STATE OF TENNESSEE

Office of the Attorney General



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August 24, 2018

Tennessee Public Utility Commission c/o Ms. Sharla Dillon, Docket and Record Manager Utilities Division 502 Deaderick Street Nashville, TN 37243

In RE: Tennessee Public Utility Commission, Docket No. 18-00017, Petition of Chattanooga Gas Company for Approval of an Adjustment in Rates and Tariff; the Termination of the AUA Mechanism and the Related Tariff Changes and Revenue Deficiency Recovery; and an Annual Rate Review Mechanism

Dear Ms. Dillon:

In response to a request from Commission Staff, the Consumer Advocate files this amended CPAD Exhibit to reflect the adjustments discussed by its expert witnesses, Mr. Novak and Mr. Dittemore, at the hearing on the above-referenced Docket.

Confidential, unredacted .pdf and Excel versions of this amended CPAD Exhibit will be provided separately to Commission Staff and the Parties.

Sincerely,

Wayne M. Irvin

Senior Assistant Attorney General

Cc: All parties of record.

BEFORE THE TENNESSEE REGULATORY AUTHORITY

)	
Petition of Chattanooga Gas Company for)	
Approval of an Adjustment in Rates and)	
Tariff; the Termination of the AUA)	
Mechanism and the Related Tariff)	Docket No. 18-00017
Changes and Revenue Deficiency)	
Recovery; and an Annual Rate Review)	
Mechanism)	
)	

REVISED EXHIBIT

OF

THE CONSUMER PROTECTION AND ADVOCATE DIVISION OF THE TENNESSEE ATTORNEY GENERAL'S OFFICE

August 24, 2018

INDEX TO SCHEDULES For the 12 Months Ending December 31, 2019

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Results of Operations
For the 12 Months Ending December 31, 2019

Line No.	Rate Base	CGC Initial FIIIng A/ \$ 159,856,708	CGC Revised Filling A/ \$ 157,443,031	CPAD Initial Filing B/ \$ 135,732,910	CPAD Revised Filing 139,109,931 C/
2	Operating Income At Current Rates	7,364,093	7,779,277	10,160,715	10,185,516 D /
3 -	Earned Rate Of Return	4.61%	4.94%	7.49%	7.32%
4	Fair Rate Of Return	7.83%	7.83%	5.93%	5.93% E /
5	Required Operating Income	12,521,416	12,332,355	8,048,963	8,249,220
6	Operating Income Deficiency (Surplus)	5,157,323	4,553,078	-2,111,752	-1,936,296
7	Gross Revenue Conversion Factor	1.356361	1.356361	1.347191	1.347191_F/
8	Revenue Deficiency (Surplus)	\$6,995,192	\$6,175,618	\$2,844,934	\$2,608,560

A/ CGC MFG 25 and MFG 25 Rev 5-31-2018, Exhibit RDJ 2-1.
B/ CPAD Initial Filing Exhibit, Schedule 1.
C/ CPAD Revised Exhibit, Schedule 2.
D/ CPAD Revised Exhibit, Schedule 6.
E/ CPAD Revised Exhibit, Schedule 13.
F/ CPAD Revised Exhibit, Schedule 14.

Average Rate Base For the 12 Months Ending December 31, 2019

Line No.			Test Period A/	-4	Adjustments	Attrition Period A/
	Additions:					
1	Utility Plant in Service		\$ 280,739,167	\$	20,502,244	\$ 301,241,411 B/
2	Construction Work in Progress		4,963,770		1,617,108	6,580,878
3	Pension & OPEB Assets		0		0	0
4	Materials & Supplies		403,477		-102,865	300,612
5	Prepayments		46,418		-5,765	40,653
6	Gas Inventory		9,501,909		0	10,168,496
7	Deferred Rate Case Expense		67,551		192,814	260,365
8	Working Capital		149,625	9	0	149,625 C/
9	Total Additions		\$ 295,871,917	\$ _	22,203,536	\$ 318,742,040
	Deductions:					
10	Accumulated Depreciation		\$ 124,528,465	\$	7,422,945	\$ 131,951,410
11	Accumulated Deferred Income Taxes		40,781,225		-18,103,113	22,678,112 D/
12	Regulatory Liability - Excess Deferrals		1,107,211		20,967,094	22,074,305 E/
13	Regulatory Liability - Deferred Tax Savings		0		428,512	428,512
14	Customer Advances for Construction		166,690		-166,690	0
15	Reserve for Uncollectibles		180,938		-354	180,584
16	Reserve for Health Insurance		31,616		2,236	33,852
17	Other Reserves		72,013		4,655	76,668
18	Customer Deposits		1,695,508		180,225	1,875,733
19	Accrued Interest on Customer Deposits	.1	651,094		-318,161	332,933
20	Total Deductions		\$ 169,214,760	\$	10,417,349	\$ 179,632,109
21	Rate Base		\$ 126,657,157	\$ _	11,786,187	\$ 139,109,931

A/ CPAD Rate Base Workpaper RB-1-1.00. B/ WHN Rebuttal Attachment-1.

C/ CPAD Revised Exhibit, Schedule 4.
D/ DND Rebuttal Attachment 1.
E/ CPAD Workpaper, Attachment DD 11-1.

Comparative Rate Base For the 12 Months Ending December 31, 2019

Line No.	- Additions	CGC Initial Filing A/	CGC Revised Filing B/	CPAD Initial Filing C/	CPAD Revised Filling D/
	Additions:				
1	Utility Plant in Service	\$ 301,415,025	\$ 301,415,025	\$ 300,699,477	\$ 301,241,411
2	Construction Work in Progress	12,375,743	12,457,439	6,580,878	6,580,878
3	Pension & OPEB Assets	9,005,964	9,009,690	0	0
4	Materials & Supplies	403,477	403,477	300,612	300,612
5	Prepayments	46,418	46,418	40,653	40,653
6	Gas Inventory	9,710,633	9,710,633	10,168,496	10,168,496
7	Deferred Rate Case Expense	762,623	762,623	260,365	260,365
8	Working Capital	2,184,306	1,521,871	150,692	149,625
9	Total Additions	\$_335,904,189	\$_335,327,176	\$_318,201,173	\$_318,742,040
	Deductions:				
10	Accumulated Depreciation	\$ 127,903,439	\$ 127,903,439	\$ 131,951,410	\$ 131,951,410
11	Accumulated Deferred Income Taxes	24,809,455	25,514,266	25,514,266	22,678,112
12	Regulatory Liability - Excess Deferrals	21,105,662	22,177,646	22,074,305	22,074,305
13	Regulatory Liability - Deferred Tax Savings	0	0	428,512	428,512
14	Customer Advances for Construction	0	0	0 =	0
15	Reserve for Uncollectibles	180,021	239,893	180,584	180,584
16	Reserve for Health Insurance	31,616	31,616	33,852	33,852
17	Other Reserves	72,013	72,013	76,668	76,668
18	Customer Deposits	1,612,342	1,612,342	1,875,733	1,875,733
19	Accrued Interest on Customer Deposits	332,933	332,933	332,933	332,933
20	Total Deductions	\$ 176,047,481	\$_177,884,148	\$ <u>182,468,263</u>	\$ 179,632,109
21	Rate Base	\$159,856,708	\$ 157,443,028	\$_135,732,910	\$139,109,931

A/ CGC Exhibit RDJ 2-1, Schedule 1 and CGC Exhibit RDJ 2-2, Schedule 2.
B/ CGC TPUC MFG 25 Rev 5-31-2018, Exhibit RDJ 2-1 and Exhibit RDJ 2-2.
C/ CPAD Initial Filing Exhibit, Schedule 2.
D/ CPAD Revised Exhibit, Schedule 2.

Lead Lag Results
For the 12 Months Ending December 31, 2019

Line No.		CPAD
1	Revenue Lag	43.76 A /
2	Expense Lag	8/
3	Net Lag	3.45
4	Daily Cost of Service	\$190,353_ B /
5	Lead Lag Study	\$ 656,194
6	Tax Collections Withheld	506,569_ C /
7	Net Cash Working Capital Provided	\$ 149,625

A/ CPAD Rate Base Workpaper RB-41-1.00.
B/ CPAD Revised Exhibit, Schedule 5.
C/ CPAD Workpaper, Attachment DD 5-1.

Working Capital Expense Lag For the 12 Months Ending December 31, 2019

Line No.			Amount A/	Lag B/	Dollar Days
	Operating & Maintenance Expenses:				
1	Purchased Gas Expense	\$	42,765,421	40.94	\$ 1,750,816,336
2	O&M Labor		2,983,448	14.01 C/	41,798,106
3	Pension Expense		23,318	0.00	0
4	Post-Retirement Benefits Other Than Pension		0	0.00	0
5	Miscellaneous Employee Benefits		-136,472	4.47	-610,030
6	401K Benefits		122,846	12.07	1,482,751
7	Health/Life Insurance Expense		615,670	8.98	5,528,717
8	Allocated Cost		3,117,375	21.94	68,395,208
9	Uncollectible Expense		121,863	43.76	5,332,725
10	Other Operating Expense		4,116,129	31.49	129,616,902
	Taxes:				
11	Taxes Other Than Income Tax		3,833,418	171.16 D/	656,127,825
12	State Income Tax - Current		0	37.88	0
13	State Income Tax Deferred		370,631	0.00	0
14	Federal Income Tax - Current		0	37.88	0
15	Federal Income Tax - Deferred		-326,752	0.00	0
	Other:				
16	Depreciation Expense		7,848,702	0.00	0
17	Interest on Customer Deposits		114,315	0.00	0
18	Interest Expense - Short Term Debt		375,597	-51.36	-19,290,652
19	Interest Expense - Long Term Debt		3,533,392	45.76	161,688,029
20	Total Working Capital Requirement	\$	69,478,901	40.31	\$ 2,800,885,917
21	Daily Working Capital Requirement \$_	190,353			
22 23	Return on Equity Total Cost of Service	\$	6,276,527 75,755,428		

A/ CPAD Revised Exhibit, Schedule 6.

B/ CPAD Rate Base Workpaper RB-41-1.00.

C/ CGC MFG 72-1; Base Payroll lag, excludes consideration of Incentive Compensation lag.

D/ CGC MFG 72 Revised; "TOT Summary Calculation" tab.

Income Statement at Current Rates For the 12 Months Ending December 31, 2019

Line No.		Test Period	Д	djustments		Attrition Amount
	Operating Revenues:					
1	Gas Sales & Transportation Revenues	\$ 65,732,896 A/	\$	9,007,197	\$	74,740,093 B/
2	Other Revenues	718,331 D/		-43,210		675,121 C/
3	AFUDC	161,689 D/		178,525		340,214 C/
4	Total Operating Revenue	\$ 66,612,916	\$	9,142,512	\$	75,755,428
	Operating & Maintenance Expenses:					
5	Purchased Gas Expense	\$ 39,763,604 A/	\$	3,001,817	\$	42,765,421 C/
6	Operations & Maintenance - Labor	2,781,798 K/		201,650		2,983,448 H/
7	Operations & Maintenance - NonLabor	7,027,105_K/		953,624		7,980,729 H/
8	Total Operating & Maintenance Expenses	\$ 49,572,507	\$	4,157,091	\$_	53,729,598
	Other Expenses:					
9	Depreciation Expense	\$ 6,943,506 E/	\$	905,196	\$	7,848,702 F/
10	Interest on Customer Deposits	-317,818 G/		432,133		114,315 G/
11	General Taxes	3,527,995 1/		305,423		3,833,418 //
12	State Excise Taxes	5,999 L/		364,632		370,631 J/
13	Federal Income Taxes	-154,194 L/	_	-172,558	_	-326,752 J/
14	Total Other Expenses	\$10,005,488	\$	1,834,826	\$_	11,840,314
15	Total Operating Expenses	\$59,577,995	\$_	5,991,917	\$_	65,569,912
16	Utility Operating Income	\$7,034,921	\$	3,150,595	\$_	10,185,516

A/ CPAD Revenue Workpaper R-1-1.04.

B/ CPAD Revised Exhibit, Schedule 8.
C/ CPAD Revenue Workpaper R-1-1.01.

CPAD Revenue Workpaper R-1-1.01.

CPAD Rate Base Workpaper R-60-1.00.

E/ CPAD Rate Base Workpaper RB-60-6.00.

F/ CPAD Rate Base Workpapers RB-60.00 and RB-61-1.01.

G/ CPAD Rate Base Workpaper R-50-1.00.

H/ CPAD Revised Exhibit, Schedule 9.

I/ CPAD Revised Exhibit, Schedule 10.

J/ CPAD Revised Exhibit, Schedule 11.

K/ CPAD Workpaper, Attachment DD 9.
L/ Company response to CPAD-1-2a, Accounts 427200 and 427400,

Comparative Income Statement at Current Rates For the 12 Months Ending December 31, 2019

Line No.	 Operating Revenues:	CGC Initial Filing A	CGC RevisedB/	CPAD Initial Filing C/	CPAD Revised Filing C/
1	Gas Sales & Transportation Revenues	\$ 70,623,501	\$ 69,644,006	\$ 74,740,093	\$ 74,740,093
2	Other Revenues	612,767	612,767	675,121	675,121
3	AFUDC	900,355	900,355	340,214	340,214
4	Total Operating Revenue	\$ 72,136,623	\$ 71,157,128	\$ 75,755,428	\$ 75,755,428
	Operating & Maintenance Expenses:				
5	Purchased Gas Expense	\$ 38,791,279	\$ 37,973,978	\$ 42,765,421	\$ 42,765,421
6	Operations & Maintenance - Labor	7,166,815	3,537,716	2,983,448	2,983,448
7	Operations & Maintenance - NonLabor	6,497,788	10,001,510	7,980,729	7,980,729
8	Total Operating & Maintenance Exp.	52,455,882	51,513,204	53,729,598	53,729,598
	Other Expenses:				
9	Depreciation Expense	\$ 8,035,649	\$ 8,035,649	\$ 7,848,702	\$ 7,848,702
10	Interest on Customer Deposits	96,740	96,740	114,315	114,315
11	General Taxes	3,523,947	3,523,947	3,833,418	3,833,418
12	State Excise Taxes	283,685	284,891	376,800	370,631
13	Federal Income Taxes	376,627	-76,582	-308,120	-326,752
14	Total Other Expenses	12,316,648	11,864,645	11,865,115	11,840,314
15	Total Operating Expenses	\$ 64,772,530	\$ 63,377,849	\$65,594,713	\$ 65,569,912
16	Hallita On anatima In a	r 7.264.003	¢ 7.770.070	£ 40.400.745	£ 40.495.540
16	Utility Operating Income	\$ 7,364,093	\$ 7,779,279	\$ 10,160,715	\$ <u>10,185,516</u>

A/ CGC Exhibit RDJ 2-1, Schedule 1 and CGC Exhibit RDJ 2-2, Schedule 2.
B/ CGC TPUC MFG 25 Rev 5-31-2018, Exhibit RDJ 2-1 and Exhibit RDJ 2-2,
C/ CPAD Revised Exhibit, Schedule 6.

Comparative Revenue Summary For the 12 Months Ending December 31, 2019

Line No.	Customer Class	CGC Initial FilingA/	CGC Revised Filing B/	CPAD Initial Filing C/	CPAD Revised Filing C/
	Sales & Transportation Margin:				
1	Residential (R-1)	\$ 14,332,354	\$ 14,335,536	\$ 14,340,557	\$ 14,340,557
2	Multi-Family Housing (R-4)	26,108	26,108	28,029	28,029
3	Commercial (C-1)	3,543,718	3,544,307	3,504,507	3,504,507
4	Commercial`(C-2)	8,057,726	8,055,736	8,270,624	8,270,624
5	Industrial (F-1/T-2)	2,143,429	2,143,423	2,003,400	2,003,400
6	Industrial (I-1)	36,133	36,129	36,274	36,274
7	Industrial (T-1)	1,099,653	1,099,657	1,082,153	1,082,153
8	Industrial (T-1/T-2)	1,201,231	1,201,232	1,290,946	1,290,946
9	Industrial (T-3)	1,251,745	1,120,183	1,276,880	1,276,880
10	Special Contract	140,247	140,247	141,302	141,302
11	Total Margin	\$ 31,832,344	\$ 31,702,558	\$ 31,974,672	\$ 31,974,672
12	Gas Cost	38,791,279	37,973,978	42,765,421	42,765,421
13	Total Revenue	\$70,623,623	\$ <u>69,676,536</u> D/	\$ 74,740,093	\$74,740,093

A/ MFG 25, CGC 2018 Rate Case Revenue Model, "Attrition Year" tab.
B/ Revised MFG 25, 2018-06-11 CGC 2018 Rate Case Revenue Model, "Attrition Year" tab.

C/ CPAD Revenue Workpaper R-1-1.00.

D/ CGC's total revenue on this schedule does not tie to the revenue on Schedule 7, due to errors in the Company's calculations.

Comparative O&M Expense Summary For the 12 Months Ending December 31, 2019

Line No.	Expense	CGC Initial Filing A/	CGC Revised Filing B/	CPAD Initial Filling	CPAD Revised Filing
1	Payroll Expense	\$ 3,594,761	\$ 3,537,716	\$ 2,983,448 C/	\$ 2,983,448 C/
2	Employee Benefits	647,170	647,170	728,437 D/	728,437 D/
3	Benefits Capitalized	-59,257	-59,257	-103,075 E/	-103,075 E/
4	Fleet Services & Facilities Expense	728,185	728,185	822,931 F/	822,931 F/
5	Outside Services	2,087,933	2,087,933	1,878,336 G/	1,878,336 G/
6	Bad Debt Expense	204,108	127,970	121,863 H/	121,863 H/
7	Sales Promotion Expense	71,891	71,891	52,574 1/	52,574 1/
8	Customer Service & Account Expense	6,482	6,482	4,831 J/	4,831 J/
9	Administrative & General Expense	771,489	771,489	829,853 K/	829,853 K/
10	A&G Salaries Capitalized	-74,525	-66,719	-69,690 L/	-69,690 L/
11	Other Distribution & Storage Expense	804,148	804,148	597,294 M/	597,294 M/
12	AGL Service Company Allocations	4,882,218	4,882,218	3,117,375_N/	3,117,375 N/
13	Total O&M Expense	\$ 13,664,603	\$ 13,539,226	\$ 10,964,177	\$ 10,964,177

A/ CGC TPUC MFG Item 25-1, Tab COSS IS Summary MFG 25-1,

CGC TPUC MFG 25 Rev 5-31-2018, Page 4 of 7.

B/ CGC TPUC MFG 25 Rev 5-37-2018, Page C/ CPAD Workpaper, Attachment DD 9-1. D/ CPAD Workpaper, Attachment DD 9-2. E/ CPAD Workpaper, Attachment DD 9-3. F/ CPAD Workpaper, Attachment DD 9-4. G/ CPAD Workpaper, Attachment DD 9-4. H/ CPAD Rate Base Workpaper RB-46-2.00.

CPAD Workpaper, Attachment DD 9-6.
CPAD Workpaper, Attachment DD 9-6.
CPAD Workpaper, Attachment DD 9-8.
CPAD Workpaper, Attachment DD 9-9.

M/ CPAD Workpaper, Attachment DD 9-10.
N/ CPAD Workpaper, Attachment DD 9-11.

Taxes Other than Income Income Taxes
For the 12 Months Ending December 31, 2019

Line No.	Property Taxes	CGC Initial Filling \$ 1,980,447	CGC Revised W Filling B/ \$ 1,975,518	**Elling C/ 2,039,886	CPAD Revised Filing C/ \$ 2,039,886
2	TPUC Inspection Fee	315,074	315,074	391,525	391,525
3	Payroll Taxes	367,292	214,815	355,971	355,971
4	Franchise Tax	409,292	409,287	141,050	141,050
5	Gross Receipts Tax	451,841	451,841	904,986	904,986
6	Allocated & Other Taxes	0	157,412	0	0
7	Total	\$ 3,523,946	\$ 3,523,947	\$ 3,833,418	\$ 3,833,418

A/ CGC MFG Items 25-1, 25-2.
B/ CGC MFG Upated; "Other Taxes" tab.
C/ CPAD Workpaper, Attachment DD 10-1.

Excise and Income Taxes For the 12 Months Ending December 31, 2019

Line		0040
No.	Operating Revenues	CPAD \$ 75,755,428 A/
1	Operating Nevenues	10,700,420
	Operating Expenses:	
2	Purchased Gas Expense	\$ 42,765,421 A/
3	O&M Expenses	10,964,177 A/
4	Depreciation Expense	7,848,702 A/
5	Interest on Customer Deposits	114,315 A/
6	General Taxes	3,833,418 A/
7	Total Operating Expenses	\$ 65,526,033
8	NOI Before Excise and Income Taxes	\$ 10,229,395
9	AFUDC	-340,214 A/
10	Interest Expense	3,908,989_B/
11	Net Income Before Income Taxes	\$ 5,980,192
	Tennessee Excise Tax Calculation:	
12	Net Income Before Income Taxes	\$ 5,980,192
13	Excise Tax Rate	6.50%
14	Excise Tax Expense	\$ 388,712
15	Less After-Tax Excess Deferred Tax Liability Amortization	18,081 C/
16	Net Excise Tax Expense	\$ 370,631
	•	
17	Excise Tax - Current	\$ 0 D/
18	Excise Tax - Deferred	\$ 370,631 D/
	Federal Income Tax Calculation:	
19	Net Income Before Income Taxes	\$ 5,980,192
20	Net Excise Tax Expense	370,631
21	Net Income Before Federal Income Tax	\$ 5,609,560
22	FIT Rate	21.00%
23	Federal Income Tax Expense	\$ 1,178,008
24	Less After-Tax Excess Deferred Tax Liability Amortization - Protected	-21,351 C/
25	Less After-Tax Excess Deferred Tax Liability Amortization - Tax Cut & Jobs Act	-1,230,266 C/
26	Less 2018 Tax Savings Amortization	253,143_C/
27	Net Federal Income Tax Expense	\$
28	Federal Income Tax - Current	\$ 0 D/
29	Federal Income Tax - Deferred	\$ -326,752 D/
23	1 edelal modile Tax - Deletted	Ψ - 020,102 D/

A/ CPAD Revised Exhibit, Schedule 6.
B/ CPAD Revised Exhibit, Schedule 13.
C/ CPAD Workpaper, Attachment DD 11.
D/ All Pre-tax book income assumed to be deferred.

Income Statement at Proposed Rates For the 12 Months Ending December 31, 2019

Line No.		Current Rates A/	Rate Increase B/	Proposed Rates
	Operating Revenues:		: 	
1	Gas Sales & Transportation Revenues	\$ 74,740,093	\$ -2,608,560	\$ 72,131,533
2	Other Revenues	675,121	-22,867	652,254
3	AFUDC	340,214	. 0	340,214
4	Total Operating Revenue	\$ 75,755,428	\$ -2,631,427	\$ 73,124,001
	Operating & Maintenance Expenses:			
5	Purchased Gas Expense	\$ 42,765,421	\$ 0	\$ 42,765,421
6	Operations & Maintenance - Labor	2,983,448	0	2,983,448
7	Operations & Maintenance - NonLabor	7,980,729	-10,028	7,970,701
8	Total Operating & Maintenance Expenses	\$ 53,729,598	\$ -10,028	\$ 53,719,570
	Other Expenses:			
9	Depreciation Expense	\$ 7,848,702	\$ 0	\$ 7,848,702
10	Interest on Customer Deposits	114,315	0	114,315
11	General Taxes	3,833,418	0	3,833,418
12	State Excise Taxes	370,631	-170,391	200,241
13	Federal Income Taxes	-326,752	-514,711	-841,463
14	Total Other Expenses	\$ 11,840,314	\$ -685,102	\$ 11,155,213
45	Total Onorsking Funances	¢ 65 550 042	\$ -695.130	\$ 64.874.782
15	Total Operating Expenses	\$ 65,569,912	\$695,130	\$ 64,874,782
16	Utility Operating Income	\$10,185,516	\$1,936,297	\$ 8,249,219

A/ CPAD Revised Exhibit, Schedule 6. B/ CPAD Revised Exhibit, Schedule 1.

Rate of Return Summary
For the 12 Months Ending December 31, 2019

			CPAD	A/
Line No.	Class of Capital	Percent of Total	Cost Rate	Weighted Cost Rate
1	CGC Short-Term Debt	6.30%	3.01%	0.19%
2,	CGC Long-Term Debt	44.47%	4.73%	2.10%
3	Parent Short-Term Debt			0.08%
4	Parent Long-Term Debt			0.44%
5	Common Equity		9.00%	3.12%
6	Total	100.00%	0	5.93%
	Interest Expense Short-Term Debt:			
7	Rate Base			\$ 139,109,931 B /
8	Short-Term Weighted Debt Cost			0.27%
9	Short-Term Debt Interest Expense			\$ 375,597
	Interest Expense Long-Term Debt:			
10	Rate Base			\$ 139,109,931 B /
11	Long-Term Weighted Debt Cost			2.54%
12	Long-Term Debt Interest Expense			\$ 3,533,392
13	Total Interest Expense			\$3,908,989

A/ Klein Exhibit, Page 2 of 17.
B/ CPAD Revised Exhibit, Schedule 2.

Revenue Conversion Factor For the 12 Months Ending December 31, 2019

Line No.	Operating Revenues	Amount	Balance 1.000000
2	Add: Forfeited Discounts	0.008766 A /	0.008766
3	Balance		1.008766
4	Uncollectible Ratio	0.003811 B /	0.003844
5	Balance		1.004922
6	State Excise Tax	0.065000 C /	0.065320
7	Balance		0.939602
8	Federal Income Tax	0.210000 C/	0.197316
9	Balance		0.742285
10	Revenue Conversion Factor (Line 1 / Line 9)		1.347191

A/ CPAD Revenue Workpaper R-60-2.00.
B/ CPAD Revenue Workpaper R-46-2.00.
C/ Statutory Rates.

CHATTANOOGA GAS COMPANY CPAD Proposed Margin Change For the 12 Months Ending December 31, 2019

Line No.	Customer Class	Current Rates A/	Proposed Rates	Margin Change B/	Percent Change
1	Residential (R-1)	\$ 14,340,557	\$ 13,170,624	\$ -1,169,933	-8.16%
2	Multi-Family Housing (R-4)	28,029	25,742	-2,287	-8.16%
3	Commercial (C-1)	3,504,507	3,218,602	-285,905	-8.16%
4	Commercial (C-2)	8,270,624	7,595,889	-674,735	-8.16%
5	Industrial (F-1/T-2)	2,003,400	1,839,958	-163,442	-8_16%
6	Industrial (I-1)	36,274	33,315	-2,959	-8.16%
7	Industrial (T-1)	1,082,153	993,869	-88,284	-8.16%
8	Industrial (T-1/T-2)	1,290,946	1,185,628	-105,318	-8.16%
9	Industrial (T-3)	1,276,880	1,172,709	-104,171	-8.16%
10	Special Contract	141,302	129,774	-11,528	8.16%
11	Total Sales & Transportation Margin	\$ 31,974,672	\$ 29,366,112	\$ -2,608,560	-8.16%
12	Other Revenues	675,121	652,254	-22,867	-3.39%
13	Total Margin	\$32,649,793	\$ 30,018,366	\$2,631,427	-8.06%

A/ CPAD Revised Exhibit, Schedule 8. B/ CPAD Revised Exhibit, Schedule 12.