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April 5, 2010

VIA HAND DELIVERY

Chairman Sara Kyle
c/o Sharla Dillon
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243-00505

electronically filed 4/5/10 at 3:50pm

Re: Docket No. 09-00183

Dear Chairman Kyle:

Enclosed please find a copy of Chattanooga Gas Company's ("Company") responses to the CAPD's Revised Second Set of Discovery Requests. The Company has objected to request nos. 14-26. The Company is also filing a revised response to discovery request no. 46 from the CAPD's First Set of Discovery Requests.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Jennifer L. Brundige

Enclosures

cc: Counsel of Record
Gary Hotvedt, Esq.
Pat Murphy
Elizabeth Wade, Esq.
Archie Hickerson

DISCOVERY REQUEST NO. 1:

For the purposes of this request please refer to the Exhibit DJN-2. Please provide all of the source documents and analyses undertaken by the Company in developing the cost to the participant for each program. Provide the workpapers in electronic spreadsheet form, with all links and formulas intact, source data used, all supporting documents, and explain all assumptions and calculations used. To the extent the data does not exist in the exact format requested, please provide it in the format in which it is available and explain why it is not available in the format requested.

Response:

The costs to customers were based upon an informal phone survey of 2 to 3 natural gas appliance dealers in the Company's Chattanooga service territory for each measure conducted by the Company's marketing department. As such, electronic workpapers are not available. The costs are based upon the vendor's opinion of the incremental appliance costs. Each of the vendors spoken to as well as Company personnel, expressed that actual cost may vary depending upon such factors as asbestos remediation, appliance location, additional piping requirements, and venting requirements.

DISCOVERY REQUEST NO. 2:

For the purposes of this request please refer to the Exhibit DJN-2. Please provide all of the source documents and analyses undertaken by the Company in developing the therm savings to the participant for each program. Provide the workpapers in electronic spreadsheet form, with all links and formulas in tact, source data used, all supporting documents, and explain all assumptions and calculations used. To the extent the data does not exist in the exact format requested, please provide it in the format in which it is available and explain why it is not available in the format requested.

Response:

This information was already provided in the electronic format in the response to CAPD data requests 151 and 173.

DISCOVERY REQUEST NO. 3:

For the purposes of this request please refer to the Exhibit DJN-2. Please explain what type of food service equipment is assumed for the "food service equipment" program and explain how all assumptions were developed for this program. Provide the workpapers in electronic spreadsheet form, with all links and formulas in tact, source data used, all supporting documents, and explain all assumptions and calculations used. To the extent the data does not exist in the exact format requested, please provide it in the format in which it is available and explain why it is not available in the format requested.

Response:

The program is design to provide incentives to promote the use of more efficient cooking equipment by Chattanooga Gas' commercial food service customers. Four types of equipment are being initially targeted, Combi-Ovens, gas griddles, fryers and convection ovens. Attachment 2-3.1 presents the development of the energy savings for these appliances.

Annual Base Load
Commercial Food Appliances

	BTU's/Hr	Hours/Day Full Service Restaurant	Hours/Day Fast Food Chain	Annual Base Load Full Service Restaurant	Annual Base Load Fast Food Chain in BTUs
Combi Oven	75,700	4	5.5	302,800	416,350
Fryer	100,000	4	5.5	400,000	550,000
Convection Oven	60,000	4	5.5	240,000	330,000
Gas Griddle	30,000	4	5.5	120,000	165,000

	Standard Annual Base Load Fast Food Chain in Therms	Standard Cooking Energy Efficiency (%)	High Efficiency Cooking Energy Efficiency (%)	High Efficiency Annual Base Load Fast Food Chain in Therms	Energy Savings
Combi Oven	42	30%	51%	24	-17
Fryer	55	35%	52%	37	-18
Convection Oven	33	30%	42%	24	-9
Gas Griddle	17	32%	41%	13	-4
Total	146			98	-48

DISCOVERY REQUEST NO. 4:

Please provide the rationale for the "Primary Fuel Initial Demand Cost" used in response to CAPD Data Request 151, explain what it is supposed to represent in terms of avoided costs, i.e. (is this avoided transport costs), explain why it is escalated, and provide all documents supporting the contention that transport demand charges have escalated over the last 10, 15, and 20 years.

Response:

The "Primary Fuel Initial Demand Cost" represents system storage and capacity costs that might be avoided on a design day if customers enact the savings measures proposed in the energySMART program. This amount is escalated because cost/benefit analysis looks out over a long time horizon based on equipment effective lives of which exceed 20 years in some cases. In fact over the long term the Company's use of a 2.5% inflation rate may be low based upon data provided by Dr. Dismukes in response to Company's data request number 35. As can be seen in attachment 2-4.1, the annual long term increase in the delivered price of natural gas to residential gas customers has been 5.4% per year over the past 10 years, and 8% per year over the past 40 years, with the non-gas portion of the price as computed by taking the well head difference from the delivered price, has risen 6.3% per year over the past 10 years, and 5.6% per year over the past 40 years. This coupled with the recent increase in the C-2 demand rate that went into effect October 1, 2009 (a rate based upon the average interstate demand and capacity cost per

Dth of design day requirement) strongly suggest that accounting for a long term modest escalation in capacity costs would be appropriate.

Chattanooga Gas Company
U.S. Residential Natural Gas Use
Estimated DNG Revenue per Customer
And Annual percentage Rate of Increase
based upon Exhibit DED-17 from Direct Testimony of Dr. Dismukes

	U.S. Natural Gas Residential Consumption (MMcf)	(Tcf)		U.S. Natural Gas Wellhead Price ($/Mcf)	Price Delivered to Residential ($/Mcf)	Non-Gas Price	Residential Customers	Per Customer Consumption		Estimated DNG
			Years (1970-2009)	40	40	40				
			Gross Precentage Increase	2082.4%	999.1%	798.9%				
			Annual Percentage	8.0%	6.2%	5.6%				
			Years (1999-2009)	10	10	10				
			Gross Precentage Increase	69.4%	79.1%	83.8%				
			Annual Percentage	5.4%	6.0%	6.3%				
1970	4,837,432	4.84	1970	0.17	1.09	0.92	38,604,000	125.31	$	115.28
1971	4,971,690	4.97	1971	0.18	1.15	0.97	39,267,000	126.61	$	122.81
1972	5,125,982	5.13	1972	0.19	1.21	1.02	39,881,000	128.53	$	131.10
1973	4,879,387	4.88	1973	0.22	1.29	1.07	40,645,000	120.05	$	128.45
1974	4,786,128	4.79	1974	0.3	1.43	1.13	41,509,000	115.30	$	130.29
1975	4,924,124	4.92	1975	0.44	1.71	1.27	41,516,000	118.61	$	150.63
1976	5,051,360	5.05	1976	0.58	1.98	1.4	41,238,000	122.49	$	171.49
1977	4,821,485	4.82	1977	0.79	2.35	1.56	41,366,000	116.56	$	181.83
1978	4,903,006	4.90	1978	0.91	2.56	1.65	41,845,000	117.17	$	193.33
1979	4,965,365	4.97	1979	1.18	2.98	1.8	43,358,000	114.52	$	206.14
1980	4,752,082	4.75	1980	1.59	3.68	2.09	44,114,000	107.72	$	225.14
1981	4,546,450	4.55	1981	1.98	4.29	2.31	44,924,000	101.20	$	233.78
1982	4,633,035	4.63	1982	2.46	5.17	2.71	44,667,000	103.72	$	281.09
1983	4,380,599	4.38	1983	2.59	6.06	3.47	45,153,000	97.02	$	336.65
1984	4,555,465	4.56	1984	2.66	6.12	3.46	45,670,000	99.75	$	345.13
1985	4,433,377	4.43	1985	2.51	6.12	3.61	46,331,000	95.69	$	345.44
1986	4,313,969	4.31	1986	1.94	5.83	3.89	46,877,000	92.03	$	357.99
1987	4,314,833	4.31	1987	1.67	5.54	3.87	47,710,444	90.44	$	349.99
1988	4,630,330	4.63	1988	1.69	5.47	3.78	48,474,449	95.52	$	361.07
1989	4,780,638	4.78	1989	1.69	5.64	3.95	49,309,593	96.95	$	382.96
1990	4,391,324	4.39	1990	1.71	5.8	4.09	50,187,178	87.50	$	357.87
1991	4,555,659	4.56	1991	1.64	5.82	4.18	51,593,206	88.30	$	369.09
1992	4,690,065	4.69	1992	1.74	5.89	4.15	52,331,397	89.62	$	371.93
1993	4,956,445	4.96	1993	2.04	6.16	4.12	52,535,411	94.34	$	388.70
1994	4,847,702	4.85	1994	1.85	6.41	4.56	53,392,557	90.79	$	414.02
1995	4,850,318	4.85	1995	1.55	6.06	4.51	54,322,179	89.29	$	402.69
1996	5,241,414	5.24	1996	2.17	6.34	4.17	55,263,673	94.84	$	395.50
1997	4,983,772	4.98	1997	2.32	6.94	4.62	56,186,958	88.70	$	409.79
1998	4,520,276	4.52	1998	1.96	6.82	4.86	57,321,746	78.86	$	383.25
1999	4,725,672	4.73	1999	2.19	6.69	4.5	58,223,229	81.16	$	365.24
2000	4,996,179	5.00	2000	3.68	7.76	4.08	59,252,728	84.32	$	344.02
2001	4,771,340	4.77	2001	4	9.63	5.63	60,286,364	79.14	$	445.58
2002	4,888,818	4.89	2002	2.95	7.89	4.94	61,107,254	80.00	$	395.22
2003	5,079,351	5.08	2003	4.88	9.63	4.75	61,871,450	82.10	$	389.95
2004	4,868,797	4.87	2004	5.46	10.75	5.29	62,496,134	77.91	$	412.12
2005	4,826,775	4.83	2005	7.33	12.7	5.37	63,616,827	75.87	$	407.44
2006	4,368,466	4.37	2006	6.39	13.73	7.34	64,166,280	68.08	$	499.71
2007	4,722,358	4.72	2007	6.25	13.08	6.83	64,964,769	72.69	$	496.48
2008	4,872,107	4.87	2008	7.96	13.89	5.93	65,253,954	74.66	$	442.76
2009	4,763,528	4.76	2009	3.71	11.98	8.27				

Source: Energy Information Administration, U.S. Department of Energy.
Total Consumption: http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_m.htm
U.S. Wellhead Price: http://tonto.eia.doe.gov/dnav/ng/hist/n9190us3a.htm
Delivered Gas Price: http://tonto.eia.doe.gov/dnav/ng/hist/n3010us3A.htm
Number of Customers: http://tonto.eia.doe.gov/dnav/ng/hist/na1501_nus_8a.htm

DISCOVERY REQUEST NO. 5:

Please explain the rationale for the development of the lost revenue amount developed and shown under the rate impact measure test provided in Response CAPD Data Request 151.

Response:

Projected annual purchased gas adjustment revenues for consumption, demand and capacity were included in lost revenues. Lost Company margin revenues were excluded based upon the assumption the Company's proposed Alignment and Usage Adjustment presented in Mr. Yardley's testimony would be adopted, thereby resulting in no lost base rate margin revenue to the Company.

DISCOVERY REQUEST NO. 6:

Please provide a copy of the Baseline Consumption from RECS 2005.

Response:

The RECS 2005 data is publicly available from the U.S. Department of Energy at the hyperlink listed below.

http://www.eia.doe.gov/emeu/recs/recs2005/c&e/detailed_tables2005c&e.html

DISCOVERY REQUEST NO. 7:

Please provide a complete and detailed reconciliation between the prices included in the cost benefit analysis (DJN-2) and the attrition analysis presented in MHS-5. Provide an explanation of all the differences between the data utilized in the two exhibits and provide the source for all underlying source data used in each exhibit.

Response:

The source data for MHS-5 and DJN-2 was presented with the electronic format of Minimum Filing Guideline number 25. The attached schedule Discovery Request 2-7.1 presents the reconciliation showing no differences.

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		Differences	
		Residential & C1		Residential & C1		Residential & C1
	NYMEX	CGC PGA	NYMEX	CGC PGA	NYMEX	CGC PGA
Jul-09	3.851	0.7262	3.851	0.7262	0	0
Aug-09	3.506	0.7262	3.506	0.7262	0	0
Sep-09	2.878	0.6990	2.878	0.6990	0	0
Oct-09	3.89	0.6618	3.89	0.6618	0	0
Nov-09	5.1	0.6821	5.1	0.6821	0	0
Dec-09	5.793	0.7239	5.793	0.7239	0	0
Jan-10	6.078	0.7595	6.078	0.7595	0	0
Feb-10	6.14	0.7843	6.14	0.7843	0	0
Mar-10	6.067	0.8001	6.067	0.8001	0	0
Apr-10	6.037	0.8081	6.037	0.8081	0	0
May-10	6.073	0.8141	6.073	0.8141	0	0
Jun-10	6.133	0.8205	6.133	0.8205	0	0
Jul-10	6.213	0.8267	6.213	0.8267	0	0
Aug-10	6.286	0.8333	6.286	0.8333	0	0
Sep-10	6.337	0.8394	6.337	0.8394	0	0
Oct-10	6.492	0.8446	6.492	0.8446	0	0
Nov-10	6.847	0.8532	6.847	0.8532	0	0
Dec-10	7.192	0.8700	7.192	0.8700	0	0
Jan-11	7.412	0.8889	7.412	0.8889	0	0
Feb-11	7.392	0.9050	7.392	0.9050	0	0
Mar-11	7.197	0.9124	7.197	0.9124	0	0
Apr-11	6.622	0.9111	6.622	0.9111	0	0
May-11	6.577	0.8925	6.577	0.8925	0	0
Jun-11	6.637	0.8870	6.637	0.8870	0	0
Jul-11	6.707	0.8858	6.707	0.8858	0	0
Aug-11	6.772	0.8865	6.772	0.8865	0	0
Sep-11	6.802	0.8882	6.802	0.8882	0	0
Oct-11	6.917	0.8894	6.917	0.8894	0	0
Nov-11	7.197	0.8940	7.197	0.8940	0	0
Dec-11	7.467	0.9057	7.467	0.9057	0	0
Jan-12	7.672	0.9194	7.672	0.9194	0	0
Feb-12	7.652	0.9324	7.652	0.9324	0	0
Mar-12	7.442	0.9378	7.442	0.9378	0	0
Apr-12	6.812	0.9344	6.812	0.9344	0	0
May-12	6.757	0.9125	6.757	0.9125	0	0
Jun-12	6.822	0.9051	6.822	0.9051	0	0
Jul-12	6.897	0.9030	6.897	0.9030	0	0
Aug-12	6.957	0.9030	6.957	0.9030	0	0
Sep-12	6.987	0.9039	6.987	0.9039	0	0
Oct-12	7.077	0.9046	7.077	0.9046	0	0
Nov-12	7.327	0.9080	7.327	0.9080	0	0
Dec-12	7.592	0.9180	7.592	0.9180	0	0
Jan-13	7.802	0.9309	7.802	0.9309	0	0
Feb-13	7.792	0.9435	7.792	0.9435	0	0
Mar-13	7.562	0.9489	7.562	0.9489	0	0

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		Differences	
		Residential & C1		Residential & C1		Residential & C1
	NYMEX	CGC PGA	NYMEX	CGC PGA	NYMEX	CGC PGA
Apr-13	6.922	0.9447	6.922	0.9447	0	0
May-13	6.872	0.9221	6.872	0.9221	0	0
Jun-13	6.942	0.9145	6.942	0.9145	0	0
Jul-13	7.022	0.9123	7.022	0.9123	0	0
Aug-13	7.087	0.9124	7.087	0.9124	0	0
Sep-13	7.117	0.9135	7.117	0.9135	0	0
Oct-13	7.207	0.9143	7.207	0.9143	0	0
Nov-13	7.457	0.9176	7.457	0.9176	0	0
Dec-13	7.732	0.9277	7.732	0.9277	0	0
Jan-14	7.937	0.9409	7.937	0.9409	0	0
Feb-14	7.927	0.9535	7.927	0.9535	0	0
Mar-14	7.692	0.9589	7.692	0.9589	0	0
Apr-14	7.032	0.9545	7.032	0.9545	0	0
May-14	6.992	0.9312	6.992	0.9312	0	0
Jun-14	7.067	0.9238	7.067	0.9238	0	0
Jul-14	7.157	0.9217	7.157	0.9217	0	0
Aug-14	7.227	0.9222	7.227	0.9222	0	0
Sep-14	7.257	0.9235	7.257	0.9235	0	0
Oct-14	7.347	0.9244	7.347	0.9244	0	0
Nov-14	7.592	0.9279	7.592	0.9279	0	0
Dec-14	7.872	0.9378	7.872	0.9378	0	0
Jan-15	8.087	0.9512				
Feb-15	8.082	0.9642				
Mar-15	7.852	0.9700				
Apr-15	7.172	0.9659				
May-15	7.132	0.9420				
Jun-15	7.202	0.9345				
Jul-15	7.287	0.9322				
Aug-15	7.357	0.9324				
Sep-15	7.387	0.9336				
Oct-15	7.487	0.9344				
Nov-15	7.737	0.9382				
Dec-15	8.012	0.9484				
Jan-16	8.227	0.9617				
Feb-16	8.222	0.9747				
Mar-16	7.992	0.9804				
Apr-16	7.312	0.9764				
May-16	7.272	0.9524				
Jun-16	7.342	0.9450				
Jul-16	7.427	0.9427				
Aug-16	7.497	0.9428				
Sep-16	7.527	0.9441				
Oct-16	7.622	0.9449				
Nov-16	7.872	0.9485				
Dec-16	8.152	0.9586				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Jan-17	8.372	0.9721				
Feb-17	8.367	0.9853				
Mar-17	8.137	0.9911				
Apr-17	7.437	0.9871				
May-17	7.397	0.9625				
Jun-17	7.477	0.9548				
Jul-17	7.567	0.9527				
Aug-17	7.627	0.9531				
Sep-17	7.652	0.9541				
Oct-17	7.737	0.9546				
Nov-17	8.002	0.9577				
Dec-17	8.302	0.9683				
Jan-18	8.527	0.9825				
Feb-18	8.522	0.9961				
Mar-18	8.292	1.0021				
Apr-18	7.587	0.9983				
May-18	7.547	0.9736				
Jun-18	7.627	0.9659				
Jul-18	7.717	0.9639				
Aug-18	7.777	0.9643				
Sep-18	7.802	0.9653				
Oct-18	7.887	0.9658				
Nov-18	8.157	0.9689				
Dec-18	8.457	0.9797				
Jan-19	8.687	0.9939				
Feb-19	8.682	1.0078				
Mar-19	8.457	1.0139				
Apr-19	7.717	1.0103				
May-19	7.677	0.9844				
Jun-19	7.757	0.9765				
Jul-19	7.847	0.9742				
Aug-19	7.912	0.9745				
Sep-19	7.937	0.9755				
Oct-19	8.022	0.9761				
Nov-19	8.302	0.9791				
Dec-19	8.617	0.9902				
Jan-20	8.847	1.0051				
Feb-20	8.842	1.0192				
Mar-20	8.612	1.0254				
Apr-20	7.852	1.0217				
May-20	7.812	0.9952				
Jun-20	7.887	0.9871				
Jul-20	7.977	0.9845				
Aug-20	8.027	0.9846				
Sep-20	8.047	0.9850				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		Differences	
		Residential & C1		Residential & C1		Residential & C1
	NYMEX	CGC PGA	NYMEX	CGC PGA	NYMEX	CGC PGA
Oct-20	8.137	0.9851				
Nov-20	8.447	0.9882				
Dec-20	8.802	1.0002				
Jan-21	9.032	1.0168				
Feb-21	9.022	1.0314				
Mar-21	8.782	1.0379				
Apr-21	8.002	1.0341				
May-21	7.957	1.0069				
Jun-21	8.027	0.9985				
Jul-21	8.112	0.9956				
Aug-21	8.162	0.9954				
Sep-21	8.177	0.9956				
Oct-21	8.262	0.9954				
Nov-21	8.572	0.9982				
Dec-21	7.934336	1.0101				
Jan-22	8.112792	0.9902				
Feb-22	8.472263	0.9930				
Mar-22	8.870069	1.0052				
Apr-22	9.151093	1.0225				
May-22	9.145228	1.0388				
Jun-22	8.897672	1.0459				
Jul-22	8.087169	1.0421				
Aug-22	8.040827	1.0140				
Sep-22	8.113879	1.0054				
Oct-22	8.202419	1.0024				
Nov-22	8.254489	1.0023				
Dec-22	8.613774	1.0025				
Jan-23		1.0149				
Feb-23		1.0178				
Mar-23		1.0303				
Apr-23		1.0481				
May-23		1.0648				
Jun-23		1.0720				
Jul-23		1.0682				
Aug-23		1.0393				
Sep-23		1.0305				
Oct-23		1.0275				
Nov-23		1.0273				
Dec-23		1.0276				
Jan-24		1.0403				
Feb-24		1.0433				
Mar-24		1.0560				
Apr-24		1.0743				
May-24		1.0914				
Jun-24		1.0988				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Jul-24		1.0949				
Aug-24		1.0653				
Sep-24		1.0563				
Oct-24		1.0532				
Nov-24		1.0530				
Dec-24		1.0533				
Jan-25		1.0663				
Feb-25		1.0693				
Mar-25		1.0824				
Apr-25		1.1011				
May-25		1.1187				
Jun-25		1.1263				
Jul-25		1.1223				
Aug-25		1.0919				
Sep-25		1.0827				
Oct-25		1.0795				
Nov-25		1.0793				
Dec-25		1.0796				
Jan-26		1.0930				
Feb-26		1.0961				
Mar-26		1.1095				
Apr-26		1.1287				
May-26		1.1467				
Jun-26		1.1544				
Jul-26		1.1503				
Aug-26		1.1192				
Sep-26		1.1097				
Oct-26		1.1065				
Nov-26		1.1063				
Dec-26		1.1066				
Jan-27		1.1203				
Feb-27		1.1235				
Mar-27		1.1372				
Apr-27		1.1569				
May-27		1.1753				
Jun-27		1.1833				
Jul-27		1.1791				
Aug-27		1.1472				
Sep-27		1.1375				
Oct-27		1.1342				
Nov-27		1.1340				
Dec-27		1.1343				
Jan-28		1.1483				
Feb-28		1.1516				
Mar-28		1.1657				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Apr-28		1.1858				
May-28		1.2047				
Jun-28		1.2129				
Jul-28		1.2085				
Aug-28		1.1759				
Sep-28		1.1659				
Oct-28		1.1625				
Nov-28		1.1623				
Dec-28		1.1626				
Jan-29		1.1770				
Feb-29		1.1804				
Mar-29		1.1948				
Apr-29		1.2155				
May-29		1.2348				
Jun-29		1.2432				
Jul-29		1.2388				
Aug-29		1.2053				
Sep-29		1.1951				
Oct-29		1.1916				
Nov-29		1.1914				
Dec-29		1.1917				
Jan-30		1.2065				
Feb-30		1.2099				
Mar-30		1.2247				
Apr-30		1.2458				
May-30		1.2657				
Jun-30		1.2743				
Jul-30		1.2697				
Aug-30		1.2354				
Sep-30		1.2249				
Oct-30		1.2214				
Nov-30		1.2212				
Dec-30		1.2215				
Jan-31		1.2366				
Feb-31		1.2401				
Mar-31		1.2553				
Apr-31		1.2770				
May-31		1.2974				
Jun-31		1.3061				
Jul-31		1.3015				
Aug-31		1.2663				
Sep-31		1.2556				
Oct-31		1.2519				
Nov-31		1.2517				
Dec-31		1.2520				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Jan-32		1.2675				
Feb-32		1.2711				
Mar-32		1.2867				
Apr-32		1.3089				
May-32		1.3298				
Jun-32		1.3388				
Jul-32		1.3340				
Aug-32		1.2980				
Sep-32		1.2869				
Oct-32		1.2832				
Nov-32		1.2830				
Dec-32		1.2833				
Jan-33		1.2992				
Feb-33		1.3029				
Mar-33		1.3188				
Apr-33		1.3416				
May-33		1.3630				
Jun-33		1.3723				
Jul-33		1.3674				
Aug-33		1.3304				
Sep-33		1.3191				
Oct-33		1.3153				
Nov-33		1.3151				
Dec-33		1.3154				
Jan-34		1.3317				
Feb-34		1.3355				
Mar-34		1.3518				
Apr-34		1.3752				
May-34		1.3971				
Jun-34		1.4066				
Jul-34		1.4015				
Aug-34		1.3637				
Sep-34		1.3521				
Oct-34		1.3482				
Nov-34		1.3479				
Dec-34		1.3483				
Jan-35		1.3650				
Feb-35		1.3689				
Mar-35		1.3856				
Apr-35		1.4096				
May-35		1.4320				
Jun-35		1.4417				
Jul-35		1.4366				
Aug-35		1.3978				
Sep-35		1.3859				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		Differences	
	Residential & C1		Residential & C1		Residential & C1	
	NYMEX	CGC PGA	NYMEX	CGC PGA	NYMEX	CGC PGA
Oct-35		1.3819				
Nov-35		1.3816				
Dec-35		1.3820				
Jan-36		1.3991				
Feb-36		1.4031				
Mar-36		1.4203				
Apr-36		1.4448				
May-36		1.4678				
Jun-36		1.4778				
Jul-36		1.4725				
Aug-36		1.4327				
Sep-36		1.4205				
Oct-36		1.4164				
Nov-36		1.4162				
Dec-36		1.4165				
Jan-37		1.4341				
Feb-37		1.4382				
Mar-37		1.4558				
Apr-37		1.4809				
May-37		1.5045				
Jun-37		1.5147				
Jul-37		1.5093				
Aug-37		1.4685				
Sep-37		1.4561				
Oct-37		1.4518				
Nov-37		1.4516				
Dec-37		1.4519				
Jan-38		1.4699				
Feb-38		1.4741				
Mar-38		1.4922				
Apr-38		1.5179				
May-38		1.5422				
Jun-38		1.5526				
Jul-38		1.5470				
Aug-38		1.5052				
Sep-38		1.4925				
Oct-38		1.4881				
Nov-38		1.4879				
Dec-38		1.4882				
Jan-39		1.5067				
Feb-39		1.5110				
Mar-39		1.5295				
Apr-39		1.5559				
May-39		1.5807				
Jun-39		1.5914				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Jul-39		1.5857				
Aug-39		1.5429				
Sep-39		1.5298				
Oct-39		1.5253				
Nov-39		1.5251				
Dec-39		1.5254				
Jan-40		1.5444				
Feb-40		1.5487				
Mar-40		1.5677				
Apr-40		1.5948				
May-40		1.6202				
Jun-40		1.6312				
Jul-40		1.6254				
Aug-40		1.5814				
Sep-40		1.5680				
Oct-40		1.5635				
Nov-40		1.5632				
Dec-40		1.5636				
Jan-41		1.5830				
Feb-41		1.5875				
Mar-41		1.6069				
Apr-41		1.6347				
May-41		1.6607				
Jun-41		1.6720				
Jul-41		1.6660				
Aug-41		1.6210				
Sep-41		1.6072				
Oct-41		1.6026				
Nov-41		1.6023				
Dec-41		1.6027				
Jan-42		1.6225				
Feb-42		1.6271				
Mar-42		1.6471				
Apr-42		1.6755				
May-42		1.7023				
Jun-42		1.7138				
Jul-42		1.7076				
Aug-42		1.6615				
Sep-42		1.6474				
Oct-42		1.6426				
Nov-42		1.6423				
Dec-42		1.6427				
Jan-43		1.6631				
Feb-43		1.6678				
Mar-43		1.6882				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Apr-43		1.7174				
May-43		1.7448				
Jun-43		1.7566				
Jul-43		1.7503				
Aug-43		1.7030				
Sep-43		1.6886				
Oct-43		1.6837				
Nov-43		1.6834				
Dec-43		1.6838				
Jan-44		1.7047				
Feb-44		1.7095				
Mar-44		1.7304				
Apr-44		1.7603				
May-44		1.7884				
Jun-44		1.8005				
Jul-44		1.7941				
Aug-44		1.7456				
Sep-44		1.7308				
Oct-44		1.7258				
Nov-44		1.7255				
Dec-44		1.7259				
Jan-45		1.7473				
Feb-45		1.7522				
Mar-45		1.7737				
Apr-45		1.8044				
May-45		1.8331				
Jun-45		1.8456				
Jul-45		1.8389				
Aug-45		1.7892				
Sep-45		1.7741				
Oct-45		1.7689				
Nov-45		1.7686				
Dec-45		1.7690				
Jan-46		1.7910				
Feb-46		1.7961				
Mar-46		1.8180				
Apr-46		1.8495				
May-46		1.8790				
Jun-46		1.8917				
Jul-46		1.8849				
Aug-46		1.8340				
Sep-46		1.8184				
Oct-46		1.8132				
Nov-46		1.8128				
Dec-46		1.8133				

Chattanooga Gas Company
Historical NYMEX and PGA Assumptions

	Prices used in DJN-2		Prices used in MFG-25		**Differences**	
		Residential & C1		**Residential & C1**		**Residential & C1**
	NYMEX	**CGC PGA**	**NYMEX**	**CGC PGA**	**NYMEX**	**CGC PGA**
Jan-47		1.8358				
Feb-47		1.8410				
Mar-47		1.8635				
Apr-47		1.8957				
May-47		1.9259				
Jun-47		1.9390				
Jul-47		1.9320				
Aug-47		1.8798				
Sep-47		1.8639				
Oct-47		1.8585				
Nov-47		1.8582				
Dec-47		1.8586				
Jan-48		1.8817				
Feb-48		1.8870				
Mar-48		1.9101				
Apr-48		1.9431				
May-48		1.9741				
Jun-48		1.9875				
Jul-48		1.9803				
Aug-48		1.9268				
Sep-48		1.9105				
Oct-48		1.9049				
Nov-48		1.9046				
Dec-48		1.9051				
Jan-49		1.9287				
Feb-49		1.9342				
Mar-49		1.9578				
Apr-49		1.9917				
May-49		2.0234				
Jun-49		2.0371				
Jul-49		2.0299				
Aug-49		1.9750				
Sep-49		1.9582				
Oct-49		1.9526				
Nov-49		1.9522				
Dec-49		1.9527				

DISCOVERY REQUEST NO. 8:

Please explain the purpose and relevance of each variable shown on Exhibit MHS-5, including how the RPGA variable relates to the PGA variable.

Response:

Basic summary descriptions of the variables used were presented in MHS-5, below are further detailed descriptions of the variables used.

Commercial Variables

CGCTRD – Trend variable used to capture the change that occurs overtime to base load usage. As base load appliances such as dryers, stoves, and hot water heaters are replaced with more efficient appliances, there is a natural decline in the use per customer.

CONSTANT – Base load usage. Usage by any customer regardless of temperature for base load appliances such as dryers, stoves, and hot water heaters.

SDD55MRD – Number of heating degree days per meter reading day with a base temperature of 55 degrees. Variable used to show increase in heat load usage that occurs below 55 degrees. Indicates the majority of commercial customers using heat would be on at this point.

SDD72MRD – Number of heating degree days per meter reading day with a base temperature of 72 degrees. Variable used to show increase in heat load usage that occurs below 72 degrees. Indicates that basic heat sensitivity begins at this point where smaller businesses would normally react to colder temperatures.

TSDD – Trend variable used to capture the heating sensitivity that occurs over time below 55 degrees. As heat load appliances such as furnaces and space heaters are replaced with more efficient appliances, there is a natural decline in the use per customer.

SDD72MRD[-1] – Number of heating degree days per meter reading day below 72 degrees lagged one month. Indicates the weather a month ago correlates with customer behavior and usage the following month. An example of this time of correlation would be after a warm period of weather, commercial customers are less likely to turn on their furnaces for a day or two of cold weather. Conversely, after a cold period of weather, commercial customers are less likely to turn off their furnaces for a day or two of warm weather.

Residential Variables

SDD65MRD – Number of heating degree days per meter reading day with a base temperature of 65 degrees. Variable used to show increase in heat load usage that occurs below 65 degrees.

KNOT5565 – Variable used to capture the increase in heating sensitivity as temperatures fall below 65 degrees. Shows as temperatures approach 65 degrees some customers begins to react to weather and continue to react while others do not react until temperatures approach closer to 55 degrees. Allows us to model customer usage and behavior more closely during shoulder months when these conditions typically occur.

PSDD – Heat sensitivity to price. Shows correlation between the price of natural gas and a customer's usage. In order to model this effect, we regressed against the cross product

of the lagged inflation adjusted price (RPGA[-1]) and the heating degree days per meter reading day with a base temperature of 65 degrees.

CGCTRD – Trend variable used to capture the change that occurs overtime to base load usage. As base load appliances such as dryers, stoves, and hot water heaters are replaced with more efficient appliances, there is a natural decline in the use per customer.

CONSTANT – Base load usage. Usage by any customer regardless of temperature for base load appliances such as dryers, stoves, and hot water heaters.

FEBMAY07 – A series of one-time prior period billing adjustments made between February 2007 and May 2007.

DISCOVERY REQUEST NO. 9:

Please explain the criteria that were used to select the models presented in MHS-5 and the exact specifications of the models estimated. Please explain which estimation techniques are used in the regressions and what estimation technique is used by Forecast Pro to compute coefficients?

Response:

The models used to run the regressions presented in Exhibit MHS-5 was Least Squares Multi-Variate Linear Regression. First, scatter plots were established then general relationships were established to heat. Knots were then established and tested. Time series plots were next added as seen at the top of Exhibit MHS-5. From this visual inspection, it was suggested there may be a base load and heat load long term trend. Known economic effects effecting demand such as price were then included in the models.

The criteria used to verify the models presented in Exhibit MHS-5 was Adj. R-square. The next measure used after the Adj. R-square was Durbin Watson and Ljung Box. Also in establishing the model criteria, we measured the BIC and MAPE. Individual variables were evaluated based upon their t-Statistic and those with less than 95% significance were rejected. Final testing was to perform a holdout period or ex-ante for periods of 12-30 months. If the model performance would have declined significantly between the data

period and holdout period, the model would have been rejected due to its inability to accurately project the future.

DISCOVERY REQUEST NO. 10:

Define all variables used in Exhibit MHS-5, including but not limited to X_4 which is not explained for commercial customers, the prior billing adjustment dummy that is called FEBMAY07, but it is stated adjustment took place February and April. Provide the data for TSDD and PSDD used in regression models.

Response:

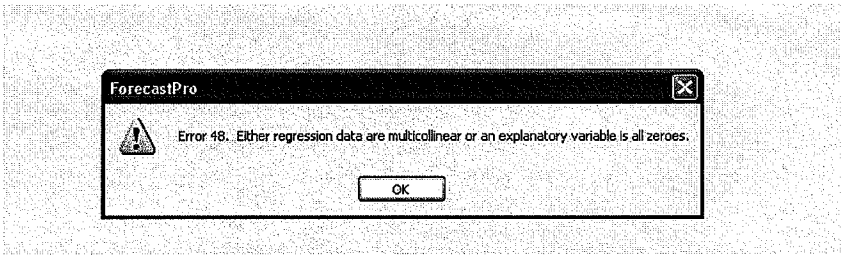
Please see Discovery Request No 8 for explanations of all variables used in Exhibit MHS-5. Price, X_4 was not used as a variable in the commercial regression. The variable defined at FEBMAY07 was used to adjust for prior period billing adjustments made between February 2007 and May 2007. As presented in MHS-5, the variable TSDD is the cross product of CGCTRD and SDD65MRD. Also as presented in MHS-5 and described in Discovery Request No 8, PSDD is the cross product of RPGA[-1] and SDD65MRD.

DISCOVERY REQUEST NO. 11:

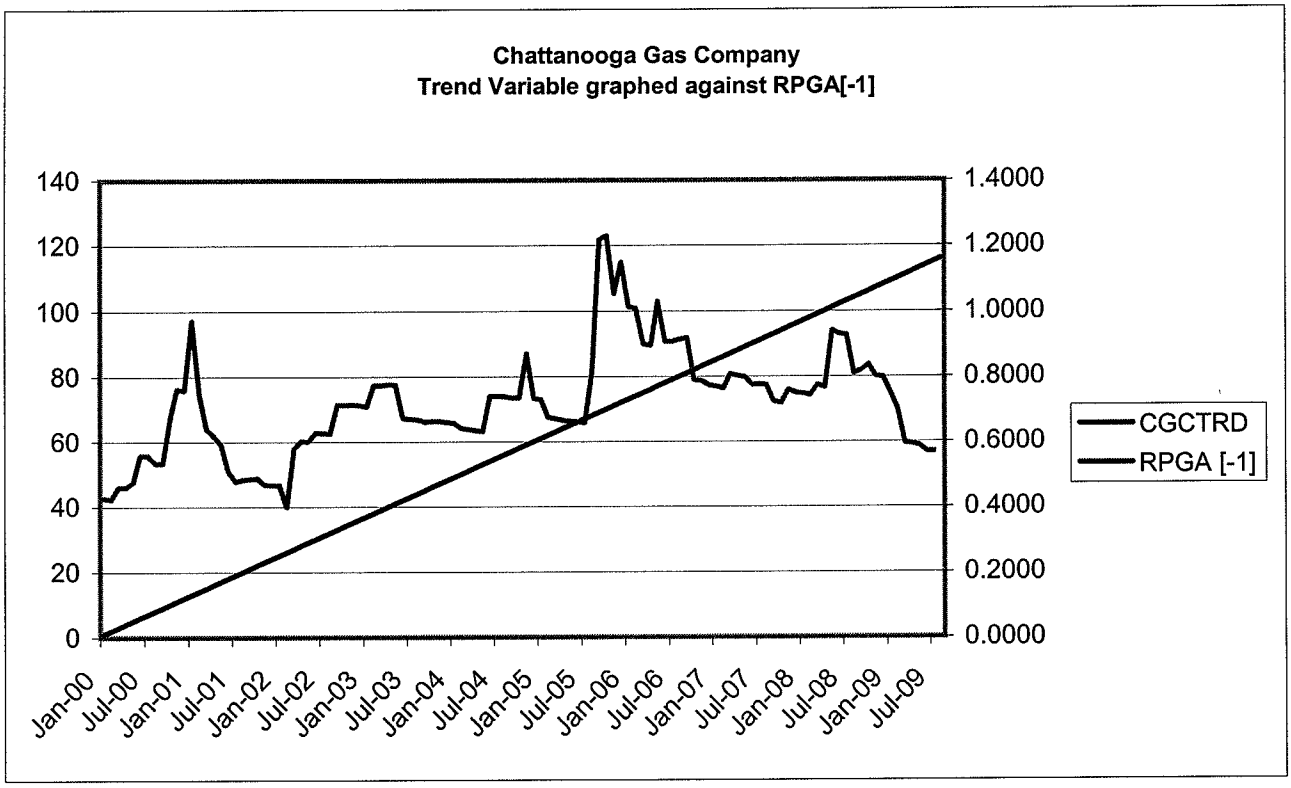
Is collinearity an issue for residential customers, given definitions of PSDD and TSDD and specification of model? If not, explain why it is not a problem.

Response:

No, collinearity is not an issue for residential customers. As clearly shown in the attachment Discovery Request 2-11, the long term trend used does not directly correlate to the price of natural gas. If collinearity was an issue, an error message similar to the one seen below would have been reported and the model would have been rejected.



Chattanooga Gas Company
Docket No. 09-00183
CAPD Question 2-11
Attachment 11-1



DISCOVERY REQUEST NO. 12:

For the purposes of this request please refer to the response to data request 150-3 and Minimum Filing Guideline 25. Explain the differences in usage reported in the excel file CGC TRA FGItem 25-Revenue Model (tab UPC) and attachment to DR 150-3. Specifically, usage for residential customers in file CGC TRA FGItem 25-Revenue Model reaches values as high as 13; however, in attachment to DR 150-3, residential usage reported is no higher than 6.

Response: Presented in MFG 25 is average customer consumption in Dekatherms by month. Presented in DR 150-3 is average customer consumption per Meter Reading Day in Therms.

DISCOVERY REQUEST NO. 13:

For the purposes of this request please refer to the response to Minimum Filing Guideline 25. Why is the base RPGA in CGC TRA FGItem 25-Revenue Model (tab UPC, cell C65) 164.1?

Response: The value represented in Cell C65 under the UPC tab of Minimum Filing Guideline 25 represents the monthly Consumer Price Index for the beginning month of our data set, January 2000. This value is used to adjust the PGA term for inflation.

DISCOVERY REQUEST NO. 27:

Please provide the following data for each rate schedule the Company intends to apply its alignment and usage adjustment: the base load and heat sensitivity factor allowed in the Company's last rate case, by rate class; the normal degree days by month since the implementation of last rate case; the average number of customers by applicable rate class for each month since the implementation of last rate case; the actual usage by rate class for each month since the implementation of last rate case; the R factor as allowed in the last rate case.

Response:

Please refer to the table below for the R factor, base load and heat sensitivity factor allowed in the Company's last rate case, by rate class:

	BASE RATE ($THERM) HEAT	HEAT SENSITIVE FACTOR - HSF (THERM)	BASE LOAD - BL (THERM)
(R-1) RESIDENTIAL GENERAL SERVICE Winter (November – April)	0.18259	0.171325	12.133
(R-4) MULTI-FAMILY HOUSING SERVICE Winter (November - April)	0.217674	0.068798	17.033
(C-1) SMALL COMMERCIAL AND INDUSTRIAL GENERAL SERVICE Winter (November - April)	0.18581	0.240546	9.433
(C-2) MEDIUM COMMERCIAL AND INDUSTRIAL GENERAL SERVICE Winter (November - April)	0.169998	2.66182	813.367

Please refer to the table below for the normal heating degree days from the last rate case.

	Leap Year	Non-Leap Year
January	795	795
February	599	581
March	397	405
April	167	174
May	37	40
June	0	0
July	0	0
August	0	0
September	14	14
October	165	165
November	415	415
December	697	697
Total	**3,286**	**3,286**

Please refer to the table below that lists data responses where the following data has already been provided:

Residential R-1 Customers by Month-	CAPD 1st set Discovery Request No. 3
Residential R-1 Consumption by Month-	CAPD 1st set Discovery Request No. 4
Residential R-4 Customers by Month-	CAPD 1st set Discovery Request No. 5
Residential R-4 Consumption by Month-	CAPD 1st set Discovery Request No. 6
Commercial C-1 Customers by Month-	CAPD 1st set Discovery Request No.7
Commercial C-1 Consumption by Month-	CAPD 1st set Discovery Request No. 8
Commercial C-1 Customers by Month-	CAPD 1st set Discovery Request No.9
Commercial C-1 Consumption by Month-	CAPD 1st set Discovery Request No. 10
Commercial T-3 Customers by Month-	CAPD 1st set Discovery Request No.24
Commercial T-3 Consumption by Month-	CAPD 1st set Discovery Request No. 25

DISCOVERY REQUEST NO. 46:

Provide the amount and account for any non-recurring charges, such as non-jurisdictional expenses, Outside Service Expenses, and outsourcing call center costs recorded in the twelve months ended 12/31/09.

Response:

Please see attachments 46-1 through 46-9.

Revised Response:

The Company is revising attachment 46-1, (the summary sheet of adjustments) to reflect the property tax adjustment as a direct expense adjustment. The original response had shown the adjustment as an allocated expense adjustment. As shown on originally filed attachment 46-7, the purpose of the adjustment is to adjust the actual amount for property tax for 2009 calendar year to the actual amounts incurred for 2009 for Chattanooga Gas Company and not AGL Services Company.

Chattanooga Gas Company
Elimination of non-jurisdictional expenses and other adjustments
For the Year Ended December 31, 2009
(Revised 4-5-2010)

Civic Participation (Schedule 46-2)

Direct	(15,000)
Allocations	(16,746)

To eliminate non-juristdictinal civic participation.

Promotional Advertising (Schedule 46-3)

Direct	(32,076)
Allocations	(3,880)

To eliminate promotional advertising.

Call Center (Schedule 46-4)

Direct	0
Allocations	274,975

To adjust expenses to reflect in-sourcing of call center.

Goodwill (Schedule 46-5)

Direct	0
Allocation	(493)

To eliminate goodwill advertising.

Total outside meter reading services (Schedule 46-6)

Direct	(129,808)
Allocation	0

To elimate outside meter reading cost no longer incurred due to automation of meter reading.

Property Tax (Schedule 46-7)

Direct	(165,163) **Revised to show as direct-not allocated**
Allocation	

To adjust property tax accrual for amounts per 2009 payments.

PUHCA tax allocation (Schedule 46-8)

Direct	0
Allocation	73,531

To eliminate effects of non-jurisdictional tax allocation amounts.