

Commonwealth of Massachusetts  
Department of Telecommunications and Energy  
Fitchburg Gas and Electric Light Company  
Docket Nos. D.T.E. 02-24/25  
Responses to the Division of Energy Resources First Set of Information Requests

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**Request No. DOER 1-12 (Gas):**

Schedule KMA-3 (Gas) provides the Marginal Cost Customer and Volumetric Components for each rate class. For the last three Company rate cases, please provide, for each customer class, the Company's estimated Marginal Cost Customer and Volumetric Components.

**Response:**

For FG&E's Gas Division, the last three rate cases were; D.T.E. 98-51 (filed on May 15, 1998), D.P.U. 84-145 (filed on July 16, 1984), and D.P.U. 1214 (filed on July 16, 1982).

A summary of marginal unit costs used in the design of rates in D.T.E. 98-51, is provided in Attachment DOER 1-12 (Gas).

For D.P.U. 84-145 and D.P.U. 1214, FG&E did not file marginal cost studies.

**Person Responsible:** Karen M. Asbury

TABLE - 13  
FITCHBURG GAS & ELECTRIC COMPANY  
MARGINAL COST ANALYSIS

Summary of Marginal Unit Costs per Dt

Line No.	Description	← Res Ht →		← Res Non Ht →		← Small C&I →		← Medium C&I →		← Large C&I →	
		Reg Ht	Low Inc Ht	Reg NonHt	LowInc N-H	Hi Winter	Lo Winter	Hi Winter	Lo Winter	Hi Winter	Lo Winter
1	CUSTOMER CHARGE \$'s per Month										
2	Customer Transportation	\$34.55	\$34.56	\$33.74	\$33.72	\$35.83	\$35.47	\$120.93	\$120.16	\$272.32	\$471.04
3	Customer Supply	\$0.41	\$0.40	\$0.07	\$0.08	\$1.16	\$0.94	\$11.85	\$11.98	\$87.66	\$280.96
4	Total Customer Charge	\$34.96	\$34.96	\$33.80	\$33.80	\$36.99	\$36.41	\$132.78	\$132.14	\$359.98	\$732.00
5											
6	WINTER CHARGES (1)										
7	Winter Supply Cost	\$0.942	\$0.846	\$0.828	\$0.790	\$1.003	\$0.850	\$0.921	\$0.786	\$0.895	\$0.734
8	Winter Transportation Pressure Support	\$0.024	\$0.022	\$0.021	\$0.020	\$0.026	\$0.022	\$0.024	\$0.020	\$0.023	\$0.019
9	Winter Transportation Reinforcements	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
10	Winter Transportation Main Ext	\$1.233	\$1.109	\$1.085	\$1.035	\$1.313	\$1.113	\$1.206	\$1.030	\$1.173	\$0.961
11	Winter Commodity - Mains Ext	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
12	Winter Commodity	\$3.727	\$3.716	\$3.738	\$3.721	\$3.742	\$3.680	\$3.732	\$3.722	\$3.736	\$3.697
13	Total Winter \$'s per Dt	\$5.927	\$5.693	\$5.673	\$5.566	\$6.084	\$5.674	\$5.883	\$5.559	\$5.827	\$5.411
14											
15	Winter Supply	\$4.669	\$4.563	\$4.567	\$4.511	\$4.745	\$4.539	\$4.653	\$4.508	\$4.631	\$4.431
16	Winter Transportation	\$1.258	\$1.130	\$1.106	\$1.055	\$1.339	\$1.135	\$1.230	\$1.050	\$1.186	\$0.980
17	Total Winter \$'s per Dt	\$5.927	\$5.693	\$5.673	\$5.566	\$6.084	\$5.674	\$5.883	\$5.559	\$5.827	\$5.411
18											
19	SUMMER CHARGES (1)										
20	Demand Charge	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
21	Summer Commodity - Mains Ext	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
22	Commodity Charge	\$2.744	\$2.739	\$2.714	\$2.708	\$2.758	\$2.707	\$2.772	\$2.711	\$2.792	\$2.703
23	Total Summer \$'s per Dt	\$2.744	\$2.739	\$2.714	\$2.708	\$2.758	\$2.707	\$2.772	\$2.711	\$2.792	\$2.703
24											
25	CALENDAR MONTH BILLING DETERMINANTS										
26	Customers	(1997-98) 9,816	888	2,613	221	804	281	179	88	12	7
27	Design Day Dt	9,041	667	567	60	1,922	307	3,228	954	1,428	1,313
28	Winter Dt	812,543	66,669	57,944	6,397	162,223	30,552	296,640	102,639	134,972	151,439
29	Summer Dt	213,464	18,807	27,107	2,734	20,461	23,414	51,228	65,494	22,330	117,737
30	Total Annual Dt	1,026,007	85,476	85,051	9,131	182,684	53,966	347,866	168,133	157,302	269,176
31											
32	Annual Design Day Load Factor	31%	35%	41%	42%	28%	48%	30%	48%	30%	56%
33	% of Use in Winter	79%	78%	68%	70%	89%	57%	85%	61%	86%	56%
34											
35	Functional Summary of Rates										
36											
37	Gas Supply										
38	Customer \$'s per month	\$0.41	\$0.40	\$0.07	\$0.08	\$1.16	\$0.94	\$11.85	\$11.98	\$87.66	\$280.96
39	Winter \$'s per MCF	\$4.669	\$4.563	\$4.567	\$4.511	\$4.745	\$4.539	\$4.653	\$4.508	\$4.631	\$4.431
40	Summer \$'s per MCF	\$2.744	\$2.739	\$2.714	\$2.708	\$2.758	\$2.707	\$2.772	\$2.711	\$2.792	\$2.703
41											
42	Transportation										
43	Customer \$'s per Month	\$34.55	\$34.56	\$33.74	\$33.72	\$35.83	\$35.47	\$120.93	\$120.16	\$272.32	\$471.04
44	Winter \$'s per MCF	\$1.258	\$1.130	\$1.106	\$1.055	\$1.339	\$1.135	\$1.230	\$1.050	\$1.186	\$0.980
45	Summer \$'s per MCF	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000

NOTES:

1 Source: TABLE - 12 revenues divided by calendar month normalized determinants.