

Comparison of Present and Proposed Rates (R-3 Winter)

Bill Percentile	Therms	Base Rate— Present	Base Rate— Proposed	Difference— Revenue	Difference— Percent	Rate w/ CGC— Present	Rate w/ CGC— Proposed	Difference— Revenue	Difference— Percent
25%	60	\$28.83	\$37.24	\$8.40	29.15%	\$87.47	\$96.54	\$9.07	10.37%
50%	100	\$38.70	\$48.06	\$9.36	24.19%	\$136.43	\$146.90	\$10.47	7.67%
75%	175	\$52.64	\$63.35	\$10.71	20.34%	\$223.67	\$236.32	\$12.65	5.66%

SOURCE:PMN-RD-4-5, page 3 of 24.

Schedule RDC-2

Average Monthly Natural Gas Bills and Average Number of Rooms by Income (New Hampshire) (2008)		
Income Range	Monthly Gas Bills	Number of Rooms
\$0 - \$9,999	\$61.50	4.9
\$10 - \$14,999	\$45.90	4.1
\$15 - \$19,999	\$56.20	4.4
\$20 - \$29,999	\$75.00	4.7
\$30 - \$49,999	\$97.00	4.8
\$50 - \$74,999	\$122.50	5.3
\$75 - \$149,999	\$133.90	6.2
\$150,000 or more	\$158.90	7.8
SOURCE: 2008 American Community Survey		

Schedule RDC-3

Gas Bills and Income by Number of Rooms in Housing Unit (NH 2008)		
Number of Rooms	Natural Gas Bill	Average Income
1	\$49.30	\$26,112
2	\$29.90	\$38,109
3	\$37.30	\$36,773
4	\$72.60	\$55,914
5	\$112.10	\$62,757
6	\$134.20	\$73,420
7	\$144.90	\$95,442
8	\$157.90	\$130,160
9	\$188.90	\$111,745
10	\$223.50	\$191,139
11	\$304.30	\$128,769
12	\$237.60	\$195,323
SOURCE: American Community Survey		

Natural Gas Expenditures by Income (Northeast Region)

	Total Northeast	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$69,999	\$70,000 and more
2005-2006	\$640	\$278	\$319	\$370	\$576	\$533	\$596	\$645	\$723	\$823
2006-2007	\$656	\$217	\$291	\$386	\$554	\$510	\$535	\$647	\$732	\$888
2007-2008	\$690	\$281	\$318	\$420	\$520	\$515	\$548	\$625	\$691	\$965
2008-2009	\$723	\$334	\$399	\$408	\$470	\$565	\$625	\$663	\$683	\$996

SOURCE: US Department of Labor, Consumer Expenditures Tables (2-Year Tables, Annual).

Schedule RDC-5

	Percentile	Usage	Customer Charge	Block 1	Block 2	Proposed	Existing	Difference (\$)	Difference (%)
R-3 Colton	25	60	15.43	0.3298	0.3298	\$35.22	\$28.83	\$6.39	22.16%
	50	100	15.43	0.3298	0.3298	\$48.41	\$38.70	\$9.71	25.09%
	75	175	15.43	0.3298	0.3298	\$73.15	\$52.64	\$20.51	38.95%
Company	25	60	21.00	0.2706	0.2039	\$37.24	\$28.83	\$8.41	29.16%
	50	100	21.00	0.2706	0.2039	\$48.06	\$38.70	\$9.36	24.19%
	75	175	21.00	0.2706	0.2039	\$68.36	\$52.64	\$15.72	29.85%

	Percentile	Usage	Customer Charge	Block 1	Block 2	Proposed	Existing	Difference (\$)	Difference (%)
R-4 Colton	25	70	6.17	0.1319	0.1319	\$15.41	\$12.52	\$2.89	23.04%
	50	100	6.17	0.1319	0.1319	\$19.36	\$15.48	\$3.88	25.08%
	75	150	6.17	0.1319	0.1319	\$25.96	\$19.20	\$6.76	35.19%
Company	25	70	8.40	0.1082	0.0816	\$15.97	\$12.52	\$3.45	27.59%
	50	100	8.40	0.1082	0.0816	\$19.22	\$15.48	\$3.74	24.16%
	75	150	8.40	0.1082	0.0816	\$24.63	\$19.20	\$5.43	28.28%

Schedule RDC-6

Natural Gas Consumption by Income (1997 vs. 2005) (MCF)										
2005	<\$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$29,999	\$30,000- \$39,999	\$40,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000 or more	Total
Usage (MCF)	51	49	48	52	45	48	45	54	51	49
1997	<\$10,000	\$10,000 - \$24,999			\$25,000 - \$49,999		\$50,000 or more			Total
Usage (MCF)	55	60								65
Usage Reduction (MCF)	4	11	12	8	21	18	21	12	15	16
Percent Reduction	7%	18%	20%	13%	32%	27%	32%	18%	23%	25%

Schedule RDC-7

Natural Gas Usage Intensity by Income (1997 vs. 2005) (MCF per [HDD x HSF / 1,000])										
2005	<\$10,000	\$10,000-\$14,999	\$15,000-\$19,999	\$20,000-\$29,999	\$30,000-\$39,999	\$40,000-\$49,999	\$50,000-\$74,999	\$75,000-\$99,999	\$100,000 or more	Total
Intensity	9.959	10.036	8.566	8.332	6.514	6.387	5.701	4.574	4.803	6.283
1997	<\$10,000	\$10,000 - \$24,999			\$25,000 - \$49,999		\$50,000 or more			Total
Intensity	11.242	9.758			7.610		6.406			7.676
Intensity Reduction	1.283	-0.278	1.192	1.426	1.096	1.223	0.705	1.832	1.603	1.39
Percent Reduction	11%	-3%	12%	15%	14%	16%	11%	29%	25%	18%

Schedule RDC-8

Square Feet of Living Space by Income										
2005	<\$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$29,999	\$30,000- \$39,999	\$40,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000 or more	Total
Intensity	1,393	1,430	1,518	1,709	1,937	2,314	2,361	2,939	3,311	2,171
SOURCE: U.S. Department of Energy, Residential Energy Consumption Survey (2005).										

Schedule RDC-9

	Low-income	Average Residential
Heating intensity (1997)	11.242	7.676
Housing size (000 SF)	1.5	2.5
HDDs (NH)	6,588	6,588
Use	1,111	1,264
Average price	0.98	0.98
Total revenue	\$1,089	\$1,239
Total number of customers	1,000	1,000
Total customers by income	180	820
Aggregate gas space heatng revenue	\$196,020	\$1,015,980

	Low-income	Non-low-income
Heating intensity (2005)	9.959	6.283
Housing size (000 SF)	1.5	2.5
HDDs (NH)	6,588	6,588
Use	984	1,035
Average price	\$0.980	\$0.980
Total revenue	\$964	\$1,014
Total number of customers	1,000	1,000
Total customers by income	180	820
Aggregate space heating revenue	\$173,520	\$831,480
Lost space heating revenue	\$22,500	\$184,500
Total lost revenue	\$207,000	\$207,000
Average usage	984	1,035
Aggregate usage	177,147	848,544
Total aggregate usage	1,025,691	1,025,691
Lost revenue per kWh	\$0.2018	\$0.2018
Lost revenue paid by income	\$35,751	\$171,249
Excess/(loss) paid by income	\$13,251	(\$13,251)
Total lost revenue paid	\$207,000	\$207,000
	\$13.25	(\$13.25)

Schedule RDC-10

***Basic Family Budget by Household Size and Structure
(Selected Cities—New Hampshire)***

	1-parent/1-child	1-parent/2-children	2-parent/2-children
Manchester	\$41,231	\$50,239	\$55,609
Nashua	\$43,407	\$52,503	\$57,784
Rural	\$37,866	\$46,128	\$51,698
100% of Federal Poverty Level	\$14,000	\$17,600	\$21,200
200% of Federal Poverty Level	\$28,000	\$35,200	\$42,400

SOURCE: Economic Policy Institute: Basic Family Budget Calculator (October 2008).

Schedule RDC-11

Collection Data: National Grid NH: January 2006 through May 2008

	Disconnect Nonpayment	Reconnections	Percent Reconnected
Jan-06	14	9	64.3%
Feb-06	15	6	40.0%
Mar-06	9	4	44.4%
Apr-06	246	81	32.9%
May-06	291	78	26.8%
Jun-06	220	32	14.5%
Jul-06	186	31	16.7%
Aug-06	239	50	20.9%
Sep-06	243	79	32.5%
Oct-06	168	88	52.4%
Nov-06	12	3	25.0%
Dec-06	26	15	57.7%
Jan-07	16	6	37.5%
Feb-07	16	9	56.3%
Mar-07	24	12	50.0%
Apr-07	232	81	34.9%
May-07	290	93	32.1%
Jun-07	224	58	25.9%
Jul-07	202	36	17.8%
Aug-07	200	52	26.0%
Sep-07	231	58	25.1%
Oct-07	237	87	36.7%
Nov-07	80	41	51.3%
Dec-07	0	0	---
Jan-08	12	5	41.7%
Feb-08	14	5	35.7%
Mar-08	16	8	50.0%
Apr-08	265	87	32.8%
May-08	285	95	33.3%
Totals	4,013	1,209	30.1%

ENERGYNORTH NATURAL GAS, INC.
d/b/a NATIONAL GRID NH
DG 10-017

National Grid NH's Responses to
Staff's Data Requests – Set #1

Date Received: May 11, 2010
Request No.: Staff 1-11

Date of Response: May 26, 2010
Witness: Ann F. Leary

REQUEST: For 2002-2009, please provide the average monthly bill (and commodity-related percentage portion of the bill) for each calendar month for the following customer classes:

- a. Residential non-heat (R-1)
- b. Residential heating (R-3)
- c. Non-Residential

RESPONSE: Please see the Company's previous objection to this request. Notwithstanding that objection, and without waiving it, the Company responds as follows:

Please see Attachment Staff 1-11 for the years 2003-2009.

Schedule RDC-12
Page 2 of 2

National Grid NH
Docket DG 10-017
Attachment Staff 1-11
Page 1 of 1

Average Monthly Bill and Commodity Related Percentage

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003	R-1	\$32.87	\$35.49	\$32.68	\$28.05	\$27.80	\$24.21	\$22.34	\$21.22	\$19.93	\$23.76	\$28.13	\$34.98
	CGA %	54.80%	56.08%	54.51%	51.98%	54.26%	54.76%	53.49%	51.69%	48.28%	52.19%	54.94%	59.81%
	R-3	\$140.59	\$169.59	\$147.80	\$101.60	\$70.41	\$49.93	\$36.21	\$32.63	\$32.58	\$48.90	\$86.03	\$142.06
2004	R-1	\$39.55	\$44.56	\$37.83	\$34.10	\$26.03	\$21.94	\$20.56	\$19.84	\$20.06	\$22.24	\$28.15	\$34.78
	CGA %	61.99%	64.24%	62.35%	60.27%	54.30%	49.35%	48.97%	46.69%	48.98%	51.27%	57.17%	62.23%
	R-3	\$183.67	\$225.65	\$158.71	\$125.81	\$62.48	\$40.63	\$32.15	\$30.90	\$31.16	\$42.69	\$89.10	\$135.96
2005	R-1	\$40.39	\$42.76	\$43.01	\$34.45	\$31.76	\$26.00	\$21.71	\$20.27	\$21.40	\$25.25	\$34.23	\$45.98
	CGA %	64.14%	64.75%	64.92%	62.72%	62.08%	56.10%	51.69%	50.91%	52.99%	58.10%	64.69%	69.88%
	R-3	\$182.35	\$207.35	\$183.03	\$129.76	\$79.41	\$52.98	\$34.01	\$31.88	\$33.41	\$44.68	\$101.48	\$193.56
2006	R-1	\$50.18	\$45.72	\$44.47	\$37.39	\$30.90	\$26.90	\$22.03	\$20.34	\$21.97	\$24.45	\$30.87	\$38.21
	CGA %	70.84%	69.02%	67.33%	64.80%	61.24%	57.94%	55.19%	50.89%	52.94%	55.50%	60.78%	65.71%
	R-3	\$224.49	\$200.02	\$210.15	\$128.85	\$72.85	\$48.74	\$34.28	\$31.45	\$34.48	\$46.97	\$91.24	\$138.06
2007	R-1	\$42.33	\$49.60	\$47.58	\$41.98	\$33.32	\$26.35	\$26.71	\$20.55	\$19.81	\$21.61	\$28.66	\$42.25
	CGA %	67.21%	68.87%	68.74%	67.88%	63.25%	57.75%	57.75%	51.00%	48.72%	50.86%	58.21%	68.27%
	R-3	\$176.18	\$252.72	\$226.06	\$158.71	\$83.79	\$45.29	\$46.67	\$31.89	\$31.46	\$36.96	\$83.73	\$186.28
2008	R-1	\$44.88	\$45.24	\$44.73	\$41.79	\$34.08	\$29.68	\$24.99	\$26.03	\$22.43	\$28.31	\$36.58	\$46.67
	CGA %	68.84%	68.82%	68.83%	68.39%	65.49%	63.05%	61.61%	61.61%	53.72%	56.81%	62.00%	65.75%
	R-3	\$203.09	\$205.98	\$197.71	\$153.43	\$80.39	\$48.95	\$37.50	\$39.16	\$40.51	\$53.06	\$102.56	\$177.85
2009	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2010	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2011	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2012	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2013	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2014	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2015	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2016	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2017	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2018	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
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	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2020	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31
2021	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
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	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
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2023	R-1	\$52.56	\$51.90	\$46.55	\$38.75	\$28.68	\$22.00	\$20.18	\$18.75	\$18.41	\$20.34	\$25.61	\$34.86
	CGA %	66.97%	66.60%	64.76%	61.34%	53.09%	43.06%	40.30%	37.46%	36.22%	39.59%	48.80%	59.95%
	R-3	\$228.95	\$241.94	\$191.73	\$127.94	\$60.89	\$34.51	\$31.03	\$29.22	\$29.40	\$40.11	\$72.80	\$118.31

PLAIN ENGLISH NOTICE

Low Income Discount Rate

If you feel that you are low income, and you need help paying your gas bill, we have a low income gas discount rate that might help you. This discount could reduce your total bill by up to 20%. If you are interested, please call us at ***1-800-LOWBILL***.

You are eligible to receive the discount rate if you show us that you are enrolled in any one of the following programs:

1. Fuel Assistance
2. Electric Assistance
3. Food Stamps (SNAP)
4. Public Housing or subsidized (Section 8) housing
5. TANF
6. Aid to the Permanently and Totally Disabled
7. Aid to the Needy Blind
8. Old Age Assistance
9. School Lunch/School Breakfast
10. Head Start
11. Supplemental Security Income
12. Women, Infants and Children (WIC)
13. Commodity Surplus Food

BILL DISCOUNT EXAMPLE:

\$100 Your current bill
20% Low income discount
\$80 Your bill after receiving discount. You pay this amount.

APPENDIX A

Roger D. Colton

BUSINESS ADDRESS:

Fisher Sheehan & Colton
Public Finance and General Economics
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EDUCATION:

J.D. (Order of the Coif), University of Florida (1981)

M.A. (Economics), McGregor School, Antioch University (1993)

B.A. Iowa State University (1975) (journalism, political science, speech)

PROFESSIONAL EXPERIENCE:

Fisher, Sheehan and Colton, Public Finance and General Economics: 1985 - present.

As a co-founder of this economics consulting partnership, Colton provides services in a variety of areas, including: regulatory economics, poverty law and economics, public benefits, fair housing, community development, energy efficiency, utility law and economics (energy, telecommunications, water/sewer), government budgeting, and planning and zoning.

Colton has testified in state and federal courts in the United States and Canada, as well as before regulatory and legislative bodies in more than three dozen states. He is particularly noted for creative program design and implementation within tight budget constraints.

National Consumer Law Center (NCLC): 1986 - 1994

As a staff attorney with NCLC, Colton worked on low-income energy and utility issues. He pioneered cost-justifications for low-income affordable energy rates, as well as developing models to quantify the non-energy benefits (*e.g.*, reduced credit and collection costs, reduced working capital) of low-income energy efficiency. He designed and implemented low-income affordable rate and fuel assistance programs across the country. Colton was charged with developing new practical and theoretical underpinnings for solutions to low-income energy problems.

Community Action Research Group (CARG): 1981 - 1985

As staff attorney for this non-profit research and consulting organization, Colton worked primarily on energy and utility issues. He provided legal representation to low-income persons on public utility issues; provided legal and technical assistance to consumer and labor organizations; and provided legal and technical assistance to a variety of state and local governments nationwide on natural gas, electric, and telecommunications issues. He routinely appeared as an expert witness before regulatory agencies and legislative committees regarding energy and telecommunications issues.

PROFESSIONAL AFFILIATIONS:

- Coordinator: BelmontBudget.org (Belmont's Community Budget Forum)
- Coordinator: Belmont Affordable Shelter Fund (BASF)
- Member: Board of Directors, Belmont Housing Trust, Inc.
- Chair: Housing Work Group, Belmont (MA) Comprehensive Planning Process
- Past Chair: Waverley Square Fire Station Re-use Study Committee (Belmont MA)
- Past Member: Belmont (MA) Energy and Facilities Work Group
- Past Member: Belmont (MA) Uplands Advisory Committee
- Past Member: Advisory Board: Fair Housing Center of Greater Boston.
- Past Member: Fair Housing Committee, Town of Belmont (MA)
- Past Member: Aggregation Advisory Committee, New York State Energy Research and Development Authority.
- Past Member: Board of Directors, Vermont Energy Investment Corporation.
- Past Member: Board of Directors, National Fuel Funds Network
- Past Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.
- Past Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.
- Past Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*
- Past Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.
- Past Member: National Advisory Board: Energy Financing Alternatives for Subsidized Housing, New York State Energy Research and Development Authority.

PROFESSIONAL ASSOCIATIONS:

- National Association of Housing and Redevelopment Officials (NAHRO)
- Association for Enterprise Opportunity (AEO)
- Iowa State Bar Association
- Energy Bar Association
- Association for Institutional Thought (AFIT)
- Association for Evolutionary Economics (AEE)

Society for the Study of Social Problems (SSSO)
International Society for Policy Studies
Association for Social Economics

BOOKS

Colton. (1996). *Funding Fuel Assistance: State and Local Strategies to Help Pay Low-Income Home Energy Bills*, Fisher, Sheehan and Colton, Public Finance and General Economics: Belmont, MA (1996).

Colton and Sheehan. (1995). *The Other Part of the Year: Low-Income Households and Their Need for Cooling: A State-by-State Look at Low-Income Summer Electric Bills*, Flying Pencil Publications: Portland, OR.

Colton. (1995). *Energy Efficiency and the Low-Income Consumer: Planning, Designing and Financing*, Flying Pencil Publications: Portland, OR.

Colton and Sheehan. (1994). *On the Brink of Disaster: A State-by-State Look at Low-Income Winter Natural Gas Heating Bills*, Flying Pencil Publications: Portland, OR.

Colton, *et al.*, *Access to Utility Service*, National Consumer Law Center: Boston (4th edition 2008).

Colton, *et al.*, *Tenants' Rights to Utility Service*, National Consumer Law Center: Boston (1994).

Colton, *The Regulation of Rural Electric Cooperatives*, National Consumer Law Center: Boston (1992).

JOURNAL PUBLICATIONS

Colton (November 2003). "Winter Weather Payments: The Impact of Iowa's Winter Utility Shutoff Moratorium on Utility Bill Payments by Low-Income Customers." 16(9) *Electricity Journal* 59.

Colton (March 2002). "Energy Consumption and Expenditures by Low-Income Households," 15(3) *Electricity Journal* 70.

Colton, Roger and Stephen Colton (Spring 2002). "An Alternative to Regulation in the Control of Occupational Exposure to Tuberculosis in Homeless Shelters," *New Solutions: Journal of Environmental and Occupational Health Policy*.

Colton (2001). "The Lawfulness of Utility Actions Seeking to Impose as a Condition of Service Liability for a Roommate's Debt Incurred at a Prior Address," *Clearinghouse Review*.

Colton (2001). "Limiting The "Family Necessaries" Doctrine as a Means of Imposing Third Party Liability for Utility Bills," *Clearinghouse Review*.

Colton (2001). "Prepayment Utility Meters and the Low-Income Consumer." *Journal of Housing and Community Development Law* (American Bar Association).

Colton, Brown and Ackermann (June 2000). "Mergers and the Public Interest: Saving the Savings for the Poorest Customers." *Public Utilities Fortnightly*.

Colton. (2000). "Aggregation and the Low-Income Consumer." *LEAP Newsletter*.

Colton. (1999). "Challenging Entrance and Transfer Fees in Mobile Home Park Lot Rentals." *Clearinghouse Review*.

- Colton and Adams (1999). "Y2K and Communities of Color," *Media Alert: The Quarterly Publication of the National Black Media Coalition*.
- Colton and Sheehan (1999). "The Problem of Mass Evictions in Mobile Home Parks Subject to Conversion." *Journal of Housing and Community Development Law* (American Bar Association).
- Colton (1999). "Utility Rate Classifications and Group Homes as "Residential" Customers," *Clearinghouse Review*.
- Colton (1998). "Provider of Last Resort: Lessons from the Insurance Industry." *The Electricity Journal*.
- Colton and Adams (1998). "Fingerprints for Check Cashing: Where Lies the Real Fraud," *Media Alert: The Quarterly Publication of the National Black Media Coalition*.
- Colton. (1998). "Universal Service: A Performance-Based Measure for a Competitive Industry," *Public Utilities Fortnightly*.
- Colton, Roger and Stephen Colton (1998). "Evaluating Hospital Mergers," 17 *Health Affairs* 5:260.
- Colton. (1998). "Supportive Housing Facilities as "Low-Income Residential" Customers for Energy Efficiency Purposes," 7 *Journal of Housing and Community Development Law* 406 (American Bar Association).
- Colton, Frisof and King. (1998). "Lessons for the Health Care Industry from America's Experience with Public Utilities." 18 *Journal of Public Health Policy* 389.
- Colton (1997). "Fair Housing and Affordable Housing: Availability, Distribution and Quality." 1997 *Colloqui: Cornell Journal of Planning and Urban Issues* 9.
- Colton, (1997). "Competition Comes to Electricity: Industry Gains, People and the Environment Lose," *Dollars and Sense*.
- Colton (1996). "The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility And Childhood Education in Missouri." 2 *Journal on Children and Poverty* 23.
- Colton and Sheehan. (1995). "Utility Franchise Charges and the Rental of City Property." 72 *New Jersey Municipalities* 9:10.
- Colton. (1995). "Arguing Against Utilities' Claims of Federal Preemption of Customer-Service Regulations." 29 *Clearinghouse Review* 772.
- Colton and Labella. (1995). "Landlord Failure to Resolve Shared Meter Problems Breaches Tenant's Right to Quiet Enjoyment." 29 *Clearinghouse Review* 536.
- Colton and Morrissey. (1995). "Tenants' Rights to Pretermination Notice in Cases of Landlords' Nonpayment of Utilities". 29 *Clearinghouse Review* 277.
- Colton. (1995). "The Perverse Incentives of Fair Market Rents." 52 *Journal of Housing and Community Development* 6.
- Colton (1994). "Energy Efficiency and Low-Income Housing: Energy Policy Hurts the Poor." XVI *ShelterForce: The Journal of Affordable Housing Strategies* 9.
- Colton (1994). "The Use of Consumer Credit Reports in Establishing Creditworthiness for Utility Deposits." *Clearinghouse Review*.

- Colton (1994). "Institutional and Regulatory Issues Affecting Bank Product Diversification Into the Sale of Insurance," *Journal of the American Society of CLU and ChFC*.
- Colton. (1993). "The Use of State Utility Regulations to Control the 'Unregulated' Utility." *27 Clearinghouse Review* 443.
- Colton and Smith. (1993). "The Duty of a Public Utility to Mitigate 'Damages' from Nonpayment through the Offer of Conservation Programs." *3 Boston University Public Interest Law Journal* 239.
- Colton and Sheehan. (1993). "Cash for Clunkers Program Can Hurt the Poor," *19 State Legislatures: National Conference of State Legislatures* 5:33.
- Colton. (1993). "Consumer Information and Workable Competition in the Telecommunications Industry." *XXVII Journal of Economic Issues* 775.
- Colton and Sheehan. (1992). "Mobile Home Rent Control: Protecting Local Regulation," *Land Use Law and Zoning Digest*.
- Colton and Smith. (1992 - 1993). "Co-op Membership and Utility Shutoffs: Service Protections that Arise as an Incident of REC Membership." *29 Idaho Law Review* 1, *reprinted*, *XV Public Utilities Law Anthology* 451.
- Colton and Smith. (1992). "Protections for the Low-Income Customer of Unregulated Utilities: Federal Fuel Assistance as More than Cash Grants." *13 Hamline University Journal of Public Law and Policy* 263.
- Colton (1992). "CHAS: The Energy Connection," *49 The Journal of Housing* 35, *reprinted*, *19 Current Municipal Problems* 173.
- Colton (March 1991). "A Cost-Based Response to Low-Income Energy Problems." *Public Utilities Fortnightly*.
- Colton. (1991). "Protecting Against the Harms of the Mistaken Utility Undercharge." *39 Washington University Journal of Urban and Contemporary Law* 99, *reprinted*, *XIV Public Utilities Anthology* 787.
- Colton. (1990). "Customer Consumption Patterns within an Income-Based Energy Assistance Program." *24 Journal of Economic Issues* 1079
- Colton (1990). "Heightening the Burden of Proof in Utility Shutoff Cases Involving Allegations of Fraud." *33 Howard L. Review* 137.
- Colton (1990). "When the Phone Company is not the Phone Company: Credit Reporting in the Post-Divestiture Era." *24 Clearinghouse Review* 98.
- Colton (1990). "Discrimination as a Sword: Use of an 'Effects Test' in Utility Litigation." *37 Washington University Journal of Urban and Contemporary Law* 97, *reprinted*, *XIII Public Utilities Anthology* 813.
- Colton (1989). "Statutes of Limitations: Barring the Delinquent Disconnection of Utility Service." *23 Clearinghouse Review* 2.
- Colton & Sheehan. (1989). "Raising Local Revenue through Utility Franchise Fees: When the Fee Fits, Foot It." *21 The Urban Lawyer* 55, *reprinted*, *XII Public Utilities Anthology* 653, *reprinted*, Freilich and Bushek (1995). *Exactions, Impacts Fees and Dedications: Shaping Land Use Development and Funding Infrastructure in the Dolan Era*, American Bar Association: Chicago.
- Colton (1989). "Unlawful Utility Disconnections as a Tort: Gaining Compensation for the Harms of Unlawful Shutoffs." *22 Clearinghouse Review* 609.

- Colton, Sheehan & Uehling. (1987). "Seven cum Eleven: Rolling the Toxic Dice in the U.S. Supreme Court," 14 *Boston College Environmental L. Rev.* 345.
- Colton & Sheehan. (1987). "A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs," 21 *Clearinghouse Review* 135.
- Colton & Fisher. (1987). "Public Inducement of Local Economic Development: Legal Constraints on Government Equity Funding Programs." 31 *Washington University J. of Urban and Contemporary Law* 45.
- Colton & Sheehan. (1986). "The Illinois Review of Natural Gas Procurement Practices: Permissible Regulation or Federally Preempted Activity?" 35 *DePaul Law Review* 317, reprinted, IX *Public Utilities Anthology* 221.
- Colton (1986). "Utility Involvement in Energy Management: The Role of a State Power Plant Certification Statute." 16 *Environmental Law* 175, reprinted, IX *Public Utilities Anthology* 381.
- Colton (1986). "Utility Service for Tenants of Delinquent Landlords," 20 *Clearinghouse Review* 554.
- Colton (1985). "Municipal Utility Financing of Energy Conservation: Can Loans only be Made through an IOU?." 64 *Nebraska Law Review* 189.
- Colton (1985). "Excess Capacity: A Case Study in Ratemaking Theory and Application." 20 *Tulsa Law Journal* 402, reprinted, VIII *Public Utilities Anthology* 739.
- Colton (1985). "Conservation, Cost-Containment and Full Energy Service Corporations: Iowa's New Definition of 'Reasonably Adequate Utility Service.'" 34 *Drake Law Journal* 1.
- Colton (1984). "Prudence, Planning and Principled Ratemaking." 35 *Hastings Law Journal* 721.
- Colton (1983). "Excess Capacity: Who Gets the Charge from the Power Plant?" 33 *Hastings Law Journal* 1133.
- Colton (1983). "Old McDonald (Inc.) Has a Farm. . . Maybe, or Nebraska's Corporate Farm Ban; Is it Constitutional?" 6 *University of Arkansas at Little Rock Law Review* 247.
- Colton (1982). "Mandatory Utility Financing of Conservation and Solar Measures." 3 *Solar Law Reporter* 167.
- Colton (1982). "The Use of Canons of Statutory Construction: A Case Study from Iowa, or When Does 'GHOTI' Spell 'Fish'?" 5 *Seton Hall Legislative Journal* 149.
- Colton (1977). "The Case for a Broad Construction of 'Use' in Section 4(f) of the Department of Transportation Act." 21 *St. Louis Law Journal* 113.

OTHER PUBLICATIONS

- Colton (2009). *Mirror, Mirror on the Wall: How Well Does Belmont's Town Meeting Reflect the Community at Large*, prepared for Fisher, Sheehan & Colton, Public Finance and General Economics, Belmont (MA).
- Colton (2009). *An Outcomes Planning Approach to Serving TPU Low-Income Customers*, prepared for Tacoma Public Utilities, Tacoma (WA).
- Colton (2009). *An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs: 2008 – 2009*, prepared for Citizens Gas and Coke Utility, Northern Indiana Public Service Company, Vectren Energy Delivery Indianapolis (IN).

Roger Colton (2009). *The Earned Income Tax Credit (EITC) as “Energy Assistance” in Pennsylvania*, prepared for Pennsylvania Utility Law Project (PULP).

Colton (2009). *Energy Efficiency as a Homebuyer Affordability Tool in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).

Colton (2009). *Energy Efficient Utility Allowances as a Usage Reduction Tool in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).

Colton (2009). *Home Energy Consumption Expenditures by Income (Pennsylvania)*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).

Colton (2009). *The Contribution of Utility Bills to the Unaffordability of Low-Income Rental Housing in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).

Colton (2009). *The Integration of Federal LIHEAP Benefits with Ratepayer-Funded Percentage of Income Payment Programs (PIPPs): Legal and Policy Questions Involving the Distribution of Benefits*, prepared for Pennsylvania Office of Consumer Advocate, Harrisburg (PA).

Colton (2008). *Home Energy Affordability in Indiana: Current Needs and Future Potentials*, prepared for Indiana Community Action Association.

Colton (2008). *Public Health Outcomes Associated with Energy Poverty: An Analysis of Behavioral Risk Factor Surveillance System (BRFSS) Data from Iowa*, prepared for Iowa Department of Human Rights.

Colton (2008). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2007*, prepared for Coalition to Keep Indiana Warm.

Colton (2008). *Inverted Block Tariffs and Universal Lifeline Rates: Their Use and Usability in Delivering Low-Income Electric Rate Relief*, prepared for Hydro-Quebec.

Colton (2007). *Best Practices: Low-Income Affordability Programs: Articulating and Applying Rating Criteria*, prepared for Hydro-Quebec.

Colton (2007). *An Outcome Evaluation of Indiana’s Low-Income Rate Affordability Programs*, performed for Citizens Gas & Coke Utility, Vectren Energy Delivery, Northern Indiana Public Service Company.

Colton (2007). *A Multi-state Study of Low-Income Programs*, in collaboration with Apprise, Inc., prepared for multiple study sponsors.

Colton (2007). *The Law and Economics of Determining Hot Water Energy Use in Calculating Utility Allowances for Public and Assisted Housing*.

Colton (2006). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2006*, prepared for Coalition to Keep Indiana Warm.

Colton (2006). *Home Energy Affordability in Maryland: Necessary Regulatory and Legislative Actions*, prepared for the Maryland Office of Peoples Counsel.

Colton (2006). *A Ratepayer Funded Home Energy Affordability Program for Low-Income Households: A Universal Service Program for Ontario’s Energy Utilities*, prepared for the Low-Income Energy Network (Toronto).

Colton (2006). *Georgia REACH Project Energize: Final Program Evaluation*, prepared for the Georgia Department of Human Resources.

Colton (2006). *Experimental Low-Income Program (ELIP): Empire District Electric Company, Final Program Evaluation*, prepared for Empire District Electric Company.

Colton (2006). *Municipal Aggregation for Retail Natural Gas and Electric Service: Potentials, Pitfalls and Policy Implications*, prepared for Maryland Office of Peoples Counsel.

Colton (2005). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2005*, prepared for Coalition to Keep Indiana Warm.

Colton (2005). *Impact Evaluation of NIPSCO Winter Warmth Program*, prepared for Northern Indiana Public Service Company.

Colton (2005). *A Water Affordability Program for the Detroit Water and Sewer Department*, prepared for Michigan Poverty Law Center.

Colton (2004). *Paid but Unaffordable: The Consequences of Energy Poverty in Missouri*, prepared for the National Low-Income Home Energy Consortium.

Sheehan and Colton (2004). *Fair Housing Plan: An Analysis of Impediments and Strategies on How to Address The: Washington County/Beaverton (OR)*, prepared for Washington County Department of Community Development.

Colton (2004). *Controlling Tuberculosis in Fulton County (GA) Homeless Shelters: A Needs Assessment*, prepared for the Georgia Department of Human Resources, Division of Public Health.

Colton (2003). *The Impact of Missouri Gas Energy's Experimental Low-Income Rate (ELIR) On Utility Bill Payments by Low-Income Customers: Preliminary Assessment*, prepared for Missouri Gas Energy.

Colton (2003). *The Economic Development Impacts of Home Energy Assistance: The Entergy States*, prepared for Entergy Services, Inc.

Colton (2003). *Energy Efficiency as an Affordable Housing Tool in Colorado*, prepared for Colorado Energy Assistance Foundation.

Colton (2003). *The Economic Development Impacts of Home Energy Assistance in Colorado*, Colorado Energy Assistance Foundation.

Colton (2003). *Measuring the Outcomes of Home Energy Assistance through a Home Energy Insecurity Scale*, prepared for the U.S. Department of Health and Human Services, Administration for Children and Families.

Colton (2002). *Winter Weather Payments: The Impact of Iowa's Winter Utility Shutoff Moratorium On Utility Bill Payments by Low-Income Customer*, prepared for Iowa Department of Human Rights.

Colton (2002). *A Fragile Income: Deferred Payment Plans and the Ability-to-Pay of Working Poor Utility Customers*, prepared for National Fuel Funds Network.

Colton (2002). *Credit where Credit is Due: Public Utilities and the Earned Income Tax Credit for Working Poor Utility Customers*, prepared for National Fuel Funds Network.

Colton (2001). *Integrating Government-Funded and Ratepayer-Funded Low-Income Energy Assistance Programs*, prepared for U.S. Department of Health and Human Services (HHS) and Oak Ridge National Laboratory.

Colton (2001). *In Harm's Way: Home Heating, Fire Hazards, and Low-Income Households*, prepared for National Fuel Funds Network.

- Colton (2001). *Reducing Energy Distress: "Seeing RED" Project Evaluation* (evaluation of Iowa REACH project), prepared for Iowa Department of Human Rights.
- Colton (2001). *Group Buying of Propane and Fuel Oil in New York State: A Feasibility Study*, prepared for New York State Community Action Association.
- Colton (2000). *Establishing Telecommunications Lifeline Eligibility: The Use of Public Benefit Programs and its Impact on Lawful Immigrants*, prepared for Dayton (OH) Legal Aide.
- Colton (2000). *Outreach Strategies for Iowa's LIHEAP Program Innovation in Improved Targeting*, prepared for Iowa Department of Human Rights.
- Colton (1999). *Integration of LIHEAP with Energy Assistance Programs Created through Electric and/or Natural Gas Restructuring*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families (Nov. 1999).
- Colton (1999). *Fair Housing in the Suburbs: The Role of a Merged Fleet Boston in The Diversification of the Suburbs Report to the Federal Reserve Board Concerning the Merger of BankBoston Corp. and Fleet Financial Group*, prepared for Belmont Fair Housing Committee/Belmont Housing Partnership.
- Colton (1999). *Measuring LIHEAP's Results: Responding to Home Energy Unaffordability*, prepared for Iowa Department of Human Resources.
- Colton (1999). *Monitoring the Impact of Electric Restructuring on Low-Income Consumers: The What, How and Why of Data Collection*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families.
- Colton (1999). *Developing Consumer Education Programs in a Restructured Electric Industry*, prepared for Central Missouri Counties Community Development Corporation.
- Colton (1999). *Electric Restructuring and the Low-Income Consumer: Legislative Implications for Colorado*, prepared for Colorado General Assembly.
- Colton (1998). *Low-Income Electric Rate Affordability in Virginia: Funding Low-Income Assistance*, prepared for Virginia Council Against Poverty.
- Colton and Alexander (1998). *The Implications of an Increased Federal Role in the Regulation of Electricity on State Regulation of Consumer Protection and Universal Service Programs*.
- R.Colton and S.Colton (1998). *The Occupational Control of Tuberculosis in Homeless Shelters*, prepared for the U.S. Occupational Safety and Health Administration.
- Colton (1998). *The Connection Between Affordable Housing and Educational Excellence in Belmont*, prepared for Belmont Fair Housing Committee.
- Colton (1998). *Serving the Affordable Housing Needs of Belmont's Older Residents*, prepared for Belmont Fair Housing Committee.
- Colton (1998). *The Costs of a Universal Service Fund in Minnesota: Electric and Natural Gas*, prepared for the Energy Cents Coalition.
- Colton (1998). *Controlling the Occupational Exposure to Tuberculosis in Homeless Shelters: Applying Federal OSHA Standards to Volunteers*, prepared for the U.S. Occupational Safety and Health Administration.

Colton (1997). *Public Housing Utility Allowances for the Metro Dade Housing Agency*, prepared for Legal Services Corporation of Greater Miami.

Colton (1997). *Low-Income Energy Needs in Maryland: An Overview*, prepared for Maryland Office of Peoples Counsel.

Colton (1997). *Structuring a Public Purpose Distribution Fee for Missouri*, prepared for Missouri Department of Natural Resources.

Colton (1997). *The Low-Income Interest in Utility Mergers and Acquisitions*

Colton (1997). *The Obligation to Serve and a Restructured Electric Industry*, prepared for U.S. Department of Energy, Oak Ridge National Laboratory.

Colton (1997). *Structuring and Evaluating a Direct Vendor Payment Shadow Billing Program for Publicly Assisted Housing in Houston*, prepared under contract to Gulf Coast Legal Foundation (with funding by Houston Lighting Company).

Colton (1997). *The For-Profit Conversion of the New England Education Loan Marketing Corporation: Lessons from Non-Profit Hospital Conversions*.

Colton (1997). *Rental Housing Affordability in Burlington, Vermont: A Report to the Burlington City Council*.

Colton (1997). *Structuring a "Wires Charge" for New Hampshire: A Framework for Administration and Operation*, prepared under contract to the New Hampshire Community Action Association.

Colton (1996). *Setting Income Eligibility for Fuel Assistance and Energy Efficiency Programs in a Competitive Electric Industry: The Marginal Impacts of Increasing Household Income*.

Colton (1996). *Fair Housing and Affordable Housing in Belmont, Massachusetts: Data on Availability, Distribution and Quality*.

Colton and Sheehan (1996). *Fair Housing Analysis of Impediments Study for Washington County (Oregon)*. Prepared for Oregon Department of Human Rights.

Colton (1996). *Structuring a Low-Income "Wires Charge" for New Jersey*, prepared for Citizens Against Rate Escalation (CARE).

Colton (1996). *Structuring a Low-Income "Wires Charge" for Kentucky*, prepared for Louisville Legal Aide Association.

Colton (1996). *Structuring a Low-Income "Wires Charge" for Iowa*, prepared for Iowa Bureau of Human Resources, Office of Weatherization.

Colton (1996). *Structuring a Low-Income "Wires Charge" for Montana*, prepared for Energy Share of Montana.

Colton (1996). *Structuring a Low-Income "Wires Charge" for Oklahoma*, prepared for Oklahoma State Association of Community Action Agencies.

Colton (1996). *Structuring a Low-Income "Wires Charge" for Ohio*, prepared for Ohio Legal Services Corporation.

Colton (1996). *Structuring a Low-Income "Wires Charge" for Indiana*, prepared for Indiana Citizen Action Campaign.

Colton (1996). *Shawmut Bank and Community Reinvestment in Boston: Community Credit Needs and Affordable Housing*.

Colton (1995). *Understanding "Redlining" in a Competitive Electric Utility Industry*.

Colton (1995). *Energy Efficiency as a Credit Enhancement: Public Utilities and the Affordability of First-Time Homeownership*.

Colton (1995). *Competition in the Electric Industry: Assessing the Impacts on Residential, Commercial and Low-Income Customers*, prepared under contract to the National Association of Regulatory Utility Commissioners.

Colton (1995). *Performance-Based Evaluation of Customer Collections in a Competitive Electric Utility Industry*.

Colton (1995). *Poverty Law and Economics: Calculating the Household Budget*, prepared for presentation to National Legal Aid and Defender Association, Substantive Law Training.

Colton (1995). *The Need for Regulation in a Competitive Electric Utility Industry*.

Colton (1995). *Rewriting the Social Compact: A Competitive Electric Industry and its Core Customer*.

Colton (1995). *The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility, and Childhood Education in Missouri*, prepared for the Missouri Association of Head Start Directors.

Colton (revised 1995). *Models of Low-Income Utility Rates*, prepared under contract to Washington Gas Company.

Colton (1995). *Beyond Social Welfare: Promoting the Earned Income Tax Credit (EITC) as an Economic Development Strategy by Public Utilities*.

Colton (1995). *Should Regulation of Electricity Depend on the Absence of Competition?*

Colton (1995). *Comprehensive Credit and Collection Strategies in a Competitive Electric Utility Industry*, prepared under contract to Hydro-Quebec.

Colton (1995). *Economically Stranded Investment in a Competitive Electric Industry: A Primer for Cities, Consumers and Small Business Advocates*.

Colton (1995). *Competitive Solicitation as an Integrated Resource Planning Model: Its Competitive Impacts on Small Businesses Serving Low-Income Households*, prepared under contract to the Arkansas State Weatherization

Colton (1995). *Reviewing Utility Low-Income DSM Programs: A Suggested Framework for Analysis*.

Colton (1995). *Least-Cost Integrated Resource Planning in Arkansas: The Role of Low-Income Energy Efficiency* prepared under contract to the Arkansas State Weatherization Assistance Program.

Colton (1994). *Addressing Low-Income Inability-to-Pay Utility Bills During the Winter Months On Tribal Lands Served By Electric Co-ops: A Model Tribal Winter Utility Shutoff Regulation*.

Colton (1994). *An Earned Income Tax Credit Utility Intervention Kit*.

Colton (1994). *Telecommunications Credit and Collections and Controlling SNET Uncollectibles*, prepared under contract to the Connecticut Office of Consumer Counsel.

Colton (1994). *Customer Deposit Demands by U.S. West: Reasonable Rationales and the Proper Assessment of Risk*, prepared on behalf of the Staff of the Washington Utilities and Transportation Commission.

Colton (1994). *Credit and Collection Fees and Low-Income Households: Ensuring Effectiveness and Cost-Effectiveness*, prepared on behalf of the Missouri Office of Public Counsel.

Colton (1994). *Weatherization Assistance Program Evaluations: Assessing the Impact on Low-Income Ability-to-Pay*.

Colton (1994). *DSM Planning in a Restrictive Environment*.

Part 1: Why Ramping Down DSM Expenditures Can Be "Pro" DSM
Part 2: Low-Income Opposition to DSM: Ill-Defined and Misguided
Part 3: Low-Income DSM Expenditures as a Non-Resource Acquisition Strategy: The Potential for Niche Marketing

Colton (1994). *Loan Guarantees as a Utility Investment in Energy Efficiency for Low-Income Housing*.

Colton and Sheehan.(1994). *"Linked Deposits" as a Utility Investment in Energy Efficiency for Low-Income Housing*.

Colton (1994). *Securitizing Utility Avoided Costs: Creating an Energy Efficiency "Product" for Private Investment in WAP*.

Colton and Sheehan (1994). *Economic Development Utility Rates: Targeting, Justifying, Enforcing*, prepared under contract to Texas ROSE.

Colton and Sheehan (1993). *Affordable Housing and Section 8 Utility Allowances: An Evaluation and a Proposal for Action*:

Part I: Adequacy of Annual Allowances.
Part II: Adequacy of Monthly Allowances.

Colton and Sheehan (1993). *Identifying Savings Arising From Low-Income Programs*.

Colton (1993). *Low-Income Programs And Their Impact on Reducing Utility Working Capital Allowances*.

Colton, et al. (1995). *An Assessment of Low-Income Energy Needs in Washington State*. Prepared under contract to the Washington state Department of Community Development.

Colton, et al. (1993). *Funding Social Services Through Voluntary Contribution Programs: A Proposal for SNET Participation in Funding INFOLINE's Information and Referral Services in Connecticut*. Prepared under contract with United Way of Connecticut.

Colton. (1993). *Public Utility Credit and Collection Activities: Establishing Standards and Applying them to Low-Income Utility Programs*. Prepared under contract to the national office of the American Association of Retired Persons.

Colton (1992). *Filling the Gaps: Financing Low-Income Energy Assistance in Connecticut*. Prepared under contract to the Connecticut State Department of Human Resources.

Colton and Quinn. (1992). *The Impact on Low-Income People of the Increased Cost for Basic Telephone Service: A Study of Low-income Massachusetts Resident's Telephone Usage Patterns and Their Perceptions of Telephone Service Quality*. Prepared under contract to the Massachusetts Office of the Attorney General.

Colton and Quinn. (1991). *The ABC's of Arrearage Forgiveness*. Prepared with a grant from the Mary Reynolds Babcock Foundation.

Colton and Sable (1991). *A California Advocate's Guide to Telephone Customer Service Issues*. Prepared with funding from the California Telecommunications Education Trust Fund.

Colton and Levinson. (1991). *Energy and Poverty in North Carolina: Combining Public and Private Resources to Solve a Public and Private Problem*. Prepared under contract to the North Carolina General Assembly.

Colton. (1991). *The Percentage of Income Payment Plan in Jefferson County, Kentucky: One Alternative to Distributing LIHEAP Benefits*. Prepared with funds provided by the City of Louisville, Kentucky and the Louisville Community Foundation.

Colton. (1991). *The Energy Assurance Program for Ohio: A Cost-Based Response to Low-Income Energy Problems*. Prepared for Cincinnati Legal Aid Society, Dayton Legal Society, and Cleveland Legal Aid Society.

Colton. (1991). *Utility-Financed Low-Income DSM: Winning for Everybody*. Prepared with funds provided by the Public Welfare Foundation and the Mary Reynolds Babcock Foundation.

Colton (1991). *Percentage of Income Payment Plans as an Alternative Distribution of LIHEAP Benefits: Good Business, Good Government, Good Social Policy*. Prepared under contract to the New England Electric System (NEES).

Colton (1991). *The Forced Mobility of Low-Income Customers: The Indirect Impacts of Shutoffs on Utilities and their Customers*.

Colton (1990). *Controlling Uncollectible Accounts in Pennsylvania: A Blueprint for Action*. Prepared under contract to the Pennsylvania Office of Consumer Advocate.

Colton (1990). *Nonparticipation in Public Benefit Programs: Lessons for Fuel Assistance*.

Colton (1990). *Why Customers Don't Pay: The Need for Flexible Collection Techniques*. Prepared under contract to the Philadelphia Public Advocate.

Colton (1990). *A Regulatory Response to Low-income Energy Needs in Colorado: A Proposal*. Prepared for the Legal Aid Society of Metro Denver.

Colton (1990). *Determining the Cost-Effectiveness of Utility Credit and Collection Techniques*. Prepared with funds provided by the Mary Reynolds Babcock Foundation.

Colton (1990). *Energy Use and the Poor: The Association of Consumption with Income*.

Colton (1989). *Identifying Consumer Characteristics Which are Important to Determining the Existence of Workable Competition in the Interexchange Telecommunications Industry*. Prepared under contract to the Office of Public Counsel of the Florida Legislature.

Colton (1989). *The Interexchange Telecommunications Industry: Should Regulation Depend on the Absence of Competition*. Prepared under contract to the Office of Public Counsel of the Florida Legislature.

Colton (1989). *Fuel Assistance Alternatives for Utah*. Prepared under contract to the Utah State Energy Office.

Colton (1989). *Losing the Fight in Utah: High Energy Bills and Low-Income Consumers*. Prepared under contract with the Utah State Energy Office.

Colton (1989). *The Denial of Local Telephone Service for Nonpayment of Toll Bills: A Review and Assessment of Regulatory Litigation* (2d ed.).

Colton (1988). *Customer Service Regulations for Residential Telephone Customers in the Post-Divestiture Era: A Study of Michigan Bell Telephone Company*. Prepared under contract to the Michigan Divestiture Research Fund.

Colton (1988). *Low-Income Utility Protections in Maine*. (3 volumes). Prepared under contract to the Maine Public Utilities Commission.

- ❖ Volume 1: An Evaluation of Low-Income Utility Protections in Maine: Winter Requests for Disconnect Permission.
- ❖ Volume 2: An Evaluation of Low-Income Utility Protections in Maine: Payment Arrangements for Maine's Electric Utilities.
- ❖ Volume 3: An Evaluation of Low-Income Utility Protections in Maine: Fuel Assistance and Family Crisis Benefits.

Colton (1988). *The Recapture of Interest on LIHEAP Payments to Unregulated Fuel Vendors: An Evaluation of the 1987 Maine Program*. Prepared with a grant from the Jessie B. Cox Charitable Trust.

Colton (1988). *An Evaluation of the Warwick (Rhode Island) Percentage of Income Payment Plan*. Prepared under contract to the Rhode Island Governor's Office of Energy Assistance.

Colton, Hill & Fox (1986). *The Crisis Continues: Addressing the Energy Plight of Low-Income Pennsylvanians Through Percentage of Income Plans*. Prepared under contract to the Pennsylvania Utility Law Project.

Fisher, Sheehan and Colton (1986). *Public/Private Enterprise as an Economic Development Strategy for States and Cities*. Prepared under contract to the United States Department of Commerce, Economic Development Administration.

Colton (1985). *Creative Financing for Local Energy Projects: A Manual for City and County Government in Iowa*. Prepared under contract to the Iowa Energy Policy Council.

Colton (1985). *The Great Rate Debate: Rate Design for the Omaha Public Power District*. Prepared under contract to the Omaha Public Power District.

Grenier and Colton (1984). *Utility Conservation Financing Programs for Nebraska's Publicly Owned Utilities: Legal Issues and Considerations*. Prepared under contract to the Nebraska Energy Office.

Colton (1984). *The Financial Implications to the Utility Industry of Pursuing Energy Management Strategies*. Prepared under contract to the Nebraska Energy Office.

COLTON EXPERIENCE AS EXPERT WITNESS

1988 - PRESENT

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
I/M/O Commonwealth Edison	Witness	Office of Attorney General	Rate design/revenue requirement	Illinois	10
I/M/O National Grid d/b/a Energy North	Witness	NH Legal Assistance	Rate design/revenue requirement	New Hampshire	10
I/M/O Duquesne Light Company	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O Avista Natural Gas Corporation	Witness	The Opportunity Council	Low-income assistance/rate design	Washington	10
I/M/O Manitoba Hydro	Witness	Resource Conservation Manitoba (RCM)	Low-income program design	Manitoba	10
I/M/O TW Phillips	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O PECO Energy—Gas Division	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O PECO Energy—Electric Division	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O PPL Energy	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O Columbia Gas Company	Witness	Office of Consumer Advocate	Low-income program design/cost recovery	Pennsylvania	10
I/M/O Atlantic City Electric Company	Witness	Office of Rate Council	Customer service	New Jersey	10
I/M/O Philadelphia Gas Works	Witness	Office of Consumer Advocate	Low-income program cost recovery	Pennsylvania	10
I/M/O Philadelphia Gas Works	Witness	Office of Consumer Advocates	Low-income program design	Pennsylvania	10
I/M/O Xcel Energy Company	Witness	Xcel Energy Company (PSCo)	Low-income program design	Colorado	09
I/M/O Atmos Energy Company	Witness	Atmos Energy Company	Low-income program funding	Colorado	09
I/M/O New Hampshire CORE Energy Efficiency Programs	Witness	New Hampshire Legal Assistance	Low-income efficiency funding	New Hampshire	09
I/M/O Public Service Company of New Mexico (electric)	Witness	Community Action of New Mexico	Rate Design	New Mexico	09
I/M/O UGI Pennsylvania Natural Gas Company (PNG)	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	09
I/M/O UGI Central Penn Gas Company (CPG)	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	09
I/M/O PECO Electric (provider of last resort)	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	08
I/M/O Equitable Gas Company	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	08
I/M/O Columbia Gas Company	Witness	Office of Ohio Consumers' Counsel	Rate design	Ohio	08
I/M/O Dominion East Ohio Gas Company	Witness	Office of Ohio Consumers' Counsel	Rate design	Ohio	08

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
I/M/O Vectren Energy Delivery Company	Witness	Office of Ohio Consumers' Counsel	Rate design	Ohio	08
I/M/O Public Service Company of North Carolina	Witness	NC Department of Justice	Rate design	North Carolina	08
I/M/O Piedmont Natural Gas Company	Witness	NC Department of Justice	Rate design	North Carolina	08
I/M/O National Grid	Witness	New Hampshire Legal Assistance	Low-income rate assistance	New Hampshire	08
I/M/O EmPower Maryland	Witness	Office of Peoples Counsel	Low-income energy efficiency	Maryland	08
I/M/O Duke Energy Carolinas Save-a-Watt Program	Witness	NC Equal Justice Foundation	Low-income energy efficiency	North Carolina	08
I/M/O Zia Natural Gas Company	Witness	Community Action New Mexico	Low-income/low-use rate design	New Mexico	08
I/M/O Universal Service Fund Support for the Affordability of Local Rural Telecomm Service	Witness	Office of Consumer Advocate	Telecomm service affordability	Pennsylvania	08
I/M/O Philadelphia Water Department	Witness	Public Advocate	Credit and Collections	Philadelphia	08
I/M/O Portland General Electric Company	Witness	Community Action--Oregon	General rate case	Oregon	08
I/M/O Philadelphia Electric Company (electric)	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	08
I/M/O Philadelphia Electric Company (gas)	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	08
I/M/O Columbia Gas Company	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	08
I/M/O Public Service Company of New Mexico	Witness	Community Action New Mexico	Fuel adjustment clause	New Mexico	08
I/M/O Petition of Direct Energy for Low-Income Aggregation	Witness	Office of Peoples Counsel	Low-income electricity aggregation	Maryland	07
I/M/O Office of Consumer Advocate et al. v. Verizon and Verizon North	Witness	Office of Consumer Advocate	Lifeline telecommunications rates	Pennsylvania	07
I/M/O Pennsylvania Power Company	Consultant	Office of Consumer Advocate	Low-income program	Pennsylvania	07
I/M/O National Fuel Gas Distribution Corporation	Consultant	Office of Consumer Advocate	Low-income program	Pennsylvania	07
I/M/O Public Service of New Mexico--Electric	Witness	Community Action New Mexico	Low-income programs	New Mexico	07
I/M/O Citizens Gas/NIPSCO/Vectren for Universal Service Program	Witness	Citizens Gas & Coke Utility/Northern Indiana Public Service/Vectren Energy	Low-income program design	Indiana	07
I/M/O PPL Electric	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	07
I/M/O Section 15 Challenge to NSPI Rates	Witness	Energy Affordability Coalition	Discrimination in utility regulation	Nova Scotia	07
I/M/O Philadelphia Gas Works	Witness	Office of Consumer Advocate	Low-income and residential collections	Pennsylvania	07
I/M/O Equitable Gas Company	Witness	Office of Consumer Advocate	Low-income program	Pennsylvania	07
I/M/O Section 11 Proceeding, Energy Restructuring	Witness	Office of Peoples Counsel	Low-income needs and responses	Maryland	06

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
I/M/O Citizens Gas/NIPSCO/Vectren for Universal Service Program	Witness	Citizens Gas & Coke Utility/Northern Indiana Public Service/Vectren Energy	Low-income program design	Indiana	06
I/M/O Public Service Co. of North Carolina	Witness	North Carolina Attorney General/Dept. of Justice	Low-income energy usage	North Carolina	06
I/M/O Electric Assistance Program	Witness	New Hampshire Legal Assistance	Electric low-income program design	New Hampshire	06
I/M/O Verizon Petition for Alternative Regulation	Witness	New Hampshire Legal Assistance	Basic local telephone service	New Hampshire	06
I/M/O Pennsylvania Electric Co/Metropolitan Edison Co.	Witness	Office of Consumer Advocate	Universal service cost recovery	Pennsylvania	06
I/M/O Duquesne Light Company	Witness	Office of Consumer Advocates	Universal service cost recovery	Pennsylvania	06
I/M/O Natural Gas DSM Planning	Witness	Low-Income Energy Network	Low-income DSM program.	Ontario	06
I/M/O Union Gas Co.	Witness	Action Centre for Tenants Ontario (ACTO)	Low-income program design	Ontario	06
I/M/O Public Service of New Mexico merchant plant	Witness	Community Action New Mexico	Low-income energy usage	New Mexico	06
I/M/O Customer Assistance Program design and cost recovery	Witness	Office of Consumer Advocate	Low-income program design	Pennsylvania	06
I/M/O NIPSCO Proposal to Extend Winter Warmth Program	Witness	Northern Indiana Public Service Company	Low-income energy program evaluation	Indiana	05
I/M/O Piedmont Natural Gas	Witness	North Carolina Attorney General/Dept. of Justice	Low-income energy usage	North Carolina	05
I/M/O PSEG merger with Exelon Corp.	Witness	Division of Ratepayer Advocate	Low-income issues	New Jersey	05
Re. Philadelphia Water Department	Witness	Public Advocate	Water collection factors	Philadelphia	05
I/M/O statewide natural gas universal service program	Witness	New Hampshire Legal Assistance	Universal service	New Hampshire	05
I/M/O Sub-metering requirements for residential rental properties	Witness	Tenants Advocacy Centre of Ontario	Sub-metering consumer protections	Ontario	05
I/M/O National Fuel Gas Distribution Corp.	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	05
I/M/O Nova Scotia Power, Inc.	Witness	Dalhousie Legal Aid Service	Universal service	Nova Scotia	04
I/M/O Lifeline Telephone Service	Witness	National Ass'n State Consumer Advocates (NASUCA)	Lifeline rate eligibility	FCC	04
Mackay v. Verizon North	Witness	Office of Consumer Advocate	Lifeline rates—vertical services	Pennsylvania	04
I/M/O PECO Energy	Witness	Office of Consumer Advocate	Low-income rates	Pennsylvania	04
I/M/O Philadelphia Gas Works	Witness	Office of Consumer Advocate	Credit and collections	Pennsylvania	04
I/M/O Citizens Gas & Coke/Vectren	Witness	Citizens Action Coalition of Indiana	Universal service	Indiana	04
I/M/O PPL Electric Corporation	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	04

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
I/M/O Consumers New Jersey Water Company	Witness	Division of Ratepayer Advocate	Low-income water rate	New Jersey	04
I/M/O Washington Gas Light Company	Witness	Office of Peoples Counsel	Low-income gas rate	Maryland	04
I/M/O Washington Gas Light Company	Witness	Office of Peoples Counsel	Low-income gas rate	Maryland	03
Golden v. City of Columbus	Witness	Helen Golden	ECOA disparate impacts	Ohio	02
Huegel v. City of Easton	Witness	Phyllis Huegel	Credit and collection	Pennsylvania	02
I/M/O Universal Service Fund	Witness	Public Utility Commission staff	Universal service funding	New Hampshire	02
I/M/O Philadelphia Gas Works	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	02
I/M/O Washington Gas Light Company	Witness	Office of Peoples Counsel	Rate design	Maryland	02
I/M/O Consumers Illinois Water Company	Witness	Illinois Citizens Utility Board	Credit and collection	Illinois	02
I/M/O Public Service Electric & Gas Rates	Witness	Division of Ratepayer Advocate	Universal service	New Jersey	01
I/M/O Pennsylvania-American Water Company	Witness	Office of Consumer Advocate	Low-income rates and water conservation	Pennsylvania	01
I/M/O Louisville Gas & Electric Prepayment Meters	Witness	Kentucky Community Action Association	Low-income energy	Kentucky	01
I/M/O NICOR Budget Billing Plan Interest Charge	Witness	Cook County State's Attorney	Rate Design	Illinois	01
I/M/O Rules Re. Payment Plans for High Natural Gas Prices	Witness	Cook County State's Attorney	Budget Billing Plans	Illinois	01
I/M/O Philadelphia Water Department	Witness	Office of Public Advocate	Credit and collections	Philadelphia	01
I/M/O Missouri Gas Energy	Witness	Office of Peoples Counsel	Low-income rate relief	Missouri	01
I/M/O Bell Atlantic--New Jersey Alternative Regulation	Witness	Division of Ratepayer Advocate	Telecommunications universal service	New Jersey	01
I/M/O T.W. Phillips Gas and Oil Co.	Witness	Office of Consumer Advocate	Ratemaking of universal service costs.	Pennsylvania	00
I/M/O Peoples Natural Gas Company	Witness	Office of Consumer Advocate	Ratemaking of universal service costs.	Pennsylvania	00
I/M/O UGI Gas Company	Witness	Office of Consumer Advocate	Ratemaking of universal service costs.	Pennsylvania	00
I/M/O PFG Gas Company	Witness	Office of Consumer Advocate	Ratemaking of universal service costs.	Pennsylvania	00
Armstrong v. Gallia Metropolitan Housing Authority	Witness	Equal Justice Foundation	Public housing utility allowances	Ohio	00
I/M/O Bell Atlantic--New Jersey Alternative Regulation	Witness	Division of Ratepayer Advocate	Telecommunications universal service	New Jersey	00
I/M/O Universal Service Fund for Gas and Electric Utilities	Witness	Division of Ratepayer Advocate	Design and funding of low-income programs	New Jersey	00
I/M/O Consolidated Edison Merger with Northeast Utilities	Witness	Save Our Homes Organization	Merger impacts on low-income	New Hampshire	00

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
I/M/O UtiliCorp Merger with St. Joseph Light & Power	Witness	Missouri Dept. of Natural Resources	Merger impacts on low-income	Missouri	00
I/M/O UtiliCorp Merger with Empire District Electric	Witness	Missouri Dept. of Natural Resources	Merger impacts on low-income	Missouri	00
I/M/O PacifiCorp	Witness	The Opportunity Council	Low-income energy affordability	Washington	00
I/M/O Public Service Co. of Colorado	Witness	Colorado Energy Assistance Foundation	Natural gas rate design	Colorado	00
I/M/O Avista Energy Corp.	Witness	Spokane Neighborhood Action Program	Low-income energy affordability	Washington	00
I/M/O TW Phillips Energy Co.	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	00
I/M/O PECO Energy Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	00
I/M/O National Fuel Gas Distribution Corp.	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	00
I/M/O PFG Gas Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	00
I/M/O UGI Energy Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	00
Re. PSCO/NSP Merger	Witness	Colorado Energy Assistance Foundation	Merger impacts on low-income	Colorado	99 - 00
I/M/O Peoples Gas Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	99
I/M/O Columbia Gas Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	99
I/M/O PG Energy Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	99
I/M/O Equitable Gas Company	Witness	Office of Consumer Advocate	Universal service	Pennsylvania	99
Allerruzzo v. Klarchek	Witness	Barlow Allerruzzo	Mobile home fees and sales	Illinois	99
I/M/O Restructuring New Jersey's Natural Gas Industry	Witness	Division of Ratepayer Advocate	Universal service	Pennsylvania	99
I/M/O Bell Atlantic Local Competition	Witness	Public Utility Law Project	Lifeline telecommunications rates	New Jersey	99
I/M/O Merger Application for SBC and Ameritech Ohio	Witness	Edgemont Neighborhood Association	Merger impacts on low-income consumers	Ohio	98 - 99
Davis v. American General Finnce	Witness	Thomas Davis	Damages in "loan flipping" case	Ohio	98 - 99
Griffin v. Associates Financial Service Corp.	Witness	Earlie Griffin	Damages in "loan flipping" case	Ohio	98 - 99
I/M/O Baltimore Gas and Electric Restructuring Plan	Witness	Maryland Office of Peoples Counsel	Consumer protection/basic generation service	Maryland	98 - 99
I/M/O Delmarva Power and Light Restructuring Plan	Witness	Maryland Office of Peoples Counsel	Consumer protection/basic generation service	Maryland	98 - 99
I/M/O Potomac Electric Power Co. Restructuring Plan	Witness	Maryland Office of Peoples Counsel	Consumer protection/basic generation service	Maryland	98 - 99
I/M/O Potomac Edison Restructuring Plan	Witness	Maryland Office of Peoples Counsel	Consumer protection/basic generation service	Maryland	98 - 99

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
VMHOA v. LaPierre	Witness	Vermont Mobile Home Owners Association	Mobile home tying	Vermont	98
Re. Restructuring Plan of Virginia Electric Power	Witness	VMH Energy Services, Inc.	Consumer protection/basic generation service	Virginia	98
Mackey v. Spring Lake Mobile Home Estates	Witness	Timothy Mackey	Mobile home fees	State ct: Illinois	98
Re. Restructuring Plan of Atlantic City Electric	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Jersey Central Power & Light	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Public Service Electric & Gas	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Rockland Electric	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Appleby v. Metropolitan Dade County Housing Agency	Witness	Legal Services of Greater Miami	HUD utility allowances	Fed. court: So. Florida	97 - 98
Re. Restructuring Plan of PECO Energy Company	Witness	Energy Coordinating Agency of Philadelphia	Universal service	Pennsylvania	97
Re. Atlantic City Electric Merger	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97
Re. IES Industries Merger	Witness	Iowa Community Action Association	Low-income issues	Iowa	97
Re. New Hampshire Electric Restructuring	Witness	NH Comm. Action Ass'n	Wires charge	New Hampshire	97
Re. Natural Gas Competition in Wisconsin	Witness	Wisconsin Community Action Association	Universal service	Wisconsin	96
Re. Baltimore Gas and Electric Merger	Witness	Maryland Office of Peoples Counsel	Low-income issues	Maryland	96
Re. Northern States Power Merger	Witness	Energy Cents Coalition	Low-income issues	Minnesota	96
Re. Public Service Co. of Colorado Merger	Witness	Colorado Energy Assistance Foundation	Low-income issues	Colorado	96
Re. Massachusetts Restructuring Regulations	Witness	Fisher, Sheehan & Colton	Low-income issues/energy efficiency	Massachusetts	96
Re. FERC Merger Guidelines	Witness	National Coalition of Low-Income Groups	Low-income interests in mergers	Washington D.C.	96
Re. Joseph Keliikuli III	Witness	Joseph Keliikuli III	Damages from lack of homestead	Honolulu	96
Re. Theresa Mahaulu	Witness	Theresa Mahaulu	Damages from lack of homestead	Honolulu	95
Re. Joseph Ching, Sr.	Witness	Re. Joseph Ching, Sr.	Damages from lack of homestead	Honolulu	95
Joseph Keaulana, Jr.	Witness	Joseph Keaulana, Jr.	Damages from lack of homestead	Honolulu	95

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
Re. Utility Allowances for Section 8 Housing	Witness	National Coalition of Low-Income Groups	Fair Market Rent Setting	Washington D.C.	95
Re. PGW Customer Service Tariff Revisions	Witness	Philadelphia Public Advocate	Credit and collection	Philadelphia	95
Re. Customer Responsibility Program	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	95
Re. Houston Lighting and Power Co.	Witness	Gulf Coast Legal Services	Low-Income Rates	Texas	95
Re. Request for Modification of Winter Moratorium	Witness	Philadelphia Public Advocate	Credit and collection	Philadelphia	95
Re. Dept of Hawaii Homelands Trust Homestead Production	Witness	Native Hawaiian Legal Corporation	Prudence of trust management	Honolulu	94
Re. SNET Request for Modified Shutoff Procedures	Witness	Office of Consumer Counsel	Credit and collection	Connecticut	94
Re. Central Light and Power Co.	Witness	United Farm Workers	Low-income rates/DSM	Texas	94
Blackwell v. Philadelphia Electric Co.	Witness	Gloria Blackwell	Role of shutoff regulations	Penn. courts	94
U.S. West Request for Waiver of Rules	Witness	Wash. Util. & Transp. Comm'n Staff	Telecommunications regulation	Washington	94
Re. U.S. West Request for Full Toll Denial	Witness	Colorado Office of Consumer Counsel	Telecommunications regulation	Colorado	94
Washington Gas Light Company	Witness	Community Family Life Services	Low-income rates & energy efficiency	Washington D.C.	94
Clark v. Peterborough Electric Utility	Witness	Peterborough Community Legal Centre	Discrimination of tenant deposits	Ontario, Canada	94
Dorsey v. Housing Auth. of Baltimore	Witness	Baltimore Legal Aide	Public housing utility allowances	Federal district court	93
Penn Bell Telephone Co.	Witness	Penn. Utility Law Project	Low-income phone rates	Pennsylvania	93
Philadelphia Gas Works	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	93
Central Maine Power Co.	Witness	Maine Assn Ind. Neighborhoods	Low-income rates	Maine	92
New England Telephone Company	Witness	Mass Attorney General	Low-income phone rates	Massachusetts	92
Philadelphia Gas Co.	Witness	Philadelphia Public Advocate	Low-income DSM	Philadelphia	92
Philadelphia Water Dept.	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	92
Public Service Co. of Colorado	Witness	Land and Water Fund	Low-income DSM	Colorado	92
Sierra Pacific Power Co.	Witness	Washoe Legal Services	Low-income DSM	Nevada	92
Consumers Power Co.	Witness	Michigan Legal Services	Low-income rates	Michigan	92
Columbia Gas	Witness	Office of Consumer Advocate (OCA)	Energy Assurance Program	Pennsylvania	91
Mass. Elec. Co.	Witness	Mass Elec Co.	Percentage of Income Plan	Massachusetts	91

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
AT&T	Witness	TURN	Inter-LATA competition	California	91
Generic Investigation into Uncollectibles	Witness	Office of Consumer Advocate	Controlling uncollectibles	Pennsylvania	91
Union Heat Light & Power	Witness	Kentucky Legal Services (KLS)	Energy Assurance Program	Kentucky	90
Philadelphia Water	Witness	Philadelphia Public Advocate (PPA)	Controlling accounts receivable	Philadelphia	90
Philadelphia Gas Works	Witness	PPA	Controlling accounts receivable	Philadelphia	90
Mississippi Power Co.	Witness	Southeast Mississippi Legal Services Corp.	Formula ratemaking	Mississippi	90
Kentucky Power & Light	Witness	KLS	Energy Assurance Program	Kentucky	90
Philadelphia Electric Co.	Witness	PPA	Low-income rate program	Philadelphia	90
Montana Power Co.	Witness	Montana Ass'n of Human Res. Council Directors	Low-income rate proposals	Montana	90
Columbia Gas Co.	Witness	Office of Consumer Advocate	Energy Assurance Program	Pennsylvania	90
Philadelphia Gas Works	Witness	PPA	Energy Assurance Program	Philadelphia	89
Southwestern Bell Telephone Co.	Witness	SEMLSC	Formula ratemaking	Mississippi	90
Generic Investigation into Low-income Programs	Witness	Vermont State Department of Public Service	Low-income rate proposals	Vermont	89
Generic Investigation into Dmnd Side Management Measures	Consultant	Vermont DPS	Low-income conservation programs	Vermont	89
National Fuel Gas	Witness	Office of Consumer Advocate	Low-income fuel funds	Pennsylvania	89
Montana Power Co.	Witness	Human Resource Develop. Council District XI	Low-income conservation	Montana	88
Washington Water Power Co.	Witness	Idaho Legal Service Corp.	Rate base, rate design, cost-allocations	Idaho	88

APPENDIX B

NATIONAL GRID - NH
Comparison of Present and Proposed Rates
Winter Season
Residential Heating
Rate R-3

Sales therm	Present Rate		Proposed Rate		Difference		Present Rate		Proposed Rate		Difference	
	Base Rate	Revenues Per therm	Base Rate	Revenues Per therm	Base Rate	Percent Base	With CGC Revenues		With CGC Revenues		With CGC Revenues	
							Rate	Revenues Per therm	Rate	Revenues Per therm	Rate	Percent
0	\$14.03	NA	\$21.00	NA	\$6.97	49.60%	\$14.03	NA	\$21.00	NA	\$6.97	49.60%
10	16.50	1.650	23.71	2.371	7.21	43.70%	26.27	2.627	33.59	3.359	7.32	27.06%
25	20.20	0.808	27.77	1.111	7.57	37.47%	44.63	1.705	52.40	2.099	7.05	17.50%
50	26.37	0.527	34.53	0.691	8.17	30.97%	75.23	1.505	83.95	1.679	0.72	11.59%
75	32.53	0.434	41.30	0.551	8.76	26.93%	105.03	1.411	115.43	1.539	9.60	9.07%
100	38.70	0.387	48.06	0.481	9.36	24.19%	136.43	1.364	146.90	1.469	10.47	7.67%
125	43.35	0.347	53.16	0.425	9.81	22.63%	165.51	1.324	176.71	1.414	11.20	6.77%
150	48.00	0.320	58.26	0.388	10.26	21.38%	194.59	1.297	206.52	1.377	11.93	6.13%
175	52.64	0.301	63.35	0.362	10.71	20.34%	223.67	1.278	236.32	1.350	12.65	5.66%
200	57.29	0.286	68.45	0.342	11.16	19.48%	252.75	1.264	266.13	1.331	13.38	5.29%
225	61.94	0.275	73.55	0.327	11.61	18.74%	281.83	1.253	295.94	1.315	14.11	5.01%
250	66.59	0.266	78.65	0.315	12.06	18.11%	310.91	1.244	325.75	1.303	14.84	4.77%
275	71.23	0.259	83.74	0.305	12.51	17.56%	339.99	1.236	355.55	1.293	15.56	4.50%
300	75.88	0.253	88.84	0.296	12.96	17.00%	369.07	1.230	385.36	1.285	16.29	4.41%
350	85.18	0.243	99.04	0.283	13.86	16.27%	427.23	1.221	444.98	1.271	17.75	4.15%
400	94.47	0.236	109.23	0.273	14.76	15.62%	485.39	1.213	504.59	1.261	19.20	3.96%
450	103.77	0.231	119.43	0.265	15.66	15.09%	543.55	1.208	564.21	1.254	20.66	3.80%
500	113.06	0.226	129.62	0.259	16.56	14.65%	601.71	1.203	623.02	1.248	22.11	3.67%
750	159.54	0.213	180.60	0.241	21.06	13.20%	892.51	1.190	921.90	1.229	29.39	3.29%
1,000	206.01	0.206	231.57	0.232	25.56	12.41%	1,183.31	1.183	1,219.97	1.220	36.66	3.10%
Estimated Bill Percentile - 25%												
60	20.83	0.481	37.24	0.621	8.40	29.15%	87.47	1.458	96.54	1.609	9.07	10.37%
Bill Percentile - 50%												
100	38.70	0.387	48.06	0.481	9.36	24.19%	136.43	1.364	146.90	1.469	10.47	7.67%
Estimated Bill Percentile - 75%												
175	52.64	0.301	63.35	0.362	10.71	20.34%	223.67	1.278	236.32	1.350	12.65	5.66%
Equivalent DRY Therm Present Rate R-3												
			Block						Proposed Rate			R-3
			therm	Rate					therm	Rate		
Customer Charge			-	\$14.03 /Customer				Customer Charge		-	\$21.00 /Customer	
First			100	\$0.2467 /therm				First		100	\$0.2706 /therm	
Over			100	\$0.1859 /therm				Over		100	\$0.2039 /therm	
TOTAL CGC & LDAC				\$0.9773 /therm				TOTAL CGC & LDAC			\$0.9804 /therm	
CGC				\$0.9369				CGC			\$0.9480 /therm	
LDAC				\$0.0404				LDAC			\$0.0404 /therm	

NOTE: The present CGC rate reflects approved rates. All present rates are restated to Dry therms to allow comparison with proposed rates (also in dry therms).

NATIONAL GRID - NH
Comparison of Present and Proposed Rates
Summer Season
Residential Heating
Rate R-3

Sales therm	Present Rate		Proposed Rate		Difference		Present Rate		Proposed Rate		Difference	
	Base Rate	Revenues Per therm	Base Rate	Revenues Per therm	Base Rate	Percent	With CGC Revenues	Revenues Per therm	With CGC Revenues	Revenues Per therm	Revenues Per therm	Percent
0	\$14.03	NA	\$21.00	NA	\$6.97	49.60%	\$14.03	NA	\$21.00	NA	\$6.97	49.60%
10	16.50	1.650	23.71	2.371	7.21	43.70%	23.10	2.310	30.35	3.035	7.25	31.40%
25	19.89	0.796	27.43	1.097	7.54	37.89%	36.39	1.456	44.04	1.761	7.64	21.00%
50	24.54	0.491	32.53	0.651	7.99	32.55%	57.54	1.151	65.74	1.315	8.20	14.25%
75	29.19	0.309	37.63	0.502	8.44	28.91%	70.69	1.049	87.44	1.166	8.76	11.13%
100	33.84	0.338	42.72	0.427	8.89	26.27%	99.83	0.998	109.14	1.091	9.31	9.33%
125	38.48	0.300	47.82	0.383	9.34	24.26%	120.90	0.968	130.05	1.047	9.87	8.16%
150	43.13	0.288	52.92	0.353	9.79	22.69%	142.13	0.948	152.55	1.017	10.42	7.33%
175	47.78	0.273	58.02	0.332	10.24	21.43%	163.27	0.933	174.25	0.996	10.98	6.72%
200	52.43	0.262	63.11	0.316	10.69	20.39%	184.42	0.922	195.95	0.980	11.53	6.25%
225	57.07	0.254	68.21	0.303	11.14	19.52%	205.57	0.914	217.66	0.967	12.09	5.88%
250	61.72	0.247	73.31	0.293	11.59	18.77%	226.71	0.907	239.36	0.957	12.65	5.50%
275	66.37	0.241	78.41	0.285	12.04	18.14%	247.86	0.901	261.06	0.949	13.20	5.33%
300	71.02	0.237	83.50	0.278	12.49	17.50%	269.01	0.897	282.76	0.943	13.76	5.11%
350	80.31	0.229	93.70	0.268	13.39	16.67%	311.30	0.889	326.17	0.932	14.87	4.78%
400	89.61	0.224	103.89	0.260	14.29	15.95%	353.59	0.884	369.57	0.924	15.98	4.52%
450	98.90	0.220	114.09	0.254	15.19	15.36%	395.89	0.880	412.98	0.918	17.09	4.32%
500	108.20	0.216	124.28	0.249	16.09	14.87%	438.18	0.876	456.38	0.913	18.20	4.15%
750	154.67	0.206	175.26	0.234	20.59	13.31%	649.65	0.866	673.41	0.898	23.76	3.66%
1,000	201.15	0.201	226.23	0.226	25.09	12.47%	861.12	0.861	890.43	0.890	29.32	3.40%

Estimated Bill Percentile - 25%												
12	16.99	1.416	24.25	2.021	7.26	42.71%	24.91	2.076	32.22	2.605	7.31	29.34%
Bill Percentile - 50%												
20	18.96	0.948	26.41	1.321	7.45	39.27%	32.16	1.608	39.70	1.905	7.53	23.42%
Estimated Bill Percentile - 75%												
30	20.82	0.694	28.45	0.948	7.63	36.63%	40.62	1.354	48.38	1.613	7.75	19.09%

	Equivalent DRY Therm Present Rate R-3			Proposed Rate R-3	
	Block therm	Rate		Block therm	Rate
Customer Charge	-	\$14.03 /Customer	Customer Charge	-	\$21.00 /Customer
First	20	\$0.2467 /therm	First	20	\$0.2706 /therm
Over	20	\$0.1859 /therm	Over	20	\$0.2039 /therm
TOTAL CGC & LDAC		\$0.6600 /therm	TOTAL CGC & LDAC		\$0.6642 /therm
CGC		\$0.6196	CGC		\$0.6238 /therm
LDAC		\$0.0404	LDAC		\$0.0404 /therm

NOTE: The present CGC rate reflects approved rates. All present rates are restated to Dry therms to allow comparison with proposed rates (also in dry therms).

NATIONAL GRID - NH
Comparison of Present and Proposed Rates
Winter Season
Low Income Residential Heating
Rate R-4

Sales therm	Present Rate		Proposed Rate		Difference		Present Rate		Proposed Rate		Difference	
	Base Rate	Revenues	Base Rate	Revenues	Revenues	Percent	With CGC Revenues		With CGC Revenues		With CGC Revenues	
		Per therm		Per therm	Base Rate	Base Rate	Rate	Rate	Revenues Per therm	Rate	Revenues Per therm	Rate
0	\$5.61	NA	\$8.40	NA	\$2.79	49.73%	\$5.61	NA	\$8.40	NA	\$2.79	49.73%
10	6.60	0.660	9.48	0.948	2.89	43.73%	16.37	1.637	19.37	1.937	3.00	18.30%
25	8.08	0.323	11.11	0.444	3.03	37.40%	32.51	1.300	35.82	1.433	3.31	10.17%
50	10.55	0.211	13.81	0.276	3.27	30.96%	59.41	1.188	63.23	1.265	3.82	6.43%
75	13.01	0.174	16.52	0.220	3.50	26.92%	86.31	1.151	90.65	1.209	4.33	5.02%
100	15.48	0.155	19.22	0.192	3.74	24.16%	113.21	1.132	118.06	1.181	4.85	4.28%
125	17.34	0.139	21.26	0.170	3.92	22.61%	139.50	1.116	144.81	1.158	5.31	3.80%
150	19.20	0.128	23.30	0.155	4.10	21.35%	165.80	1.105	171.56	1.144	5.77	3.48%
175	21.06	0.120	25.34	0.145	4.28	20.32%	192.09	1.098	198.31	1.133	6.22	3.24%
200	22.92	0.115	27.38	0.137	4.46	19.46%	218.38	1.092	225.06	1.125	6.68	3.06%
225	24.78	0.110	29.42	0.131	4.64	18.72%	244.67	1.087	251.81	1.119	7.14	2.92%
250	26.64	0.107	31.46	0.126	4.82	18.09%	270.97	1.084	278.56	1.114	7.60	2.80%
275	28.50	0.104	33.50	0.122	5.00	17.54%	297.26	1.081	305.31	1.110	8.05	2.71%
300	30.36	0.101	35.54	0.118	5.18	17.06%	323.55	1.079	332.06	1.107	8.51	2.63%
350	34.08	0.097	39.62	0.113	5.54	16.26%	376.14	1.075	385.56	1.102	9.43	2.51%
400	37.80	0.095	43.70	0.109	5.90	15.61%	428.72	1.072	439.06	1.098	10.34	2.41%
450	41.52	0.092	47.78	0.106	6.26	15.08%	481.31	1.070	492.56	1.095	11.26	2.34%
500	45.24	0.090	51.86	0.104	6.62	14.63%	533.89	1.068	546.06	1.092	12.17	2.28%
750	63.84	0.085	72.26	0.096	8.42	13.19%	796.82	1.062	813.56	1.085	16.75	2.10%
1,000	82.44	0.082	92.66	0.093	10.22	12.40%	1,059.74	1.060	1,081.06	1.081	21.32	2.01%
Estimated Bill Percentile - 25%												
70	12.52	0.179	15.97	0.228	3.46	27.60%	80.93	1.156	85.16	1.217	4.23	5.23%
Bill Percentile - 50%												
100	15.48	0.155	19.22	0.192	3.74	24.16%	113.21	1.132	118.06	1.181	4.85	4.28%
Estimated Bill Percentile - 75%												
150	19.20	0.128	23.30	0.155	4.10	21.35%	165.80	1.105	171.56	1.144	5.77	3.48%
Equivalent DRY Therm Present Rate R-4				Proposed Rate R-4								
		Block				Block						
		therm	Rate			therm	Rate					
Customer Charge			\$5.61 /Customer			Customer Charge		\$8.40 /Customer				
First	100		\$0.0987 /therm			First	100	\$0.1082 /therm				
Over	100		\$0.0744 /therm			Over	100	\$0.0816 /therm				
TOTAL CGC & LDAC			\$0.9773 /therm			TOTAL CGC & LDAC		\$0.9884 /therm				
CGC			\$0.9369			CGC		\$0.9480				
LDAC			\$0.0404			LDAC		\$0.0404				

NOTE: The present CGC rate reflects approved rates. All present rates are restated to Dry therms to allow comparison with proposed rates (also in dry therms).

NATIONAL GRID - NH
Comparison of Present and Proposed Rates
Summer Season
Low Income Residential Heating
Rate R-4

Sales therm	Present Rate		Proposed Rate		Difference		Present Rate		Proposed Rate		Difference	
	Base Rate	Revenues Per therm	Base Rate	Revenues Per therm	Base Rate	Percent Rate	With CGC Revenues		With CGC Revenues		With CGC Revenues	
							Rate	Revenues Per therm	Rate	Revenues Per therm	Rate	Percent Rate
0	\$5.61	NA	\$0.40	NA	\$2.79	49.73%	\$5.61	NA	\$0.40	NA	\$2.79	49.73%
10	6.60	0.660	9.48	0.948	2.89	43.73%	13.20	1.320	16.12	1.612	2.93	22.18%
25	7.96	0.318	10.97	0.439	3.02	37.91%	24.46	0.978	27.58	1.103	3.12	12.76%
50	9.02	0.196	13.01	0.260	3.20	32.56%	42.81	0.856	46.22	0.924	3.41	7.96%
75	11.60	0.156	15.05	0.201	3.38	28.91%	61.17	0.816	64.87	0.865	3.69	6.04%
100	13.54	0.135	17.09	0.171	3.56	26.27%	79.53	0.795	83.51	0.835	3.98	5.00%
125	15.40	0.123	19.13	0.153	3.74	24.27%	97.89	0.783	102.16	0.817	4.26	4.36%
150	17.26	0.115	21.17	0.141	3.92	22.69%	116.25	0.775	120.80	0.805	4.55	3.91%
175	19.12	0.109	23.21	0.133	4.10	21.43%	134.61	0.769	139.45	0.797	4.84	3.59%
200	20.98	0.105	25.25	0.126	4.28	20.39%	152.97	0.765	158.09	0.790	5.12	3.35%
225	22.84	0.101	27.29	0.121	4.46	19.51%	171.33	0.761	176.74	0.785	5.41	3.16%
250	24.70	0.099	29.33	0.117	4.64	18.77%	189.69	0.759	195.30	0.782	5.69	3.00%
275	26.56	0.097	31.37	0.114	4.82	18.14%	208.05	0.757	214.03	0.778	5.98	2.87%
300	28.42	0.095	33.41	0.111	5.00	17.50%	226.41	0.755	232.67	0.776	6.26	2.77%
350	32.14	0.092	37.49	0.107	5.36	16.67%	263.13	0.752	269.96	0.771	6.84	2.60%
400	35.86	0.090	41.57	0.104	5.72	15.94%	299.84	0.750	307.25	0.768	7.41	2.47%
450	39.58	0.088	45.65	0.101	6.08	15.35%	336.56	0.748	344.54	0.766	7.98	2.37%
500	43.30	0.087	49.73	0.099	6.44	14.87%	373.20	0.747	381.83	0.764	8.55	2.29%
750	61.90	0.083	70.13	0.094	8.24	13.31%	556.87	0.742	568.28	0.758	11.41	2.05%
1,000	80.50	0.080	90.53	0.091	10.04	12.47%	740.47	0.740	754.73	0.755	14.26	1.93%

Estimated Bill Percentile - 25%												
14	6.99	0.499	9.91	0.708	2.92	41.81%	16.23	1.159	19.21	1.372	2.98	10.37%
Bill Percentile - 50%												
25	7.96	0.318	10.97	0.439	3.02	37.91%	24.46	0.978	27.58	1.103	3.12	12.76%
Estimated Bill Percentile - 75%												
40	9.07	0.227	12.20	0.305	3.12	34.44%	35.47	0.887	38.76	0.969	3.29	9.28%

	Equivalent DRY Therm Present Rate R-4			Proposed Rate R-4	
	Block therm	Rate		Block therm	Rate
Customer Charge	-	\$5.61 /Customer	Customer Charge	-	\$6.40 /Customer
First	20	\$0.0987 /therm	First	20	\$0.1082 /therm
Over	20	\$0.0744 /therm	Over	20	\$0.0816 /therm
TOTAL CGC & LDAC		\$0.6600 /therm	TOTAL CGC & LDAC		\$0.6642 /therm
CGC		\$0.6196	CGC		\$0.6238 /therm
LDAC		\$0.0404	LDAC		\$0.0404 /therm

NOTE: The present CGC rate reflects approved rates. All present rates are restated to Dry therms to allow comparison with proposed rates (also in dry therms).

APPENDIX C

UTILITY CREDIT AND COLLECTIONS AND THE LOW-INCOME CONSUMER

Presentation to:
Credit and Collections Working Group
National Grid—New Hampshire

July 15, 2009

Critical findings (collections):

- When National Grid states that it is going to pursue more intense collections efforts directed toward payment-troubled customers, those more intense collections efforts will be disproportionately directed toward low-income customers. When the Company reports that it expects to disconnect an additional 2,845 R-3 customers per year for each of the next three years, it is reasonable to expect that a substantial proportion of those customers will be low-income customers who are disconnected because they cannot afford to pay their bills.
- While the R-4 rate discount addresses the concerns for participating customers, the R-4 discount reaches only 35% of the Company's income-eligible customer base. Compared to the highest R-4 participation rate experienced by the Company (4,925 customers), based on the number of customers identified by the Company for each community it serves, and the penetration of low-income persons (below 175% of Federal Poverty Level) in each community, the Company has at least 13,812 customers with income at or below 175% of the Federal Poverty Level.
- 175% of the Federal Poverty level does not adequately delineate the population that cannot afford their natural gas bills. The basic family needs budgets in New Hampshire do not simply exceed 175% of the Federal Poverty Level, they fall into a range around 250% of the Federal Poverty Level.
- Contrasted to this known adverse impact on low-income customers, the Company cannot provide data on any positive impact to the utility (and its ratepayers).
 - ❖ The Company does not maintain any evaluation or analysis that considers when it is *cost-effective* to disconnect service for nonpayment. (NHLA-3-14). The Company has not developed specific criteria by which to measure either the effectiveness of its collection activities (NHLA-3-23) or the cost-effectiveness of its collection activities (NHLA-3-25).
 - ❖ The Company was asked to provide any written study it had within its custody or control that assesses the extent to which the following activities *reduce*

residential bad debt: (1) cash security deposits; (2) deferred payment agreements; (3) disconnections for nonpayment; (4) field collection; (5) call center collection calls; or (6) late payment charges. The Company could provide no such information. (NHLA-3-30).

- ❖ The Company was asked to provide any written study it had within its custody or control that assesses the extent to which the following activities *reduce residential arrears*: (1) cash security deposits; (2) deferred payment agreements; (3) disconnections for nonpayment; (4) field collection; (5) call center collection calls; or (6) late payment charges. The Company could provide no such information. (NHLA-3-31).
 - ❖ When asked to provide any study within its custody or control regarding the relationship between the rate at which a utility issues disconnect notices and the reduction in bad debt, the Company could not provide any such analysis. (NHLA-3-27).
 - ❖ The Company could not provide information that assesses the relationship between the rate at which a utility issues disconnect notices and the control of arrears. (NHLA-3-28).
 - ❖ The Company could not provide information that assesses the relationship between the rate at which a utility issues disconnect notices and any increase in residential payments. (NHLA-3-29).
- The disconnection of service has a serious long-term impact on the affected customer.
- ❖ The Company is collecting its smaller arrears rather than its larger arrears. As examples, while 40% of the accounts that were 30 days in arrears in April 2006 were still in arrears in June, 52% of the dollars were. While 32% of the accounts that were in arrears in August 2007 were still in arrears in October 2007, 50% of the dollars were.
 - ❖ Disconnections are not routinely followed by reconnections. During the 30-month time period January 2006 through May 2008, only 30% of all disconnected customers were reconnected.

Recommendations:

#1. Increase penetration of Budget Billing.

National Grid should increase the penetration of Budget Billing as an arrearage prevention technique. Levelized Budget Billing plans help customers avoid the “peak” in utility bills that

often accompanies winter heating load. Increasing the use of Budget Billing could occur in three ways:

- First, National Grid should remove barriers to participation in Budget Billing programs. A common barrier, for example, is the requirement that a customer not be in arrears at the time he or she enters the Budget Billing program. Indeed, Budget Billing may be most beneficial to those customers that *are* in arrears. It is the fact of arrearages that evidences the need to address the high winter bills with which to begin.
- Second, National Grid should use Budget Billing to incentivize payment behavior. Many utilities, for example, do not allow customers to enter Budget Billing during the winter months. An alternative decision-rule might be that a customer could enter a Budget Billing program during cold weather months if the account is current immediately before the first cold weather month (or if certain minimum payments have been made) (*e.g.*, if you paid 75% of your winter bills to date, you will be allowed to levelize the remainder of your winter bills over a longer period of time).
 - ❖ Note the Tennessee approach that makes Budget Billing *mandatory* for natural gas accounts in arrears during the winter months. Tennessee approach resulted in substantial reduction in shutoffs and improved collections during time of sharply increasing gas prices.
- Third, National Grid should incentivize the use of Budget Billing. For example, the offer of a 10-month Budget Billing plan, allowing a customer to “skip” making payments in two months of the customer’s choice, might be attractive to customers who do not wish to make utility payments in months with high amounts of competing expenses (*e.g.*, holiday expenses, back-to-school expenses).

#2. Seasonal Budget Billing as an arrearage management technique.

In addition to incentivizing (as well as removing barriers to) participation in Budget Billing, National Grid should offer an alternative Budget Billing option. Experience counsels that many low-income natural gas customers do not wish to enter into Budget Billing that significantly increases their warm weather month bills. Even though the whole purpose of Budget Billing is to time-shift part of a bill, the realization that the elimination of the high winter bill *also* means the corresponding elimination of the low summer bill (assuming a natural gas customer, that is) creates a barrier to Budget Billing enrollment.

Given this recognition, National Grid should offer something other than an *annual* Budget Billing plan. A “seasonal” Budget Billing plan would help guard against the high winter bills while also preserving the low-cost summer months for the customer. The data clearly shows that many customers in arrears are simply engaging in short-term time-shifting of high winter bills without the structure of a Budget Billing plan. To allow customers to move some of that time-

shifting *forward* rather than having it merely be *backward* would be consistent with the desire to keep bills paid, and the demonstrated inability to make that happen in the high cost winter months.

To move some of those January through March dollars forward to the lower cost months immediately preceding winter should help lower arrears without running afoul of the customers' desires to retain their low-cost summer bills.

#3. Understanding “no reconnect” accounts.

National Grid should develop a better understanding of its *disconnected* accounts that do not *reconnect* to the system. There is a substantial population of accounts that do not appear to reconnect to the utility system after service has been disconnected for nonpayment.

National Grid should inquire into what happens when an account is not reconnected. Is the account reconnected in a different name? Does the customer go without utility service? Does the disconnected customer change residences and be replaced with another customer at the disconnected service address? Is the home completely abandoned? The utility need not track the specific customer in order to determine what happens at the service address.

Finally, National Grid should emulate Pennsylvania is requiring utilities to engage in a pre-winter termination survey. This survey involves checking each service address that has had service disconnected but not reconnected since the beginning of the last winter heating season²⁰ to determine whether someone is living at that service address, whether that resident is taking service unlawfully, whether the resident remains without utility service entering the winter heating season, or whether the housing unit has been abandoned. This winter survey occurs immediately before the start of each winter heating season.

#4. Targeted EITC outreach as an arrears management technique.

National Grid should engage in outreach for the federal Earned Income Tax Credit (EITC) targeted specifically to winter month payment-troubled customers. Little question exists but that high winter bills pose an affordability problem for low-income National Grid customers.

Targeting EITC outreach to payment-troubled customers meeting a minimum level of arrears would help address this problem. If a “trigger” amount for such outreach is appropriately set, it is likely that the account in arrears would be low-income. There is a significant increase in average past-due balances for the total residential customer base during the winter heating season. If EITC outreach is targeted to accounts with an average arrears noticeably higher than

²⁰ One need not consider whether service was reconnected to the same customer, for purposes of the winter survey, but only what happens with the service at a particular address where service had been terminated for nonpayment.

the total residential average (e.g., \$300), it is more likely than not that the account will be low-income.

Engaging in EITC outreach targeted to customers in arrears is likely to have a positive impact for both the customers and the company. The average EITC benefit nationwide is \$2,000. One-quarter of *all* households that receive an EITC benefit use that benefit to pay a past-due utility bill. The proportion of those households that are in arrears that use the EITC to help pay their bills is thus likely to be much higher. To the extent that customers are substantially in arrears during the months of January and/or February, assisting them to claim any EITC benefits to which they are entitled would be a financial benefit.

#5. Incentivize/decrease barriers to deferred payment arrangements.

National Grid should focus increased attention on enrolling customers with arrears in deferred payment arrangements. A fraction of residential customers in arrears enroll in a deferred payment arrangement as a mechanism to help retire those arrears. Not all arrears *should* be subject to payment plans, of course. Accounts that have either small (or short-term) arrears do not necessarily merit deferred payments.

At a minimum, additional inquiry should be made into why low-income customers in substantial arrears are not entering into deferred payment arrangements. The reason for this phenomenon might be that barriers exist that affirmatively impede such payment plans. Such barriers might include downpayment requirements that are too high or payment plan terms that are too short (making monthly payments impossible to meet). The reason might be that the higher arrearage amounts for low-income customers are more likely to have resulted in a shutoff and that, accordingly, payment plan pre-requisites involve the payment of reconnect fees and/or deposits that serve as barriers to entering into a deferred payment plan for the underlying arrears.

The remedy for the failure to enroll low-income customers in arrears in deferred payment plan agreements depends, of course, on the underlying cause for the failure. Smaller downpayments and longer terms may well be merited. One remedy, also, might address those arrears that have escalated beyond a range that might involve any reasonable opportunity to retire. In those instances, National Grid should consider entering into payment plans for less than the entire outstanding arrears. If a low-income customer owes \$2,000, in other words, the utility might reasonably enter into a payment plan for \$600.²¹

National Grid should create incentives for a low-income customer to enter into a deferred payment plan for some portion of a large and unretirable arrears. For example, an agreement to waive late payment fees on the portion of the arrears not subject to the payment plan so long as

²¹ In this regard, one can be mindful of the baseball team that is down three-games-to-none in a seven game League Championship Series. The team is well-served by the attitude that they do not need to “win four games” to win the series. They need only win “tomorrow.” Taking it “one game at a time” may be a cliché, but it is accurate nonetheless. That first \$600 in arrears is the equivalent to Game Four in that seven game series.

the payment plan is current might be an effective incentive. On an arrears that is large enough to qualify for such a split payment plan, waiving such fees could deliver real dollars of benefit to the customer.

#6. Sharpen the criteria for issuing notices of disconnection for nonpayment.

National Grid should sharpen the criteria it uses for issuing notices of disconnection of service for nonpayment. The utility appears to send far more notices warning of the disconnection of service for nonpayment than it is either willing or able to actually implement. When a utility consistently threatens the disconnection of service if payment of an outstanding bill is not made by a date certain, with no follow-through on that warning, customers eventually learn that the notices of disconnection are a false threat that can be safely ignored without consequence.

National Grid issues a high percentage of “false” warnings of an impending disconnection for nonpayment each month. The problem with issuing disconnect notices that do not lead to the disconnection of service is that the notices eventually destroy the efficacy of their “message” that “consequences will flow if you do not make a payment.” Indeed, in many ways, “over-noticing” customers may well lead to an *increase* in the number of ultimate service disconnections. Moreover, a series of shutoff notices that do *not* lead to such disconnections lead some customers to ignore notices that they should not. There is no way for a customer to tell the difference between a notice issued when the utility “really *means* it, this time” from one that is not issued under such circumstances.

The problem was addressed by the courts in an Ohio case involving Columbia Gas. In referring to a “flood of final notices” that was not followed up by an actual service disconnection for nonpayment, an Ohio federal judge referred to the company’s practice of “a wolf kind of notice which does not conform to the constitutional requirements that notice be truly informative and be given at a meaningful time.” Quite aside from the legal implications, the over-issuance of disconnect notices impedes the collection efficacy of these notices. National Grid should investigate its ability to better define the circumstances under which a service disconnection is likely to occur and restrict the issuance of disconnect notices to customers falling within those circumstances.

#7. Create a dedicated Low-Income Customer Assistance Unit.

An early identification program directed toward payment-troubled natural gas customers has as its fundamental objective not merely the recognition of a payment troubled customer, but the recognition of certain attributes of that customer useful for purposes of targeting an appropriate utility response. An early identification program builds on a customer segmentation analysis, which in turn, counsels that not all instances of nonpayment could, or should, be treated alike. A prompt and effective resolution of potential payment troubles depends upon appropriately

characterizing the nature of the difficulty, the ability of the customer to respond, and thus the appropriate utility response.

Accordingly, National Grid should create a dedicated staff unit specifically assigned the responsibility of addressing the customer service and bill payment needs of low-income customers. The dedicated staff unit should be trained as specialists in understanding and addressing the unique needs of low-income customers. These specialized staff can generate additional resources to be applied to low-income bills to the advantage of both the low-income customer base and the utility.

A dedicated low-income customer assistance unit (LICAU) would accomplish the following three objectives:

- Generating additional external resources in response to understanding the needs of, and opportunities available to, low-income customers;
- Reducing potential collection initiatives among low-income customers through an understanding of low-income circumstances; and
- Generating increased payment success through an understanding of low-income circumstances.

An LICAU would consist of the following action steps on the part of National Grid:

- Implementation of an “early identification program” (EIP). The efficacy of a Low-Income Customer Assistance Unit depends upon the ability of the utility to identify its low-income customers. Utilities frequently note that “we don’t now who our low-income customers are.” While that may be true, it *need* not be true. Responding to payment troubles of residential customers can be enhanced through a process of specialized training for customer service representatives. The representatives benefiting from such education include any individual that might have personal contact with a customer on behalf of the utility. Early identification involves more than noticing an arrears when it appears on a customer’s bill. It involves “hearing” indicators of financial distress on the part of the customer during normal day-to-day customer contacts.
- The second component of an Early Identification Program is to archive objective information in the customer service system indicating whether a customer received some type of low-income assistance. Receipt of a pledge from a LIHEAP agency or other energy assistance agency would indicate low-income status. Participation in the R-4 program would indicate low-income status. The customer service system should mark certain transactions as “high priority,” and move those high priority items to a “red flag” basis and to the top of the customer service screen. Through such a

process, the customer service representative can identify a customer as a low-income customer.

- Creation of a process of special “skills-based routing” for low-income customers is the third step. Having identified a low-income customer, the next step in implementing a LICAU would be the transfer of customers to staff having received specialized training in responding to low-income payment troubles. The specialized skills-based training would not only allow these dedicated staff to identify particular problems, and to respond in a culturally-appropriate way, but would involve knowing what assistance might be available to respond to the problem.
- Finally, charging LICAU staff with the responsibility of developing the National Grid presence within the network of low-income service providers, including both energy and non-energy assistance providers. The “best” way to respond to an inability to pay by a low-income customer is not necessarily through energy assistance. The LICAU staff should know when, where, how and through whom to access such assistance.

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APPENDIX D

**USING EARNED INCOME TAX CREDIT AS “ENERGY ASSISTANCE”
(PREPARED FOR TACOMA PUBLIC UTILITIES: JUNE 2009)**

Problem Statement #2

Low-income customers have insufficient resources to pay their utility bill. As a result, they incur arrears, experience collections, shoulder additional fees, and sometimes face the disconnection of service for nonpayment. This process of collection is expensive to both the utility and to the customer. The federal government provides assistance designed to help pull people out of poverty. In an overwhelming proportion of cases, those dollars of federal benefit are used by households to pay past-due bills. Much of this federal aid, however, is left on the table, being available but unclaimed.

Strategy

Increase energy assistance to moderately low-income “working poor.”

Objectives

1. Generate additional external financial resources specifically for payment-troubled customers.
2. Increase arrears retirement within low-income customer base at times of high arrears.

Tactics

1. Provide EITC outreach targeted specifically to payment-troubled customers.
2. Fund EITC free tax preparation clinics by local nonprofit agencies. Convene local business Task Force to generate matching funding for free tax preparation clinics. Designed to free EITC recipients from paid tax preparers and Refund Anticipation Loans (RALs).
3. Convene local business roundtable designed to increase EITC claims by 5% in Pierce County.
4. Add EITC outreach to existing utility processes. Add an EITC page to the TPU web site. Add EITC outreach message to “hold message” on TPU phone system.

**DISCUSSION IN SUPPORT OF USING EARNED INCOME TAX CREDIT (EITC)
AS “ENERGY ASSISTANCE”**

Little question exists but that low-income households frequently do not have sufficient household resources to consistently pay their utility bills in a full and timely fashion. Bill payment assistance resources are available to low-income customers through the federal Low-Income Home Energy Assistance Program (LIHEAP). LIHEAP, however, is constrained to paying only home energy bills. Moreover, LIHEAP is often budget constrained, thus limiting the time it is available, the population defined to be eligible for assistance, and the level of grants that are provided.

Tacoma Public Utilities can redress many of these shortcomings by LIHEAP by targeting specific programs to assist the working poor in Pierce County. There can be little question today but that the inability to pay for home utility bills, whether they be water/sewer, energy or trash, is increasingly reaching into the middle class.

RECOGNIZING THE INABILITY-TO-PAY IN THE MIDDLE CLASS

The Table below shows the basic family needs budget for households living in Tacoma for a variety of family sizes and types. The data considers the basic needs budget for households ranging from a two-person household (one parent/one-child: 1P1C) to a four-person household with two parents and two children (2P2C). The table shows how the budget required to meet basic family needs now reaches 250% of the Federal Poverty Level and more.

Moreover, the Table documents how the gross household income is not necessarily the best measure of the low-income status of a household. While, for example, a two-parent/two-child family has a basic family need budget of more than \$14,000 higher than a one-parent/one-child family, the ratio of income to the Federal Poverty Level for the larger household is actually somewhat less (248% vs. 269%).

Tacoma (WA) Basic Family Needs Budget (2007)										
By Size and Composition of Family (Parents (P) and Children (C))										
Family Type	Housing	Food	Childcare	Transportation	Health care	Other Necessities	Taxes	Monthly Total	Annual Total	Federal Poverty Level (2007)
1P1C	\$845	\$317	\$757	\$339	\$220	\$279	\$316	\$3,074	\$36,883	269%
1P2C	\$845	\$465	\$1,211	\$339	\$322	\$315	\$319	\$3,816	\$45,786	267%
2P1C	\$845	\$514	\$757	\$482	\$294	\$327	\$335	\$3,554	\$42,642	248%
2P2C	\$845	\$643	\$1,211	\$482	\$396	\$358	\$331	\$4,266	\$51,194	248%

Economic Policy Institute (May 2009)

THE IMPROPRIETY OF RATE DISCOUNTS FOR THE MIDDLE CLASS

Despite the inadequacy of income for these high-range poverty households in Tacoma to meet their basic family needs budget, it is not appropriate for Tacoma Public Utilities to offer rate discounts in response to their income shortfall. The general standard for energy affordability is 6% of income. If home energy bills are less than or equal to this benchmark, they are considered “affordable” from the utility’s perspective. Water/sewer bills are considered to be “affordable” if they fall within a range of 2% of household income.

Given these two benchmarks for affordability, home energy bills in Tacoma would be unaffordable only if they exceed a range of \$2,213 (1-parent/1-child) to nearly \$3,100 (2-parents/2-children). Water/sewer bills would be unaffordable only if they fell within a range of roughly \$750 (1-parent/1-child) to more than \$1,000 (2-parent/2-children). Typical TPU bills do not fall within these bill ranges, particularly for low-income households.

USING THE EARNED INCOME TAX CREDIT (EITC) AS UTILITY BILL PAYMENT ASSISTANCE

Despite the conclusion that TPU should not extend its rate discounts to serve the middle class, there are specific steps that TPU can and should take to respond to the lack of sufficient household resources to meet basic home energy needs.²² Even should the “unaffordability” relate primarily to housing costs, for example, those unaffordable household expenses may manifest themselves in unpaid utility bills as households make trade-offs on which bills they will pay in any given month.

Helping income-eligible households claim their entire federal Earned Income Tax Credit (EITC) is one initiative that TPU should pursue for its high range poverty households. The EITC is the nation’s primary anti-poverty program. In Pierce County (WA) alone:

- In 2006,²³ 46,704 households claimed a total of \$83,939,215 in Federal EITC credits (an average credit of \$1,797);
- In 2005, 45,907 households claimed a total of \$80,471,821 in Federal EITC credits (an average credit of \$1,753);
- In 2004, 45,630 households claimed a total of \$77,955,414 in Federal EITC credits (an average credit of \$1,708);
- In 2003, 43,977 households claimed a total of \$73,255,919 in Federal EITC credits (an average credit of \$1,666).

The EITC tends to serve more moderate income populations. According to the Center on Budget and Policy Priorities (CBPP), the Washington D.C.-based organization operating the national EITC Outreach Campaign, working families with children that have annual incomes below about

²² For ease of reference, this section refers to “energy” needs. By this reference, the term “energy needs” is intended to include all five utility services offered by TPU.

²³ 2006 is the last year for which data is available.

\$34,000 to \$41,000 (depending on marital status and the number of children in the family) generally are eligible for the EITC. Also, poor workers without children that have incomes below about \$13,000 (\$16,000 for a married couple) can receive a very small EITC.

THE BENEFITS TO TPU FROM THE EITC

EITC claims directly benefit TPU. According to a study of EITC recipients in New York, performed by faculty at Colgate University, 40% of the households reporting using their EITC to pay bills used those benefits to pay utility bills, a higher percentage than those using the EITC to pay for rent (31%), credit cards (28%), car payments (22%), and groceries (21%).²⁴ More than two-thirds of EITC recipients use their credits to pay for basic needs, while half use their credits to pay off a debt. Another study found that 65% of EITC recipients have a “making ends meet” use for their credits, with the payment of utility bills and rent the most important uses, followed by the purchase of food and clothing.²⁵

Moreover, an Edison Electric Institute (EEI) staffperson reported that a 1994 study of EITC recipients in New Jersey found that one-third of all EITC recipients used their EITC to pay past-due bills, and one-quarter of all recipients used their EITC benefits to pay past-due *utility* bills.²⁶

One benefit of the EITC is that it can reach beyond merely serving the objective of helping low-income customers pay their home utility bills. One study in San Antonio, for example, found that every \$1 in EITC benefits received in that city generated \$1.58 in local economic activity. The San Antonio study found further that every \$37,000 in local economic activity would generate one additional permanent job. According to the Brooking Institute, the EITC generates a concentrated infusion into local economies, in many cities, more than \$1.0 million per square mile. One study in Cuyahoga County (OH) found that the EITC benefits claimed in the early months of 2003 exceeded all the wages and benefits paid in the local hotel industry in that quarter.

ACTION STEPS BY TACOMA PUBLIC UTILITIES REGARDING EITC CLAIMS

TPU can generate substantial new “energy assistance” benefits for its high-range poverty households by supporting efforts to promote the Earned Income Tax Credit. The view frequently articulated is that few jurisdictions exist that cannot, with a reasonable amount of effort, increase the penetration of income-eligible households claiming their EITC by at least five percent. In Pierce County, alone, a five percent (5%) increase in the number of EITC claims would result in more than 2,300 households newly receiving the EITC, generating an additional \$4.2 million in benefits flowing to Pierce County.

Given these benefits, TPU should take the following action steps:

²⁴ Simpson, et al. (October 2006). The Efficacy of the EITC: Evidence from Madison County (New York), Colgate University Department of Economics.

²⁵ Timothy Smeeding, et al. (December 2000). The EITC: Expectation, Knowledge, Use and Economic and Social Mobility,” National Tax Journal, 53(4): 1187, 1198. Smeeding is with the Center for Policy Research, The Maxwell School, Syracuse University (NY).

²⁶ Since this data is based on generic EITC outreach directed to the population as a whole, should outreach be focused on payment-troubled customers, it would be expected that these percentages would increase.

- TPU should direct targeted EITC outreach to customers in arrears. Indeed, combining the “Early Identification Program” recommended elsewhere in this report, TPU could direct EITC outreach to payment-troubled customers that the utility has previously identified as being low-income.
- TPU should fund outreach efforts targeted toward populations that under-utilize the EITC. Rather than doing generic outreach campaigns, TPU could help fund “gap-filling” outreach. According to the national EITC Outreach Campaign, women fill a disproportionate number of part-time and low-wage jobs. Newly employed women, in particular, are less likely to file for EITC benefits. Moreover, Hispanic parents are much less likely to file for EITC benefits. An Urban Institute study found that only 32% of low-income Hispanic parents knew about the EITC, and only 20% of such parents claimed their EITC. TPU should direct funding to specific community-based organizations that can document their ability to reach these under-served populations.
- TPU should refer payment-troubled customers to free tax preparation clinics (called Volunteer Income Tax Assistance, or “VITA,” sites). Customers who contact the utility during the tax preparation season who have received energy assistance in the past, are currently receiving the low-income discount, or have otherwise been identified as “low-income” through the proposed Early Identification Program, can be directed toward VITA sites in addition to being directed toward energy assistance agencies. Information on VITA sites can be included with shutoff notices, with written confirmation of payment plan terms, or in other collection initiatives. According to EITC outreach specialists, the primary problem with VITA sites is that not enough people use them. Most people do not know about VITA sites; those that do often find it difficult to find them. Unfortunately, the local IRS telephone assistance lines through which people might obtain information on the location of VITA sites are often busy.
- TPU should add EITC outreach to its existing contacts with its customers. Adding an EITC information message during the call-center hold time would be helpful. Adding EITC outreach materials to the TPU web site would reach a different population. Including EITC outreach with shutoff notices would provide an opportunity for payment-troubled customers to seek additional financial resources.
- In addition to EITC outreach efforts, TPU should financially support the provision of free tax preparation clinics designed to help income-eligible households claim their EITC. In Pierce County, of the 46,704 low-income households claiming the EITC in 2006, 28,241 (61%) used paid tax preparers, while 13,248 (29%) received “tax anticipation loans.” In these circumstances, the cost of the tax preparation, according to one Brookings Institution study, is \$150, with an additional cost of \$130 for the Refund Anticipation Loan (RAL), \$280 total. The Brookings Institution found that low-income households receiving such Refund Anticipation Loans pay an annual percentage rate of 171% in interest. These two processes (i.e., the use of paid tax preparers and the use of RALs) pulled \$6.0 million out of the low-income community in Tacoma in 2006 alone. Efforts providing on-site mobile free tax preparation in Pierce County have been extraordinarily successful through SSOS.

Finally, while this report recommends specific action steps for TPU to take as the local utility, not all steps need be funded and advanced by TPU. Increasing the number of EITC claims in Pierce County would benefit the community as a whole, including the business community. Using the 1.58x multiplier effect described above, and the previous research documenting that each \$37,000 in benefits supports one fulltime job, a 5% increase in EITC claims in Pierce County would generate \$6.7 million in economic activity in Tacoma and 180 new fulltime jobs. Accordingly, TPU should convene a business roundtable in Tacoma, along with appropriate leadership within the nonprofit community, to develop and implement plans specific to Pierce County for EITC outreach above and beyond that outreach that TPU directs to its own low-income, payment-troubled population.

