Original Page 96-A Rate ADE

## ALTERNATE DEFAULT ENERGY SERVICE RATE ADE

### AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for energy and capacity in conjunction with the applicable Delivery Service Rate Schedule. It is available to Customers who are receiving Delivery Service under Primary General Delivery Service Rate GV, Large General Delivery Service Rate LG, and Backup Delivery Service Rate B. Service under this rate is mandatory for and only available to customers who received Supplier Service or Self-Supply Service for at least twelve consecutive months. Once a Customer terminates Supplier Service or Self-Supply Service following at least twelve consecutive months of receipt of such service, any energy and capacity service taken from the Company during the next twenty-four months must be taken under this rate, unless this rate is temporarily closed. In the event of a temporary closure of this rate, any Customer returning to energy and capacity service from the Company during the period that this rate is closed must take such service under Default Energy Service Rate DE. Once this rate is re-opened, such Customers will be transferred to service hereunder. Service under Default Energy Service Rate DE during the period that this rate is closed shall be deemed to be part of the twenty-four month period described above.

Renewable service options are available to Customers who are not enrolled in the Residential Electric Assistance Program Rate EAP and have not been approved to receive electric service payment assistance through the Fuel Assistance Program administered by a Community Action Agency.

Notwithstanding any other Tariff provision or Special Contract terms, no discount shall be applied to this rate.

RATE PER MONTH

Per Kilowatt-Hour

Energy Charge

6.40¢

### LIMITATION OF AVAILABILITY

Availability of service under this rate is limited to twenty-four months following the end of any period of twelve consecutive months during which the Customer receives Supplier Service or Self-Supply Service. If the Customer receives energy and capacity service from the Company after the twenty-four month period is reached, such service will be rendered under Default Energy Service Rate DE.

Issued: April 27, 2012

Effective: XX XX, 2012

Issued by: \_

Original Page 96-B Rate ADE

## RENEWABLE SERVICE OPTIONS

The Company will purchase and retire a sufficient number of new renewable generation resource certificates ("Certificate") to match the kilowatt-hour usage associated with the Customers enrolled in a renewable service option.

A Certificate represents one thousand kilowatt-hours of electricity generated by a generation resource physically located in New England that is certified by the Commission as a Class I or Class II generation resource under the New Hampshire Electric Renewable Portfolio Standard or is capable of earning certification under the New Hampshire Renewable Portfolio Standard. The Company is not required to purchase Certificates simultaneously with Customer usage. Certificates supporting the renewable service options under this rate schedule will be acquired by the Company such that up to 30% of one calendar year's Certificate requirements could be satisfied with Certificates produced in either of the previous two calendar years or during the first quarter of the subsequent calendar year.

100% Renewable Service Option	-	The Company will purchase Certificates to match a Customer's total kilowatt-hour usage.
50% Renewable Service Option	-	The Company will purchase Certificates to match 50% of a Customer's total kilowatt-hour usage.
25% Renewable Service Option	-	The Company will purchase Certificates to match 25% of a Customer's total kilowatt-hour usage.

The Company will use reasonable efforts to purchase Certificates, but does not guarantee the availability of Certificates. In the event Certificates are not available or cannot be purchased at a reasonable cost, the Company shall make a payment to the Renewable Energy Fund created pursuant to the New Hampshire Electric Renewable Portfolio Standard in lieu of purchasing Certificates.

Beginning in 2011 the Company will submit a report to the Commission annually by July 1st to document the number of Certificates purchased and retired by the Company on behalf of Customers receiving service under the renewable service options during the preceding calendar year.

The Customer must notify the Company to initiate service under a renewable service option. In the event the Company can process the Customer request to initiate service prior to the Customer's next regularly scheduled meter read date, the next bill rendered by the Company shall include a charge for the renewable service option chosen by the Customer. Otherwise, the

Issued:	April 27, 2012	Issued by:	
		·	Gary A. Long
Effective:	XX XX, 2012	Title:	President and Chief Operating Officer

Original Page 96-C Rate ADE

subsequent bill rendered by the Company shall include a charge for the renewable service option chosen by the Customer. The Company shall confirm customer acceptance of the date that service will be initiated under a renewable service option, i.e. either the most recent meter read date or the next subsequent meter read date.

The Customer must notify the Company to discontinue service under a renewable service option. In the event the Company can process the Customer request to discontinue such service prior to the Customer's next regularly scheduled meter read date, the next bill rendered by the Company shall not include a charge for the renewable service option. Otherwise, the subsequent bill rendered by the Company shall not include a charge for the renewable service option.

## RATE PER MONTH - RENEWABLE SERVICE OPTIONS

100% Renewable Service Option Charge:	3.579¢ per kilowatt-hour in addition to the Energy Charge
50% Renewable Service Option Charge:	1.790¢ per kilowatt-hour in addition to the Energy Charge
25% Renewable Service Option Charge:	0.895¢ per kilowatt-hour in addition to the Energy Charge

Issued: April 27, 2012

Issued by: \_\_\_\_\_

Gary A. Long

Effective: XX XX, 2012

Title: President and Chief Operating Officer

4<sup>th</sup>-5<sup>th</sup> Revised Page 94 Superseding 3<sup>rd</sup>-4<sup>th</sup> Revised Page 94 Rate DE

# DEFAULT ENERGY SERVICE RATE DE

### AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for energy and capacity in conjunction with the applicable Delivery Service Rate Schedule. It is available to those Customers who are not receiving Supplier Service or Self-Supply Service, except for those Customers who are required to take such service under Alternate Default Energy Service Rate ADE. In addition, renewable service options are available to Customers who are not enrolled in the Residential Electric Assistance Program Rate EAP and have not been approved to receive electric service payment assistance through the Fuel Assistance Program administered by a Community Action Agency.

Notwithstanding any other Tariff provision or Special Contract terms, no discount shall be applied to this rate.

RATE PER MONTH

Per Kilowatt-Hour

Energy Charge

8.75¢

### **RENEWABLE SERVICE OPTIONS**

The Company will purchase and retire a sufficient number of new renewable generation resource certificates ("Certificate") to match the kilowatt-hour usage associated with the Customers enrolled in a renewable service option. A Certificate represents one thousand kilowatt-hours of electricity generated by a generation resource physically located in New England that is certified by the Commission as a Class I or Class II generation resource under the New Hampshire Electric Renewable Portfolio Standard or is capable of earning certification under the New Hampshire Renewable Portfolio Standard. The Company is not required to purchase Certificates simultaneously with Customer usage. Certificates supporting the renewable service options under this rate schedule will be acquired by the Company such that up to 30% of one calendar year's Certificate requirements could be satisfied with Certificates produced in either of the previous two calendar years or during the first quarter of the subsequent calendar year.

Issued: April 27, 2012

Issued by: \_

Gary A. Long

Effective: XX XX, 2012

Title: President and Chief Operating Officer

#### Scenario Analysis of Proposed PSNH Rate ADE

This case represents a base case scenario. It is assumed that prices do not deviate from the rate setting forecast in June. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 005kWh premium and long-term rates include a 1.00/kWh premium. This scenario indicates that "long-term" customers will steadily sign up for the ADE rate and "short-term" customers will only be interested during higher priced months.

							Scenario	1 - Stable P	rice				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
Year	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	0%	6.40	5.37	5.37	0.00	Open	4.80	5.30	6.35	0.000	0.000	0
	Aug	0%	6.40	5.43	5.43	0.00	Open	4.83	5.33	6.41	0.000	10.551	166
	Sep	0%	6.40	5.50	5.50	0.00	Open	4.59	5.09	6.46	0.000	19.738	357
	Oct	0%	6.40	5.60	5.60	0.00	Open	4.66	5.16	6.51	0.000	28.765	501
	Nov	0%	6.40	5.71	5.71	0.00	Open	4.91	5.41	6.50	0.000	37.886	563
	Dec	0%	6.40	5.82	5.82	0.00	Open	6.04	6.54	6.60	20.281	48.027	246
2013	Jan	0%	6.40	5.78	5.78	0.00	Open	6.91	7.41	6.61	21.072	58.563	(404)
	Feb	0%	6.40	5.52	5.52	0.00	Open	7.02	7.52	6.64	18.631	67.878	(540)
	Mar	0%	6.40	5.13	5.13	0.00	Open	5.92	6.42	6.67	19.123	77.440	467
	Apr	0%	6.40	4.86	4.86	0.00	Open	4.49	4.99	6.69	0.000	86.159	1,643
	May	0%	6.40	5.03	5.03	0.00	Open	4.93	5.43	6.71	0.000	94.944	1,399
	Jun	0%	6.40	5.12	5.12	0.00	Open	5.12	5.62	6.73	0.000	104.449	1,335
	Total										79,107	634,400	5 732

#### Notes:

1) Approximately 40 MW of customers move to and from ADE based on monthly economics (short-term); and approximately 20 MW move to and from ADE based on 12-month economics (long-term). 2) Analysis assumes a 0.50 c/kWh adder above marginal costs in short-term rates, a 1.00 c/kWh adder in long-term rates; and a 1.03 c/kWh adder above marginal costs in PSNH's ADE rate.

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate

(c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.

- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0t/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case energy prices in each month are 10% higher than originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.¢/kWh premium and long-term rates include a 1.0¢/kWh premium. Similar to Scenario 1, Scenario 2 shows short-term customers utilizing the ADE rate during high priced months and long-term customers steadily joining the rate.

						S	cenario 2	- Price Incr	ease				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
Year	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	10%	6.40	5.37	5.76	-0.39	Open	5.14	5.64	6.74	0.000	10.913	137
	Aug	10%	6.40	5.43	5.83	-0.40	Open	5.17	5.67	6.80	0.000	21.464	263
	Sep	10%	6.40	5.50	5.90	-0.40	Open	4.90	5.40	6.86	0.000	30.651	459
	Oct	10%	6.40	5.60	6.01	-0.41	Open	4.98	5.48	6.91	0.000	39.679	565
	Nov	10%	6.40	5.71	6.13	-0.42	Open	5.26	5.76	6.91	0.000	48.799	557
	Dec	10%	6.40	5.82	6.25	-0.44	Open	6.51	7.01	7.02	20.281	58.940	(84)
2013	Jan	10%	6.40	5.78	6.21	-0.43	Open	7.46	7.96	7.03	21.072	69.476	(961)
	Feb	10%	6.40	5.52	5.92	-0.40	Open	7.58	8.08	7.06	18.631	78.791	(1,148)
	Mar	10%	6.40	5.13	5.49	-0.36	Open	6.36	6.86	7.09	19.123	88.353	41
	Apr	10%	6.40	4.86	5.19	-0.33	Open	4.79	5.29	7.11	0.000	97.073	1,566
	May	10%	6.40	5.03	5.38	-0.35	Open	5.26	5.76	7.13	0.000	105.857	1,202
	Jun	10%	6.40	5.12	5.49	-0.36	Open	5.49	5.99	7.15	0.000	115.363	1,054
	Total										79.107	765.359	3,652

#### Notes:

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate
- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0t/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (i) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case energy prices in each month are 10% lower than originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.¢/kWh premium and long-term rates include a 1.0¢/kWh premium. Similar to Scenario 1, Scenario 3 shows short-term customers utilizing the ADE rate during peak months. However, those are the only customers taking the ADE rate due to lower long-term market prices.

						So	cenario 3	- Price Dec	rease				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
<u>Year</u>	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	-10%	6.40	5.37	4.98	0.39	Open	4.45	4.95	5.96	0.000	0.000	0
	Aug	-10%	6.40	5.43	5.03	0.40	Open	4.48	4.98	6.01	0.000	0.000	0
	Sep	-10%	6.40	5.50	5.10	0.40	Open	4.28	4.78	6.06	0.000	0.000	0
	Oct	-10%	6.40	5.60	5.18	0.41	Open	4.34	4.84	6.10	0.000	0.000	0
	Nov	-10%	6.40	5.71	5.28	0.42	Open	4.57	5.07	6.10	0.000	0.000	0
	Dec	-10%	6.40	5.82	5.38	0.44	Open	5.57	6.07	6.19	0.000	0.000	0
2013	Jan	-10%	6.40	5.78	5.35	0.43	Open	6.35	6.85	6.20	21.072	0.000	10
	Feb	-10%	6.40	5.52	5.12	0.40	Open	6.47	6.97	6.22	18.631	0.000	(13)
	Mar	-10%	6.40	5.13	4.77	0.36	Open	5.47	5.97	6.25	0.000	0.000	`o´
	Apr	-10%	6.40	4.86	4.52	0.33	Open	4.20	4.70	6.27	0.000	0.000	0
	May	-10%	6.40	5.03	4.68	0.35	Open	4.59	5.09	6.29	0.000	0.000	0
	Jun	-10%	6.40	5.12	4.76	0.36	Open	4.76	5.26	6.30	0.000	0.000	0
	Total										39.703	0.000	(3)

Notes:

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate
- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725C/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.500/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.00/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case energy prices in each month incrementally rise an additional 5% from what was originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 00% Wh premium and long-term rates include a 1.0 ¢/kWh premium. In this scenario long-term customers steadily take service from the ADE rate. However, the constant energy price increases close the rate in October and the rate stays closed until the rate is reset in January, at which time both short-term and long-term customers once again move onto the ADE rate. The rate closes again in May and June.

						Scenari	io 4 - Con	tinuous Pric	e Increase				
				Original Forecasted	Updated Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
<u>Year</u>	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	5%	6.40	5.37	5.57	-0.20	Open	4.97	5.47	6.55	0.000	10.913	156
	Aug	10%	6.40	5.43	5.83	-0.40	Open	5.17	5.67	6.80	0.000	21.464	263
	Sep	15%	6.40	5.50	6.10	-0.60	Open	5.06	5.56	7.06	0.000	30.651	411
	Oct	20%	6.40	5.60	6.42	-0.83	Closed	5.29	5.79	7.32	0.000	30.651	340
	Nov	25%	6.40	5.71	6.77	-1.06	Closed	5.77	6.27	7.52	0.000	30.651	192
	Dec	30%	6.40	5.82	7.12	-1.31	Closed	7.44	7.94	7.85	0.000	30.651	(318)
2013	Jan	35%	8.10	7.07	7.28	-0.21	Open	8.85	9.35	8.07	21.072	20.115	(309)
	Feb	40%	8.10	6.72	7.12	-0.40	Open	9.24	9.74	8.31	18.631	29.431	(550)
	Mar	45%	8.10	6.22	6.76	-0.54	Open	7.92	8.42	8.56	19.123	38.992	101
	Apr	50%	8.10	5.85	6.52	-0.67	Open	5.96	6.46	8.80	0.000	47,712	1,018
	May	55%	8.10	6.08	6.96	-0.88	Closed	6.78	7.28	9.03	0.000	47.712	626
	Jun	60%	8.10	6.22	7.31	-1.09	Closed	7.31	7.81	9.27	0.000	47.712	375
	Total										58.826	386.656	2,306

#### Notes:

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate
- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725C/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50t/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.00/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case each month incrementally falls an additional 5% from what was originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 00 kWh premium and long-term rates include a 1.0 ¢/kWh premium. In this scenario the rate always stays open, but because of falling prices no customers take the rate. This analysis did not assume that PSNH would reset the rate in falling market. However, it is possible that PSNH would reset the rate under this scenario.

						Scenario	o 5 - Cont	inuous Price	e Decrease				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
<u>Year</u>	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (i)
2012	Jul	-5%	6.40	5.37	5.17	0.20	Open	4.62	5.12	6.16	0.000	0.000	0
	Aug	-10%	6.40	5.43	5.03	0.40	Open	4.48	4.98	6.01	0.000	0.000	0
	Sep	-15%	6.40	5.50	4.89	0.60	Open	4.13	4.63	5.86	0.000	0.000	0
	Oct	-20%	6.40	5.60	4.77	0.83	Open	4.03	4.53	5.70	0.000	0.000	0
	Nov	-25%	6.40	5.71	4.65	1.06	Open	4.06	4.56	5.49	0.000	0.000	0
	Dec	-30%	6.40	5.82	4.51	1.31	Open	4.64	5.14	5.36	0.000	0.000	0
2013	Jan	-35%	6.40	5.78	4.27	1.50	Open	4.97	5.47	5.16	0.000	0.000	0
	Feb	-40%	6.40	5.52	3.91	1.61	Open	4.81	5.31	4.97	0.000	0.000	0
	Mar	-45%	6.40	5.13	3.50	1.63	Open	3.91	4.41	4.78	0.000	0.000	0
	Apr	-50%	6.40	4.86	3.19	1.67	Open	3.02	3.52	4.58	0.000	0.000	0
	May	-55%	6.40	5.03	3.09	1.93	Open	3.07	3.57	4.38	0.000	0.000	0
	Jun	-60%	6.40	5.12	2.93	2.19	Open	2.93	3.43	4.18	0.000	0.000	0
	Total										0.000	0.000	0

Notes:

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate
- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.77250/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50t/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.00/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

#### Scenario Analysis of Proposed PSNH Rate ADE

This case represents a base case scenario. It is assumed that prices do not deviate from the rate setting forecast in June. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.5 ¢/kWh premium and long-term rates include a 1.0 ¢/kWh premium. This scenario indicates that "long-term" customers will steadily sign up for the ADE rate and "short-term" customers will only be interested during higher priced months.

							Scenario 1	- Stable Pi	rice				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
<u>Year</u>	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	0%	6.40	5.37	5.37	0.00	Open	4.80	5.30	6.35	0.000	0.000	0
	Aug	0%	6.40	5.43	5.43	0.00	Open	4.83	5.33	6.41	0.000	15.827	249
	Sep	0%	6.40	5.50	5.50	0.00	Open	4.59	5.09	6.46	0.000	29.607	535
	Oct	0%	6.40	5.60	5.60	0.00	Open	4.66	5.16	6.51	0.000	43.148	751
	Nov	0%	6.40	5.71	5.71	0.00	Open	4.91	5.41	6.50	0.000	56.829	844
	Dec	0%	6.40	5.82	5.82	0.00	Open	6.04	6.54	6.60	15.211	72.040	314
2013	Jan	0%	6.40	5.78	5.78	0.00	Open	6.91	7.41	6.61	15.804	87.844	(526)
	Feb	0%	6.40	5.52	5.52	0.00	Open	7.02	7.52	6.64	13.973	101.817	(723)
	Mar	0%	6.40	5.13	5.13	0.00	Open	5.92	6.42	6.67	14.342	116.159	631
	Apr	0%	6.40	4.86	4.86	0.00	Open	4.49	4.99	6.69	0.000	129.239	2,465
	May	0%	6.40	5.03	5.03	0.00	Open	4.93	5.43	6.71	0.000	142.415	2,099
	Jun	0%	6.40	5.12	5.12	0.00	Open	5.12	5.62	6.73	0.000	156.674	2,002
	Total										59.330	951.600	8,641

#### Notes:

1) Approximately 30 MW of customers move to and from ADE based on monthly economics (short-term); and approximately 30 MW move to and from ADE based on 12-month economics (long-term). 2) Analysis assumes a 0.50 c/kWh adder above marginal costs in short-term rates, a 1.00 c/kWh adder in long-term rates; and a 1.03 c/kWh adder above marginal costs in PSNH's ADE rate.

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate

(c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.

- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.

(i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0¢/kwh.

- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case energy prices in each month are 10% higher than originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.5 C/kWh premium and long-term rates include a 1.0 C/kWh premium. Similar to Scenario 1, Scenario 2 shows short-term customers utilizing the ADE rate during high priced months and long-term customers steadily joining the rate.

						S	cenario 2	- Price Incre	ease				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
Year	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	10%	6.40	5.37	5.76	-0.39	Open	5.14	5.64	6.74	0.000	16.370	206
	Aug	10%	6.40	5.43	5.83	-0.40	Open	5.17	5,67	6.80	0.000	32.197	395
	Sep	10%	6.40	5.50	5.90	-0.40	Open	4.90	5.40	6.86	0.000	45.977	688
	Oct	10%	6.40	5.60	6.01	-0.41	Open	4.98	5.48	6.91	0.000	59.518	848
	Nov	10%	6.40	5.71	6.13	-0.42	Open	5.26	5.76	6.91	0.000	73,199	836
	Dec	10%	6.40	5.82	6.25	-0.44	Open	6.51	7.01	7.02	15.211	88.410	(110)
2013	Jan	10%	6.40	5.78	6.21	-0.43	Open	7.46	7.96	7.03	15.804	104.214	(1,274)
	Feb	10%	6.40	5.52	5.92	-0.40	Open	7.58	8.08	7.06	13.973	118.187	(1,557)
	Mar	10%	6.40	5.13	5.49	-0.36	Open	6.36	6.86	7.09	14.342	132.529	56
	Apr	10%	6.40	4.86	5.19	-0.33	Open	4.79	5.29	7.11	0.000	145.609	2,349
	May	10%	6.40	5.03	5.38	-0.35	Open	5.26	5.76	7.13	0.000	158.785	1,803
	Jun	10%	6.40	5.12	5.49	-0.36	Open	5.49	5.99	7.15	0.000	173.044	1,580
	Total										59.330	1,148.039	5,821

Notes:

1) Approximately 30 MW of customers move to and from ADE based on monthly economics (short-term); and approximately 30 MW move to and from ADE based on 12-month economics (long-term). 2) Analysis assumes a 0.50 c/kWh adder above marginal costs in short-term rates, a 1.00 c/kWh adder in long-term rates; and a 1.03 c/kWh adder above marginal costs in PSNH's ADE rate.

(a) The percent energy market change from what was assumed at the time of the rate setting in June

(b) The PSNH ADE Rate

(c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.

(d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.

(e) (c) minus (d). If the delta drops below -0.7725 $\$ /kwh, then the rate is closed.

(f) The availability status of ADE

(g) PSNH's monthly marginal cost.

(h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.

(i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0¢/kwh.

(j) Short-term customers taking the ADE rate.

(k) Long-term customers taking the ADE rate.

(I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) - (g)] \times 10$ 

In this case energy prices in each month are 10% lower than originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.5 ¢/kWh premium and long-term rates include a 1.0 ¢/kWh premium. Similar to Scenario 1, Scenario 3 shows short-term customers utilizing the ADE rate during peak months. However, those are the only customers taking the ADE rate due to lower long-term market prices.

						So	cenario 3 -	Price Decr	ease				
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
Year	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	-10%	6.40	5.37	4.98	0.39	Open	4.45	4.95	5.96	0.000	0.000	0
	Aug	-10%	6.40	5.43	5.03	0.40	Open	4.48	4.98	6.01	0.000	0.000	0
	Sep	-10%	6.40	5.50	5.10	0.40	Open	4.28	4.78	6.06	0.000	0.000	0
	Oct	-10%	6.40	5.60	5.18	0.41	Open	4.34	4.84	6.10	0.000	0.000	0
	Nov	-10%	6.40	5.71	5.28	0.42	Open	4.57	5.07	6.10	0.000	0.000	0
	Dec	-10%	6.40	5.82	5.38	0.44	Open	5.57	6.07	6.19	0.000	0.000	0
2013	Jan	-10%	6.40	5.78	5.35	0.43	Open	6.35	6.85	6.20	15.804	0.000	7
	Feb	-10%	6.40	5.52	5.12	0.40	Open	6.47	6.97	6.22	13.973	0.000	(10)
	Mar	-10%	6.40	5.13	4.77	0.36	Open	5.47	5.97	6.25	0.000	0.000	0
	Apr	-10%	6.40	4.86	4.52	0.33	Open	4.20	4.70	6.27	0.000	0.000	0
	May	-10%	6.40	5.03	4.68	0.35	Open	4.59	5.09	6.29	0.000	0.000	0
	Jun	-10%	6.40	5.12	4.76	0.36	Open	4.76	5.26	6.30	0.000	0.000	0
	Total		,								29.777	0.000	(3)

Notes:

1) Approximately 30 MW of customers move to and from ADE based on monthly economics (short-term); and approximately 30 MW move to and from ADE based on 12-month economics (long-term). 2) Analysis assumes a 0.50 c/kWh adder above marginal costs in short-term rates, a 1.00 c/kWh adder in long-term rates; and a 1.03 c/kWh adder above marginal costs in PSNH's ADE rate.

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate

(c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.

- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0¢/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case energy prices in each month incrementally rise an additional 5% from what was originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.5 ¢/kWh premium and long-term rates include a 1.0 ¢/kWh premium. In this scenario long-term customers steadily take service from the ADE rate. However, the constant energy price increases close the rate in October and the rate stays closed until the rate is reset in January, at which time both short-term and long-term customers once again move onto the ADE rate. The rate closes again in May and June.

						Scenari	o 4 - Con	inuous Pric	e Increase				
				Original Forecasted	Updated Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
Year	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	5%	6.40	5.37	5.57	-0.20	Open	4.97	5.47	6.55	0.000	16.370	234
	Aug	10%	6.40	5.43	5.83	-0.40	Open	5.17	5.67	6.80	0.000	32.197	395
	Sep	15%	6.40	5.50	6.10	-0.60	Open	5.06	5.56	7,06	0.000	45.977	617
	Oct	20%	6.40	5.60	6.42	-0.83	Closed	5.29	5.79	7.32	0.000	45.977	510
	Nov	25%	6.40	5.71	6.77	-1.06	Closed	5.77	6.27	7.52	0.000	45.977	289
	Dec	30%	6.40	5.82	7.12	-1.31	Closed	7.44	7,94	7.85	0.000	45.977	(477)
2013	Jan	35%	8.10	7.07	7.28	-0.21	Open	8.85	9.35	8.07	15.804	30.173	(345)
	Feb	40%	8.10	6.72	7.12	-0.40	Open	9.24	9.74	8.31	13.973	44.146	(665)
	Mar	45%	8.10	6.22	6.76	-0.54	Open	7.92	8.42	8.56	14.342	58.488	127
	Apr	50%	8.10	5.85	6.52	-0.67	Open	5.96	6.46	8.80	0.000	71.568	1,527
	May	55%	8.10	6.08	6.96	-0.88	Closed	6.78	7.28	9.03	0.000	71.568	938
	Jun	60%	8.10	6.22	7.31	-1.09	Closed	7.31	7.81	9.27	0.000	71.568	562
	Total										44.119	579.984	3,712

Notes:

1) Approximately 30 MW of customers move to and from ADE based on monthly economics (short-term); and approximately 30 MW move to and from ADE based on 12-month economics (long-term). 2) Analysis assumes a 0.50 c/kWh adder above marginal costs in short-term rates, a 1.00 c/kWh adder in long-term rates; and a 1.03 c/kWh adder above marginal costs in PSNH's ADE rate.

(a) The percent energy market change from what was assumed at the time of the rate setting in June

(b) The PSNH ADE Rate

- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0¢/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

In this case each month incrementally falls an additional 5% from what was originally forecast. Two different types of customer movement on and off of the ADE rate are included in the analysis; movement deriving from customers seeking short-term rates and those seeking long-term rates. Each month the analysis compares the PSNH ADE rate to 1) a monthly rate offering from 3rd party suppliers (short term) and 2) a rolling 12-month looking forward rate from 3rd party suppliers (long term). Short-term rates offered by competitive suppliers include a 0.5 ¢/kWh premium and long-term rates include a 1.0 ¢/kWh premium. In this scenario the rate always stays open, but because of falling prices no customers take the rate. This analysis did not assume that PSNH would reset the rate in a falling market. However, it is possible that PSNH would reset the rate under this scenario.

		Scenario 5 - Continuous Price Decrease											
				Original	Updated								
				Forecasted	Forecast of						Customers	Customers	
		Energy		Marginal	Marginal		PSNH		Short-Term	Long-Term	Utilizing a	Utilizing a	Contribution
		Market	PSNHCo	sts for	Costs for	Marginal	ADE	PSNH	Competitive	Competitive	Short-Term	Long-Term	to PSNH
		Price	ADE	Remaining	Remaining	Cost	Rate	Monthly	Supplier	Supplier	Approach	Approach	Fixed Costs
<u>Year</u>	<u>Month</u>	Change (a)	Rate (b)	Term (c)	Term (d)	Delta (e)	Open (f)	Cost (g)	Rate (h)	Rate (i)	GWh (j)	GWh (k)	\$(000) (I)
2012	Jul	-5%	6.40	5.37	5.17	0.20	Open	4.62	5.12	6.16	0.000	0.000	0
	Aug	-10%	6.40	5.43	5.03	0.40	Open	4.48	4.98	6.01	0.000	0.000	0
	Sep	-15%	6.40	5.50	4.89	0.60	Open	4.13	4.63	5.86	0.000	0.000	0
	Oct	-20%	6.40	5.60	4.77	0.83	Open	4.03	4.53	5.70	0.000	0.000	0
	Nov	-25%	6.40	5.71	4.65	1.06	Open	4.06	4.56	5.49	0.000	0.000	0
	Dec	-30%	6.40	5.82	4.51	1.31	Open	4.64	5.14	5.36	0.000	0.000	0
2013	Jan	-35%	6.40	5.78	4.27	1.50	Open	4.97	5.47	5.16	0.000	0.000	0
	Feb	-40%	6.40	5.52	3.91	1.61	Open	4.81	5.31	4.97	0.000	0.000	0
	Mar	-45%	6.40	5.13	3.50	1.63	Open	3.91	4.41	4.78	0.000	0.000	0
	Apr	-50%	6.40	4.86	3.19	1.67	Open	3.02	3.52	4.58	0.000	0.000	0
	May	-55%	6.40	5.03	3.09	1.93	Open	3.07	3.57	4.38	0.000	0.000	0
	Jun	-60%	6.40	5.12	2.93	2.19	Open	2.93	3.43	4.18	0.000	0.000	0
	Total						****				0.000	0.000	0

Notes:

- (a) The percent energy market change from what was assumed at the time of the rate setting in June
- (b) The PSNH ADE Rate
- (c) PSNH's original estimate of average marginal costs for the remaining months of the rate year ending in June. For example, in December this number represents the average marginal cost December through June.
- (d) Updated marginal cost estimate based on the change in energy market prices. Used for determining the open or closed status of the ADE rate.
- (e) (c) minus (d). If the delta drops below -0.7725¢/kwh, then the rate is closed.
- (f) The availability status of ADE
- (g) PSNH's monthly marginal cost.
- (h) Competitive supplier short-term posted rate. (g) plus 0.50¢/kwh.
- (i) Competitive supplier long-term posted rate. A rolling 12-month looking forward average of marginal costs from and including the month in question, plus 1.0¢/kwh.
- (j) Short-term customers taking the ADE rate.
- (k) Long-term customers taking the ADE rate.
- (I) Benefit deriving from the ADE rate.  $[(j) + (k)] \times [(b) (g)] \times 10$

#### 1 PUBLI 2 2012 ALTE 3 4 5 6 7 8 9 9 10 Summary of Forecasted Alternate Energy Service 11 Cost For January 2012 Through December 2012 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE 2012 ALTERNATE ENERGY SERVICE RATE CALCULATION (Dollars in 000's) Reference 12 13 14 Scrubber Cost 15 Merrimack Scrubber Depreciation Expense 16 Merrimack Scrubber Property Tax Expense 17 Merrimack Scrubber Return on Rate Base 18 \$ 14,544 Page 2 288 Page 2 35,740 Page 3 19 Total Forecasted Merrimack Scrubber Non-Operating Cost \$ 50,572 Total Forecasted Merrimack Scrubber Non-Operating Cost Total Forecasted Retail MWH Sales Forecasted Energy Service Merrimack Scrubber Rate Impact Cents Per KWH (Line 19 / Line 25) Marginal Cost 4,922,142 MWh 1.03 ¢/kWh 29 Marginal Cost 30 Marginal Cost of Serving Energy Service 31 32 Alternate Default Energy Service Rate ADE 5.37 ¢/kWh Attachment 6 6.40 ¢/kWh

J

÷

Attachment 5 Page 2 · 6.,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE													
2	2012 ENERGY SERVICE RATE CALCULATION												
3	MERRIMACK SCRUBBER DEPRECIATION AND PROPERTY TAXES												
				JULY	2012 - JUNE 2	2013		-					
(Dollars in 000's)													
6													
7													
8													
9	July	August	September	October	November	December	January	February	March	April	May	June	
10	2012	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	Total
11 Merrimack Scrubber Depreciation & Property Taxes	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
12													4
13 Merrimack Scrubber Depreciation Cost	1,203	1,203	1,203	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215	14,544
14 Merrimack Scrubber Property Taxes (1)	24	24	24	24	24	24	24	24	24	24	24	24	288
15													
16 Total Merrimack Scrubber Depreciation and Property Taxes	\$ 1,227	\$ 1,227	\$ 1,227	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 1,239	\$ 14,832
1/													

18 (1) Merrimack Scrubber related property tax impact represents the projection of the non-exempt portion of the project

Amounts shown above may not add due to rounding.

1 2 3 4	PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE ENERGY SERVICE RATE CALCULATION MERRIMACK SCRUBBER RETURN ON RATE BASE JULY 2012 - JUNE 2013																								
5																									
6																									
7																									
8																									
9		July		August	Sept	tember	October	N	lovember	Dec	cember		January	F	ebruarv		March		April		May		lune		
10	Merrimack Scrubber	2012		2012	20	012	2012		2012	2	2012		2013		2013		2013		2013		2013		2013		Total
11	Return on Rate Base	Estimate	E	Estimate	Esti	imate	Estimate	E	Estimate	Es	timate	E	stimate	E	Estimate	E	stimate	E	stimate	Fs	stimate	F	stimate		10101
12																							Joannato		
13																									
14	Rate base																								
15	Net Plant	\$ 384,148	\$	382,945	\$ 3	83,742	\$ 382,527	\$	381,312	\$ 3	383,097	\$	381,882	\$	380,667	\$	381,452	\$	380,237	\$	379,022	\$	377,807		
16																									
17	Working Capital Allow. (45 days of O&M)	505	<b>;</b>	505		505	505		505		505		505		505		505		505		505		505		
18	Deferred Taxes	(49,632	)	(55,874)	(!	56,029)	(54,224)		(57,333)		(61,906)		(61,906)		(61,906)		(61,906)		(61,906)		(61,906)		(61,906)		
19	Total Rate Base (L15 thru L18)	335,021		327,576	33	28,218	328,808		324,484	3	321,696		320,481		319,266		320,051		318,836		317,621		316,406	•	
20																								•	
21	Average Rate Base (prev + curr month)	337,880		331,299	33	27,897	328,513		326,646	3	323,090		321,089		319,874		319,659		319,444		318,229		317,014		
22	x Return	0.9186%	6	0.9186%	0.	.9186%	0.9186%		0.9186%		0.9186%		0.9186%		0.9186%		0.9186%		0.9186%		0.9186%		0.9186%		
23	Merrimack Scrubber Return (L21 x L22)	\$ 3,104	\$	3,043	\$	3,012	\$ 3,018	\$	3,001	\$	2,968	\$	2,950	\$	2,938	\$	2,936	\$	2,934	\$	2,923	\$	2,912	\$	35,740

Amounts shown above may not add due to rounding.

Attachment 5

 $\vec{n}_{\mu}$ 

۰.

Page 3

### PSNH Rate ADE Proposal - Docket DE 11-216 Marginal Cost to Serve Incremental Sales - July, 2012 to June, 2013

	<u>MWh</u>	<u>c/kWh</u>	<u>Notes</u>
Sales Increment	769,085		(1)
Marginal Costs to Serve Incremental Sales:	\$(000)		(2)
Energy	\$ 30,191	3.93	(3)
Capacity	7,455	0.97	(4)
Ancillaries	129	0.02	(5)
RPS	3,155	0.41	(6)
ISO Expenses	 358	0.05	
Total	\$ 41,288		
	<u>¢/kWh</u>		
Marginal cost to serve incremental sales	5.37	5.37	(7)

#### Notes:

4

y.

1) The incremental annual peak at the meter is 157 MW.

2) Marginal costs are consistent with the modeling and assumptions used in PSNH's May, 2012 ES rate filing in Docket DE 11-215.

3) As per note 2), based on NYMEX 4/16/12 forward energy market prices.

4) Forecasted costs associated with 2,526 MW-months of capacity in ISO-NE's forward capacity market.

5) Ancillaries include regulation, reserves, and ARR revenues.

6) Based on July, 2012 thru June, 2013 REC volume requirements and price quotations.

7) The marginal cost does not include any costs/adders for the coverage of risk or for profit.