTION ARE YOU RECOMMENDING THAT THE
17		COMMISSION TAKE WITH REGARDS TO THE COMPANY'S
18		PROPOSED LED LIGHTING SERVICE?
19	A10.	I recommend that the Commission deny the Company's proposed rates and
20		charges for the provision of LED lighting service in the Outdoor Lighting and
21		Street Lighting tariffs at this time. As I mentioned earlier, the denial of these

<sup>&</sup>lt;sup>5</sup> See Supplemental Attachment WHN-3, Items 3.13, 3.14, 3.15 and 3.16 where the Company was unable to provide cost data support for LED lighting.

<sup>6</sup> See Supplemental Attachment WHN-3, Item 22.

1	rates will have no impact on the revenue requirement in this rate case since no
2	customers are presently taking this type of service. The Company can then make
3	a separate tariff filing at a future date when it has adequate cost data support for
1	providing this service

5

6

# Q11. DOES THIS COMPLETE YOUR TESTIMONY?

7 All. Yes, it does. However, I reserve the right to incorporate any new data that may subsequently become available.

# IN THE TENNESSEE PUBLIC UTILITY COMMISSION AT NASHVILLE, TENNESSEE

IN RE:  PETITION OF KINGSPORT POWER  COMPANY d/b/a AEP APPALACHIAN  POWER GENERAL RATE CASE	) ) ) DOCKET NO. 21-00107 )			
AFFIDAVIT				

I, William H. Novak, on behalf of the Consumer Advocate Unit of the Attorney General's Office, hereby certify that the attached Supplemental Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate Unit.

WILLIAM H. NOVAK

Sworn to and subscribed before me this 405 day of 4pr. 1, 2022.

NOTARY PUBLIC

My commission expires: September 28, 2002.

# SUPPLEMENTAL ATTACHMENT WHN-1

Consumer Advocate
Supplemental Exhibit

# BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

	)	
	)	
PETITION OF KINGSPORT POWER	)	
COMPANY D/B/A AEP	)	Docket No. 21-00107
APPALACHIAN POWER FOR A	)	
GENERAL RATE CASE	)	
	)	
	)	

# SUPPLEMENTAL EXHIBIT

OF

THE CONSUMER ADVOCATE UNIT
OF THE
FINANCIAL DIVISION
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL

April 20, 2022

# INDEX TO SCHEDULES For the 12 Months Ending December 31, 2022

	Schedule
Results of Operations	1
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Comparative Rate Base	3
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Results of Operations
For the 12 Months Ending December 31, 2022

Line No.		Kingsport Power		Consumer Advocate		Difference
1	Rate Base	\$ 	\$	128,541,218 <b>A</b> /	\$	-18,516,708
2	Operating Income At Current Rates	-1,218,234 <b>B/</b>		4,184,962 <b>B/</b>		5,403,196
3	Earned Rate Of Return	-0.83%		3.26%		4.08%
4	Fair Rate Of Return	6.36% <b>C/</b>		4.97% <b>D/</b>		-1.40%
5	Required Operating Income	9,352,885		6,382,071		-2,970,814
6	Operating Income Deficiency (Surplus)	10,571,119		2,197,109		-8,374,010
7	Gross Revenue Conversion Factor	1.359897 <b>C/</b>	-	1.340349 <b>E/</b>	-	0.019548
8	Revenue Deficiency/(Surplus)	\$ 14,375,633	\$	2,944,892	\$_	11,430,741

A/ Consumer Advocate Exhibit, Schedule 3.
B/ Consumer Advocate Exhibit, Schedule 5.
C/ Company Filing, Exhibit KMJ-1a, "1-a IncrCalcSmry" tab.
D/ Consumer Advocate Exhibit, Schedule 10.
E/ Company Exhibit, 1-a (DRB).

Average Rate Base For the 12 Months Ending December 31, 2022

Line No.		Test Period	Attrition Adjustments	Attrition Period
	Additions:			
1	Utility Plant in Service	\$ 262,718,884	\$ -35,714,959	\$ 227,003,925
2	Property Held for Future Use	187,481	0	187,481
3	Construction Work in Progress	7,892,893	-2,790,280	5,102,613
4	Materials & Supplies	404,696	-104,084	300,612
5	Prepayments	6,877,867	-4,795,436	2,082,431
6	Total Additions	\$ <u>278,081,821</u>	\$43,404,759	\$ 234,677,062
	<b>5</b>			
	Deductions:			
7	Accumulated Depreciation	\$ 88,535,728	\$ -7,426,925	\$ 81,108,803
8	Accumulated Deferred Income Taxes	31,612,360	-12,979,600	18,632,760
9	Customer Advances for Construction	793,102	-90,849	702,253
11	Customer Deposits	5,734,417	-42,389	5,692,028
12	Total Deductions	\$ <u>126,675,607</u>	\$20,539,763	\$ <u>106,135,844</u>
14	Rate Base	\$ <u>151,406,214</u>	\$22,864,996	\$ <u>128,541,218</u>

SOURCE: Consumer Advocate Rate Base Workpaper RB-1.00.

Comparative Rate Base For the 12 Months Ending December 31, 2022

Line No.	- Additions:	Kingsport Power A/	Consumer Advocate B/	Difference
1	Utility Plant in Service	\$ 232,988,286	\$ 227,003,925	\$ -5,984,361
2	Property Held for Future Use	187,481	187,481	0
3	Construction Work in Progress	3,450,361	5,102,613	1,652,252
4	Materials & Supplies	326,490	300,612	-25,878
5	Prepayments	6,056,323	2,082,431	-3,973,892
6	Total Additions	\$ <u>243,008,941</u>	\$ <u>234,677,062</u>	\$
	Deductions:			
7	Accumulated Depreciation	\$ 80,022,394	\$ 81,108,803	\$ 1,086,409
8	Accumulated Deferred Income Taxes	11,528,284	18,632,760	7,104,476
9	Customer Advances for Construction	130,128	702,253	572,125
10	Customer Deposits	4,270,209	5,692,028	1,421,819
11	Total Deductions	\$ <u>95,951,015</u>	\$ <u>106,135,844</u>	\$ 10,184,829
12	Rate Base	\$ 147,057,926	\$ 128,541,218	\$ -18,516,708

A/ Company Filing, Exhibit KMJ-1a, "1-b JrsSumry" tab. B/ Consumer Advocate Exhibit, Schedule 2.

Income Statement at Current Rates For the 12 Months Ending December 31, 2022

Line No.		Test Period	Adjustments	Attrition Amount
	Operating Revenues:			
1	Sale of Electricity	\$ 150,383,78	4 \$ -6,672,432	\$ 143,711,352 <b>A/</b>
2	Other Revenues	7,347,85	6 -5,832,762	1,515,094 <b>B/</b>
3	Total Operating Revenue	\$ 157,731,64	<u>-12,505,194</u>	\$ 145,226,446
	Operating Expenses:			
4	Purchased Power	\$ 117,746,45	0 \$ 1,921,227	\$ 119,667,677 <b>A/</b>
5	Transmission Expense	731,65	3 -731,653	0 <b>C/</b>
6	Distribution Expense	9,601,76	7 -6,349,981	3,251,786 <b>C/</b>
7	Customer Accounts Expense	1,299,53	0 -107,125	1,192,405 <b>C/</b>
8	Customer Service & Information Expense	281,70	1 -176,035	105,666 <b>C/</b>
9	Sales Expense	5,40	4 -136	5,268 <b>C/</b>
10	Administrative & General Expense	1,740,38	0 -755,221	985,159 <b>C/</b>
11	Other O&M Expense	468,17	0 -280,128	188,042 <b>C/</b>
12	Depreciation & Amortization Expense	8,898,34	3 -492,446	8,405,897 <b>D/</b>
13	Other Income/Expense (Includes AFUDC)	205,41	8 -48,302	157,116 <b>E/</b>
14	Taxes Other Than Income Taxes	11,033,84	2 -4,505,848	6,527,994 <b>F/</b>
15	State Excise Taxes	-35,85	4 229,201	193,347 <b>G/</b>
16	Federal Income Taxes	-267,31	0 628,437	361,127 <b>G/</b>
17	Total Operating Expenses	\$ <u>151,709,49</u>	<u>-10,668,010</u>	\$ <u>141,041,484</u>
18	Utility Net Operating Income	\$ <u>6,022,14</u>	<u>6</u> \$ <u>-1,837,184</u>	\$ <u>4,184,962</u>

A/ Consumer Advocate Revenue Workpapers R-1-1.00 and R-1-2.00.

Consumer Advocate Revenue Workpaper R-90-1.00.
Consumer Advocate Expense Workpaper Schedule-1-O&M.
Consumer Advocate Revenue Workpaper R-1-1.01.

Consumer Advocate Rate Base Workpaper RB-50-1.00.

F/ Consumer Advocate Exhibit, Schedule 7.
G/ Consumer Advocate Exhibit, Schedule 8.

KINGSPORT POWER COMPANY
Comparative Income Statement at Current Rates
For the 12 Months Ending December 31, 2022

Line No.		Kingsport <u>Power</u> A/	Consumer Advocate B/	Difference
	Operating Revenues:			
1	Sale of Electricity	\$ 140,353,086	\$ 143,711,352	\$ 3,358,266
2	Other Revenues	1,065,719	1,515,094	449,375
3	Total Operating Revenue	\$ <u>141,418,805</u>	\$ <u>145,226,446</u>	\$ 3,807,641
	Operating Expenses:			
4	Purchased Power	\$ 117,746,450	\$ 119,667,677	\$ 1,921,227
5	Transmission Expense	0	0	0
6	Distribution Expense	7,997,543	3,251,786	-4,745,757
7	Customer Accounts Expense	1,313,158	1,192,405	-120,753
8	Customer Service & Information Expense	113,355	105,666	-7,689
9	Sales Expense	5,404	5,268	-136
10	Administrative & General Expense	1,674,020	985,159	-688,861
11	Other O&M Expense	468,170	188,042	-280,128
12	Depreciation Expense	8,191,433	8,405,897	214,464
13	Other Income/Expense (Includes AFUDC)	229,855	157,116	-72,739
14	Taxes Other Than Income Taxes	6,643,772	6,527,994	-115,778
15	State Excise Taxes	-229,590	193,347	422,937
16	Federal Income Taxes	-1,516,531	361,127	1,877,658
17	Total Operating Expenses	\$ <u>142,637,039</u>	\$ <u>141,041,484</u>	\$
18	Utility Net Operating Income	\$ <u>-1,218,234</u>	\$ <u>4,184,962</u>	\$ 5,403,196

A/ Company Exhibits 1a-4c Kingsport JCOS CCOS (KMJ-MHW), "JCOS Detail 2-a" tab. B/ Consumer Advocate Exhibit, Schedule 4.

Consumer Advocate Comparative Margin Summary For the 12 Months Ending December 31, 2022

Line No.	Customer Class	Revenues	Power Cost	Margin
1	Residential Service	\$ 65,355,008	\$ 57,730,035	\$ 7,624,973
2	Small General Service	3,190,885	1,854,077	1,336,808
3	Medium General Service	11,688,459	8,216,031	3,472,428
4	Large General Service	17,882,161	12,335,761	5,546,400
5	Industrial Power Service	35,725,670	33,467,645	2,258,025
6	Church Service	1,049,298	729,142	320,156
7	Public School Service	2,701,277	2,464,910	236,367
8	Electric Heating General Service	3,394,603	2,300,057	1,094,546
9	Outdoor Lighting Service	901,548	202,879	698,669
10	Street Lighting Service	1,822,443	367,140	1,455,303
11	Total Electric Sales Revenue	\$ 143,711,352	\$ 119,667,677	\$ 24,043,675
12	Other Revenues	1,515,094	0	1,515,094
13	Total Revenues	\$ <u>145,226,446</u>	\$ <u>119,667,677</u>	\$ 25,558,769

**SOURCE:** Consumer Advocate Revenue Workpapers R-1-1.00 and R-90-1.00.

KINGSPORT POWER COMPANY
Taxes Other than Income Income Taxes
For the 12 Months Ending December 31, 2022

Line No.	Property Taxes	**Engsport** **Power** \$ 1,375,722	A/ Consumer Advocate \$ 1,310,046	A/ <u>Difference</u> \$ -65,676
2	TPUC Inspection Fee	533,862	533,862	0
3	Payroll Taxes	157,295	107,194	-50,101
4	Franchise Tax	364,122	364,122	0
5	Gross Receipts Tax	4,211,650	4,211,650	0
6	Allocated & Other Taxes	1,120	1,120	0
7	Total	\$ 6,643,771	\$ 6,527,994	\$

KINGSPORT POWER COMPANY
Excise and Income Taxes
For the 12 Months Ending December 31, 2022

Line		Consumer
No.	Onersting Revenues	Advocate
1	Operating Revenues: Sale of Electricity	\$ 143,711,352 <b>A/</b>
2	Other Revenues	· · · · · · · · · · · · · · · · · · ·
3	Total Operating Revenue	1,515,094 <b>A/</b> \$ 145,226,446
3	Total Operating Revenue	\$ <u></u>
	Expenses:	
4	Purchased Power	\$ 119,667,677 <b>A/</b>
5	Transmission Expense	0 <b>A/</b>
6	Distribution Expense	3,251,786 <b>A/</b>
7	Customer Accounts Expense	1,192,405 <b>A/</b>
8	Customer Service & Information Expense	105,666 <b>A/</b>
9	Sales Expense	5,268 <b>A/</b>
10	Administrative & General Expense	985,159 <b>A/</b>
11	Other Expense	188,042 <b>A/</b>
12	Depreciation Expense	8,405,897 <b>A/</b>
13	Other Income/Expense (Includes AFUDC)	157,116 <b>A/</b>
14	Taxes Other Than Income Taxes	6,527,994 <b>A/</b>
15	Total Operating Expenses	\$ 140,487,010
16	NOI Before Excise and Income Taxes	\$ 4,739,436
17	Interest Expense	1,764,871 <b>B/</b>
18	Pre-tax Book Income	\$ 2,974,565
	State Excise Tax:	
19	Pre-tax Book Income	\$ 2,974,565
20	Excise Tax Rate	\$ 2,974,565 6.50% <b>C/</b>
21	State Excise Tax Expense	\$ 193,347
21	Otate Endise Tax Expense	Ψ 199,947
	Federal Income Tax:	
22	Pre-tax Book Income	\$ 2,974,565
23	Excise Tax Expense	193,347
24	FIT Taxable Income	\$ 2,781,218
25	FIT Rate	21.00% <b>C/</b>
26	Gross Federal Income Tax Expense	584,056
27	Less Amortization of Protected Excess ADIT	-222,929 <b>D/</b>
28	Net Federal Income Tax Expense	\$ 361,127

A/ Consumer Advocate Exhibit, Schedule 4. B/ CAPD Exhibit, Schedule 10. C/ Statutory Rates.

D/ Company response to Consumer Advocate Discovery Request 1-36, Attachment 3, DFIT 1 tab, Line 107.

Income Statement at Proposed Rates
For the 12 Months Ending December 31, 2022

Line No.		Current Rates A/	Rate Increase B/	Proposed Rates
	Operating Revenues:			
1	Sale of Electricity	\$ 143,711,352	\$ 2,944,892	\$ 146,656,244
2	Other Revenues	1,515,094	33,321	1,548,415
3	Total Operating Revenue	\$ <u>145,226,446</u>	\$ 2,978,213	\$ <u>148,204,659</u>
	Operating Expenses:			
4	Purchased Power	\$ 119,667,677	\$	\$ 119,667,677
5	Transmission Expense	0		
6	Distribution Expense	3,251,786		3,251,786
7	Customer Accounts Expense	1,192,405	3,723	1,196,128
8	Customer Service & Information Expense	105,666		105,666
9	Sales Expense	5,268		5,268
10	Administrative & General Expense	985,159		985,159
11	Other O&M Expense	188,042		188,042
12	Depreciation & Amortization Expense	8,405,897		8,405,897
13	Other Income/Expense (Includes AFUDC)	157,116		157,116
14	Taxes Other Than Income Taxes	6,527,994		6,527,994
15	State Excise Taxes	193,347	193,342	386,689
16	Federal Income Taxes	361,127	584,038	945,165
17	Total Operating Expenses	\$ <u>141,041,484</u>	\$ <u>781,103</u>	\$ <u>141,822,586</u>
18	Utility Net Utility Operating Income	\$ 4,184,962	\$ <u>2,197,110</u>	\$ 6,382,073

A/ Consumer Advocate Exhibit, Schedule 4.
B/ Consumer Advocate Exhibit, Schedule 1 and 11.

Rate of Return Summary
For the 12 Months Ending December 31, 2022

		Consumer Advocate				
Line No.	Class of Capital	Percent of Total	Cost Rate	Weighted Cost Rate		
1	Short-Term Debt	8.61%	0.45%	0.039%		
2	Long-Term Debt	42.49%	3.14%	1.334%		
3	Common Equity	48.90%	7.35%	3.592%		
4 5	Total	100.00%		4.965%		
6						
	Interest Expense Short-Term Debt:					
7	Rate Base			\$ 128,541,218 <b>B/</b>		
8	Short-Term Weighted Debt Cost			0.04%		
9	Short-Term Debt Interest Expense			\$ 50,131		
	Interest Expense Long-Term Debt:					
10	Rate Base			\$ 128,541,218 <b>B/</b>		
11	Long-Term Weighted Debt Cost			1.33%		
12	Long-Term Debt Interest Expense			\$ <u>1,714,740</u>		
13	Total Interest Expense			\$1,764,871		

A/ Exhibit ALR-1 B/ Consumer Advocate Exhibit, Schedule 2.

Revenue Conversion Factor For the 12 Months Ending December 31, 2022

Line No.		Amount	Balance
1	Operating Revenues		1.000000
2	Add: Forfeited Discounts	0.011315 <b>A/</b>	0.011315
3	Balance		1.011315
4	Uncollectible Ratio	0.001250 <b>B/</b>	0.001264
5	Balance		1.010051
6	State Excise Tax	0.065000 <b>C/</b>	0.065653
7	Balance		0.944398
8	Federal Income Tax	0.210000 <b>C/</b>	0.198323
9	Balance		0.746074
10	Revenue Conversion Factor (Line 1 / Line 9)		1.340349

A/ Consumer Advocate Revenue Workpaper R-90-2.00. B/ Consumer Advocate Expense Workpaper AB-3-UR. C/ Statutory Rates.

KINGSPORT POWER COMPANY Consumer Advocate Proposed Margin Change For the 12 Months Ending December 31, 2022

Line No.	Customer Class	Current Margin	Margin A/ Change	Proposed B/ Margin	Percent Change
1	Residential Service	\$ 7,624,973	\$ 933,914	\$ 8,558,887	12.25%
2	Small General Service	1,336,808	163,734	1,500,542	12.25%
3	Medium General Service	3,472,428	425,306	3,897,734	12.25%
4	Large General Service	5,546,400	679,328	6,225,728	12.25%
5	Industrial Power Service	2,258,025	276,565	2,534,590	12.25%
6	Church Service	320,156	39,213	359,369	12.25%
7	Public School Service	236,367	28,950	265,317	12.25%
8	Electric Heating General Service	1,094,546	134,061	1,228,607	12.25%
9	Outdoor Lighting Service	698,669	85,574	784,243	12.25%
10	Street Lighting Service	1,455,303	178,247	1,633,550	12.25%
11	Total Electric Sales Margin	\$ 24,043,675	2,944,892	26,988,567	12.25%
12	Other Revenues	1,515,094	33,321	1,548,415	2.20%
13	Total Margin	\$ 25,558,769	\$ 2,978,213	\$ 28,536,982	11.65%

A/ Consumer Advocate Exhibit, Schedule 6. B/ Consumer Advocate Exhibit, Schedule 9.

# SUPPLEMENTAL ATTACHMENT WHN-2

# Consumer Advocate Supplemental Proposed Rate Design

# Kingsport Power Company Consumer Advocate Proposed Rate Design Residential Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Residential:							
Regular Residential (Tariff Code 15):							
Service Charge (Bills)	509,129	\$12.6300000	\$6,430,299	\$945,670	\$7,375,970	\$14.4900000	14.71%
Energy Charge (KWH)	666,758,266	0.0032500	2,166,964		2,166,964	0.0032500	0.00%
Total Regular Residential (Tariff Code 15)			\$8,597,264	\$945,670	\$9,542,934		11.00%
Employee Residential (Tariff Code 18)							
Service Charge (Bills)	882	12.6300000	\$11,140	\$1,638	\$12,778	\$14.4900000	14.71%
Energy Charge (KWH)	1,287,578	0.0000000	0	. ,	0	0.0000000	0.00%
Total Employee Residential (Tariff Code 18)			\$11,140	\$1,638	\$12,778		14.71%
Regular Load Management Residential (Tariff Code 11)							
Service Charge (Bills)	294	12.6300000	\$3,713	\$546	\$4,259	\$14.4900000	14.71%
Energy Charge (KWH)	306,795	0.0032500	997	44.15	997	0.0032500	0.00%
Energy Charge (Last 250 KWH per Month)	73,500	0.0000000	0		0	0.0000000	0.00%
Total Regular Load Management Residential (Tariff Code 11)			\$4,710	\$546	\$5,256		11.59%
Employee Load Management Residential (Tariff Code 51)							
Service Charge (Bills)	12	12.6300000	\$152	\$22	\$174	\$14.4900000	14.71%
Energy Charge (KWH)	22,369	0.0000000	0	*	0	0.0000000	0.00%
Energy Charge (Last 250 KWH per Month)	3,000	0.0000000	0		0	0.0000000	0.00%
Total Employee Load Management Residential (Tariff Code 51)	-,		\$152	\$22	\$174		14.71%
Regular Time of Day Residential (Tariff Codes 30 and 31)							
Service Charge (Bills)	66	26.7000000	\$1,762	\$259	\$2,021	\$30.6300000	14.71%
Energy Charge - On Peak (KWH)	277,162	0.0187600	5,200	Ψ200	5,200	0.0187600	0.00%
Energy Charge - Off Peak (KWH)	170,664	0.0000000	0		0	0.0000000	0.00%
Total Regular Time of Day Residential (Tariff Codes 30 and 31)	-,		\$6,962	\$259	\$7,221		3.72%
Total Base Residential Margin			\$8,620,227	\$948,136	\$9,568,363		11.00%
Prompt Payment Discount			-995,254	-14,222	-1,009,476		1.43%
Net Base Residential Margin	510,383 668,899,334		\$7,624,973	\$933,914	\$8,558,887		12.25%
	000,033,334						

**SOURCE:** Consumer Advocate Revenue Workpaper R-10-1.00 and Consumer Advocate Exhibit, Schedule 12.

## Kingsport Power Company Consumer Advocate Proposed Rate Design Small General Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Small General Service:							
Time of Day Small General Service (229)							
Service Charge (Bills)	50	\$50.0000000	\$2,500	\$571	\$3,071	\$61.4300000	22.86%
Energy Charge - On Peak KWH per Month	274,048	0.0442200	12,118		12,118	0.0442200	0.00%
Energy Charge - Off Peak KWH per Month	151,342	0.0000000	0		0	0.0000000	0.00%
Total TOD General Service			\$14,618	\$571	\$15,190		3.91%
SGS-Fixed (Tariff Code 231):							
Service Charge (Bills)	44,227	\$15.2500000	\$674,462	\$154,167	\$828,629	\$18.7400000	22.86%
Energy Charge - First 600 KWH per Month	12.240.456	0.0322500	394,755	Ψ.σ.,.σ.	394.755	0.0322500	0.00%
Energy Charge - Over 600 KWH per Month	9,550,254	0.0207600	198,263		198,263	0.0207600	0.00%
Total SGS-Fixed			\$1,267,480	\$154,167	\$1,421,646		12.16%
SGS-Measured (Tariff Code 232):							
Service Charge (Bills)	2,587	15.2500000	\$39,452	\$9,018	\$48,470	\$18.7400000	22.86%
Energy Charge - First 600 KWH per Month	901,202	0.0322500	29,064	ψο,σ.σ	29,064	0.0322500	0.00%
Energy Charge - Over 600 KWH per Month	909,428	0.0207600	18,880		18,880	0.0207600	0.00%
Total SGS-Measured			\$87,395	\$9,018	\$96,413		10.32%
SGS-Non Metered (Tariff Code 233):							
Service Charge (Bills)	709	15.2500000	\$10,812	\$2,471	\$13,284	\$18.7400000	22.86%
Energy Charge - First 600 KWH per Month	90,520	0.0322500	2,919	Ψ2, 17 1	2,919	0.0322500	0.00%
Energy Charge - Over 600 KWH per Month	104,776	0.0207600	2,175		2,175	0.0207600	0.00%
Total SGS-Non Metered			\$15,907	\$2,471	\$18,378		15.54%
Total Base Small General Service Margin			\$1,385,400	\$166,227	\$1,551,627		12.00%
Prompt Payment Discount			-48,592	-2,493	-51,085		5.13%
Net Base Small General Service Margin	47,573		\$1,336,808	\$163,734	\$1,500,542		12.25%
2200 2 20 <b>3 30</b>	24,222,026		<del>+ 1,300,000</del>	<del>\$100,104</del>	<del>+ 1,500,042</del>		12.2070

# Kingsport Power Company Consumer Advocate Proposed Rate Design Medium General Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Medium General Service:			9				
MGS-Secondary (Tariff Code 235):							
Service Charge (Bills)	14,828	\$43.0000000	\$637,604	\$190,607	\$828,211	\$55.8500000	29.89%
Demand Charge	366,712	\$2.2000000	806,766	241,176	1,047,943	2.8576720	29.89%
Energy Charge - Step 1	64,166,820	0.0343800	2,206,055		2,206,055	0.0343800	0.00%
Energy Charge - Step 2	35,164,130	0.0000000	0		0	0.0000000	0.00%
Total MGS Secondary			\$3,650,426	\$431,783	\$4,082,208		11.83%
MGS-Primary (Tariff Code 237): Service Charge (Bills) Demand Charge Energy Charge - Step 1 Energy Charge - Step 2	0 0 0 0	190.0000000 2.1500000 0.0292700 0.0000000	\$0 0 0	\$0 0	\$0 0 0	\$202.8500000 2.8076720 0.0292700 0.0000000	6.76% 30.59% 0.00% 0.00%
MGS-Primary			\$0	\$0	\$0		
Total Base Medium General Service Margin Prompt Payment Discount			<b>\$3,650,426</b> -177,997	<b>\$431,783</b> -6,477	<b>\$4,082,208</b> -184,474		11.83% 3.64%
Net Base Medium General Service Margin	14,828 366,712 99,330,950	-	\$3,472,429	\$425,306	\$3,897,735		12.25%

**SOURCE:** Consumer Advocate Revenue Workpaper R-21-1.00 and Consumer Advocate Exhibit, Schedule 12.

# Kingsport Power Company Consumer Advocate Proposed Rate Design Large General Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Large General Service:			<u>g</u>		<u></u>		
LGS-Secondary (Tariff Code 240):							
Service Charge (Bills)	1,963	\$156.0000000	\$306,228	\$50,675	\$356,903	\$181.8200000	16.55%
Energy Charge (KWH)	161,541,124	0.0078700	1,271,329		1,271,329	0.0078700	0.00%
Demand Charge (KVA)	461,888	6.7200000	3,103,887	513,635	3,617,523	7.8320344	16.55%
Alternate Feed Service Demand Charge (KW)	18,000	2.4600000	44,280		44,280		0.00%
Alternate Feed Service Switch Charge	12	14.6900000	176		176		0.00%
Total LGS Secondary			\$4,725,900	\$564,310	\$5,290,211		11.94%
LGS-Multi-Secondary (Tariff Code 242):							
Service Charge (Bills)	48	156.0000000	\$7,488	\$1,239	\$8,727	\$181.8200000	16.55%
Energy Charge (KWH)	3,810,000	0.0078700	29,985	. ,	29,985	0.0078700	0.00%
Demand Charge (KVA)	9,988	6.7200000	67,119	11,107	78,226	7.8320344	16.55%
Total LGS-Mulit-Secondary			\$104,592	\$12,346	\$116,938		11.80%
LGS-Primary (Tariff Code 244):							
Service Charge (Bills)	179	330.0000000	\$59,070	\$9,775	\$68,845	\$384.6100000	16.55%
Energy Charge (KWH)	30,647,450	0.0085100	260,810	*-,	260,810	0.0085100	0.00%
Demand Charge (KVA)	104,679	5.9600000	623,887	103,242	727,128	6.9462686	16.55%
Alternate Feed Service Demand Charge (KW)	18,000	2.4600000	44,280	,	44,280		0.00%
Alternate Feed Service Switch Charge	12	14.6900000	176		176		0.00%
Total LGS-Primary			\$988,223	\$113,017	\$1,101,240		11.44%
Total Base Large General Service Margin			\$5,818,715	\$689,673	\$6,508,388		11.85%
Prompt Payment Discount			-272,317	-10,345	-282,662		3.80%
Net Base Large General Service Margin	2,190		\$5,546,398	\$679,328	\$6,225,726		12.25%
2002 20. 30 001 1100 margin	195,998,574		<del>+5,540,000</del>	<del>+310,020</del>	<del>+++++++++++++++++++++++++++++++++++++</del>		12.2070
	576,555						
	010,000						

# Kingsport Power Company Consumer Advocate Proposed Rate Design Industrial Power Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Industrial Power Service:	Determinants	Dase Nates	- wargin	Deficiency	- wargin	Dase Nates	morease
IP-Primary (Tariff Code 322):							
Service Charge (Bills)	24	\$480.0000000	\$11,520	\$1,239	\$12,759	\$531.6200000	10.75%
Energy Charge (KWH)	54,928,900	0.0000000	0		0	0.0000000	0.00%
On-Peak Demand Charge (KW)	91,299	4.4100000	402,629	43,303	445,931	4.8842953	10.75%
Off-Peak Demand Charge (KW)	184	4.4100000	811		811	4.4100000	0.00%
Reactive Charge (KVAR)	4,562	0.7500000	3,422		3,422	0.7500000	0.00%
Total IP-Primary			\$418,382	\$44,542	\$462,923		10.65%
IP-Transmission (Tariff Code 324):							
Service Charge (Bills)	48	3,860.0000000	\$185,280	\$19,927	\$205,207	4,275.1400000	10.75%
Energy Charge (KWH)	476,012,071	0.0000000	0	Ψ10,021	0	0.0000000	0.00%
On-Peak Demand Charge (KW)	834,537	2.4100000	2,011,234	216,308	2,227,542	2.6691954	10.75%
Off-Peak Demand Charge (KW)	26,094	1.4200000	37,053	=:=,===	37,053	1.4200000	0.00%
Reactive Charge (KVAR)	200,166	0.7500000	150,125		150,125	0.7500000	0.00%
Backup Reservation Charge - Level A	252,000	0.0000000	0		0	0.0000000	0.00%
Backup Reservation Charge - Level B	120,000	0.0000000	0		0	0.0000000	0.00%
Backup Reservation Charge - Level C	96,000	0.0000000	0		0	0.0000000	0.00%
Total IP-Transmission			\$2,383,692	\$236,235	\$2,619,927		9.91%
Total Base Industrial Power Margin			\$2,802,074	\$280,777	\$3,082,850		10.02%
Prompt Payment Discount			-544,046	-4,212	-548,258		0.77%
Net Base Industrial Margin	72		\$2,258,028	\$276,565	\$2,534,593		12.25%
Net base maastral margin	530,940,971		ΨΣ,230,020	Ψ210,000	ΨΣ,004,000		12.2070
	925,836						
	26,278						
	204,728						
	204,728						

**SOURCE:** Consumer Advocate Revenue Workpaper R-31-1.00 and Consumer Advocate Exhibit, Schedule 12.

# Kingsport Power Company Consumer Advocate Proposed Rate Design Church Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Church Service:							
Church Service (Tariff Code 221):							
Service Charge (Bills)	2,315	\$34.0000000	\$78,710	\$39,810	\$118,520	\$51.2000000	50.58%
Energy Charge (KWH)	8,549,481	0.0301100	257,425		257,425	0.0301100	0.00%
Total Church Service (Tariff Code 221)			\$336,135	\$39,810	\$375,945		11.84%
Total Base Church Service Margin			\$336,135	\$39,810	\$375,945		11.84%
Prompt Payment Discount			-15,979	-597	-16,576		3.74%
Net Base Church Service Margin			\$320,156	\$39,213	\$359,369		12.25%

**SOURCE:** Consumer Advocate Revenue Workpaper R-40-1.00 and Consumer Advocate Exhibit, Schedule 12.

# Kingsport Power Company Consumer Advocate Proposed Rate Design Public School Service

Tariff	Billing Determinants	Current Base Rates	Current Margin	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Public School:							
Public School - Regular (Tariff Code 640):							
Service Charge (Bills)	168	\$57.5000000	\$9,660	\$13,528	\$23,188	\$138.0200000	140.04%
Energy Charge (KWH)	8,365,603	0.0193200	161,623		161,623	0.0193200	0.00%
Total Public School - Regular		;	\$171,283	\$13,528	\$184,811		7.90%
Public School - Electric Heating Units (Tariff Code 641):							
Service Charge (Bills)	12	57.5000000	\$690	\$966	\$1,656	\$138.0200000	140.04%
Energy Charge - Block 1 (KWH)	150,000	0.0193200	2,898	****	2,898	0.0193200	0.00%
Energy Charge - Block 2 (KWH)	577,200	0.0050500	2,915		2,915	0.0050500	0.00%
Total Public School - Electric Heating Units			\$6,503	\$966	\$7,469		14.86%
Public School - Electric Heating (Tariff Code 642):							
Service Charge (Bills)	185	57.5000000	\$10,638	\$14,897	\$25,534	\$138.0200000	140.04%
Energy Charge (KWH)	17,639,310	0.0050500	89,079		89,079	0.0050500	0.00%
Total Public School - Electric Heating			\$99,716	\$14,897	\$114,613		14.94%
Total Base Public School Margin			\$277,502	\$29,391	\$306,893		10.59%
Prompt Payment Discount			-41,136	-441	-41,577		1.07%
Net Base Public School Margin	365	•	\$236,366	\$28,950	\$265,316		12.25%
•	26,732,113	•	· ·				

**SOURCE:** Consumer Advocate Revenue Workpaper R-41-1.00 and Consumer Advocate Exhibit, Schedule 12.

# Kingsport Power Company Consumer Advocate Proposed Rate Design Electric Heating General Service

	Billing	Current	Current	Margin	Proposed	Proposed	Percent
Tariff	Determinants	Base Rates	Margin	Deficiency	Margin	Base Rates	Increase
Electric Heating General Service:							
Electric Heating General - Regular (Tariff Code 208):							
Service Charge (Bills)	6,068	\$50.1800000	\$304,492	\$107,242	\$411,734	\$67.8500000	35.22%
Energy Charge (KWH)	22,747,397	0.0156900	356,907		356,907	0.0156900	0.00%
Demand Charge (KW)	96,680	3.5100000	339,347		339,347	3.5100000	0.00%
Total Electric Heating General - Regular		·	\$1,000,746	\$107,242	\$1,107,988		10.72%
							_
Electric Heating General - Minimum (Tariff Code 209):							
Service Charge (Bills)	1,633	50.1800000	\$81,944	\$28,861	\$110,805	\$67.8500000	35.22%
Energy Charge (KWH)	4,050,297	0.0156900	63,549		63,549	0.0156900	0.00%
Demand Charge (KW)	27,478	0.0000000	0		0	0.0000000	0.00%
Total Electric Heating General - Minimum		=	\$145,493	\$28,861	\$174,354	:	19.84%
Total Base Electric Heating General Service Margin			\$1,146,239	\$136,103	\$1,282,341		11.87%
Prompt Payment Discount			-51,694	-2,042	-53,736		3.95%
Net Base Electric Heating General Service Margin	7,701	•	\$1,094,545	\$134,061	\$1,228,606		12.25%
	26,797,694 124,158	•				•	

**SOURCE:** Consumer Advocate Revenue Workpaper R-42-1.00 and Consumer Advocate Exhibit, Schedule 12.

# Kingsport Power Company Consumer Advocate Proposed Rate Design Outdoor Lighting Service

<b>-</b> "	Billing	Current	Current	Margin	Proposed	Proposed	Percent
Tariff Control on Limbian Complex	Determinants	Base Rates	Margin	Deficiency	Margin	Base Rates	Increase
Outdoor Lighting Service:							
Lamps Charges:	0.400	<b>c</b> 0.00	<b>#00.000</b>	<b>#0.000</b>	<b>#05.050</b>	£40.0700000	40.040/
7000 Mercury Vapor (93)	2,469	\$9.06	\$22,369	\$2,983	\$25,352	\$10.2700000	13.34%
9500 High Pressure Sodium (94)	34,493	7.26	250,419	33,397	283,817	8.2300000	13.34%
20000 Mercury Vapor (95)	264	14.89	3,931	524	4,455	16.8800000	13.34%
22000 High Pressure Sodium (97)	8,386	10.34	86,711	11,564	98,276	11.7200000	13.34%
27500 High Pressure Sodium Post Top (103)	49	39.73	1,947	260	2,206	45.0300000	13.34%
22000 High Pressure Sodium Floodlight(107)	4,700	11.02	51,794	6,908	58,702	12.4900000	13.34%
50000 High Pressure Sodium Floodlight (109)	1,290	14.27	18,408	2,455	20,863	16.1700000	13.34%
17000 Metal Halide Floodlight (110)	1,004	12.73	12,781	1,705	14,485	14.4300000	13.34%
9500 High Pressure Sodium Post Top (111)	3,880	12.36	47,957	6,396	54,353	14.0100000	13.34%
9500 High Pressure Sodium Floodlight (115)	1,103	9.47	10,445	1,393	11,838	10.7300000	13.34%
28800 Metal Halide Floodlight (116)	8,699	14.66	127,527	17,008	144,535	16.6200000	13.34%
50000 High Pressure Sodium Shoebox (120)	156	17.61	2,747	366	3,114	19.9600000	13.34%
16000 High Pressure Sodium Post Top (122)	253	37.85	9,576	1,277	10,853	42.9000000	13.34%
50000 High Pressure Post Top Floodlight (124)	48	35.54	1,706	228	1,933	40.2800000	13.34%
36000 Metal Halide Post Top Floodlight (126)	74	41.90	3,101	414	3,514	47.4900000	13.34%
Total Lamps	66,868	- -	\$651,420	\$86,877	\$738,297		13.34%
Facility Charges:							
Poles	6,925	\$7.95	\$55,054		\$55,054	7.9500000	0.00%
Spans	1,728	1.40	2,419		2,419	1.4000000	0.00%
Conduits	3,503	1.00	3,503		3,503	1.0000000	0.00%
Total Facility Charges		- -	\$60,976	\$0	\$60,976		0.00%
		·					
Total Base Outdoor Lighting Service Margin			\$712,396	\$86,877	\$799,273		12.20%
Prompt Payment Discount		-	-13,729	-1,303	-15,032		9.49%
Net Base Outdoor Lighting Service Margin		-	\$698,667	\$85,574	\$784,241		12.25%

Lamp Type	Lamp Lumens	Billing Determinants	Pro Forma Net Base Rate	Pro Forma Current Base Rates	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
Street Lighting Service:								
SV	9500	108	\$3.05	\$329	\$40	\$369	\$3.42	12.20%
SV	9500	4,524	4.97	22,498	2,745	25,243	5.58	12.20%
SV	9500	27,935	5.37	150,146	18,321	168,467	6.03	12.20%
SV	22000	408	6.09	2,483	303	2,786	6.83	12.20%
SV	16000	3,252	6.28	20,419	2,492	22,911	7.05	12.20%
SV	9500	60	6.43	386	47	433	7.21	12.20%
SV	9500	1,104	6.46	7,135	871	8,006	7.25	12.20%
SV	9500	15,902	6.99	111,169	13,565	124,733	7.84	12.20%
MV	7000	1,368	7.25	9,918	1,210	11,129	8.13	12.20%
SV	22000	6,559	8.03	52,659	6,426	59,085	9.01	12.20%
SV	16000	6,000	8.17	49,027	5,982	55,009	9.17	12.20%
SV	28000	1,380	8.88	12,258	1,496	13,754	9.97	12.20%
SV	9500	13,500	10.20	137,662	16,798	154,460	11.44	12.20%
SV	22000	1,464	10.43	15,272	1,863	17,135	11.70	12.20%
SV	16000	324	10.98	3,556	434	3,990	12.32	12.20%
SV	16000	1,341	11.10	14,889	1,817	16,706	12.46	12.20%
SV	28000	1,176	11.54	13,567	1,655	15,223	12.94	12.20%
MV	7000	312	12.08	3,769	460	4,229	13.56	12.20%
SV	9500	72	12.10	871	106	977	13.57	12.20%
SV	50000	2,436	12.12	29,531	3,603	33,134	13.60	12.20%
MV	20000	144	12.23	1,761	215	1,976	13.72	12.20%
SV	22000	780	12.84	10,017	1,222	11,240	14.41	12.20%
SV	16000	9,348	12.93	120,837	14,745	135,581	14.50	12.20%
SV	9500	9,192	13.26	121,898	14,874	136,773	14.88	12.20%
SV	28000	276	13.70	3,780	461	4,242	15.37	12.20%
SV	16000	1,068	14.44	15,424	1,882	17,306	16.20	12.20%
SV	9500	132	15.03	1,984	242	2,226	16.86	12.20%
SV	9500	156	15.75	2,457	300	2,756	17.67	12.20%
SV	50000	780	15.76	12,290	1,500	13,789	17.68	12.20%
SV	22000	360	16.71	6,016	734	6,750	18.75	12.20%
SV	50000	504	16.95	8,540	1,042	9,582	19.01	12.20%
MV	20000	24	17.05	409	50	459	19.13	12.20%
SV	22000	12	17.68	212	26	238	19.84	12.20%
SV	28000	84	17.82	1,497	183	1,679	19.99	12.20%
SV	28000	1,920	18.54	35,589	4,343	39,931	20.80	12.20%
SV	50000	1,032	21.78	22,473	2,742	25,215	24.43	12.20%
MV	20000	156	21.88	3,414	417	3,831	24.55	12.20%

# Kingsport Power Company Consumer Advocate Proposed Rate Design Street Lighting Service

	Lamp Type	Lamp Lumens	Billing Determinants	Pro Forma Net Base Rate	Pro Forma Current Base Rates	Margin Deficiency	Proposed Margin	Proposed Base Rates	Percent Increase
	SV	50000	60	22.03	1,322	161	1,483	24.71	12.20%
	SV	16000	468	22.31	10,442	1,274	11,716	25.03	12.20%
	SV	140000	1,152	23.28	26,822	3,273	30,094	26.12	12.20%
	SV	28000	204	24.09	4,915	600	5,515	27.03	12.20%
	SV	28000	1788	24.57	43,935	5,361	49,296	27.57	12.20%
	SV	28000	60	24.92	1,495	182	1,677	27.96	12.20%
	SV	50000	516	28.31	14,610	1,783	16,393	31.77	12.20%
	SV	28000	660	33.53	22,130	2,700	24,830	37.62	12.20%
	SV	28000	252	34.00	8,568	1,045	9,613	38.15	12.20%
	SV	50000	1,416	37.24	52,730	6,434	59,165	41.78	12.20%
	SV	50000	204	37.75	7,701	940	8,641	42.36	12.20%
	SV	22000	84	43.09	3,620	442	4,061	48.35	12.20%
	SV	28000	1,800	44.19	79,538	9,705	89,243	49.58	12.20%
	SV	50000	2,508	48.41	121,406	14,814	136,219	54.31	12.20%
	SV	140000	660	87.37	57,665	7,036	64,701	98.03	12.20%
Total Street L	ighting Service	ce Margin	127,025		\$1,483,041	\$180,961	\$1,664,002	•	12.20%
Prompt Page 1	ayment Discoι	ınt			-27,753	-2,714	-30,467	_	9.78%
Net S	Street Lighting	g Margin			\$1,455,288	\$178,247	\$1,633,535		12.25%

**SOURCE:** Consumer Advocate Revenue Workpaper R-51-1.00, R-51-3.12 and Consumer Advocate Exhibit, Schedule 12.

# SUPPLEMENTAL ATTACHMENT WHN-3

Kingsport Power Company
Responses to Consumer
Advocate Informal Data
Request 3B

3.10. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Please provide the rate support for Tariff Code 172 (38,700 Lumens/300 Watts) for the proposed Outdoor Lighting Overhead LED Flood Lamps of \$10.23.

#### **RESPONSE:**

Please see tab "LED Rate Design" row 23.

# **CONSUMER ADVOCATE FOLLOW-UP:**

The response refers to data (Row 23) that doesn't exist in the CA's copy of the referenced file.

# **RESPONSE:**

KIW Workpaper 1 – Rate Design file provided. The workpaper previously provided was not final.

3.11. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Please provide the rate support for Tariff Code 173 (38,700 Lumens/300 Watts) for the proposed Outdoor Lighting Underground LED Flood Lamps of \$18.99.

#### **RESPONSE:**

Please see tab "LED Rate Design" row 24.

# **CONSUMER ADVOCATE FOLLOW-UP:**

The response refers to data (Row 24) that doesn't exist in the CA's copy of the referenced file.

# **RESPONSE:**

KIW Workpaper 1 – Rate Design file provided. The workpaper previously provided was not final.

3.12. Refer to Page 46 of 75 in the Company's proposed tariff included with MFR 5c. Explain why Tariff Code 173 (LED Flood OH) has been grouped with the underground Outdoor Lighting lamps.

# **RESPONSE:**

Tariff Code 173 should read: (LED Flood UG).

3.13. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells A50 to L65 of this spreadsheet that contain the installation cost components of LED Lighting. Provide the source and support for the following rates included on this spreadsheet.

Item	Rate
Labor Hours to Install	0.30
Labor Hourly Rate	\$45.00
Labor Overhead Rate	278.50%
Transportation Hourly Rate	\$30.41
Stores Overhead Rate	13.30%
Administrative Overhead Rate	22.70%

# **RESPONSE:**

This data comes directly from the Company's system used to prepare construction cost estimates. The below values were the current values as of the time of filing.

#### CONSUMER ADVOCATE FOLLOW-UP:

The response does not include the source and support for the referenced data as requested.

#### **RESPONSE:**

These are hourly rates and average overhead percentages used for estimating the cost of a new light installation. Please see the example provided in 3.15.

# CONSUMER ADVOCATE FOLLOW-UP:

Item 3-13 still doesn't provide the source and support for the rates used. We need the support for these items to confirm the rate calculation. Please provide the data supporting the rates used in the Table for this request.

## **RESPONSE:**

We will confer with the groups who utilize the distribution work management system to see what else can be provided in the way of support.

3.14. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells K50 to K65 of this spreadsheet that contain the material cost components of LED Lighting. Provide the source and support for the following material costs included on this spreadsheet.

Item	Cost
Rates 163/164	\$85.00
Rates 152/153	117.00
Rates 165/166	256.00
Rates 167/168	275.00
Rate 169	288.00
Rate 171	229.00
Rate 158	239.00
Rate SL-LED 60 Decorative Post-Top	559.00
Rate SL-LED 90 Decorative Post-Top	899.00

# **RESPONSE:**

These are lamp costs direct from the manufacturer, provided to the Company's procurement department.

# CONSUMER ADVOCATE FOLLOW-UP:

The response does not include the source and support for the referenced data as requested.

# **RESPONSE:**

AEP Procurement conducted a sourcing event designed to select appropriate LED equivalent lamps across the AEP footprint. The prices are the result of negotiations with various manufacturers. See "LED Pricing Sheet" which compiles the proposed LED offerings, alongside additional notes and other specifications, for Kingsport proposed LED equivalents.

3.15. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells M50 to P61 of this spreadsheet that contain the other material cost components of LED Lighting. Provide the source and support for the following material costs included on this spreadsheet.

Item	Cost
UG Light Fuse Holder	\$57.19
UG Connectors	6.33
Light Ground	79.63
Flood Bracket	68.87
Overhead Light 30" Arm	98.62
Pole – 17 Aluminum Pole with Fuse	727.62
Pole – Black 20' Above Ground Capped Top	858.14
Tenon 8" Light Bracket	244.79
Removal Cost	81.17

#### **RESPONSE:**

These are additional materials needed for outdoor light and street light installation.

## CONSUMER ADVOCATE FOLLOW-UP:

The response does not include the source and support for the referenced data as requested.

## **RESPONSE:**

The information is housed in the AEP Distribution Work Management System (DWMS). DWMS is a set of processes and software programs implemented to streamline distribution work. Included within DWMS is STORMS Work Management which is a resource management tool allowing jobs to be initiated and estimated. STORMS calculates the cost to complete a job, based on the materials and labor needed, and generates a work order. Please see "Work Order Example" which includes an image of the cost calculations for a Flood Bracket. Labor and overhead is added to the material cost to reach a work request cost of \$66.03. This is comparable to the loaded material costs included in the rate design calculations for a Flood Bracket at \$68.87. The individual material costs can fluctuate depending on availability and market cost.

#### **CONSUMER ADVOCATE FOLLOW-UP:**

Item 3-15 refers to a "Work Order Example" file that doesn't appear to be included with the Attachments. Please provide this file or direct us to where it is located.

## **RESPONSE:**

Attached

3.16. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells C39 to E47 of this spreadsheet that contain various expense, tax and return rates for LED Lighting installation. Provide the source and support for the following rates included on this spreadsheet.

Item	Cost
Depreciation Rate	5.00%
Federal Income Tax Rate	0.92%
Property, Tax and A&G Expense	1.32%

#### **RESPONSE:**

See tab "Carrying Charges" for the various percentages provided considering a 20 year investment life.

#### CONSUMER ADVOCATE FOLLOW-UP:

The response does not include the source and support for the referenced data as requested.

#### **RESPONSE:**

AEP Corporate Finance develops this information, by operating company, for use in a wide variety of analyses, including this instance, where the information is used to evaluate return and cost components for new customer offerings. The return rate reflects the proposed WACC in this proceeding as shown in KgPCo Exhibit No. 1 (FDM), Actual Cost of Capital (as of June 30, 2021). The depreciation rate assumes a 20 year life. The remaining information utilizes the Corporate Finance calculations for FIT rate and other expense. Please see files "Carrying Cost\_Kingsport\_1220" and "Property Taxes and A&G Expenses 2020."

3.17. Refer to the "OL" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells B29 to Q46 of this spreadsheet that contain the proposed rates for new non-LED lamp service. Provide the source and support for the following current rates included in Column F on this spreadsheet.

Rate Code	Current Rate
121 – High Pressure Sodium – 70 Watt	\$11.60
104 – High Pressure Sodium – 400 Watt	42.45
125 – Metal Halide – 400 Watt	42.55
99 – Mercury Vapor – 175 Watt	13.85

# **RESPONSE:**

These tariffs are no longer in use and should not be included in the proposed tariff.

# **CONSUMER ADVOCATE FOLLOW-UP:**

Does the Company intend to withdraw these rates (99, 104, 121, and 125) from the proposed tariff?

# **RESPONSE:**

The Company intends to withdraw these rates from the proposed tariff.

3.18. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells M1 to N35 of this spreadsheet that contain various Fuel and Purchased Power Adjustment Rate data for new LED lamps. Provide the source and support for the "Approx Monthly kWh" amounts included in Column M on this spreadsheet.

## **RESPONSE:**

See the provided file, "LED Options with Energy Calculation," which calculates annual and monthly consumption for the LED lamps. Also stated on sheet 16-2 of the current and proposed tariff, the lamps will burn approximately 4,000 hours annually.

# **CONSUMER ADVOCATE FOLLOW-UP:**

The response includes hard-coded factors of "10.959", "30", and "1,000" that are embedded within the formulas for "Monthly kWh Consumption" in the attached spreadsheet without any explanation or reference.

#### **RESPONSE:**

The derivation of the average monthly consumption multiplies the approximate wattage by an average of 10.959 hours burned each day, multiplied by an average number of days in a month (30), converted to kWh.

# **CONSUMER ADVOCATE FOLLOW-UP:**

Item 3-18 refers to the "10.959" factor as the number of hours burned each day. Can you also provide us with the support for this amount?

#### **RESPONSE:**

4,000 hours / 365 days = 10.959 hours per day

3.19. Refer to Page 23 of 75 in the Company's proposed tariff included with MFR 5c that contain the rates for the Fuel and Purchased Power Adjustment Rider. Provide the source and support for the following new tariff codes included in the Rider.

Rate Code	FPPAR Rate
121 – High Pressure Sodium – 70 Watt	\$0.98
104 – High Pressure Sodium – 400 Watt	5.75
125 – Metal Halide – 400 Watt	5.47
99 – Mercury Vapor – 175 Watt	2.49
172 – LED – 300 Watt	3.35
173 – LED – 300 Watt	3.35

## **RESPONSE:**

See 3.17, these tariffs are no longer in use and should not be included in the proposed FPPAR tariff.

# **CONSUMER ADVOCATE FOLLOW-UP:**

Does the Company intend to withdraw these rates (99, 104, 121, 125, 172, and 173) from the proposed FPPAR tariff?

# **RESPONSE:**

The Company intends to withdraw these rates from the proposed tariff.

3.20. Refer to the "LED Conversion Charge" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells A1 to E20 of this spreadsheet that contain the proposed rates for converting existing lamps to LED lamps. Provide the source and support for the following amounts used in the conversion charge calculation.

Description	Amount
Outdoor Lighting Book Value – Account 371	\$176,216
Street Lighting Book Value – Account 373	\$1,750,805
Outdoor Lighting Lamps	5,536
Street Lighting Lamps	10,586

# **RESPONSE:**

See the provided file, "KgPCo SL OL NBV 06-2021" for NBV information. This information was obtained from Company accounting records. The number of lamps is derived from test year number of lamps. OL: 66,437/12 = 5,536. SL: 127,032/12 = 10,586. Both the total number of lamps can be found in either KIW Workpaper 1 - Rate Design or KgPCo Exhibit No.1 (KIW) Revenue Proof.

# **CONSUMER ADVOCATE FOLLOW-UP:**

In the attachment to the response, the Company is using total net book value (Account 371) for Outdoor Lighting, but only a component (Lighting Assembly, Complete) of total net book value (Account 373) for Street Lighting, without an explanation for these different calculation methods.

#### **RESPONSE:**

The Outdoor Lighting conversion charge should only include the Retirement Unit "Lighting Assembly." Therefore, the conversion charge calculation should use \$167,129.31 instead of \$176,216. Using \$167,129.31 results in a conversion charge of \$30 instead of \$31. (\$167,129.31 / 5,536 lamps = \$30).

#### CONSUMER ADVOCATE FOLLOW-UP:

Item 3-20 states that the Street Lighting Conversion Charge should only include the Retirement Unit "Lighting Assembly", but it doesn't state why it should only include this component when the Outdoor Lighting Conversion Charge includes all cost components. Please provide the reasoning for why Street Lighting only includes the "Lighting Assembly" component.

## **RESPONSE:**

Both OL and SL conversion charges should only include the "Lighting Assembly" NBV. Lighting Assembly refers to only the lamp portion of the investment. Customers converting to LEDs can continue to utilize the same pole so it would be inappropriate to include pole or other NBV in the conversion charge calculation.

3.21. Refer to the "LED Conversion Charge" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells A1 to E20 of this spreadsheet that contain the proposed rates for converting existing lamps to LED lamps. Explain the Company's rationale/logic for basing its proposed LED conversion charge on the average net book value per lamp.

# **RESPONSE:**

The Company is proposing to recover the remaining NBV of installed non-LED lights from customers who choose to convert to LED, rather than charge other customers for such costs. Since the Company's accounting system does not track NBV by individual lamp, average NBV is a fair approximation of a customer's remaining non-LED lamp cost responsibility.

3.22. Refer to the "LED Rate Design" tab in the "KIW Workpaper 1" spreadsheet. Specifically refer to Cells G1 to G35 of this spreadsheet that contain the forecasted Maintenance Costs for new LED lamps. An examination of the formulas contained in these cells reveals that the Company's forecasted Maintenance Costs appear to be based on the forecasted LED Installation Costs plus the cost of removal. Explain the Company's rationale/logic for basing its proposed LED Maintenance Costs on LED installation and removal costs.

#### **RESPONSE:**

The maintenance cost assumes that the lamp will require replacement at some point over its life and therefore incorporates the cost of removal and installation.