

APPENDIX E: INPUT ASSUMPTIONS AND DATA SOURCES

FINANCIAL INPUTS

Debt financing %	80%
Equity financing %	20%
Cost of debt	8%
Cost of equity	10%
Federal Tax Rate	34%
State Tax Rate	7%
Composite Tax Rate	39%
Gross Up Factor	1.629
Discount Rate	10%
Book Life	20
Tax Schedule	B
half year 1?	no
O&M Escalation	2.5%
Additional Capital Escalation	0%
First Year	2011
Added Capital Expenditure	0 2011\$

Inflation Forecast from EIA AEO 2010

Calendar Year	Type Price Index (2000=1.000)	GDP Chain-Type Price Index (2008=1.000)	GDP Chain-Type Price Index (2009=1.000)	GDP Chain-Type Price Index (2010=1.000)
2007	1.198	0.978	0.963	0.949
2008	1.225	1.000	0.985	0.971
2009	1.244	1.015	1.000	0.985
2010	1.262	1.030	1.015	1.000
2011	1.278	1.044	1.028	1.013
2012	1.297	1.059	1.043	1.028
2013	1.320	1.077	1.061	1.046
2014	1.342	1.096	1.079	1.064
2015	1.365	1.114	1.098	1.082
2016	1.390	1.134	1.117	1.101
2017	1.415	1.155	1.138	1.121
2018	1.441	1.177	1.159	1.142
2019	1.468	1.198	1.181	1.163
2020	1.497	1.222	1.204	1.186
2021	1.529	1.248	1.229	1.211
2022	1.562	1.275	1.256	1.238
2023	1.596	1.303	1.283	1.265
2024	1.629	1.330	1.310	1.291
2025	1.662	1.357	1.337	1.317
2026	1.697	1.385	1.365	1.345
2027	1.733	1.415	1.393	1.373
2028	1.770	1.445	1.424	1.403
2029	1.809	1.477	1.455	1.433
2030	1.849	1.509	1.487	1.465

UTILITY RATE SAVINGS BY CHP

Energy Rate (\$/kWh)

	Zone	Small	Medium	Large
1	Newport	\$ 0.1573	\$ 0.0904	\$ 0.0894
2	St. Albans	\$ 0.0692	\$ 0.0602	\$ 0.0566
3	Johnson	\$ 0.1573	\$ 0.0904	\$ 0.0894
4	Morrisville	\$ 0.0951	\$ 0.0951	\$ 0.0951
5	Montpelier	\$ 0.1412	\$ 0.0810	\$ 0.0806
6	St. Johnsbury	\$ 0.0692	\$ 0.0602	\$ 0.0566
7	Burlington	\$ 0.1355	\$ 0.0855	\$ 0.0774
8	Essex IBM			
9	Chittenden\Addison GMP	\$ 0.1412	\$ 0.0810	\$ 0.0806
10	Middlebury	\$ 0.0692	\$ 0.0602	\$ 0.0566
11	Central - Barnard	\$ 0.0692	\$ 0.0602	\$ 0.0566
12	Proctor (Florence)			
13	Rutland	\$ 0.0692	\$ 0.0602	\$ 0.0566
14	Ascutney	\$ 0.0692	\$ 0.0602	\$ 0.0566
15	Southern	\$ 0.0692	\$ 0.0602	\$ 0.0566
16	Highgate	\$ 0.1573	\$ 0.0904	\$ 0.0894

Demand Rate (\$/kW)

	Zone	Small	Medium	Large
1	Newport	\$ -	\$ 23.89	\$ 19.56
2	St. Albans	\$ 17.43	\$ 15.87	\$ 11.39
3	Johnson	\$ -	\$ 23.89	\$ 19.56
4	Morrisville	\$ 17.36	\$ 17.36	\$ 17.36
5	Montpelier	\$ -	\$ 16.35	\$ 16.26
6	St. Johnsbury	\$ 17.43	\$ 15.87	\$ 11.39
7	Burlington	\$ -	\$ 19.93	\$ 18.93
8	Essex IBM			
9	Chittenden\Addison GMP	\$ -	\$ 16.35	\$ 16.26
10	Middlebury	\$ 17.43	\$ 15.87	\$ 11.39
11	Central - Barnard	\$ 17.43	\$ 15.87	\$ 11.39
12	Proctor (Florence)			
13	Rutland	\$ 17.43	\$ 15.87	\$ 11.39
14	Ascutney	\$ 17.43	\$ 15.87	\$ 11.39
15	Southern	\$ 17.43	\$ 15.87	\$ 11.39
16	Highgate	\$ -	\$ 23.89	\$ 19.56

FUEL ASSUMPTIONS*Nominal Prices Used in Model*

	<i>Forecasts per Latest Data</i>				<i>Avoided Costs Per AESC 2009</i>		
	Natural Gas LDC \$/MMBTU	Distillate \$/MMBTU	Propane \$/MMBTU		Natural Gas LDC \$/MMBTU	Distillate \$/MMBTU	Propane \$/MMBTU
2011	\$ 9.63	\$ 19.94	\$ 29.52	2011	\$ 7.60	\$ 15.68	\$ 25.61
2012	\$ 9.82	\$ 20.38	\$ 31.63	2012	\$ 8.20	\$ 17.65	\$ 27.98
2013	\$ 10.97	\$ 21.21	\$ 33.99	2013	\$ 8.35	\$ 19.60	\$ 30.87
2014	\$ 10.99	\$ 22.85	\$ 36.03	2014	\$ 8.57	\$ 21.77	\$ 33.77
2015	\$ 11.23	\$ 24.05	\$ 37.54	2015	\$ 8.80	\$ 24.01	\$ 36.92
2016	\$ 11.46	\$ 25.46	\$ 39.22	2016	\$ 9.10	\$ 26.23	\$ 40.38
2017	\$ 11.65	\$ 26.62	\$ 40.80	2017	\$ 9.45	\$ 28.47	\$ 43.90
2018	\$ 11.90	\$ 27.87	\$ 42.50	2018	\$ 9.85	\$ 29.12	\$ 44.86
2019	\$ 12.15	\$ 28.76	\$ 43.71	2019	\$ 10.18	\$ 29.83	\$ 45.92
2020	\$ 12.46	\$ 29.64	\$ 44.96	2020	\$ 10.20	\$ 30.46	\$ 46.73
2021	\$ 12.82	\$ 30.62	\$ 46.31	2021	\$ 10.23	\$ 31.22	\$ 47.99
2022	\$ 13.30	\$ 31.65	\$ 47.68	2022	\$ 10.55	\$ 32.29	\$ 49.35
2023	\$ 13.62	\$ 32.74	\$ 49.21	2023	\$ 10.97	\$ 32.88	\$ 50.10
2024	\$ 13.86	\$ 33.85	\$ 50.72	2024	\$ 11.66	\$ 34.04	\$ 51.34
2025	\$ 14.25	\$ 34.96	\$ 52.25	2025	\$ 12.03	\$ 35.41	\$ 53.28
2026	\$ 14.72	\$ 35.92	\$ 53.61	2026	\$ 12.42	\$ 36.84	\$ 55.32
2027	\$ 15.23	\$ 37.18	\$ 55.28	2027	\$ 12.83	\$ 38.34	\$ 57.46
2028	\$ 15.84	\$ 38.53	\$ 56.97	2028	\$ 13.27	\$ 39.93	\$ 59.70
2029	\$ 16.48	\$ 39.97	\$ 58.93	2029	\$ 13.70	\$ 41.59	\$ 62.05
2030	\$ 17.17	\$ 41.21	\$ 60.69	2030	\$ 14.17	\$ 43.33	\$ 64.51

FUEL ASSUMPTIONS*Source Data*

		<i>Forecasts per Latest Data</i>			<i>Avoided Costs Per AESC 2009⁴</i>		
		Real 2010\$	Real 2008\$	Real 2010\$	Real 2009\$	Real 2009\$	Real 2009\$
		Natural Gas LDC ¹	Distillate ²	Propane ³	Natural Gas LDC ⁵	Distillate ⁶	Propane ⁷
		\$/MMBTU	\$/MMBTU	\$/MMBTU	\$/MMBTU	\$/MMBTU	\$/MMBTU
1	2011	\$ 9.51	\$ 19.10	\$ 29.14	\$ 7.39	\$ 15.25	\$ 24.91
2	2012	\$ 9.56	\$ 19.25	\$ 30.78	\$ 7.86	\$ 16.93	\$ 26.84
3	2013	\$ 10.49	\$ 19.69	\$ 32.51	\$ 7.87	\$ 18.48	\$ 29.09
4	2014	\$ 10.33	\$ 20.86	\$ 33.87	\$ 7.94	\$ 20.17	\$ 31.29
5	2015	\$ 10.38	\$ 21.58	\$ 34.70	\$ 8.02	\$ 21.88	\$ 33.63
6	2016	\$ 10.41	\$ 22.45	\$ 35.61	\$ 8.14	\$ 23.48	\$ 36.14
7	2017	\$ 10.39	\$ 23.04	\$ 36.38	\$ 8.30	\$ 25.02	\$ 38.58
8	2018	\$ 10.41	\$ 23.69	\$ 37.21	\$ 8.50	\$ 25.13	\$ 38.70
9	2019	\$ 10.44	\$ 24.00	\$ 37.57	\$ 8.62	\$ 25.27	\$ 38.90
10	2020	\$ 10.50	\$ 24.25	\$ 37.89	\$ 8.47	\$ 25.31	\$ 38.82
11	2021	\$ 10.58	\$ 24.54	\$ 38.22	\$ 8.32	\$ 25.40	\$ 39.04
12	2022	\$ 10.74	\$ 24.82	\$ 38.51	\$ 8.40	\$ 25.71	\$ 39.28
13	2023	\$ 10.77	\$ 25.13	\$ 38.91	\$ 8.55	\$ 25.62	\$ 39.04
14	2024	\$ 10.74	\$ 25.45	\$ 39.28	\$ 8.90	\$ 25.99	\$ 39.19
15	2025	\$ 10.82	\$ 25.76	\$ 39.66	\$ 9.00	\$ 26.49	\$ 39.86
16	2026	\$ 10.95	\$ 25.93	\$ 39.87	\$ 9.10	\$ 27.00	\$ 40.54
17	2027	\$ 11.09	\$ 26.29	\$ 40.26	\$ 9.21	\$ 27.52	\$ 41.24
18	2028	\$ 11.29	\$ 26.66	\$ 40.61	\$ 9.32	\$ 28.05	\$ 41.94
19	2029	\$ 11.50	\$ 27.07	\$ 41.11	\$ 9.42	\$ 28.59	\$ 42.66
20	2030	\$ 11.72	\$ 27.30	\$ 41.42	\$ 9.53	\$ 29.15	\$ 43.39

Sources

- 1 VGS G-4 Rate Class Delivered Price escalated at blended STEO Oct. 2010 and AEO 2010 New England Delivered Commercial Gas Price
- 2 Distillate price from updated forecast based on NYMEX Futures for WTI as of October 20, 2010 and AEO 2010
- 3 Propane delivered fuel price in Vermont per Vermont DPS Fuel Price Report unadjusted for efficiency factor and escalated at LPG price from AEO 2010
- 4 Synapse. *Avoided Energy Supply Costs in New England: 2009 Report*. August 2009.
- 5 Page D-5. Commercial and Industrial Non-Heating Natural Gas Price
- 6 Page E-2. Average of Industrial and Commercial Distillate Prices. Prices for 2025-2030 extrapolated based on compound annual growth rate between 2015 and 2024.
- 7 Page E-2. Average of Industrial and Commercial Kerosene Prices. Prices for 2025-2030 extrapolated based on compound annual growth rate between 2015 and 2024.

AVOIDED FUEL COST SCALING FACTOR*Henry Hub Scaling Factor For Natural Gas Price*

	AESC	STEO/AEO	AESC	STEO/AEO	Scaling
	2009 2009\$ \$/MMBTU	Blend 2010\$ \$/MMBTU	2009 Nominal \$/MMBTU	Blend Nominal \$/MMBTU	Factor
2010					
2011	\$ 6.42	\$ 4.53	\$ 6.60	\$ 4.59	0.70
2012	\$ 7.04	\$ 4.90	\$ 7.34	\$ 5.03	0.69
2013	\$ 7.04	\$ 5.27	\$ 7.47	\$ 5.51	0.74
2014	\$ 7.11	\$ 5.67	\$ 7.67	\$ 6.03	0.79
2015	\$ 7.19	\$ 6.10	\$ 7.89	\$ 6.60	0.84
2016	\$ 7.31	\$ 6.57	\$ 8.17	\$ 7.23	0.89
2017	\$ 7.48	\$ 6.58	\$ 8.51	\$ 7.38	0.87
2018	\$ 7.69	\$ 6.63	\$ 8.91	\$ 7.57	0.85
2019	\$ 7.88	\$ 6.70	\$ 9.30	\$ 7.80	0.84
2020	\$ 7.74	\$ 6.84	\$ 9.32	\$ 8.11	0.87
2021	\$ 7.52	\$ 6.94	\$ 9.24	\$ 8.41	0.91
2022	\$ 7.60	\$ 7.14	\$ 9.55	\$ 8.84	0.93
2023	\$ 7.71	\$ 7.17	\$ 9.89	\$ 9.06	0.92
2024	\$ 8.09	\$ 7.12	\$ 10.60	\$ 9.20	0.87
2025	\$ 8.20	\$ 7.20	\$ 10.96	\$ 9.49	0.87
2026	\$ 8.30	\$ 7.37	\$ 11.33	\$ 9.91	0.87
2027	\$ 8.41	\$ 7.51	\$ 11.72	\$ 10.31	0.88
2028	\$ 8.53	\$ 7.76	\$ 12.14	\$ 10.88	0.90
2029	\$ 8.64	\$ 8.01	\$ 12.56	\$ 11.48	0.91
2030	\$ 8.75	\$ 8.29	\$ 13.01	\$ 12.15	0.93

EXTERNALITIES**Externality Costs***Per RFP Attachment A*

	Natural Gas LDC \$/MMBTU	Distillate \$/MMBTU	Propane \$/MMBTU
2010	\$ 1.22	\$ 1.94	\$ 1.47
2011	\$ 1.24	\$ 1.97	\$ 1.49
2012	\$ 1.25	\$ 1.99	\$ 1.51
2013	\$ 1.28	\$ 2.03	\$ 1.54
2014	\$ 1.30	\$ 2.06	\$ 1.56
2015	\$ 1.32	\$ 2.10	\$ 1.59
2016	\$ 1.34	\$ 2.14	\$ 1.62
2017	\$ 1.37	\$ 2.18	\$ 1.65
2018	\$ 1.39	\$ 2.22	\$ 1.68
2019	\$ 1.42	\$ 2.26	\$ 1.71
2020	\$ 1.45	\$ 2.30	\$ 1.74
2021	\$ 1.48	\$ 2.35	\$ 1.78
2022	\$ 1.51	\$ 2.40	\$ 1.82
2023	\$ 1.54	\$ 2.45	\$ 1.86
2024	\$ 1.58	\$ 2.50	\$ 1.90
2025	\$ 1.61	\$ 2.56	\$ 1.94
2026	\$ 1.64	\$ 2.61	\$ 1.98
2027	\$ 1.68	\$ 2.66	\$ 2.02
2028	\$ 1.71	\$ 2.72	\$ 2.06
2029	\$ 1.75	\$ 2.78	\$ 2.11
2030	\$ 1.79	\$ 2.84	\$ 2.15

**Avoided Electric
Emissions Rates***Per RFP Attachment A*

	Total Grid Externality Cost \$/kWh
2010	\$ 0.01
2011	\$ 0.01
2012	\$ 0.01
2013	\$ 0.01
2014	\$ 0.01
2015	\$ 0.01
2016	\$ 0.01
2017	\$ 0.01
2018	\$ 0.01
2019	\$ 0.01
2020	\$ 0.01
2021	\$ 0.01
2022	\$ 0.01
2023	\$ 0.01
2024	\$ 0.01
2025	\$ 0.01
2026	\$ 0.01
2027	\$ 0.01
2028	\$ 0.01
2029	\$ 0.01
2030	\$ 0.01

AVOIDED COSTS*Energy and Capacity**Nominal Dollars*

	<i>Total</i>			<i>Wholesale</i>		
	Energy		Capacity	Energy		Capacity
	Peak	Off-Peak	Purchased	Peak	Off-Peak	FCA Price
	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kW-yr
2010						
2011	\$ 0.083	\$ 0.063	\$ -	\$ 0.075	\$ 0.057	\$ 42.33
2012	\$ 0.090	\$ 0.068	\$ -	\$ 0.081	\$ 0.062	\$ 34.50
2013	\$ 0.094	\$ 0.075	\$ -	\$ 0.084	\$ 0.067	\$ 16.55
2014	\$ 0.097	\$ 0.078	\$ 20.86	\$ 0.086	\$ 0.069	\$ 16.84
2015	\$ 0.100	\$ 0.080	\$ 22.77	\$ 0.088	\$ 0.070	\$ 18.44
2016	\$ 0.105	\$ 0.084	\$ 24.78	\$ 0.092	\$ 0.073	\$ 20.11
2017	\$ 0.109	\$ 0.089	\$ 25.26	\$ 0.095	\$ 0.077	\$ 20.48
2018	\$ 0.115	\$ 0.094	\$ 27.38	\$ 0.100	\$ 0.080	\$ 22.25
2019	\$ 0.118	\$ 0.096	\$ 27.91	\$ 0.103	\$ 0.083	\$ 22.67
2020	\$ 0.120	\$ 0.098	\$ 30.18	\$ 0.105	\$ 0.085	\$ 24.56
2021	\$ 0.120	\$ 0.099	\$ 32.58	\$ 0.106	\$ 0.087	\$ 26.55
2022	\$ 0.124	\$ 0.103	\$ 35.09	\$ 0.109	\$ 0.090	\$ 28.64
2023	\$ 0.130	\$ 0.107	\$ 37.69	\$ 0.116	\$ 0.094	\$ 30.80
2024	\$ 0.140	\$ 0.112	\$ 40.36	\$ 0.125	\$ 0.100	\$ 33.01
2025	\$ 0.145	\$ 0.116	\$ 60.14	\$ 0.130	\$ 0.104	\$ 49.73
2026	\$ 0.150	\$ 0.121	\$ 80.77	\$ 0.136	\$ 0.109	\$ 67.14
2027	\$ 0.157	\$ 0.126	\$ 102.30	\$ 0.141	\$ 0.114	\$ 85.27
2028	\$ 0.163	\$ 0.132	\$ 124.80	\$ 0.147	\$ 0.118	\$ 104.20
2029	\$ 0.170	\$ 0.137	\$ 148.28	\$ 0.153	\$ 0.123	\$ 123.93
2030	\$ 0.178	\$ 0.143	\$ 170.70	\$ 0.159	\$ 0.128	\$ 142.72

AVOIDED COST SOURCE DATA*Energy and Capacity***Vermont Zone***2009\$ from Synapse, Avoided Energy Supply Cost in New England.**August 21, 2009. Page B-3*

	Energy				Capacity
	Winter Peak \$/kWh	Winter Off-Peak \$/kWh	Summer Peak \$/kWh	Summer Off-Peak \$/kWh	Purchased \$/kW-yr
2010	\$ 0.075	\$ 0.058	\$ 0.078	\$ 0.057	\$ -
2011	\$ 0.080	\$ 0.063	\$ 0.082	\$ 0.060	\$ -
2012	\$ 0.087	\$ 0.068	\$ 0.086	\$ 0.063	\$ -
2013	\$ 0.088	\$ 0.072	\$ 0.089	\$ 0.070	\$ -
2014	\$ 0.089	\$ 0.074	\$ 0.090	\$ 0.071	\$ 19.33
2015	\$ 0.090	\$ 0.075	\$ 0.093	\$ 0.071	\$ 20.74
2016	\$ 0.091	\$ 0.077	\$ 0.097	\$ 0.073	\$ 22.18
2017	\$ 0.093	\$ 0.080	\$ 0.099	\$ 0.077	\$ 22.20
2018	\$ 0.097	\$ 0.082	\$ 0.101	\$ 0.080	\$ 23.62
2019	\$ 0.097	\$ 0.083	\$ 0.103	\$ 0.080	\$ 23.64
2020	\$ 0.097	\$ 0.083	\$ 0.102	\$ 0.080	\$ 25.07
2021	\$ 0.095	\$ 0.081	\$ 0.100	\$ 0.080	\$ 26.50
2022	\$ 0.096	\$ 0.083	\$ 0.102	\$ 0.081	\$ 27.93
2023	\$ 0.098	\$ 0.083	\$ 0.105	\$ 0.083	\$ 29.37
2024	\$ 0.102	\$ 0.084	\$ 0.111	\$ 0.087	\$ 30.81
2025	\$ 0.104	\$ 0.085	\$ 0.113	\$ 0.089	\$ 44.99
2026	\$ 0.105	\$ 0.086	\$ 0.115	\$ 0.091	\$ 59.19
2027	\$ 0.107	\$ 0.088	\$ 0.118	\$ 0.093	\$ 73.42
2028	\$ 0.109	\$ 0.089	\$ 0.120	\$ 0.096	\$ 87.67
2029	\$ 0.111	\$ 0.090	\$ 0.123	\$ 0.098	\$ 101.94
2030	\$ 0.113	\$ 0.092	\$ 0.126	\$ 0.100	\$ 114.82

AVOIDED COST SOURCE DATA*Wholesale Energy and Capacity***Vermont Zone***2009\$ from Synapse, Avoided Energy Supply Cost in New England.**August 21, 2009. Page B-4*

	Energy				Capacity
	Winter Peak \$/kWh	Winter Off-Peak \$/kWh	Summer Peak \$/kWh	Summer Off-Peak \$/kWh	FCA Price \$/kW-yr
2010	\$ 0.068	\$ 0.052	\$ 0.070	\$ 0.051	\$ 52.51
2011	\$ 0.072	\$ 0.056	\$ 0.074	\$ 0.054	\$ 41.18
2012	\$ 0.078	\$ 0.061	\$ 0.077	\$ 0.057	\$ 33.09
2013	\$ 0.079	\$ 0.064	\$ 0.079	\$ 0.062	\$ 15.60
2014	\$ 0.079	\$ 0.065	\$ 0.080	\$ 0.062	\$ 15.60
2015	\$ 0.079	\$ 0.066	\$ 0.082	\$ 0.062	\$ 16.80
2016	\$ 0.079	\$ 0.067	\$ 0.085	\$ 0.064	\$ 18.00
2017	\$ 0.081	\$ 0.069	\$ 0.086	\$ 0.066	\$ 18.00
2018	\$ 0.084	\$ 0.070	\$ 0.088	\$ 0.068	\$ 19.20
2019	\$ 0.085	\$ 0.072	\$ 0.090	\$ 0.069	\$ 19.20
2020	\$ 0.085	\$ 0.072	\$ 0.090	\$ 0.069	\$ 20.40
2021	\$ 0.084	\$ 0.071	\$ 0.088	\$ 0.070	\$ 21.60
2022	\$ 0.084	\$ 0.073	\$ 0.090	\$ 0.071	\$ 22.80
2023	\$ 0.087	\$ 0.074	\$ 0.094	\$ 0.073	\$ 24.00
2024	\$ 0.092	\$ 0.075	\$ 0.099	\$ 0.078	\$ 25.20
2025	\$ 0.093	\$ 0.076	\$ 0.101	\$ 0.080	\$ 37.20
2026	\$ 0.095	\$ 0.078	\$ 0.104	\$ 0.082	\$ 49.20
2027	\$ 0.096	\$ 0.079	\$ 0.106	\$ 0.084	\$ 61.20
2028	\$ 0.098	\$ 0.080	\$ 0.108	\$ 0.086	\$ 73.20
2029	\$ 0.100	\$ 0.081	\$ 0.110	\$ 0.088	\$ 85.20
2030	\$ 0.101	\$ 0.082	\$ 0.113	\$ 0.090	\$ 96.00

CUSTOMER ASSUMPTIONS

Efficiency of existing unit that makes thermal (boiler)	0.85
% of Thermal 1	1.00
Thermal Load/CHP Output Match Factor	1.00
Thermal Load Split (% of time needed)	1.00
Reliability Savings (history of lost product costs \$)	-
Average monthly demand % percent of total demand	0.90

CUSTOMER SEGMENT DATA

Segment Size (MWH)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	Newport	St. Albans	Johnson	Morrisville	Montpelier	St. Johnsbury	Burlington	Essex IBM	Chittenden\Addison	GMP	Middlebury	Central - Barnard	Proctor (Florence)	Rutland	Ascutney	Southern	Highgate
1		2,056.6	970.8		26,258.6	769.6	10,087.0			18,828.5	1,506.9	5,388.3		1,063.5	996.8	4,138.9	
2		4,443.3	132.7		15,280.7	298.0	5,060.9			35,830.6	2,576.5	8,374.3		3,340.1	725.9	14,525.7	
3		1,501.8	465.3		9,785.0	304.3	17,377.9			16,631.2	855.5	3,854.7		1,635.4	284.8	4,096.3	
4		1,148.4	116.1		12,419.3	300.5	12,351.5			33,087.1	724.2	5,506.7		1,247.3	45.5	10,390.1	
5		7,557.0	1,103.8		25,907.7	1,319.2	30,994.1			32,716.5	1,169.9	10,566.3		14,047.8	1,910.0	20,642.2	
6		1,300.2	6.9		4,000.5	1.1	33,527.3			14,361.8	3.6	2,546.8		1,690.4	536.8	8,518.5	
7		9,759.2	678.0			11,811.2	7,226.3			12,128.6	8,143.2	8,673.8		12,765.1	10,017.7	18,843.8	
8		2,932.4			6,460.0		64,943.6			12,097.0	2,014.9	7,743.0		12,981.4	957.3	20,650.8	
9		9,379.5			3,203.5	3,617.1	3,988.1			6,398.6	2,756.6	10,524.8		12,592.0	3,096.3	16,201.4	
10		3,296.6			2,344.9	918.6	5,896.5			3,615.9	3,755.1	13,077.8		25,297.2	5,550.8	13,578.0	
11		10,524.6				2,682.6	7,694.4			30,489.7	7,808.1	5,103.0		27,684.1	6,931.7	31,222.5	
12		6,051.3				4,120.8	37,527.5				3,841.8	2,616.4		3,076.7	7,058.0	14,985.6	

Customer Load (MWH)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	Newport	St. Albans	Johnson	Morrisville	Montpelier	St. Johnsbury	Burlington	Essex IBM	Chittenden\Addison	GMP	Middlebury	Central - Barnard	Proctor (Florence)	Rutland	Ascutney	Southern	Highgate
1		61.1	57.3		70.5	57.0	57.1			84.8	121.1	62.7		54.7	52.8	37.7	
2		113.8	11.2		50.3	22.6	42.0			116.1	89.9	94.0		68.8	51.9	86.3	
3		51.6	37.5		37.8	74.5	35.9			83.4	171.1	60.2		80.0	41.1	57.0	
4		71.5	19.3		47.3	75.1	20.3			123.9	114.4	59.5		60.5	45.5	49.4	
5		89.2	71.7		73.2	186.3	35.6			82.7	76.2	83.7		109.2	90.7	84.5	
6		44.8	3.4		15.4	0.5	27.4			22.9	1.8	38.6		114.4	88.4	75.0	
7		1,394.9	678.0			1,469.9	420.0			1,584.7	1,090.3	1,237.2		560.5	1,403.0	614.2	
8		1,466.2			6,460.0		579.3			1,004.3	1,007.5	1,169.4		691.4	478.6	1,090.2	
9		690.3			320.3	820.6	676.6			388.8	581.2	3,364.4		1,138.5	619.3	966.1	
10		659.3			469.0	918.6	510.2			452.0	1,877.6	908.4		1,146.9	883.5	957.6	
11		608.3				894.2	1,039.7			816.2	591.3	637.9		843.5	793.2	1,080.2	
12		2,017.1				1,140.3	16,678.9				1,920.9	2,616.4		615.3	1,764.5	2,776.3	

CUSTOMER SEGMENT DATA*Customer Peak (MW)*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	Newport	St. Albans	Johnson	Morrisville	Montpelier	St. Johnsbury	Burlington	Essex IBM	Chittenden\Addison	GMP	Middlebury	Central - Barnard	Proctor (Florence)	Rutland	Ascutney	Southern	Highgate
1		0.012	0.012		0.014	0.012	0.012			0.017	0.025	0.013		0.011	0.011	0.008	
2		0.023	0.002		0.010	0.005	0.009			0.024	0.018	0.019		0.014	0.011	0.018	
3		0.010	0.008		0.008	0.015	0.007			0.017	0.035	0.012		0.016	0.008	0.012	
4		0.015	0.004		0.010	0.015	0.004			0.025	0.023	0.012		0.012	0.009	0.010	
5		0.018	0.015		0.015	0.038	0.007			0.017	0.016	0.017		0.022	0.018	0.017	
6		0.009	0.001		0.003	0.000	0.006			0.005	0.000	0.008		0.023	0.018	0.015	
7		0.284	0.138				0.299	0.085		0.323	0.222	0.252		0.114	0.286	0.125	
8		0.298			1.315		0.118			0.204	0.205	0.238		0.141	0.097	0.222	
9		0.140			0.065	0.167	0.138			0.079	0.118	0.685		0.232	0.126	0.197	
10		0.134			0.095	0.187	0.104			0.092	0.382	0.185		0.233	0.180	0.195	
11		0.124				0.182	0.212			0.166	0.120	0.130		0.172	0.161	0.220	
12		0.411				0.232	3.395				0.391	0.532		0.125	0.359	0.565	

Customer BEA E/T Ratio

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	Newport	St. Albans	Johnson	Morrisville	Montpelier	St. Johnsbury	Burlington	Essex IBM	Chittenden\Addison	GMP	Middlebury	Central - Barnard	Proctor (Florence)	Rutland	Ascutney	Southern	Highgate
1		0.11	0.11		0.12	0.05	0.12			0.13	0.11	0.12		0.11	0.07	0.13	
2		0.35	0.32		0.41	0.34	0.39			0.38	0.32	0.39		0.37	0.34	0.36	
3		0.73	0.70		0.74	0.74	0.71			0.71	0.75	0.73		0.74	0.69	0.73	
4		1.16	1.04		1.12	1.12	1.13			1.11	1.07	1.14		1.12	1.10	1.15	
5		1.77	1.73		1.75	1.77	1.75			1.75	1.77	1.75		1.77	1.73	1.76	
6		3.31	4.42		5.64	5.64	4.08			5.64	5.64	4.22		4.26	4.02	4.48	
7		0.18	0.26			0.15	0.08			0.07	0.22	0.22		0.15	0.17	0.20	
8		0.39			0.32		0.45			0.48	0.38	0.44		0.40	0.44	0.41	
9		0.77			0.69	0.79	0.76			0.73	0.75	0.76		0.79	0.80	0.74	
10		1.11			0.91	1.05	1.20			0.95	1.17	1.12		1.12	1.19	1.09	
11		1.77				1.77	1.81			1.77	1.77	1.77		1.75	1.76	1.75	
12		3.60				2.96	3.60				3.60	3.60		5.64	4.62	3.23	

RESULTS SCALING FACTORS

Actual Zone	Proxy Zone	Proxy sample MWH	Actual (2007-2009 average)	Multiple to scale proxy to actual
Newport	Central - Barnard	83,976	91,466	1.09
St. Albans	St. Albans	59,951	183,485	3.06
Johnson	Johnson	3,474	42,910	12.35
Morrisville	St. Johnsbury	26,143	76,380	2.92
Montpelier	Montpelier	105,660	261,537	2.48
St. Johnsbury	St. Johnsbury	26,143	98,575	3.77
Burlington	Burlington	236,675	242,394	1.02
Essex IBM	Burlington	236,675	206,288	0.87
Chittenden\ Addison GMP	Chittenden\ Addison GMP	216,186	485,723	2.25
Middlebury	Middlebury	35,156	106,264	3.02
Central - Barnard	Central - Barnard	83,976	169,195	2.01
Proctor (Florence)	Montpelier	105,660	182,148	1.72
Rutland	Rutland	117,421	324,104	2.76
Ascutney	Ascutney	38,111	79,528	2.09
Southern	Southern	177,794	436,569	2.46
Highgate	St. Albans	59,951	104,473	1.74