

Appendix C: Avoided Natural Gas Cost Results

Table of Exhibits

Exhibit C-1. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Southern New England (SNE) Assuming Some Avoidable Retail Margin (2013\$/MMBtu)	C-3
Exhibit C-2. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Southern New England (SNE) Assuming No Avoidable Retail Margin (2013\$/MMBtu).....	C-4
Exhibit C-3. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Northern New England (NNE) Assuming Some Avoidable Retail Margin (2013\$/MMBtu).....	C-5
Exhibit C-4. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Northern New England (NNE) Assuming No Avoidable Retail Margin (2013\$/MMBtu)	C-6
Exhibit C-5. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Vermont (VT) Assuming Some Avoidable Retail Margin (2013\$/MMBtu).....	C-7
Exhibit C-6. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Vermont (VT) Assuming No Avoidable Retail Margin (2013\$/MMBtu)	C-8
Exhibit C-7. Connecticut – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)	C-9
Exhibit C-8. Connecticut – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu) ..	C-10
Exhibit C-9. Massachusetts – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)	C-11
Exhibit C-10. Massachusetts – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)..	C-12
Exhibit C-11. Maine – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)	C-13
Exhibit C-12. Maine – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)	C-14
Exhibit C-13. New Hampshire – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)	C-15
Exhibit C-14. New Hampshire – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)	C-16
Exhibit C-15. Rhode Island – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)	C-17
Exhibit C-16. Rhode Island – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)	C-18

Exhibit C-17. Vermont – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)C-19

Exhibit C-18. Vermont – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)C-20

Exhibit C-19. New England – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)C-21

Exhibit C-20. New England – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)C-22



Exhibit C-1. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Southern New England (SNE) Assuming Some Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	5.32	5.78	6.90	6.73	5.51	6.35	6.05	6.41
2014	5.53	5.98	7.10	6.93	5.72	6.56	6.26	6.61
2015	5.54	5.98	7.09	6.93	5.72	6.56	6.26	6.61
2016	5.61	6.08	7.21	7.03	5.81	6.66	6.36	6.71
2017	5.71	6.34	7.51	7.30	5.96	6.91	6.57	6.95
2018	6.02	6.62	7.79	7.58	6.26	7.20	6.86	7.24
2019	6.46	6.95	8.08	7.90	6.66	7.53	7.22	7.58
2020	6.73	7.20	8.33	8.15	6.93	7.78	7.48	7.83
2021	6.87	7.36	8.48	8.30	7.07	7.93	7.62	7.98
2022	7.07	7.55	8.67	8.50	7.27	8.12	7.82	8.18
2023	7.20	7.67	8.80	8.62	7.40	8.25	7.95	8.30
2024	7.33	7.82	8.95	8.77	7.53	8.39	8.08	8.44
2025	7.52	7.99	9.12	8.94	7.72	8.57	8.27	8.62
2026	7.64	8.13	9.25	9.07	7.84	8.70	8.39	8.75
2027	7.76	8.25	9.37	9.19	7.96	8.82	8.51	8.87
2028	7.86	8.34	9.46	9.29	8.06	8.91	8.61	8.97
2029	8.01	8.49	9.61	9.44	8.22	9.06	8.76	9.12
2030	8.17	8.65	9.76	9.60	8.38	9.21	8.92	9.28
2031	8.33	8.81	9.92	9.76	8.54	9.37	9.08	9.44
2032	8.50	8.97	10.07	9.92	8.70	9.53	9.24	9.60
2033	8.67	9.13	10.23	10.08	8.87	9.69	9.40	9.76
2034	8.84	9.30	10.40	10.24	9.04	9.85	9.57	9.92
2035	9.01	9.47	10.56	10.41	9.22	10.02	9.74	10.09
2036	9.19	9.65	10.73	10.58	9.39	10.19	9.91	10.26
2037	9.38	9.82	10.90	10.75	9.57	10.36	10.09	10.44
2038	9.56	10.01	11.07	10.93	9.76	10.54	10.27	10.62
2039	9.75	10.19	11.25	11.11	9.95	10.72	10.45	10.80
2040	9.94	10.38	11.43	11.29	10.14	10.90	10.64	10.98
2041	10.14	10.57	11.61	11.47	10.33	11.09	10.82	11.17
2042	10.34	10.76	11.79	11.66	10.53	11.27	11.02	11.35
2043	10.55	10.96	11.98	11.85	10.73	11.46	11.21	11.55
Levelized (2014-2023) (a)	6.25	6.75	7.88	7.70	6.46	7.32	7.02	7.38
Levelized (2014-2028)	6.67	7.17	8.30	8.12	6.88	7.74	7.44	7.80
Levelized (2014-2024) (b)	7.80	8.28	9.38	9.22	8.01	8.83	8.54	8.90

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)



Exhibit C-2. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Southern New England (SNE) Assuming No Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	4.72	5.18	5.33	5.21	4.89	5.18	5.05	5.14
2014	4.93	5.38	5.53	5.41	5.10	5.39	5.26	5.34
2015	4.94	5.38	5.52	5.41	5.10	5.39	5.26	5.34
2016	5.01	5.48	5.64	5.51	5.19	5.49	5.36	5.44
2017	5.11	5.74	5.94	5.78	5.34	5.74	5.57	5.68
2018	5.42	6.02	6.22	6.06	5.64	6.03	5.86	5.97
2019	5.86	6.35	6.51	6.38	6.04	6.36	6.22	6.31
2020	6.13	6.60	6.76	6.63	6.31	6.61	6.48	6.56
2021	6.27	6.76	6.91	6.78	6.45	6.76	6.62	6.71
2022	6.47	6.95	7.10	6.98	6.65	6.95	6.82	6.91
2023	6.60	7.07	7.23	7.10	6.78	7.08	6.95	7.03
2024	6.73	7.22	7.38	7.25	6.91	7.22	7.08	7.17
2025	6.92	7.39	7.55	7.42	7.10	7.40	7.27	7.35
2026	7.04	7.53	7.68	7.55	7.22	7.53	7.39	7.48
2027	7.16	7.65	7.80	7.67	7.34	7.65	7.51	7.60
2028	7.26	7.74	7.89	7.77	7.44	7.74	7.61	7.70
2029	7.42	7.89	8.04	7.92	7.60	7.89	7.77	7.85
2030	7.58	8.05	8.20	8.08	7.76	8.05	7.92	8.01
2031	7.74	8.21	8.36	8.24	7.92	8.21	8.08	8.17
2032	7.91	8.38	8.52	8.41	8.09	8.37	8.25	8.34
2033	8.08	8.55	8.69	8.57	8.26	8.54	8.42	8.51
2034	8.26	8.72	8.85	8.75	8.43	8.71	8.59	8.68
2035	8.43	8.89	9.03	8.92	8.61	8.88	8.76	8.85
2036	8.62	9.07	9.20	9.10	8.79	9.06	8.94	9.03
2037	8.80	9.25	9.38	9.28	8.98	9.24	9.12	9.21
2038	8.99	9.43	9.56	9.46	9.16	9.42	9.31	9.40
2039	9.19	9.62	9.75	9.65	9.36	9.61	9.50	9.59
2040	9.39	9.82	9.94	9.84	9.55	9.80	9.69	9.78
2041	9.59	10.01	10.13	10.04	9.76	9.99	9.89	9.97
2042	9.80	10.21	10.33	10.24	9.96	10.19	10.09	10.18
2043	10.01	10.42	10.53	10.44	10.17	10.39	10.30	10.38
Levelized (2014-2023) (a)	5.65	6.15	6.31	6.18	5.84	6.16	6.02	6.11
Levelized (2014-2028)	6.08	6.57	6.73	6.60	6.26	6.58	6.44	6.53
Levelized (2014-2043) (b)	7.21	7.69	7.84	7.72	7.39	7.69	7.56	7.65

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)

Exhibit C-3. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Northern New England (NNE) Assuming Some Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	5.21	5.81	6.83	6.63	5.38	6.03	5.78	5.92
2014	5.07	5.79	6.84	6.61	5.29	6.24	5.99	6.12
2015	5.14	6.49	7.75	7.35	5.59	6.24	5.99	6.12
2016	5.50	6.12	7.15	6.94	5.68	6.34	6.09	6.22
2017	5.94	6.38	7.34	7.19	6.05	6.59	6.30	6.46
2018	6.07	6.81	7.87	7.64	6.30	6.88	6.59	6.75
2019	6.34	8.19	9.61	9.08	6.98	7.21	6.95	7.09
2020	6.60	8.44	9.86	9.33	7.23	7.46	7.21	7.34
2021	6.73	8.61	10.04	9.50	7.38	7.61	7.35	7.49
2022	6.94	8.83	10.26	9.72	7.59	7.80	7.55	7.69
2023	7.06	8.96	10.39	9.85	7.71	7.93	7.68	7.81
2024	7.19	9.12	10.57	10.02	7.86	8.07	7.81	7.95
2025	7.37	9.31	10.75	10.20	8.04	8.25	8.00	8.13
2026	7.49	9.44	10.90	10.34	8.16	8.38	8.12	8.26
2027	7.62	9.58	11.03	10.48	8.30	8.50	8.24	8.38
2028	7.71	9.67	11.13	10.57	8.39	8.59	8.34	8.48
2029	7.86	9.83	11.29	10.73	8.54	8.75	8.50	8.63
2030	8.01	9.99	11.46	10.90	8.70	8.90	8.65	8.79
2031	8.17	10.16	11.63	11.06	8.86	9.06	8.81	8.95
2032	8.33	10.33	11.80	11.23	9.03	9.22	8.97	9.11
2033	8.50	10.50	11.98	11.40	9.20	9.38	9.14	9.27
2034	8.67	10.68	12.15	11.58	9.37	9.55	9.31	9.44
2035	8.84	10.86	12.33	11.76	9.54	9.71	9.48	9.61
2036	9.01	11.04	12.52	11.94	9.72	9.89	9.65	9.79
2037	9.19	11.23	12.70	12.12	9.90	10.06	9.83	9.96
2038	9.37	11.41	12.89	12.30	10.08	10.24	10.01	10.14
2039	9.56	11.60	13.08	12.49	10.27	10.42	10.19	10.33
2040	9.75	11.80	13.27	12.68	10.46	10.60	10.38	10.51
2041	9.94	12.00	13.47	12.88	10.65	10.79	10.57	10.70
2042	10.14	12.20	13.67	13.08	10.85	10.98	10.77	10.90
2043	10.34	12.40	13.87	13.28	11.05	11.17	10.97	11.09
Levelized (2014-2023) (a)	6.11	7.41	8.66	8.28	6.54	7.01	6.75	6.89
Levelized (2014-2028)	6.53	8.04	9.35	8.91	7.04	7.43	7.17	7.31
Levelized (2014-2024) (b)	7.64	9.38	10.76	10.26	8.24	8.53	8.28	8.41

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)



Exhibit C-4. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Northern New England (NNE) Assuming No Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	4.70	5.30	5.50	5.34	4.92	5.31	5.14	5.25
2014	4.56	5.28	5.51	5.32	4.83	5.28	5.08	5.21
2015	4.63	5.98	6.42	6.06	5.13	5.99	5.61	5.85
2016	4.99	5.61	5.82	5.65	5.22	5.62	5.45	5.56
2017	5.43	5.87	6.01	5.90	5.59	5.87	5.75	5.83
2018	5.56	6.30	6.54	6.35	5.84	6.31	6.10	6.23
2019	5.83	7.68	8.28	7.79	6.52	7.70	7.18	7.51
2020	6.09	7.93	8.53	8.04	6.77	7.95	7.43	7.76
2021	6.22	8.10	8.71	8.21	6.92	8.12	7.60	7.93
2022	6.43	8.32	8.93	8.43	7.13	8.33	7.81	8.14
2023	6.55	8.45	9.06	8.56	7.25	8.46	7.93	8.27
2024	6.68	8.61	9.24	8.73	7.40	8.63	8.09	8.43
2025	6.86	8.80	9.42	8.91	7.58	8.81	8.27	8.61
2026	6.98	8.93	9.57	9.05	7.70	8.95	8.40	8.75
2027	7.11	9.07	9.70	9.19	7.84	9.08	8.54	8.89
2028	7.20	9.16	9.80	9.28	7.93	9.18	8.63	8.98
2029	7.35	9.32	9.97	9.44	8.09	9.34	8.79	9.14
2030	7.51	9.49	10.14	9.61	8.25	9.51	8.95	9.31
2031	7.67	9.66	10.31	9.78	8.41	9.68	9.12	9.47
2032	7.83	9.83	10.48	9.95	8.58	9.85	9.29	9.65
2033	8.00	10.00	10.66	10.13	8.75	10.02	9.46	9.82
2034	8.17	10.18	10.84	10.31	8.92	10.20	9.64	10.00
2035	8.35	10.36	11.03	10.49	9.09	10.38	9.82	10.18
2036	8.52	10.55	11.21	10.67	9.27	10.57	10.00	10.36
2037	8.71	10.73	11.41	10.86	9.46	10.75	10.18	10.55
2038	8.89	10.93	11.60	11.05	9.64	10.94	10.37	10.74
2039	9.08	11.12	11.80	11.25	9.84	11.14	10.57	10.93
2040	9.28	11.32	12.00	11.45	10.03	11.34	10.76	11.13
2041	9.47	11.52	12.20	11.65	10.23	11.54	10.96	11.33
2042	9.68	11.72	12.41	11.86	10.43	11.74	11.16	11.53
2043	9.88	11.93	12.62	12.07	10.64	11.95	11.37	11.74
Levelized (2014-2023) (a)	5.60	6.91	7.33	6.99	6.09	6.92	6.55	6.79
Levelized (2014-2028)	6.03	7.53	8.02	7.62	6.58	7.54	7.12	7.39
Levelized (2014-2043) (b)	7.14	8.88	9.45	8.99	7.79	8.89	8.41	8.72

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)

Exhibit C-5. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Vermont (VT) Assuming Some Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	5.59	6.10	7.28	7.10	5.31	5.76	5.58	6.19
2014	5.68	6.19	7.36	7.19	5.40	5.84	5.66	6.27
2015	5.75	6.34	7.55	7.35	5.50	6.00	5.79	6.42
2016	5.81	6.41	7.62	7.42	5.56	6.07	5.86	6.49
2017	6.11	6.71	7.92	7.72	5.86	6.37	6.16	6.79
2018	5.85	6.39	7.58	7.40	5.58	6.05	5.86	6.48
2019	6.65	7.27	8.48	8.28	6.41	6.92	6.71	7.34
2020	6.93	7.53	8.73	8.53	6.68	7.18	6.97	7.60
2021	7.11	7.73	8.95	8.74	6.87	7.39	7.18	7.81
2022	7.37	7.98	9.19	8.99	7.13	7.63	7.42	8.05
2023	7.54	8.14	9.34	9.14	7.29	7.79	7.58	8.21
2024	7.68	8.30	9.51	9.31	7.44	7.95	7.74	8.37
2025	7.86	8.48	9.68	9.48	7.62	8.13	7.92	8.55
2026	8.03	8.64	9.85	9.65	7.79	8.30	8.09	8.72
2027	8.18	8.79	10.00	9.80	7.94	8.44	8.23	8.86
2028	8.28	8.89	10.09	9.89	8.03	8.54	8.33	8.96
2029	8.47	9.07	10.27	10.06	8.21	8.72	8.52	9.14
2030	8.65	9.26	10.45	10.25	8.40	8.91	8.70	9.33
2031	8.85	9.45	10.63	10.43	8.59	9.10	8.89	9.52
2032	9.04	9.64	10.82	10.62	8.78	9.29	9.09	9.71
2033	9.24	9.83	11.01	10.81	8.98	9.49	9.28	9.90
2034	9.45	10.03	11.20	11.00	9.19	9.69	9.49	10.10
2035	9.66	10.24	11.40	11.20	9.40	9.90	9.69	10.31
2036	9.87	10.44	11.60	11.40	9.61	10.11	9.91	10.51
2037	10.09	10.66	11.80	11.60	9.83	10.32	10.12	10.73
2038	10.31	10.87	12.01	11.81	10.06	10.54	10.34	10.94
2039	10.54	11.09	12.22	12.02	10.28	10.76	10.57	11.16
2040	10.77	11.32	12.43	12.24	10.52	10.99	10.80	11.39
2041	11.01	11.55	12.65	12.46	10.76	11.23	11.04	11.62
2042	11.26	11.78	12.87	12.68	11.00	11.47	11.28	11.85
2043	11.51	12.02	13.10	12.91	11.26	11.71	11.52	12.09
Levelized (2014-2023) (a)	6.46	7.05	8.25	8.05	6.20	6.70	6.50	7.12
Levelized (2014-2028)	6.94	7.53	8.74	8.54	6.68	7.19	6.98	7.61
Levelized (2014-2024) (b)	8.25	8.84	10.02	9.81	8.00	8.49	8.29	8.91

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)



Exhibit C-6. Avoided Cost of Natural Gas Delivered to Retail Customers by End Use for Vermont (VT) Assuming No Avoidable Retail Margin (2013\$/MMBtu)

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
	Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
2013	4.97	5.48	5.65	5.51	5.16	5.49	5.35	5.44
2014	5.06	5.57	5.73	5.60	5.25	5.57	5.43	5.52
2015	5.13	5.72	5.92	5.76	5.35	5.73	5.56	5.67
2016	5.19	5.79	5.99	5.83	5.41	5.80	5.63	5.74
2017	5.49	6.09	6.29	6.13	5.71	6.10	5.93	6.04
2018	5.23	5.77	5.95	5.81	5.43	5.78	5.63	5.73
2019	6.03	6.65	6.85	6.69	6.26	6.65	6.48	6.59
2020	6.31	6.91	7.10	6.94	6.53	6.91	6.74	6.85
2021	6.49	7.11	7.32	7.15	6.72	7.12	6.95	7.06
2022	6.75	7.36	7.56	7.40	6.98	7.36	7.19	7.30
2023	6.92	7.52	7.71	7.55	7.14	7.52	7.35	7.46
2024	7.06	7.68	7.88	7.72	7.29	7.68	7.51	7.62
2025	7.24	7.86	8.05	7.89	7.47	7.86	7.69	7.80
2026	7.41	8.02	8.22	8.06	7.64	8.03	7.86	7.97
2027	7.56	8.17	8.37	8.21	7.79	8.17	8.00	8.11
2028	7.66	8.27	8.46	8.30	7.88	8.27	8.10	8.21
2029	7.85	8.45	8.64	8.48	8.06	8.45	8.28	8.39
2030	8.04	8.64	8.82	8.67	8.25	8.64	8.47	8.58
2031	8.23	8.83	9.01	8.85	8.44	8.83	8.66	8.77
2032	8.43	9.02	9.21	9.05	8.64	9.02	8.86	8.96
2033	8.63	9.22	9.40	9.24	8.84	9.22	9.06	9.16
2034	8.84	9.43	9.60	9.45	9.05	9.43	9.26	9.37
2035	9.06	9.63	9.81	9.65	9.26	9.63	9.47	9.58
2036	9.28	9.85	10.02	9.86	9.47	9.85	9.68	9.79
2037	9.50	10.06	10.23	10.08	9.69	10.06	9.90	10.01
2038	9.73	10.28	10.45	10.30	9.92	10.28	10.13	10.23
2039	9.97	10.51	10.67	10.52	10.15	10.51	10.35	10.46
2040	10.21	10.74	10.90	10.75	10.39	10.74	10.59	10.69
2041	10.45	10.98	11.13	10.99	10.63	10.98	10.83	10.93
2042	10.71	11.22	11.37	11.23	10.88	11.22	11.07	11.17
2043	10.97	11.47	11.61	11.47	11.13	11.47	11.32	11.42
Levelized (2014-2023) (a)	5.83	6.42	6.62	6.46	6.05	6.43	6.26	6.37
Levelized (2014-2028)	6.32	6.91	7.11	6.95	6.54	6.92	6.75	6.86
Levelized (2014-2043) (b)	7.64	8.23	8.41	8.25	7.85	8.23	8.06	8.17

(a) Real (constant \$) riskless annual rate of return: 1.36%

(b) Values from 2029-2043 extrapolated from Compound Annual Growth Rate (2019-2028)

Exhibit C-7. Connecticut – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
	1	2	3	4	5	6	7	8	9
2013									
2014	0.04	1.64	2.70	3.04	2.76	2.03	2.71	2.41	2.60
2015	0.05	4.85	7.92	8.92	8.11	5.99	7.95	7.09	7.64
2016	0.08	4.89	7.95	8.94	8.14	6.03	7.98	7.12	7.67
2017	0.08	2.04	3.14	3.49	3.20	2.45	3.15	2.84	3.04
2018	0.08	1.46	2.17	2.41	2.22	1.72	2.18	1.98	2.11
2019	0.08	0.77	1.08	1.19	1.10	0.88	1.09	1.00	1.05
2020	0.08	0.49	0.69	0.76	0.70	0.57	0.69	0.64	0.67
2021	0.08	0.37	0.52	0.57	0.53	0.42	0.52	0.48	0.50
2022	0.08	0.24	0.34	0.38	0.35	0.28	0.34	0.32	0.33
2023	0.08	0.12	0.17	0.19	0.17	0.14	0.17	0.16	0.17
2024	0.08								
2025	0.08								
2026	0.08								
2027	0.08								
2028	0.08								
2029	0.08								
2030	0.08								
2031	0.08								
2032	0.08								
2033	0.08								
2034	0.08								
2035	0.08								
2036	0.08								
2037	0.08								
2038	0.08								
2039	0.08								
2040	0.08								
2041	0.08								
2042	0.08								
2043	0.08								
Levelized (2014-2023)	0.07	1.74	2.75	3.08	2.81	2.11	2.76	2.48	2.66
Levelized (2014-2028)	0.07	1.20	1.90	2.12	1.94	1.46	1.90	1.71	1.83
Levelized (2014-2043)	0.07	0.66	1.04	1.17	1.07	0.80	1.05	0.94	1.01

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations

2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter

5 Weighted average per Percentage of residential load columns 2 to 4

6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter

8 Weighted average per Percentage of commercial load columns 6 and 7

9 Weighted average per Percentage of residential and commercial load columns 5 and 8



Exhibit C-8. Connecticut – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL END USES
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014									
2015	0.04	1.25	2.05	2.31	2.10	1.55	2.06	1.83	1.97
2016	0.05	4.45	7.24	8.14	7.41	5.49	7.26	6.49	6.98
2017	0.08	1.87	2.88	3.20	2.94	2.25	2.89	2.61	2.78
2018	0.08	1.48	2.21	2.45	2.26	1.75	2.22	2.01	2.14
2019	0.08	0.78	1.10	1.21	1.12	0.90	1.10	1.01	1.07
2020	0.08	0.50	0.70	0.77	0.72	0.57	0.70	0.65	0.68
2021	0.08	0.37	0.53	0.58	0.53	0.43	0.53	0.48	0.51
2022	0.08	0.25	0.35	0.38	0.35	0.28	0.35	0.32	0.34
2023	0.08	0.12	0.17	0.19	0.18	0.14	0.17	0.16	0.17
2024	0.08								
2025	0.08								
2026	0.08								
2027	0.08								
2028	0.08								
2029	0.08								
2030	0.08								
2031	0.08								
2032	0.08								
2033	0.08								
2034	0.08								
2035	0.08								
2036	0.08								
2037	0.08								
2038	0.08								
2039	0.08								
2040	0.08								
2041	0.08								
2042	0.08								
2043	0.08								
Levelized (2014-2023)	0.06	1.14	1.78	1.99	1.82	1.38	1.79	1.61	1.72
Levelized (2014-2028)	0.07	0.79	1.23	1.37	1.25	0.95	1.23	1.11	1.19
Levelized (2014-2043)	0.07	0.43	0.68	0.75	0.69	0.52	0.68	0.61	0.65

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-9. Massachusetts – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		2	3	4	5	6	7	8	
2013									
2014	0.09	2.86	4.71	5.31	4.82	3.55	4.72	4.21	4.54
2015	0.12	8.48	13.84	15.58	14.17	10.47	13.89	12.39	13.34
2016	0.17	8.53	13.87	15.60	14.19	10.51	13.91	12.43	13.37
2017	0.17	3.59	5.51	6.13	5.62	4.30	5.52	4.99	5.33
2018	0.17	2.57	3.83	4.24	3.91	3.04	3.84	3.49	3.72
2019	0.17	1.36	1.92	2.10	1.95	1.56	1.92	1.76	1.86
2020	0.17	0.87	1.23	1.34	1.25	1.00	1.23	1.13	1.19
2021	0.17	0.65	0.92	1.01	0.94	0.75	0.92	0.85	0.90
2022	0.17	0.43	0.61	0.67	0.62	0.50	0.62	0.57	0.60
2023	0.17	0.22	0.31	0.34	0.31	0.25	0.31	0.28	0.30
2024	0.17								
2025	0.17								
2026	0.17								
2027	0.17								
2028	0.17								
2029	0.17								
2030	0.17								
2031	0.17								
2032	0.17								
2033	0.17								
2034	0.17								
2035	0.17								
2036	0.17								
2037	0.17								
2038	0.17								
2039	0.17								
2040	0.17								
2041	0.17								
2042	0.17								
2043	0.17								
Levelized (2014-2023)	0.16	3.04	4.82	5.39	4.92	3.70	4.83	4.34	4.65
Levelized (2014-2028)	0.16	2.10	3.32	3.72	3.39	2.55	3.33	2.99	3.20
Levelized (2014-2043)	0.17	1.15	1.83	2.05	1.87	1.40	1.83	1.65	1.76

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations

2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter

5 Weighted average per Percentage of residential load columns 2 to 4

6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter

8 Weighted average per Percentage of commercial load columns 6 and 7

9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-10. Massachusetts – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014									
2015	0.09	2.19	3.58	4.03	3.66	2.71	3.59	3.21	3.45
2016	0.12	7.76	12.63	14.20	12.92	9.57	12.67	11.31	12.17
2017	0.17	3.29	5.05	5.62	5.16	3.95	5.07	4.58	4.89
2018	0.17	2.61	3.90	4.31	3.98	3.09	3.91	3.55	3.78
2019	0.17	1.38	1.95	2.13	1.98	1.59	1.95	1.79	1.89
2020	0.17	0.88	1.24	1.36	1.27	1.02	1.25	1.15	1.21
2021	0.17	0.66	0.94	1.02	0.95	0.76	0.94	0.86	0.91
2022	0.17	0.44	0.62	0.68	0.63	0.51	0.62	0.57	0.61
2023	0.17	0.22	0.31	0.34	0.32	0.26	0.31	0.29	0.30
2024	0.17								
2025	0.17								
2026	0.17								
2027	0.17								
2028	0.17								
2029	0.17								
2030	0.17								
2031	0.17								
2032	0.17								
2033	0.17								
2034	0.17								
2035	0.17								
2036	0.17								
2037	0.17								
2038	0.17								
2039	0.17								
2040	0.17								
2041	0.17								
2042	0.17								
2043	0.17								
Levelized (2014-2023)	0.14	2.01	3.12	3.49	3.19	2.42	3.13	2.82	3.02
Levelized (2014-2028)	0.15	1.38	2.15	2.40	2.20	1.67	2.16	1.94	2.08
Levelized (2014-2043)	0.16	0.76	1.18	1.32	1.21	0.92	1.19	1.07	1.15

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-11. Maine – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
	1	2	3	4	5	6	7	8	9
2013									
2014	0.01	0.59	1.01	1.14	1.03	0.75	1.01	0.90	0.97
2015	0.02	1.76	2.95	3.34	3.03	2.20	2.96	2.63	2.84
2016	0.02	1.77	2.97	3.36	3.04	2.22	2.98	2.65	2.86
2017	0.02	0.74	1.17	1.31	1.20	0.90	1.17	1.05	1.13
2018	0.02	0.53	0.81	0.90	0.83	0.63	0.81	0.74	0.79
2019	0.02	0.28	0.41	0.45	0.41	0.33	0.41	0.37	0.39
2020	0.02	0.18	0.26	0.28	0.26	0.21	0.26	0.24	0.25
2021	0.02	0.13	0.19	0.21	0.20	0.15	0.19	0.18	0.19
2022	0.02	0.09	0.13	0.14	0.13	0.10	0.13	0.12	0.12
2023	0.02	0.04	0.06	0.07	0.06	0.05	0.06	0.06	0.06
2024	0.02								
2025	0.02								
2026	0.02								
2027	0.02								
2028	0.02								
2029	0.02								
2030	0.02								
2031	0.02								
2032	0.02								
2033	0.02								
2034	0.02								
2035	0.02								
2036	0.02								
2037	0.02								
2038	0.02								
2039	0.02								
2040	0.02								
2041	0.02								
2042	0.02								
2043	0.02								
Levelized (2014-2023)	0.02	0.63	1.03	1.16	1.05	0.78	1.03	0.92	0.99
Levelized (2014-2028)	0.02	0.43	0.71	0.80	0.72	0.54	0.71	0.63	0.68
Levelized (2014-2043)	0.02	0.24	0.39	0.44	0.40	0.29	0.39	0.35	0.38

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-12. Maine – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014									
2015	0.01	0.45	0.76	0.86	0.78	0.57	0.77	0.68	0.74
2016	0.02	1.61	2.70	3.06	2.77	2.02	2.71	2.41	2.60
2017	0.02	0.68	1.07	1.20	1.10	0.83	1.08	0.97	1.04
2018	0.02	0.54	0.83	0.92	0.84	0.65	0.83	0.75	0.80
2019	0.02	0.28	0.41	0.45	0.42	0.33	0.41	0.38	0.40
2020	0.02	0.18	0.26	0.29	0.27	0.21	0.26	0.24	0.25
2021	0.02	0.13	0.20	0.22	0.20	0.16	0.20	0.18	0.19
2022	0.02	0.09	0.13	0.14	0.13	0.10	0.13	0.12	0.13
2023	0.02	0.04	0.06	0.07	0.07	0.05	0.06	0.06	0.06
2024	0.02								
2025	0.02								
2026	0.02								
2027	0.02								
2028	0.02								
2029	0.02								
2030	0.02								
2031	0.02								
2032	0.02								
2033	0.02								
2034	0.02								
2035	0.02								
2036	0.02								
2037	0.02								
2038	0.02								
2039	0.02								
2040	0.02								
2041	0.02								
2042	0.02								
2043	0.02								
Levelized (2014-2023)	0.02	0.41	0.66	0.75	0.68	0.51	0.67	0.60	0.64
Levelized (2014-2028)	0.02	0.29	0.46	0.51	0.47	0.35	0.46	0.41	0.44
Levelized (2014-2043)	0.02	0.16	0.25	0.28	0.26	0.19	0.25	0.23	0.24

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-13. New Hampshire – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014	0.01	0.59	0.99	1.13	1.02	0.74	1.00	0.89	0.96
2015	0.01	1.75	2.91	3.29	2.98	2.18	2.92	2.60	2.80
2016	0.01	1.76	2.92	3.30	3.00	2.19	2.93	2.61	2.82
2017	0.01	0.74	1.15	1.29	1.18	0.89	1.16	1.04	1.12
2018	0.01	0.53	0.80	0.89	0.82	0.63	0.80	0.73	0.78
2019	0.01	0.28	0.40	0.44	0.41	0.33	0.40	0.37	0.39
2020	0.01	0.18	0.26	0.28	0.26	0.21	0.26	0.24	0.25
2021	0.01	0.13	0.19	0.21	0.20	0.16	0.19	0.18	0.19
2022	0.01	0.09	0.13	0.14	0.13	0.10	0.13	0.12	0.12
2023	0.01	0.04	0.06	0.07	0.07	0.05	0.06	0.06	0.06
2024	0.01								
2025	0.01								
2026	0.01								
2027	0.01								
2028	0.01								
2029	0.01								
2030	0.01								
2031	0.01								
2032	0.01								
2033	0.01								
2034	0.01								
2035	0.01								
2036	0.01								
2037	0.01								
2038	0.01								
2039	0.01								
2040	0.01								
2041	0.01								
2042	0.01								
2043	0.01								
Levelized (2014-2023)	0.01	0.63	1.01	1.14	1.04	0.77	1.02	0.91	0.98
Levelized (2014-2028)	0.01	0.43	0.70	0.78	0.71	0.53	0.70	0.63	0.67
Levelized (2014-2043)	0.01	0.24	0.38	0.43	0.39	0.29	0.39	0.34	0.37

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-14. New Hampshire – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
	1	2	3	4	5	6	7	8	9
2013									
2014									
2015	0.01	0.45	0.75	0.85	0.77	0.56	0.76	0.67	0.72
2016	0.01	1.61	2.66	3.01	2.73	2.00	2.67	2.38	2.56
2017	0.01	0.68	1.06	1.18	1.08	0.82	1.06	0.96	1.02
2018	0.01	0.54	0.81	0.90	0.83	0.64	0.82	0.74	0.79
2019	0.01	0.28	0.41	0.45	0.42	0.33	0.41	0.38	0.40
2020	0.01	0.18	0.26	0.29	0.27	0.21	0.26	0.24	0.25
2021	0.01	0.14	0.20	0.21	0.20	0.16	0.20	0.18	0.19
2022	0.01	0.09	0.13	0.14	0.13	0.11	0.13	0.12	0.13
2023	0.01	0.05	0.07	0.07	0.07	0.05	0.07	0.06	0.06
2024	0.01								
2025	0.01								
2026	0.01								
2027	0.01								
2028	0.01								
2029	0.01								
2030	0.01								
2031	0.01								
2032	0.01								
2033	0.01								
2034	0.01								
2035	0.01								
2036	0.01								
2037	0.01								
2038	0.01								
2039	0.01								
2040	0.01								
2041	0.01								
2042	0.01								
2043	0.01								
Levelized (2014-2023)	0.01	0.41	0.66	0.74	0.67	0.50	0.66	0.59	0.63
Levelized (2014-2028)	0.01	0.28	0.45	0.51	0.46	0.35	0.45	0.41	0.44
Levelized (2014-2043)	0.01	0.16	0.25	0.28	0.25	0.19	0.25	0.22	0.24

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-15. Rhode Island – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014	0.01	0.40	0.65	0.73	0.66	0.49	0.65	0.58	0.62
2015	0.02	1.16	1.88	2.11	1.92	1.43	1.89	1.69	1.81
2016	0.02	1.17	1.89	2.12	1.93	1.44	1.90	1.70	1.82
2017	0.02	0.49	0.75	0.83	0.76	0.59	0.75	0.68	0.72
2018	0.02	0.35	0.52	0.57	0.53	0.41	0.52	0.47	0.50
2019	0.02	0.19	0.26	0.28	0.26	0.21	0.26	0.24	0.25
2020	0.02	0.12	0.17	0.18	0.17	0.14	0.17	0.15	0.16
2021	0.02	0.09	0.12	0.14	0.13	0.10	0.12	0.11	0.12
2022	0.02	0.06	0.08	0.09	0.08	0.07	0.08	0.08	0.08
2023	0.02	0.03	0.04	0.04	0.04	0.03	0.04	0.04	0.04
2024	0.02								
2025	0.02								
2026	0.02								
2027	0.02								
2028	0.02								
2029	0.02								
2030	0.02								
2031	0.02								
2032	0.02								
2033	0.02								
2034	0.02								
2035	0.02								
2036	0.02								
2037	0.02								
2038	0.02								
2039	0.02								
2040	0.02								
2041	0.02								
2042	0.02								
2043	0.02								
Levelized (2014-2023)	0.02	0.42	0.66	0.73	0.67	0.51	0.66	0.59	0.63
Levelized (2014-2028)	0.02	0.29	0.45	0.50	0.46	0.35	0.45	0.41	0.44
Levelized (2014-2043)	0.02	0.16	0.25	0.28	0.25	0.19	0.25	0.22	0.24

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations

2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter

5 Weighted average per Percentage of residential load columns 2 to 4

6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter

8 Weighted average per Percentage of commercial load columns 6 and 7

9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-16. Rhode Island – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014									
2015	0.01	0.30	0.49	0.55	0.50	0.37	0.49	0.44	0.47
2016	0.02	1.07	1.72	1.93	1.76	1.31	1.73	1.55	1.66
2017	0.02	0.45	0.69	0.76	0.70	0.54	0.69	0.62	0.66
2018	0.02	0.36	0.53	0.58	0.54	0.42	0.53	0.48	0.51
2019	0.02	0.19	0.26	0.29	0.27	0.22	0.26	0.24	0.26
2020	0.02	0.12	0.17	0.18	0.17	0.14	0.17	0.16	0.16
2021	0.02	0.09	0.13	0.14	0.13	0.10	0.13	0.12	0.12
2022	0.02	0.06	0.08	0.09	0.08	0.07	0.08	0.08	0.08
2023	0.02	0.03	0.04	0.05	0.04	0.03	0.04	0.04	0.04
2024	0.02								
2025	0.02								
2026	0.02								
2027	0.02								
2028	0.02								
2029	0.02								
2030	0.02								
2031	0.02								
2032	0.02								
2033	0.02								
2034	0.02								
2035	0.02								
2036	0.02								
2037	0.02								
2038	0.02								
2039	0.02								
2040	0.02								
2041	0.02								
2042	0.02								
2043	0.02								
Levelized (2014-2023)	0.02	0.28	0.42	0.47	0.43	0.33	0.43	0.38	0.41
Levelized (2014-2028)	0.02	0.19	0.29	0.33	0.30	0.23	0.29	0.26	0.28
Levelized (2014-2043)	0.02	0.10	0.16	0.18	0.16	0.13	0.16	0.15	0.16

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-17. Vermont – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014	0.00	0.10	0.18	0.20	0.18	0.13	0.18	0.16	0.17
2015	0.00	0.38	0.66	0.75	0.68	0.49	0.66	0.59	0.64
2016	0.01	0.40	0.69	0.79	0.71	0.51	0.69	0.61	0.67
2017	0.01	0.17	0.28	0.31	0.28	0.21	0.28	0.25	0.27
2018	0.01	0.12	0.20	0.22	0.20	0.15	0.20	0.18	0.19
2019	0.01	0.06	0.10	0.11	0.10	0.08	0.10	0.09	0.09
2020	0.01	0.04	0.06	0.07	0.06	0.05	0.06	0.06	0.06
2021	0.01	0.03	0.05	0.05	0.05	0.04	0.05	0.05	0.05
2022	0.01	0.02	0.03	0.04	0.03	0.03	0.03	0.03	0.03
2023	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02
2024	0.01								
2025	0.01								
2026	0.01								
2027	0.01								
2028	0.01								
2029	0.01								
2030	0.01								
2031	0.01								
2032	0.01								
2033	0.01								
2034	0.01								
2035	0.01								
2036	0.01								
2037	0.01								
2038	0.01								
2039	0.01								
2040	0.01								
2041	0.01								
2042	0.01								
2043	0.01								
Levelized (2014-2023)	0.01	0.14	0.23	0.26	0.24	0.17	0.23	0.21	0.22
Levelized (2014-2028)	0.01	0.10	0.16	0.18	0.16	0.12	0.16	0.14	0.15
Levelized (2014-2043)	0.01	0.05	0.09	0.10	0.09	0.07	0.09	0.08	0.08

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8



Exhibit C-18. Vermont – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
		1	2	3	4	5	6	7	
2013									
2014									
2015	0.00	0.10	0.17	0.19	0.18	0.13	0.17	0.15	0.16
2016	0.00	0.37	0.63	0.72	0.65	0.47	0.63	0.56	0.61
2017	0.01	0.16	0.26	0.29	0.26	0.19	0.26	0.23	0.25
2018	0.01	0.13	0.20	0.22	0.20	0.15	0.20	0.18	0.19
2019	0.01	0.06	0.10	0.11	0.10	0.08	0.10	0.09	0.09
2020	0.01	0.04	0.06	0.07	0.06	0.05	0.06	0.06	0.06
2021	0.01	0.03	0.05	0.06	0.05	0.04	0.05	0.05	0.05
2022	0.01	0.02	0.03	0.04	0.03	0.03	0.03	0.03	0.03
2023	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02
2024	0.01								
2025	0.01								
2026	0.01								
2027	0.01								
2028	0.01								
2029	0.01								
2030	0.01								
2031	0.01								
2032	0.01								
2033	0.01								
2034	0.01								
2035	0.01								
2036	0.01								
2037	0.01								
2038	0.01								
2039	0.01								
2040	0.01								
2041	0.01								
2042	0.01								
2043	0.01								
Levelized (2014-2023)	0.00	0.10	0.16	0.18	0.16	0.12	0.16	0.14	0.15
Levelized (2014-2028)	0.00	0.07	0.11	0.12	0.11	0.08	0.11	0.10	0.10
Levelized (2014-2043)	0.01	0.04	0.06	0.07	0.06	0.04	0.06	0.05	0.06

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-19. New England – 2014 Gas Efficiency Installations – Gas Supply DRIPE and Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
	1	2	3	4	5	6	7	8	9
2013									
2014	0.16	6.18	10.23	11.55	10.48	7.69	10.27	9.14	9.86
2015	0.22	18.38	30.17	33.99	30.89	22.76	30.28	26.99	29.07
2016	0.31	18.53	30.30	34.11	31.01	22.90	30.40	27.12	29.20
2017	0.31	7.77	12.00	13.36	12.25	9.34	12.03	10.86	11.60
2018	0.31	5.56	8.34	9.24	8.51	6.59	8.36	7.59	8.08
2019	0.31	2.93	4.16	4.56	4.24	3.39	4.17	3.83	4.05
2020	0.31	1.87	2.66	2.92	2.71	2.17	2.67	2.45	2.59
2021	0.31	1.41	2.00	2.19	2.03	1.63	2.00	1.84	1.94
2022	0.31	0.93	1.33	1.46	1.35	1.08	1.33	1.22	1.29
2023	0.31	0.47	0.67	0.73	0.68	0.54	0.67	0.61	0.65
2024	0.31								
2025	0.31								
2026	0.31								
2027	0.31								
2028	0.31								
2029	0.31								
2030	0.31								
2031	0.31								
2032	0.31								
2033	0.31								
2034	0.31								
2035	0.31								
2036	0.31								
2037	0.31								
2038	0.31								
2039	0.31								
2040	0.31								
2041	0.31								
2042	0.31								
2043	0.31								
Levelized (2014-2023)	0.29	6.59	10.50	11.76	10.73	8.04	10.53	9.44	10.13
Levelized (2014-2028)	0.30	4.54	7.23	8.10	7.39	5.54	7.25	6.51	6.98
Levelized (2014-2043)	0.30	2.50	3.98	4.46	4.07	3.05	3.99	3.58	3.84

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-28. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8

Exhibit C-20. New England – 2015 Gas Efficiency Installations – Gas to Electric DRIPE (2013\$/MMBtu)

Year	Gas Supply DRIPE applicable to every MMBtu Reduction	Gas to Electric DRIPE							ALL RETAIL END USES
		RESIDENTIAL				COMMERCIAL & INDUSTRIAL			
		Non Heating	Hot Water	Heating	All	Non Heating	Heating	All	
	1	2	3	4	5	6	7	8	9
2013									
2014									
2015	0.16	4.75	7.80	8.79	7.99	5.89	7.83	6.98	7.52
2016	0.22	16.87	27.58	31.05	28.23	20.85	27.68	24.69	26.58
2017	0.31	7.13	11.00	12.26	11.24	8.57	11.04	9.96	10.64
2018	0.31	5.66	8.48	9.39	8.65	6.70	8.50	7.72	8.21
2019	0.31	2.98	4.23	4.64	4.31	3.44	4.24	3.89	4.11
2020	0.31	1.90	2.70	2.96	2.75	2.20	2.71	2.49	2.63
2021	0.31	1.43	2.03	2.22	2.06	1.65	2.03	1.87	1.97
2022	0.31	0.95	1.35	1.48	1.37	1.10	1.35	1.24	1.31
2023	0.31	0.48	0.68	0.74	0.69	0.55	0.68	0.62	0.66
2024	0.31								
2025	0.31								
2026	0.31								
2027	0.31								
2028	0.31								
2029	0.31								
2030	0.31								
2031	0.31								
2032	0.31								
2033	0.31								
2034	0.31								
2035	0.31								
2036	0.31								
2037	0.31								
2038	0.31								
2039	0.31								
2040	0.31								
2041	0.31								
2042	0.31								
2043	0.31								
Levelized (2014-2023)	0.26	4.35	6.81	7.60	6.96	5.26	6.83	6.14	6.58
Levelized (2014-2028)	0.28	3.00	4.69	5.24	4.79	3.63	4.70	4.23	4.53
Levelized (2014-2043)	0.30	1.65	2.58	2.88	2.64	2.00	2.59	2.33	2.49

Real (constant \$) riskless annual rate of return: 1.36%

1 Values from Exhibit 7-20 apply to both 2014 and 2015 Installations
 2 to 4 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 5 Weighted average per Percentage of residential load columns 2 to 4
 6 to 7 Exhibit 7-29. weighted average values per percentage annual baseload and winter
 8 Weighted average per Percentage of commercial load columns 6 and 7
 9 Weighted average per Percentage of residential and commercial load columns 5 and 8