

BOMA INTERROGATORY #8

INTERROGATORY

Ref: Exhibit C1, Tab 2, Schedule 1, Appendix A, p6, Table 5

- (a) Please show the calculation for each grouping's average load, base load and heat load for each month, and show those amounts for each month for each grouping.
- (b) Please show the number of monthly customers and monthly total consumption for each revenue class for each of rate 1 and rate 6.
- (c) Please provide the aggregation of the results provided for each grouping asked for in (b) above, to the numbers that are shown in Tables 5 and 6.
- (d) Do the balance point degree days vary for different groupings, other than between the three weather regions on p14? If so, please explain why and how.
- (e) Has EGD made empirical studies of the influence of higher or lower gas prices on demand, in addition to the results supplied by the econometric model? If so, what are the results?

RESPONSE

a), b) & c)

Due to the time constraints and the work associated with other interrogatories, the derivations of average use per customer, baseload, heatload, monthly customers and monthly consumptions as shown in Exhibit C1, Tab 2, Schedule 1, Appendix A, Tables 5 and 6, cannot be provided for all of the one hundred and sixty-eight groupings (refer to BOMA Interrogatory #6 at Exhibit 1.C1.EGDI.BOMA.6 for a list of the groupings). The following twelve tables show the calculations by groupings comprised of rate classes (Rate 1 and Rate 6) and operating regions (six regions).

Tables 1 to 6 show the calculations for Rate 1 in the six operating regions. The aggregated results of these tables would reconcile to Table 5 in Exhibit C1, Tab 2, Schedule 1, Appendix A.

Similarly, Tables 7 to 12 show the calculations for Rate 6 in the six operating regions. The aggregated results of these tables would reconcile to Table 6 in Exhibit C1, Tab 2, Schedule 1, Appendix A.

Witness: M. Suarez

TABLE 1  
 GENERAL SERVICE RATE 1, METRO REGION  
 2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Notes
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	217.6	223.6	193.6	138.0	74.1	36.3	26.0	24.9	25.0	45.7	100.7	160.2	1,265.7	
1.2 Customer Meters Budget	490,427	490,966	491,461	491,847	491,800	491,468	491,298	491,763	492,269	493,801	495,188	496,334	492,385	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	444	456	394	281	151	74	53	51	51	92	203	323	2,571	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	66	67	69	63	63	67	53	51	51	54	62	63	726	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	378	389	325	217	88	7	0	0	0	39	142	260	1,845	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

TABLE 2  
 GENERAL SERVICE RATE 1, WESTERN REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	140.4	144.0	124.2	91.6	52.5	27.9	22.9	22.1	21.5	31.6	64.8	107.0	850.4	
1.2	345,999	346,380	346,729	347,005	346,971	346,734	346,611	346,945	347,308	348,405	349,399	350,227	347,393	
1.3	406	416	358	264	151	80	66	64	62	91	186	305	2,448	Row 1.1 / Row 1.2
1.4	79	80	82	76	75	73	66	64	62	66	71	79	873	
1.5	326	336	276	187	76	8	0	0	0	25	115	227	1,576	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez

TABLE 3  
 GENERAL SERVICE RATE 1, CENTRAL REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	81.5	84.2	73.0	54.7	29.8	15.2	12.4	12.1	11.9	18.5	38.3	59.8	491.4	
1.2	224,548	224,795	225,023	225,200	225,180	225,024	224,946	225,162	225,394	226,106	226,749	227,285	225,451	
1.3	363	375	324	243	132	68	55	54	53	82	169	263	2,180	Row 1.1 / Row 1.2
1.4	66	65	69	67	61	60	55	54	53	56	60	63	727	
1.5	297	309	256	176	71	7	0	0	0	26	109	200	1,453	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez

TABLE 4  
 GENERAL SERVICE RATE 1, NORTHERN REGION  
 2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Notes
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	191.7	194.7	171.8	127.0	72.2	37.7	29.4	28.5	28.0	42.6	89.6	139.2	1,152.5	
1.2 Customer Meters Budget	459,794	460,300	460,763	461,132	461,087	460,770	460,610	461,053	461,531	462,992	464,311	465,411	461,646	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	417	423	373	275	157	82	64	62	61	92	193	299	2,497	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	76	77	82	76	76	74	64	62	61	62	69	73	852	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	341	346	291	199	81	8	0	0	0	30	124	226	1,646	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez

TABLE 5  
 GENERAL SERVICE RATE 1, EASTERN REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	120.0	123.1	103.6	74.8	39.6	20.1	15.4	14.2	15.5	24.4	52.3	86.0	689.1	
1.2 Customer Meters Budget	329,921	330,287	330,622	330,888	330,857	330,625	330,510	330,832	331,178	332,230	333,183	333,976	331,259	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	364	373	313	226	120	61	47	43	47	73	157	257	2,081	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	57	55	61	55	54	55	47	43	45	45	52	55	624	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	307	318	253	171	66	6	0	0	1	28	105	202	1,457	
Meter Reading BP DD (Eastern)	696.0	716.0	568.0	381.0	147.0	9.0	0.0	0.0	2.0	86.0	288.0	494.0	3,387.0	

Witness: M. Suarez

TABLE 6  
 GENERAL SERVICE RATE 1, NIAGARA REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	52.1	55.9	50.0	35.8	18.6	9.4	6.5	6.6	6.6	10.2	21.8	37.8	311.5
1.2	Customer Meters Budget	156,317	156,488	156,645	156,769	156,755	156,649	156,594	156,743	156,904	157,395	158,209	156,942	
1.3	Budget Average Use per Customer (m <sup>3</sup> )	333	357	319	228	119	60	42	42	42	65	138	239	1,985
1.4	Baseload Average Use per Customer (m <sup>3</sup> )	51	49	51	53	40	50	42	42	42	46	51	45	563
1.5	Heatload Average Use per Customer (m <sup>3</sup> )	283	308	268	175	78	10	0	0	18	87	194	1,422	
	Meter Reading BP DD (Niagara)	522.0	560.0	473.0	329.0	147.0	15.0	0.0	0.0	55.0	211.0	379.0	2,691.0	

Row 1.1 / Row 1.2

TABLE 7  
 GENERAL SERVICE RATE 6, METRO REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Notes
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	313.0	367.1	319.5	234.7	143.3	73.9	50.8	48.5	47.0	76.8	167.9	248.8	2,091.3	
1.2 Customer Meters Budget	53,500	53,606	53,703	53,566	53,263	52,498	52,193	51,834	51,746	52,362	53,171	53,602	52,920	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	5,850	6,849	5,950	4,381	2,691	1,407	973	936	908	1,467	3,157	4,642	39,211	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	1,546	1,714	1,602	1,349	1,325	1,311	973	936	908	864	1,262	1,409	15,199	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	4,304	5,134	4,348	3,032	1,366	96	0	0	0	604	1,895	3,233	24,012	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez



TABLE 8  
 GENERAL SERVICE RATE 6, WESTERN REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	130.1	157.2	128.7	93.9	56.4	25.8	18.4	18.3	18.4	26.6	64.9	106.0	844.6	
	Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )													
1.2	30,858	30,897	30,932	30,887	30,787	30,533	30,435	30,312	30,289	30,496	30,765	30,916	30,676	
	Customer Meters Budget													
1.3	4,215	5,088	4,162	3,039	1,831	844	605	605	608	872	2,108	3,429	27,405	Row 1.1 / Row 1.2
	Budget Average Use per Customer (m <sup>3</sup> )													
1.4	951	972	931	785	823	751	605	605	608	563	852	1,022	9,470	
	Baseload Average Use per Customer (m <sup>3</sup> )													
1.5	3,264	4,115	3,231	2,254	1,007	93	0	0	0	308	1,256	2,407	17,936	
	Heatload Average Use per Customer (m <sup>3</sup> )													
	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	
	Meter Reading BP DD (Central)													

Witness: M. Suarez

TABLE 9  
 GENERAL SERVICE RATE 6, CENTRAL REGION  
 2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Notes
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	45.3	57.8	47.6	34.0	19.0	9.0	6.6	6.9	7.7	13.7	26.6	37.0	311.2	
1.2 Customer Meters Budget	13,491	13,508	13,526	13,497	13,445	13,310	13,258	13,192	13,178	13,288	13,429	13,502	13,385	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	3,358	4,277	3,519	2,521	1,410	679	496	522	585	1,030	1,983	2,740	23,120	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	1,511	1,891	1,648	1,245	676	588	496	522	585	761	1,066	1,381	12,373	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	1,847	2,385	1,871	1,276	734	90	0	0	0	268	917	1,358	10,747	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez

TABLE 10  
 GENERAL SERVICE RATE 6, NORTHERN REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	109.0	124.8	107.6	76.6	42.6	19.6	15.6	14.8	15.6	26.6	56.0	87.5	696.4	
1.2	36,844	36,876	36,909	36,871	36,782	36,558	36,474	36,368	36,348	36,527	36,762	36,896	36,685	
1.3	2,960	3,383	2,916	2,078	1,157	537	427	408	430	728	1,524	2,370	18,918	Row 1.1 / Row 1.2
1.4	859	926	877	683	581	450	427	408	430	471	630	784	7,526	
1.5	2,101	2,457	2,040	1,395	576	87	0	0	0	257	894	1,586	11,393	
Meter Reading BP DD (Central)	552.0	583.0	475.0	326.0	132.0	11.0	0.0	0.0	0.0	65.0	232.0	406.0	2,782.0	

Witness: M. Suarez

TABLE 11  
 GENERAL SERVICE RATE 6, EASTERN REGION  
2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

<u>Item.</u>	<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 3</u>	<u>Col. 4</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 7</u>	<u>Col. 8</u>	<u>Col. 9</u>	<u>Col. 10</u>	<u>Col. 11</u>	<u>Col. 12</u>	<u>Col. 13</u>	<u>Notes</u>
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	
1.1	89.0	112.2	92.0	67.5	35.9	17.0	12.0	11.7	12.0	21.5	47.9	74.2	592.7	
	Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )													
1.2	22,450	22,482	22,515	22,465	22,361	22,102	22,002	21,876	21,850	22,054	22,321	22,460	22,245	
	Customer Meters Budget													
1.3	3,963	4,991	4,084	3,004	1,604	768	547	534	549	976	2,145	3,303	26,467	Row 1.1 / Row 1.2
	Budget Average Use per Customer (m <sup>3</sup> )													
1.4	871	1,012	837	809	745	685	547	534	547	652	729	856	8,824	
	Baseload Average Use per Customer (m <sup>3</sup> )													
1.5	3,092	3,980	3,247	2,195	859	83	0	0	2	323	1,415	2,446	17,643	
	Heatload Average Use per Customer (m <sup>3</sup> )													
	696.0	716.0	568.0	381.0	147.0	9.0	0.0	0.0	2.0	86.0	288.0	494.0	3,387.0	
	Meter Reading BP DD (Eastern)													

Witness: M. Suarez

TABLE 12  
 GENERAL SERVICE RATE 6, NIAGARA REGION  
 2018 BUDGET - VOLUME, CUSTOMERS & AVERAGE USE

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Notes
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1.1 Budget Volumes (10 <sup>6</sup> m <sup>3</sup> )	43.0	51.0	45.4	34.0	19.5	10.5	7.5	7.4	7.9	12.0	22.3	33.1	293.5	
1.2 Customer Meters Budget	11,750	11,770	11,786	11,763	11,710	11,577	11,527	11,462	11,450	11,560	11,705	11,782	11,654	
1.3 Budget Average Use per Customer (m <sup>3</sup> )	3,661	4,329	3,851	2,892	1,669	911	649	648	687	1,034	1,901	2,808	25,040	Row 1.1 / Row 1.2
1.4 Baseload Average Use per Customer (m <sup>3</sup> )	819	895	845	749	884	774	649	648	687	570	644	720	8,885	
1.5 Heatload Average Use per Customer (m <sup>3</sup> )	2,842	3,434	3,006	2,143	785	137	0	0	0	463	1,257	2,088	16,155	
Meter Reading BP DD (Niagara)	522.0	560.0	473.0	329.0	147.0	15.0	0.0	0.0	0.0	55.0	211.0	379.0	2,691.0	

Witness: M. Suarez

- d) No, the balance point degree days do not vary for different groupings other than the three weather zones.
- e) No, EGD hasn't made empirical studies of the influence of higher or lower gas prices on demand, in addition to the results supplied by the econometric model.