

NEW HAMPSHIRE GAS CORPORATION

Supplemental Testimony of Jennifer Boucher

1 **Q. Please state your name, employer and business address.**

2 A. My name is Jennifer Boucher. I am employed by The Berkshire Gas Company
3 (“Berkshire”) and my business address is 115 Cheshire Rd., Pittsfield, MA 01201.

4
5 **Q. What is your position?**

6 A. I am the Manager - Regulatory Economics for Berkshire.

7
8 **Q. Have you previously submitted testimony in this proceeding?**

9 A. No, I have not.

10
11 **Q. Could you please briefly describe your educational and professional
12 background?**

13 A. Yes. I graduated from the Massachusetts College of Liberal Arts in 1994 with a
14 Bachelor of Science degree in Business Administration and from Western New
15 England College in 1999 with a Masters of Business Administration. I joined
16 Berkshire in 1997 and have held several positions including Planning Analyst,
17 Administrator of Rates and Planning and Supervisor of Rates and Planning. I was
18 promoted to the Manager of Regulatory Economics in March 2006.

19
20 **Q. Please summarize your responsibilities.**

21 A. As the Manager of Regulatory Economics, my primary responsibility is to prepare
22 all of the external rate filings and reports to state regulatory agencies, including all
23 semi-annual and out-of-period factor filings, monthly reports and annual
24 reconciliations as related to the Cost of Gas Adjustment Clause (“CGAC”) and
25 Local Distribution Adjustment Clause (“LDAC”). I also manage retail service
26 contracts with large customers and provide analysis on tariffs and pricing issues,
27 as well as operating revenue forecasts for the Company’s annual operating
28 budget. Additionally, I am responsible for the oversight of gas supply, including

1 planning and dispatch to secure a reliable and least cost gas supply for the benefit
2 of customers. I also oversee the activities between the Company and third-party
3 marketers. Finally, I assist New Hampshire Gas Corporation (“NHGC” or the
4 “Company”) with its regulatory filings.

5
6 **Q. Have you testified as a witness in any other proceedings involving either**
7 **company?**

8 A. I have experience as a witness in Massachusetts testifying before the
9 Massachusetts Department of Public Utilities (“MDPU”). I testified as a witness
10 in Berkshire’s last base rate case (D.T.E. 01-56), in its Forecast and Supply Plans
11 (D.T.E. 05-07 and D.P.U. 08-39), for approval of a gas supply contract with Coral
12 Energy (D.T.E. 06-27) and in a proceeding for approval of an Alliance with Shell
13 Energy North America (D.P.U. 07-31). I testified before the New Hampshire
14 Public Utilities Commission on several occasions with regards to the seasonal
15 Cost of Gas (“COG”) filings.

16
17 **Q. What is the purpose of your testimony in this proceeding?**

18 A. The purpose of my testimony is to explain: 1) an issue that the Company
19 discovered with respect to its Keene heating degree-days (“HDD”); 2) the impact
20 of these HDD on test-year weather normalized therm billing determinants (and
21 ultimately the Company’s rate design); and 3) NHGC’s proposed remedy to this
22 issue.

23
24 **Q. Please explain the Company’s issue with its Keene HDD.**

25 A. During the preparation of the Winter 2009-2010 Cost of Gas (“COG”) filing in
26 mid-September, the Company noticed a peculiar level of warmer-than-normal
27 weather for the November 2008 – April 2009 period based on its Keene HDD
28 data as compared to the levels experienced by Berkshire during the same period.
29 Specifically, the Keene HDD showed that the weather was nearly 14% warmer-
30 than-normal, while the Berkshire HDD showed that weather was virtually normal
31 (0.26% colder) over the same period. The Keene HDD data is used to

1 “normalize” actual therms sales and sendout that are used in the determination of
2 the COG rate. As a result of this reported warmer-than-normal Keene weather,
3 the normalization calculation increased the Company’s actual billing and sendout
4 experience for the period to account for the deviation from “normal”
5 temperatures. If the Keene HDD are flawed, it could have an impact on the
6 Company’s ability to recover its revenue requirements.

7
8 **Q. Did the Company verify its Keene HDD data?**

9 A. Yes, NHGC personnel performed a field check of the weather instrument, located
10 at the Company’s propane plant in Keene. The field check indicated that the
11 weather instrument was functioning properly. In addition, the calculation of the
12 daily HDD was validated using the data collected from the weather instrument,
13 and no inaccuracies were found. Next, the Company evaluated its database of
14 Keene HDD that contained more than 30 years of history. Finally, no changes in
15 the process of collecting the HDD had changed since 2004.

16
17 **Q. Did the Company discover any irregularities in its Keene HDD database?**

18 A. Yes, as displayed on Attachment NHGC-1, a large disparity in annual HDD
19 became apparent in the 2004 timeframe. Specifically, there was a decline of just
20 over 1,000 HDD, or 13%, in one year alone, from 2003 to 2004. Since this
21 decline in the 2004 timeframe, the annual HDD levels have not returned to their
22 previous levels. The result of this decline in annual HDD is of particular concern
23 when weather normalization calculations compare these recent HDD levels (in the
24 6,000 HDD range) to 20-year and 30-year average levels (in the 7,000 – 8,000
25 HDD range).

26
27 **Q. Does this irregularity affect the Company’s rate proposal?**

28 A. The Proposed Settlement is unaffected by the HDD irregularities because it is
29 based on revenue requirements. However, for rate design purposes, the original
30 test-year billing determinants are a cause for concern because NHGC utilized the
31 Keene historical HDD database in its original rate filing. As a result, the

1 Company believes that the use of these “normal” test-year billing determinants for
2 rate design purposes will not allow NHGC to fully collect its base revenues as
3 agreed to in the Proposed Settlement.
4

5 **Q. How does the Company propose to remedy its concern?**

6 A. After discussing this issue with Staff, the recommended approach to remedying
7 the Company’s rate design concern is to recalculate “normal” test-year billing
8 determinants utilizing Concord HDD. The use of Concord HDD as a proxy is
9 appropriate because: 1) the National Weather Service prepares and publishes daily
10 climate data, including HDD, for Concord; 2) it is generally representative of
11 Keene’s weather conditions being approximately 40 miles away; and 3) an
12 historical 30-year database of Concord HDD from a controlled source (the
13 National Weather Service) is available.
14

15 **Q. What are the results of using Concord HDD?**

16 A. Using Concord HDD to recalculate “normal” test-year billing determinants
17 produces (90,000) fewer therm billing determinants. As shown on Attachment
18 NHGC-1, annual billing determinants drop from 1,324,945 therms to 1,235,148
19 therms.
20

21 **Q. If Concord HDD are not employed in the development of cast-off rates, what
22 is the result?**

23 A. As illustrated on the Attachment, the Company could potentially experience a
24 revenue shortfall of nearly (\$88,000) if Concord HDD are not employed in the
25 development of cast-off rates.
26

27 **Q. Will the use of Concord HDD have any impact on the Company’s revenue
28 requirements?**

29 A. No. The revenue requirements are not impacted by the location used to determine
30 HDD. However, the rate design would be affected if the per-unit charges are
31 calculated based on incorrect billing determinants. By using the more appropriate

1 Concord billing determinants, the Company will have the opportunity to generate
2 the revenue requirements accepted pursuant to the Settlement Agreement.

3

4 **Q. Does this conclude your testimony?**

5 A. Yes, it does.

Summary of Keene Historical HDD as compiled by NHGC																					
Line No.	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
4	January	1,289	1,199	1,435	1,390	1,351	1,686	1,244	1,406	1,379	1,201	1,373	1,426	1,345	1,154	1,608	1,419	1,253	1,009	1,148	1,139
5	February	1,245	1,165	1,127	1,250	1,417	1,381	1,283	1,238	1,044	1,014	1,086	1,146	1,164	1,042	1,330	1,041	984	1,032	1,187	1,076
6	March	1,093	1,017	1,017	1,155	1,156	1,106	974	1,150	1,138	973	1,026	906	1090	990	1,111	810	1,050	942	983	1,020
7	April	776	702	586	758	691	664	778	699	751	642	647	698	682	630	656	484	443	530	674	520
8	May	304	466	219	369	324	416	394	436	488	243	278	347	299	441	264	180	352	306	214	342
9	June	129	90	114	132	139	85	102	92	99	152	69	141	105	179	62	78	36	96	75	66
10	July	37	34	48	93	38	11	28	50	65	48	29	82	104	49	12	7	7	3	16	2
11	August	103	63	68	125	57	125	97	47	129	56	99	113	21	82	12	31	7	58	39	42
12	September	293	294	364	323	346	353	379	277	331	243	204	335	282	203	114	138	106	215	144	128
13	October	631	554	594	765	717	672	558	656	693	604	678	640	587	708	524	472	448	550	335	512
14	November	976	914	909	1,000	971	862	1,002	1,028	991	872	760	871	980	692	704	710	636	822	750	14
15	December	1,715	1,172	1,330	1,288	1,279	1,188	1,358	1,112	1,214	1,098	1,156	1,382	1071	1,324	1,038	1,056	1,108	931	1,132	1,038
16	Total	8,591	7,670	7,811	8,648	8,486	8,549	8,197	8,191	8,322	7,146	7,405	8,087	7,561	7,782	7,423	6,420	6,504	6,308	6,769	6,635

Keene Test Year HDD per NHGC					
	Normal HDD	2008 Actual HDD	(Warmer) /Colder Than Normal	%	
26	January	1,341	1,139	(202)	-15.07%
27	February	1,172	1,076	(96)	-8.18%
28	March	1,038	1,020	(18)	-1.69%
29	April	661	520	(141)	-21.28%
30	May	332	342	10	2.89%
31	June	108	66	(42)	-38.92%
32	July	40	2	(38)	-95.02%
33	August	72	42	(30)	-41.54%
34	September	265	128	(137)	-51.63%
35	October	607	512	(95)	-15.71%
36	November	871	750	(121)	-13.85%
37	December	1,216	1,038	(178)	-14.61%
38	Total	7,722	6,635	(1,087)	-14.07%

Concord Test Year HDD per National Weather Service					
	Normal HDD	2008 Actual HDD	(Warmer) /Colder Than Normal	%	
26	January	1,329	1,289	(40)	-3.02%
27	February	1,148	1,109	(39)	-3.42%
28	March	989	1,054	65	6.62%
29	April	608	565	(43)	-7.00%
30	May	298	334	37	12.27%
31	June	80	48	(32)	-39.74%
32	July	15	1	(14)	-93.31%
33	August	27	27	0	0.93%
34	September	174	158	(16)	-9.04%
35	October	504	556	52	10.28%
36	November	796	828	32	4.00%
37	December	1,179	1,171	(8)	-0.65%
38	Total	7,145	7,140	(5)	-0.07%

Test Year Billing Determinants (Therms)				
	Using Keene HDD	Using Concord HDD	Variance	
26	January	202,743	183,357	(19,386)
27	February	218,017	203,003	(15,014)
28	March	200,290	192,761	(7,529)
29	April	156,253	146,133	(10,121)
30	May	87,689	80,758	(6,931)
31	June	53,588	52,481	(1,107)
32	July	39,459	39,565	106
33	August	40,875	40,875	0
34	September	42,866	41,629	(1,236)
35	October	44,463	42,857	(1,607)
36	November	98,479	52,697	(45,782)
37	December	140,223	159,031	18,807
38	Total	1,324,945	1,235,148	(89,798)

21	Test Year Base Revenues	\$1,008,675
22	Plus Approved Deficiency	\$288,732
23	Total Rate Design Revenues	\$1,297,407
24		
25		
26	Keene HDD Therm Billing Determinants	1,324,945
27	Average Base Rate Per Therm	\$0.98
28		
29	Concord Therm Billing Determinants	1,235,148
30	Average Base Rate Per Therm	\$0.98
31	Total Revenues Collected	\$1,209,476
32		
33	Total Rate Design Revenues	\$1,297,407
34	Less Total Revenues Collected	\$1,209,476
35	Revenue Shortfall	(\$87,931)
36		
37		
38		