



# Analysis of the performance of Vermont Gas Systems under alternative regulation

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## EXECUTIVE SUMMARY – ALTERNATIVE REGULATION

The Vermont Public Service Board approved an alternative regulation plan (“ARP”) for Vermont Gas Systems (“VGS”) in 2006 which was renewed in 2009 and is under consideration for renewal in VGS’ currently-pending rate case.

The ARP was adopted under the belief that it would accelerate VGS’ ability to recover its costs (reduce regulatory lag) while at the same time creating administrative and operational efficiency benefits for ratepayers.

This study shows that the ARP has not delivered those ratepayer benefits. Under the ARP:

- VGS customers have seen **considerable base rate increases** that have been masked by decreases in natural gas commodity costs.
- VGS’ residential base rates have increased to **levels that are above the New England regional average** and have stayed above that regional average for close to seven years.
- VGS’ operating costs have become **more inefficient** under alternative regulation and are some of the highest in New England.
- VGS’ administrative costs are some of the **highest in New England**.
- **VGS has become less, not more efficient** since the introduction of alternative regulation.
- **VGS’ rate base has grown** at inexplicably high rates.

Alternative regulation has proved to be a failure for VGS’ customers and needs to be discontinued.

## EXECUTIVE SUMMARY – THE ARP AND THE ADDISON NATURAL GAS TRANSMISSION PROJECT

The ARP has allowed VGS to construct the Addison Natural Gas Project (“ANGP”), a project that alone represents a 37.2 percent increase to VGS’ total capital investment base.

The **ANGP is not estimated to breakeven until at least 2047**; and will not recoup cumulative financial expenses until after 2070. **Today’s ratepayers will be required to subsidize this natural gas transmission project for close to a 30 year period** before any positive benefits could arise from delivering lower-cost natural gas into Vermont.

VGS’ ARP also has allowed the utility to implement a System Enhancement and Reliability Fund (“SERF”), a fund ostensibly designed to “escrow” ratepayer investment to fund the ANGP.

However, rather than use the funds collected to date to pay for the ANGP, VGS will continue to **force ratepayers to make contributions to the SERF until 2031**—long after the funds are needed to help fund the ANGP.

This study estimated that **VGS’ shareholders will receive an \$10.5 million benefit** by use of the SERF in the manner proposed by VGS in its current ARP renewal and base rate case.

## TABLE OF CONTENTS

**1.**

**Retail Rates**

**2.**

**Operating Costs & Administrative Expenses**

**3.**

**Capital Expenditures & Plant Investments**

**4.**

**Addison Natural Gas Pipeline (ANGP) Project and the  
System Enhancement & Reliability Fund (SERF)**

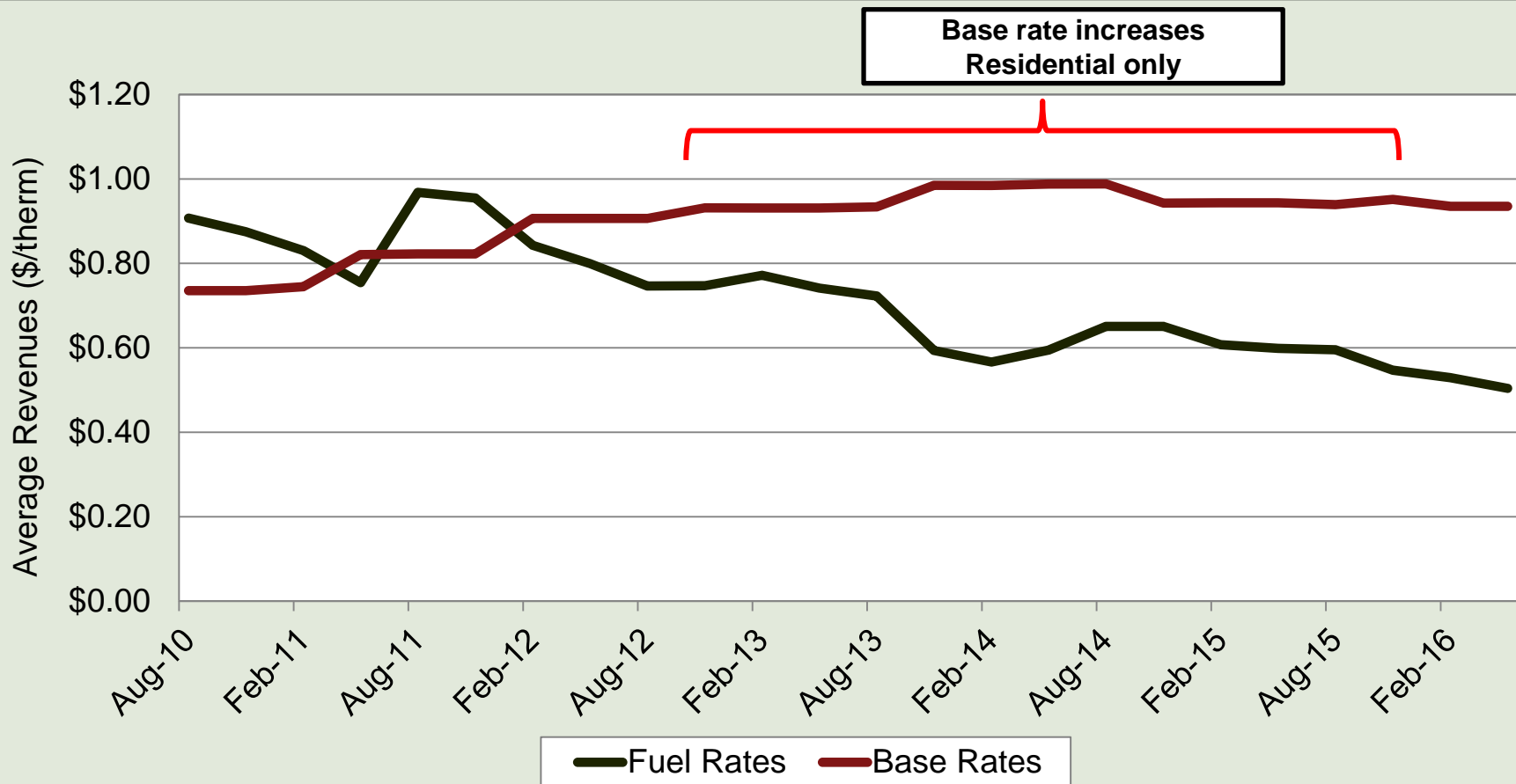
**5.**

**Conclusions**

# 1. Retail Rates

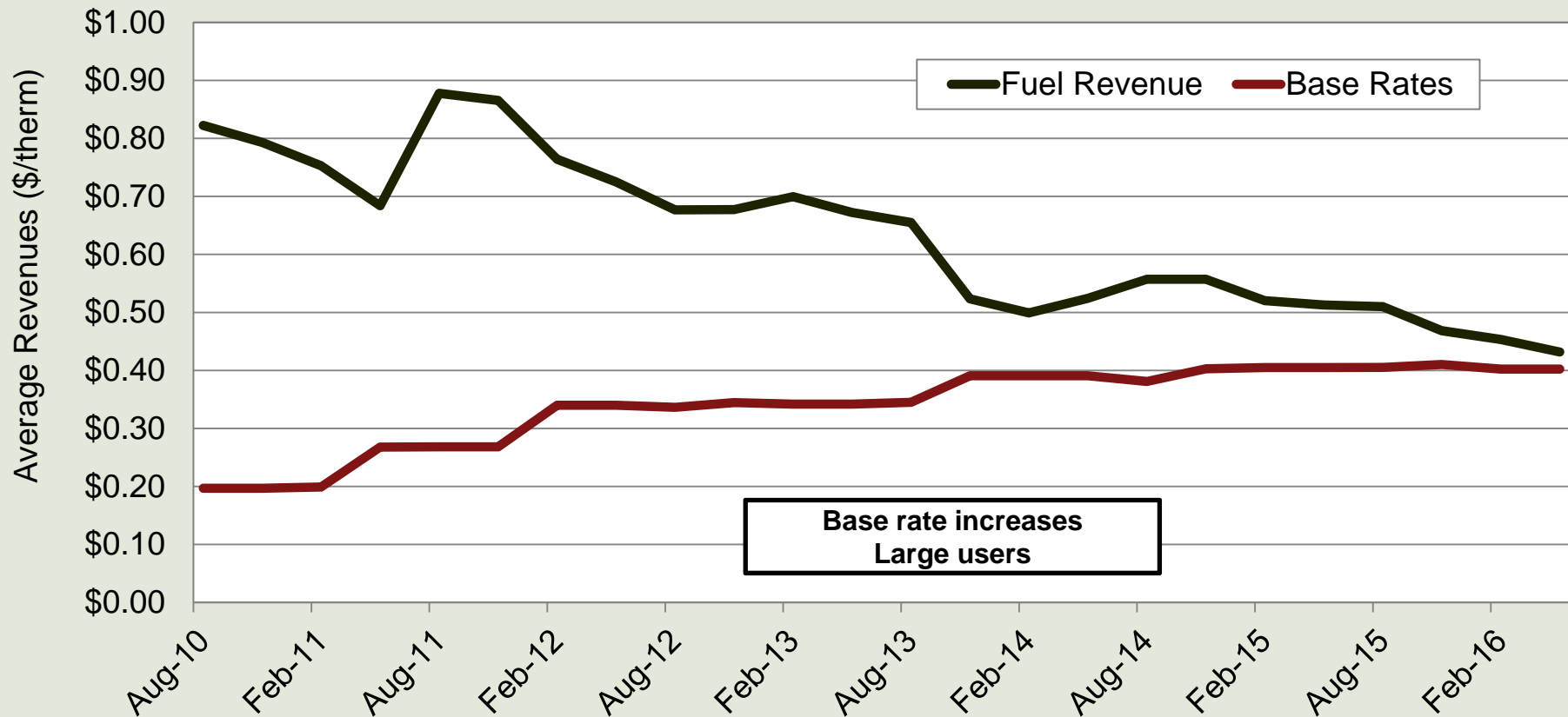
## Vermont Gas Systems (“VGS”) residential base rates

**VGS’ residential customers have seen significant base rate increases that have been “masked” by decreases in overall fuel rates. VGS’ residential base rates have increased by nearly 27 percent since August 2010.**



## VGS large commercial/industrial base rates

Large commercial and industrial customers have also seen considerable base rate increases, despite the fact that fuel rates are much lower. Large user base rates have increased by 21.2 percent on annual average basis since 2010.



## VGS residential base rate comparison to peer utilities

**With the exception of 2014, VGS has seen its residential base rates consistently increase over the past 15 years. This trend however, has been most notable since 2008.**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont Gas Systems</b>	<b>\$3.87</b>	<b>\$5.24</b>	<b>\$5.54</b>	<b>\$4.88</b>	<b>\$5.77</b>	<b>\$5.35</b>	<b>\$5.57</b>	<b>\$5.96</b>	<b>\$7.65</b>	<b>\$7.96</b>	<b>\$7.85</b>	<b>\$8.19</b>	<b>\$10.10</b>	<b>\$9.71</b>	<b>\$7.60</b>
Connecticut Natural Gas	\$2.62	\$1.45	\$3.31	\$6.17	\$5.15	\$5.03	\$6.51	\$5.89	\$5.97	\$6.29	\$6.00	\$5.53	\$6.91	\$6.31	\$7.11
Southern Connecticut Gas	\$5.99	\$6.86	\$5.93	\$8.05	\$7.20	\$6.99	\$10.27	\$8.46	\$7.47	\$8.26	\$8.86	\$8.19	\$9.74	\$7.66	\$8.04
Yankee Gas	\$5.77	\$4.38	\$5.12	\$7.43	\$7.31	\$7.90	\$9.24	\$9.03	\$9.62	\$9.63	\$10.53	\$10.55	\$11.06	\$9.82	\$10.51
Bangor Gas Company	-	\$2.28	\$4.54	\$3.04	\$2.79	\$3.22	\$5.72	\$4.45	\$0.38	\$2.53	\$2.51	\$4.99	\$11.08	\$5.97	\$7.32
Maine Natural Gas	-	-	\$3.89	\$1.62	\$0.50	\$2.73	\$9.59	\$6.78	\$2.41	\$6.11	\$4.28	\$4.03	\$5.21	\$6.93	\$7.12
Unitil (ME)	\$4.41	\$5.49	\$7.99	\$5.62	\$4.66	\$4.60	\$8.49	\$6.45	\$4.41	\$8.52	\$6.60	\$6.51	\$8.26	\$8.61	\$6.12
Berkshire Gas Company	\$5.04	\$6.54	\$5.93	\$5.66	\$6.10	\$5.79	\$7.31	\$6.58	\$7.35	\$5.62	\$7.07	\$6.85	\$7.13	\$7.27	\$7.25
Blackstone Gas Company	\$5.60	\$6.19	\$7.32	\$6.53	\$6.49	\$7.58	\$7.34	\$7.08	\$8.32	\$7.84	\$8.00	\$8.47	\$8.21	\$9.60	\$15.76
Boston Gas Company (inclding Essex Gas)	\$4.24	\$6.55	\$5.03	\$5.44	\$7.56	\$4.52	\$7.16	\$8.97	\$7.87	\$6.80	\$8.20	\$7.05	\$8.12	\$8.06	\$7.96
Colonial Gas Company	\$5.02	\$7.10	\$6.73	\$6.11	\$6.64	\$5.49	\$6.90	\$8.74	\$7.94	\$6.78	\$7.13	\$6.55	\$6.88	\$7.12	\$7.15
Columbia Gas of Massachusetts	\$4.82	\$4.44	\$4.89	\$4.30	\$4.94	\$5.28	\$5.74	\$5.34	\$5.65	\$5.57	\$5.67	\$6.56	\$6.35	\$6.95	\$8.76
Unitil (MA)	\$3.71	\$5.57	\$4.42	\$5.93	\$4.44	\$5.01	\$7.21	\$9.21	\$9.32	\$9.95	\$6.27	\$6.55	\$8.51	\$10.68	\$11.41
Liberty Utilities (MA)	\$3.35	\$5.34	\$5.23	\$4.35	\$4.56	\$3.87	\$4.61	\$5.88	\$5.59	\$8.09	\$6.13	\$7.50	\$7.86	\$7.52	\$7.98
NSTAR	\$4.51	\$6.63	\$4.21	\$4.99	\$5.37	\$4.27	\$6.47	\$6.90	\$5.36	\$6.64	\$4.60	\$6.33	\$5.89	\$5.80	\$5.10
Liberty Utilities (NH)	\$4.71	\$7.73	\$5.09	\$4.08	\$7.51	\$4.77	\$5.76	\$6.71	\$5.28	\$5.39	\$5.29	\$6.09	\$5.79	\$5.89	\$6.68
Unitil (NH)	\$4.77	\$10.90	\$8.52	\$6.12	\$8.36	\$6.83	\$7.34	\$8.05	\$6.42	\$7.31	\$6.85	\$8.35	\$9.38	\$7.42	\$8.01
National Grid (RI)	\$5.47	\$5.77	\$6.80	\$4.85	\$5.91	\$6.10	\$7.62	\$6.04	\$6.82	\$10.36	\$6.43	\$7.11	\$10.18	\$10.54	\$11.11

## VGS residential base rate comparison to peer utilities

**Prior to alternative regulation, VGS generally ranked at the average to slightly below average rankings for residential base rates in New England. VGS' residential base rates, however, surged to the highest quartile after the implementation of alternative regulation.**

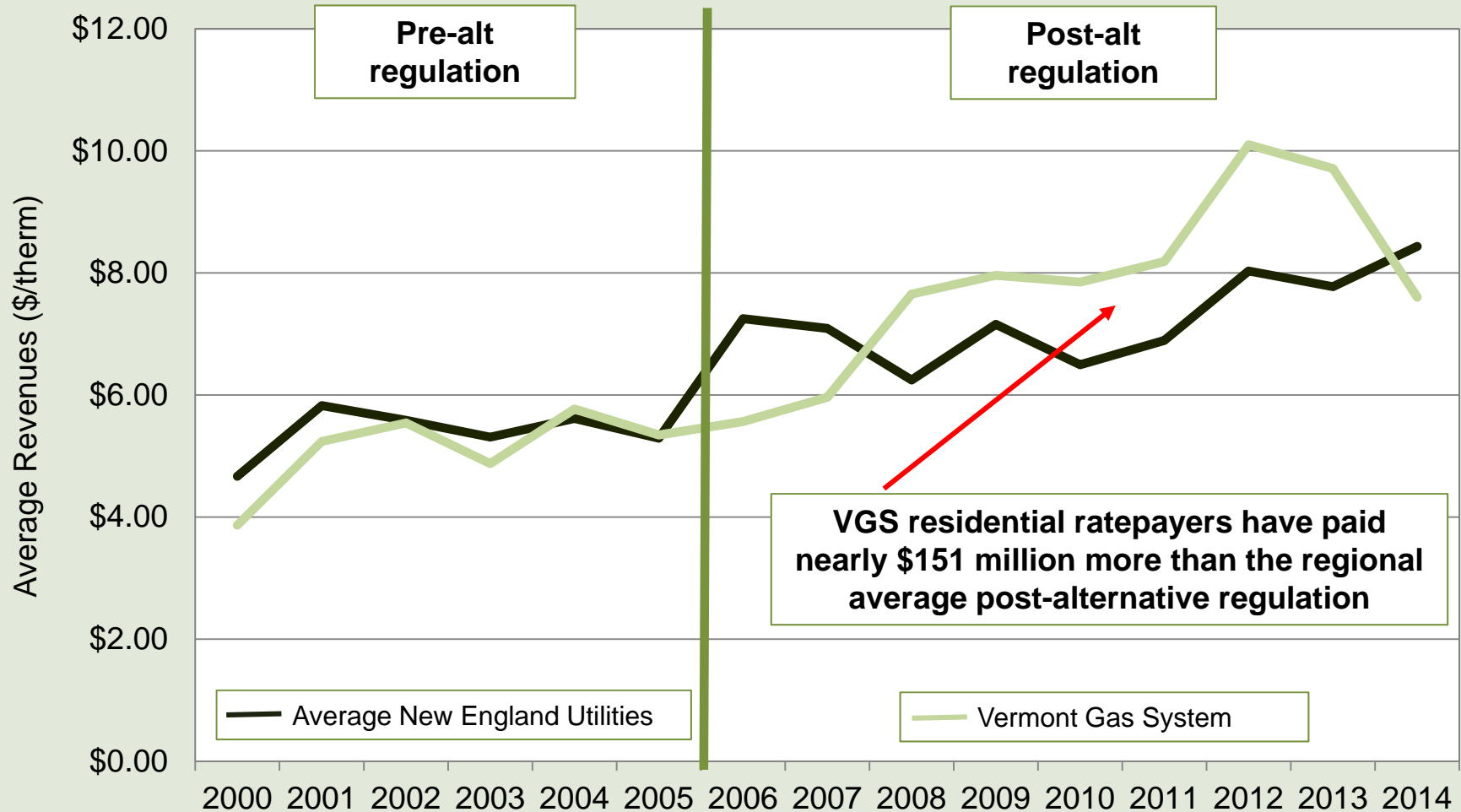
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont Gas Systems</b>	<b>4</b>	<b>5</b>	<b>11</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>2</b>	<b>5</b>	<b>13</b>	<b>12</b>	<b>14</b>	<b>14</b>	<b>15</b>	<b>15</b>	<b>9</b>
Connecticut Natural Gas	1	1	1	15	7	9	7	4	8	6	6	3	6	4	4
Southern Connecticut Gas	16	14	12	18	14	16	18	14	12	14	17	15	14	11	13
Yankee Gas	15	3	9	17	15	18	16	17	18	16	18	18	17	16	15
Bangor Gas Company	-	2	5	2	2	2	3	1	1	1	1	2	18	3	8
Maine Natural Gas	-	-	2	1	1	1	17	10	2	5	2	1	1	5	5
Unitil (ME)	6	7	17	10	5	6	15	7	3	15	10	6	11	13	2
Berkshire Gas Company	12	11	13	11	11	13	11	8	11	4	12	10	7	8	7
Blackstone Gas Company	14	10	16	16	12	17	12	12	16	11	15	17	10	14	18
Boston Gas Company (including Essex Gas)	5	12	7	9	17	5	9	16	14	9	16	11	9	12	10
Colonial Gas Company	11	15	14	13	13	12	8	15	15	8	13	7	5	7	6
Columbia Gas of Massachusetts	10	4	6	4	6	10	4	2	7	3	5	9	4	6	14
Unitil (MA)	3	8	4	12	3	8	10	18	17	17	8	8	12	18	17
Liberty Utilities (MA)	2	6	10	5	4	3	1	3	6	13	7	13	8	10	11
NSTAR	7	13	3	8	8	4	6	11	5	7	3	5	3	1	1
Liberty Utilities (NH)	8	16	8	3	16	7	5	9	4	2	4	4	2	2	3
Unitil (NH)	9	17	18	14	18	15	13	13	9	10	11	16	13	9	12
National Grid (RI)	13	9	15	6	10	14	14	6	10	18	9	12	16	17	16

**Exceptionally poor, post-alternative regulation base rate performance.**

**Note, 1 = best in class, 13 = worst.**

## VGS residential base rates comparison (pre and post-alternative regulation)

**Alternative regulation has not created any Vermont ratepayer benefits. In fact, Vermont residential ratepayers have generally paid considerably more than customers of other New England gas utilities.**



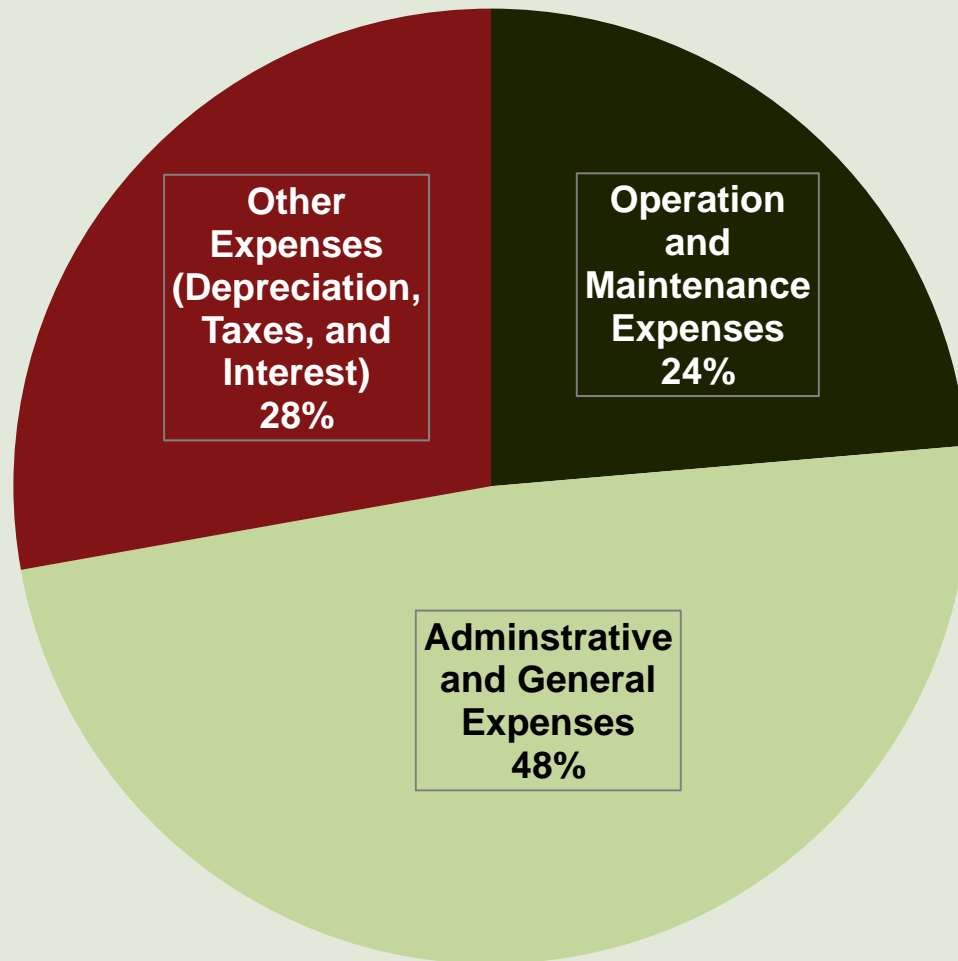
**VGS residential ratepayers have paid nearly \$151 million more than the regional average post-alternative regulation**

## **2. Operating Costs & Administrative Expenses**

## VGS cost structure (2015 annual report).

Excludes purchase gas costs

A utility's cost performance can be examined by looking at trends in its operations and maintenance ("O&M") costs and its administrative and general ("A&G," or "overhead costs"). These comprise over 20 percent of VGS' overall cost structure (with fuel) and 72 percent of its non-fuel-related cost structure.



## Peer group analysis: VGS v. New England gas utilities (O&M costs, \$/Mcf).

**Alternative regulation has not resulted in any significant cost efficiency gains. VGS' O&M expenses are above peer averages and have not improved on relative basis since the inception of alternative regulation.**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont</b>	<b>Vermont Gas Systems</b>	<b>\$8</b>	<b>\$9</b>	<b>\$10</b>	<b>\$11</b>	<b>\$11</b>	<b>\$9</b>	<b>\$9</b>	<b>\$9</b>	<b>\$8</b>	<b>\$8</b>
Massachusetts	Berkshire Gas Company	\$7	\$8	\$6	\$7	\$5	\$5	\$4	\$4	\$4	\$5
Massachusetts	Boston Gas D/B/A National Grid	\$12	\$13	\$14	\$11	\$9	\$9	\$9	\$8	\$8	\$8
Connecticut	Connecticut Natural Gas	\$12	\$13	\$12	\$14	\$10	\$10	\$8	\$8	\$8	\$7
New Hampshire	EnergyNorth Natural Gas D/B/A Liberty Utilities	\$10	\$11	\$12	\$10	\$9	\$8	\$8	\$7	\$7	\$8
Massachusetts	Fitchburg Gas and Electric D/B/A Unutil	\$10	\$10	\$8	\$9	\$11	\$8	\$5	\$8	\$6	\$7
Massachusetts	Liberty Utilities	\$11	\$11	\$12	\$13	\$13	\$11	\$10	\$10	\$8	\$10
Rhode Island	Narragansett Electric D/B/A National Grid	\$9	\$12	\$11	\$11	\$11	\$12	\$12	\$9	\$8	\$8
Maine	Northern Utilities D/B/A Unutil	\$7	\$7	\$6	\$7	\$6	\$7	\$6	\$6	\$6	\$6
New Hampshire	Northern Utilities D/B/A Unutil	\$9	\$9	\$8	\$8	\$7	\$8	\$8	\$6	\$6	\$7
Massachusetts	Nstar Gas	\$8	\$8	\$8	\$9	\$7	\$6	\$6	\$5	\$6	\$6
Connecticut	Southern Connecticut Gas	\$5	\$5	\$5	\$5	\$4	\$4	\$3	\$3	\$3	\$4
Connecticut	Yankee Gas	\$9	\$8	\$8	\$9	\$6	\$6	\$5	\$5	\$5	\$6

**Post-alternative regulation, VGS' cost performance has been 20 percent WORSE than its peers. VGS' cost performance was 27 percent worse than peers during 2008-2012.**

*Note: cost comparisons are standardized to control for utility size differences.*

## Peer group analysis: VGS v. New England gas utilities (O&M costs -- ranking)

**VGS was below-average cost performer prior to alternative regulation. For the period 2008-2012, VGS become one of the worst-performing New England gas utilities from an O&M cost perspective. VGS has seen only marginal improvement since 2013, and continues to be a relatively “high-cost” utility.**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont</b>	<b>Vermont Gas Systems</b>	4	7	8	11	10	9	11	11	9	9
Massachusetts	Berkshire Gas Company	2	3	3	3	2	2	2	2	2	2
Massachusetts	Boston Gas D/B/A National Grid	12	12	13	9	7	10	10	10	13	11
Connecticut	Connecticut Natural Gas	13	13	10	13	9	11	9	9	12	8
New Hampshire	EnergyNorth Natural Gas D/B/A Liberty Utilities	10	10	11	8	8	7	7	7	8	10
Massachusetts	Fitchburg Gas and Electric D/B/A Unutil	9	8	7	5	11	8	3	8	6	7
Massachusetts	Liberty Utilities	11	9	12	12	13	12	12	13	11	13
Rhode Island	Narragansett Electric D/B/A National Grid	8	11	9	10	12	13	13	12	10	12
Maine	Northern Utilities D/B/A Unutil	3	2	2	2	3	5	6	5	4	5
New Hampshire	Northern Utilities D/B/A Unutil	7	6	6	4	6	6	8	6	7	6
Massachusetts	Nstar Gas	5	4	4	6	5	3	5	4	5	3
Connecticut	Southern Connecticut Gas	1	1	1	1	1	1	1	1	1	1
Connecticut	Yankee Gas	6	5	5	7	4	4	4	3	3	4

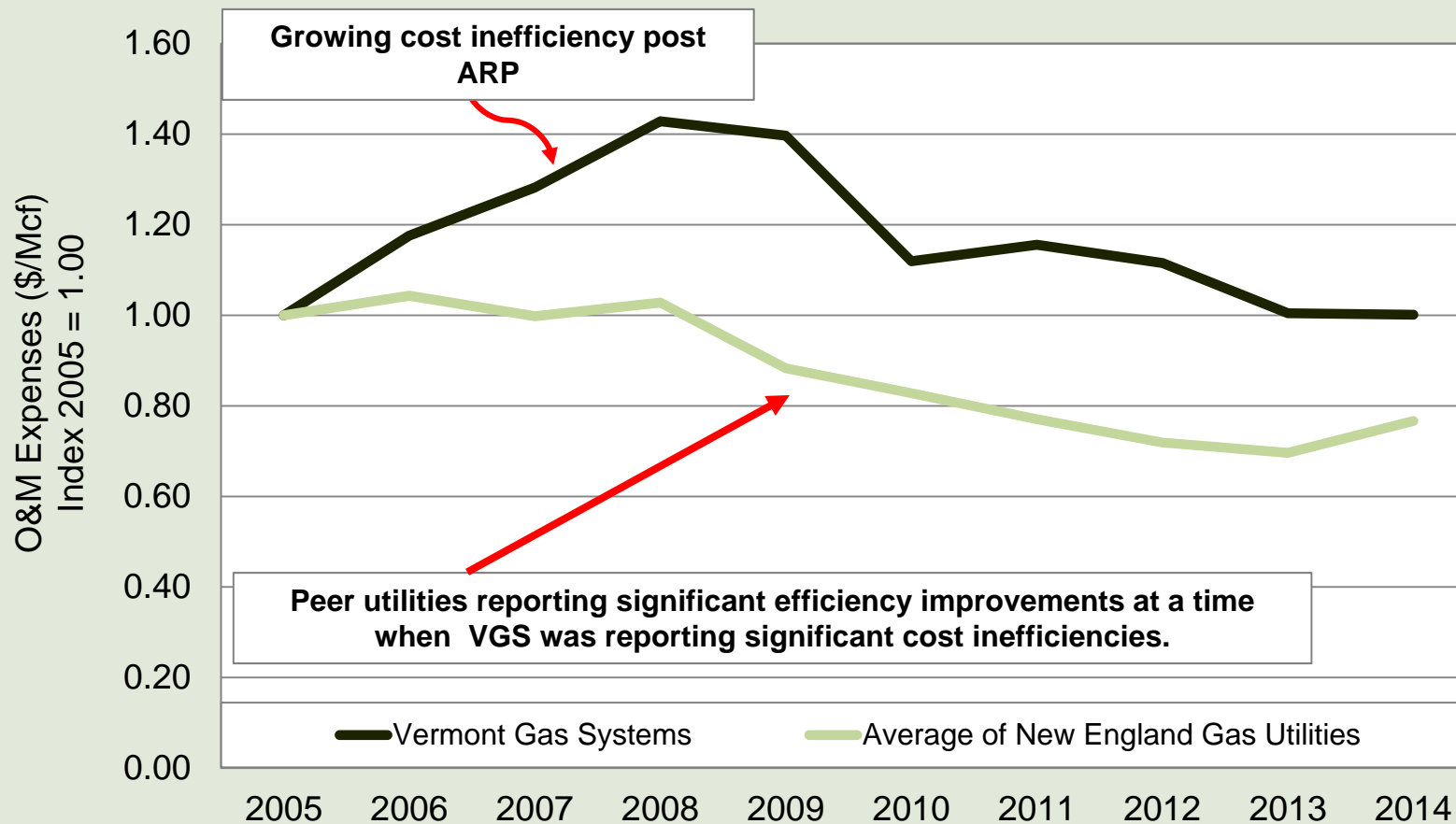
**Exceptionally poor, post-alternative regulation cost performance.**

**Note, 1 = best in class, 13 = worst.**

**Note: cost comparisons are standardized to control for utility size differences.**

## VGS v. New England gas utilities: Relative O&M cost trends (\$/Mcf).

**Alternative regulation has led to no VGS efficiency improvements and no ratepayer benefits. In fact, VGS' O&M costs increased rapidly for four years after alt reg implantation, and has continued to remain above regional peers.**



Source: Individual annual financial reports of listed companies.

## Peer group analysis: VGS v. New England gas utilities (A&G expenses, \$/Mcf).

**Alternative regulation has not resulted in any significant administrative expense improvements (administrative and general or “A&G” costs). VGS continues to incur considerable expenses on A&G functions relative to other utilities.**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont</b>	<b>Vermont Gas Systems</b>	<b>\$0.81</b>	<b>\$0.95</b>	<b>\$0.77</b>	<b>\$0.89</b>	<b>\$1.08</b>	<b>\$1.11</b>	<b>\$1.14</b>	<b>\$1.26</b>	<b>\$1.22</b>	<b>\$1.21</b>
Massachusetts	Berkshire Gas Company	\$0.50	\$0.53	\$0.50	\$0.49	\$0.61	\$0.44	\$0.50	\$0.48	\$0.55	\$0.39
Massachusetts	Boston Gas D/B/A National Grid	\$0.65	\$0.93	\$0.93	\$0.76	\$0.78	\$0.73	\$0.88	\$1.32	\$1.04	\$0.94
Connecticut	Connecticut Natural Gas	\$0.63	\$0.73	\$0.77	\$0.81	\$1.20	\$0.55	\$0.59	\$0.65	\$0.62	\$0.68
New Hampshire	EnergyNorth Natural Gas D/B/A Liberty Utilities	\$0.34	\$0.48	\$0.47	\$0.55	\$0.57	\$0.69	\$0.45	\$1.13	\$0.91	\$0.58
Massachusetts	Fitchburg Gas and Electric D/B/A Unitil	\$1.14	\$0.90	\$0.87	\$0.18	\$1.23	\$1.23	\$0.90	\$1.39	\$1.35	\$1.23
Massachusetts	Liberty Utilities	\$0.90	\$0.96	\$1.42	\$1.42	\$2.33	\$2.24	\$2.35	\$2.49	\$1.71	\$1.75
Rhode Island	Narragansett Electric D/B/A National Grid	\$0.97	\$0.99	\$1.12	\$1.19	\$0.91	\$1.09	\$1.28	\$1.30	\$1.15	\$1.09
Maine	Northern Utilities D/B/A Unitil	\$1.00	\$1.11	\$1.13	\$1.18	\$0.34	\$0.62	\$0.54	\$0.66	\$0.63	\$0.65
New Hampshire	Northern Utilities D/B/A Unitil	\$0.98	\$1.10	\$0.96	\$0.82	\$0.60	\$0.73	\$0.80	\$0.94	\$0.67	\$0.65
Massachusetts	Nstar Gas	\$0.49	\$0.54	\$0.51	\$0.55	\$0.42	\$0.44	\$0.56	\$0.59	\$0.58	\$0.51
Connecticut	Southern Connecticut Gas	\$0.32	\$0.33	\$0.32	\$0.35	\$0.37	\$0.27	\$0.25	\$0.35	\$0.29	\$0.39
Connecticut	Yankee Gas	\$0.74	\$0.79	\$0.78	\$0.75	\$0.79	\$0.81	\$0.87	\$0.95	\$0.84	\$0.72

**Post-alternative regulation, VGS’ administrative expense performance has been nearly 28 percent WORSE than its peers. VGS’ cost performance was over 33 percent worse than peers during 2008-2014.**

***Note: expense comparisons are standardized to control for utility size differences.***

## Peer group analysis: VGS v. New England gas utilities (A&G expenses -- ranking)

**Alternative regulation has not led to improvements in VGS' administrative expenses. VGS has been, and continues to be, one of the WORSE performing regional utilities in terms of its A&G expense performance.**

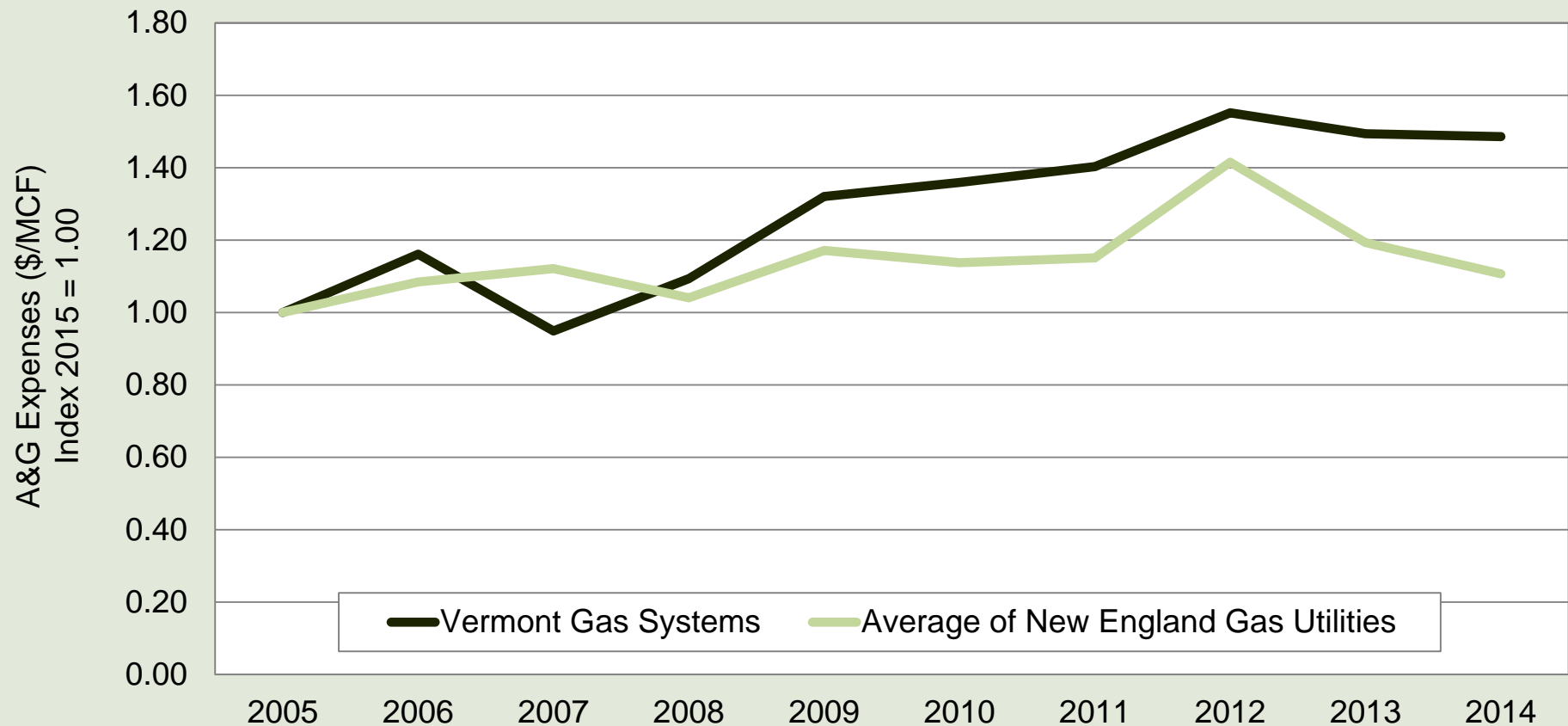
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Vermont</b>	<b>Vermont Gas Systems</b>	8	9	6	10	10	11	11	9	11	11
Massachusetts	Berkshire Gas Company	4	3	3	3	6	2	3	2	2	2
Massachusetts	Boston Gas D/B/A National Grid	6	8	9	7	7	7	9	11	9	9
Connecticut	Connecticut Natural Gas	5	5	5	8	11	4	6	4	4	7
New Hampshire	EnergyNorth Natural Gas D/B/A Liberty Utilities	2	2	2	4	4	6	2	8	8	4
Massachusetts	Fitchburg Gas and Electric D/B/A Unitil	13	7	3	1	12	12	10	12	12	12
Massachusetts	Liberty Utilities	9	10	13	13	13	13	13	13	13	13
Rhode Island	Narragansett Electric D/B/A National Grid	10	11	11	12	9	10	12	10	10	10
Maine	Northern Utilities D/B/A Unitil	12	13	12	11	1	5	4	5	5	6
New Hampshire	Northern Utilities D/B/A Unitil	11	12	10	9	5	8	7	6	6	5
Massachusetts	Nstar Gas	3	4	4	5	3	3	5	3	3	3
Connecticut	Southern Connecticut Gas	1	1	1	2	2	1	1	1	1	1
Connecticut	Yankee Gas	7	6	7	6	8	9	8	7	7	8

**VGS' administrative expense performance has only gotten worse, not better since the inception of alternative regulation. Note, 1 = best in class, 13 = worst.**

*Note: expense comparisons are standardized to control for utility size differences.*

## VGS v. New England gas utilities: Relative A&G expense trends (\$/Mcf).

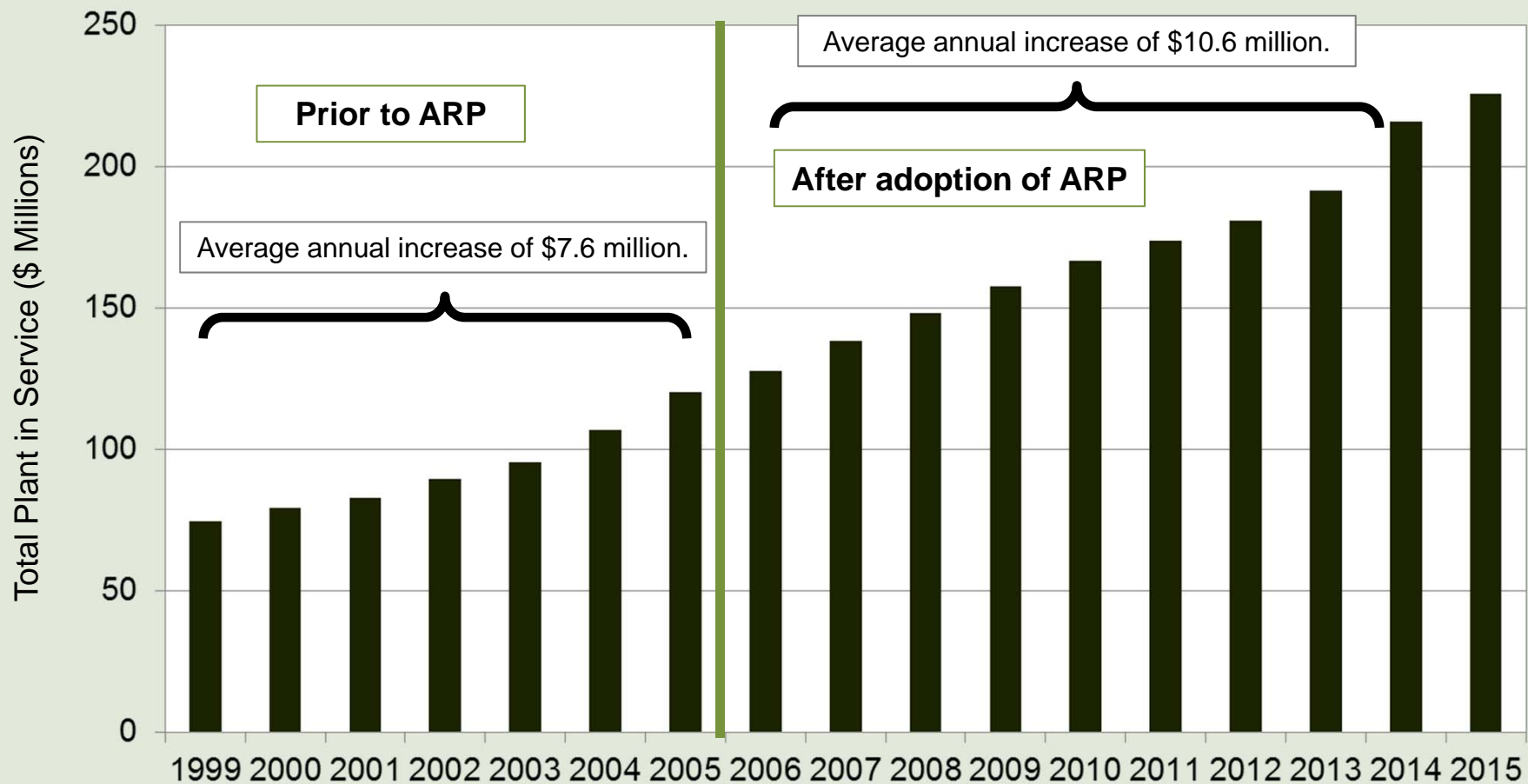
**Alternative regulation has led to no ratepayer benefits. VGS is one of the worse-in-class performers on administrative expense basis.**



### **3. Capital Expenditures & Plant Investments**

VGS total gross capital expenditures (gross plant in service, excluding ANGP).

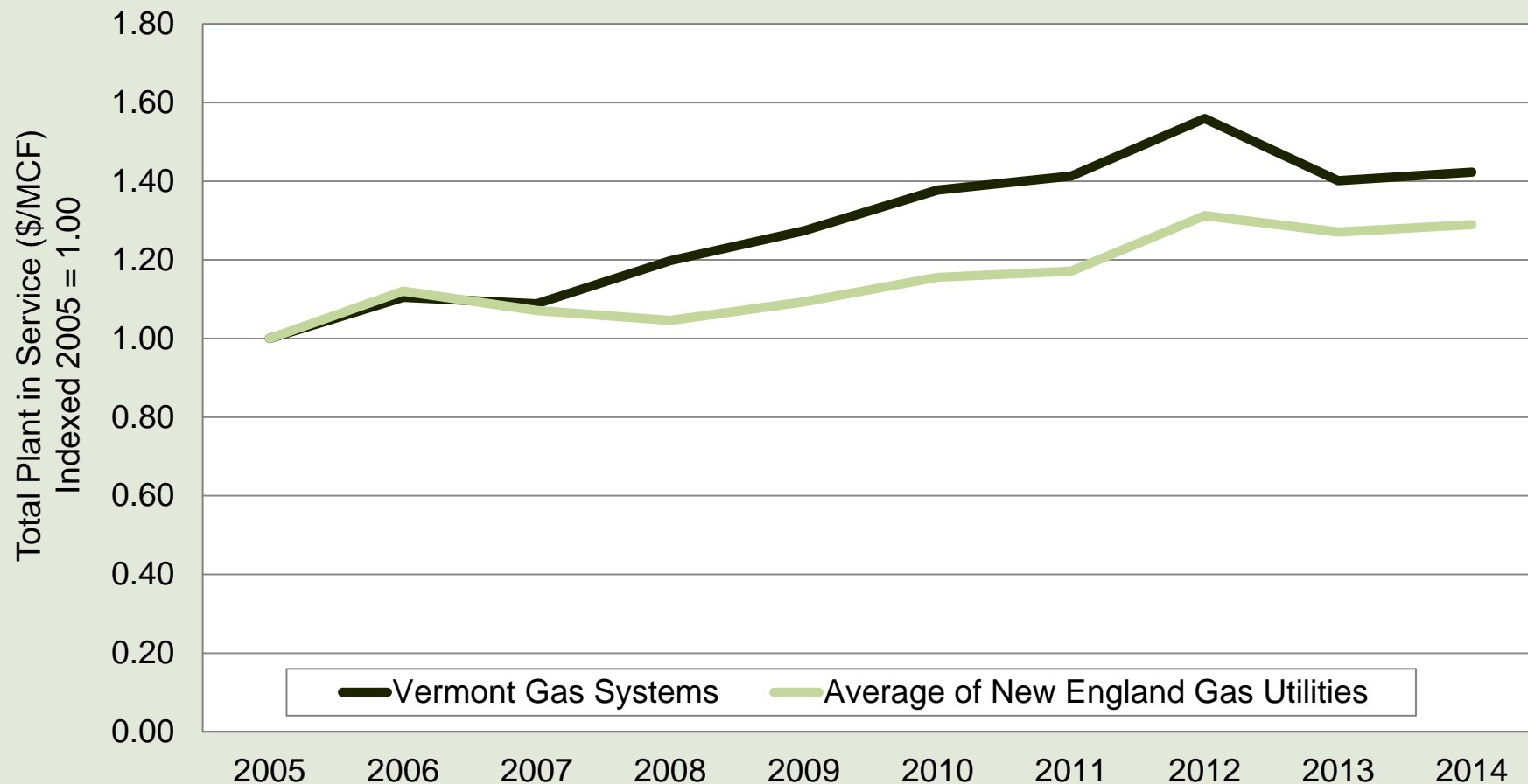
VGS' post-alternative regulation capital investments have increased by \$105.6 million or 188 percent.



Source: VGS Annual Reports, excludes ANGP-related investments/expenses.

## VGS v. New England gas utilities: Relative capital expenditure trends.

**Alternative regulation has led to considerable, unexplainable, increases in VGS' capital expenditures. Alternative regulation has not incented any VGS capital expenditure discipline; in fact, alternative regulation has likely weakened that discipline.**



## Priority Main Shares: VGS v. New England Utilities

**VGS has no priority or leak-prone infrastructure (cast iron, bare steel) raising significant questions about the nature of its post-alternative regulation capital spending bonanza.**

		2011	2012	2013	2014	2015
<b>Vermont</b>	<b>Vermont Gas Systems</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Massachusetts	Berkshire Gas Company	20%	19%	18%	16%	15%
Massachusetts	Boston Gas D/B/A National Grid	51%	50%	48%	47%	46%
Connecticut	Connecticut Natural Gas	20%	19%	18%	18%	17%
New Hampshire	EnergyNorth Natural Gas D/B/A Liberty Utilities	11%	11%	10%	10%	9%
Massachusetts	Fitchburg Gas & Electric D/B/A Unitil	27%	26%	29%	25%	24%
Massachusetts	Liberty Utilities	41%	40%	38%	36%	35%
New Hampshire	Northern Utilities D/B/A Unitil	14%	13%	12%	11%	11%
Maine	Northern Utilities D/B/A Unitil	8%	6%	5%	3%	2%
Massachusetts	Nstar Gas	37%	36%	35%	34%	33%
Connecticut	Southern Connecticut Gas	34%	34%	33%	32%	31%
Connecticut	Yankee Gas	17%	16%	15%	14%	13%

Other New England natural gas utilities have seen growth in plant in service due to efforts to replace obsolete cast iron and steel mains which are prone to corrosion and weather-related breaking. VGS has no such infrastructure replacement requirements.

## **4. Addison Natural Gas Pipeline (ANGP) Project and the System Enhancement & Reliability Fund (SERF)**

## Addison Natural Gas Pipeline Project (“ANGP”)

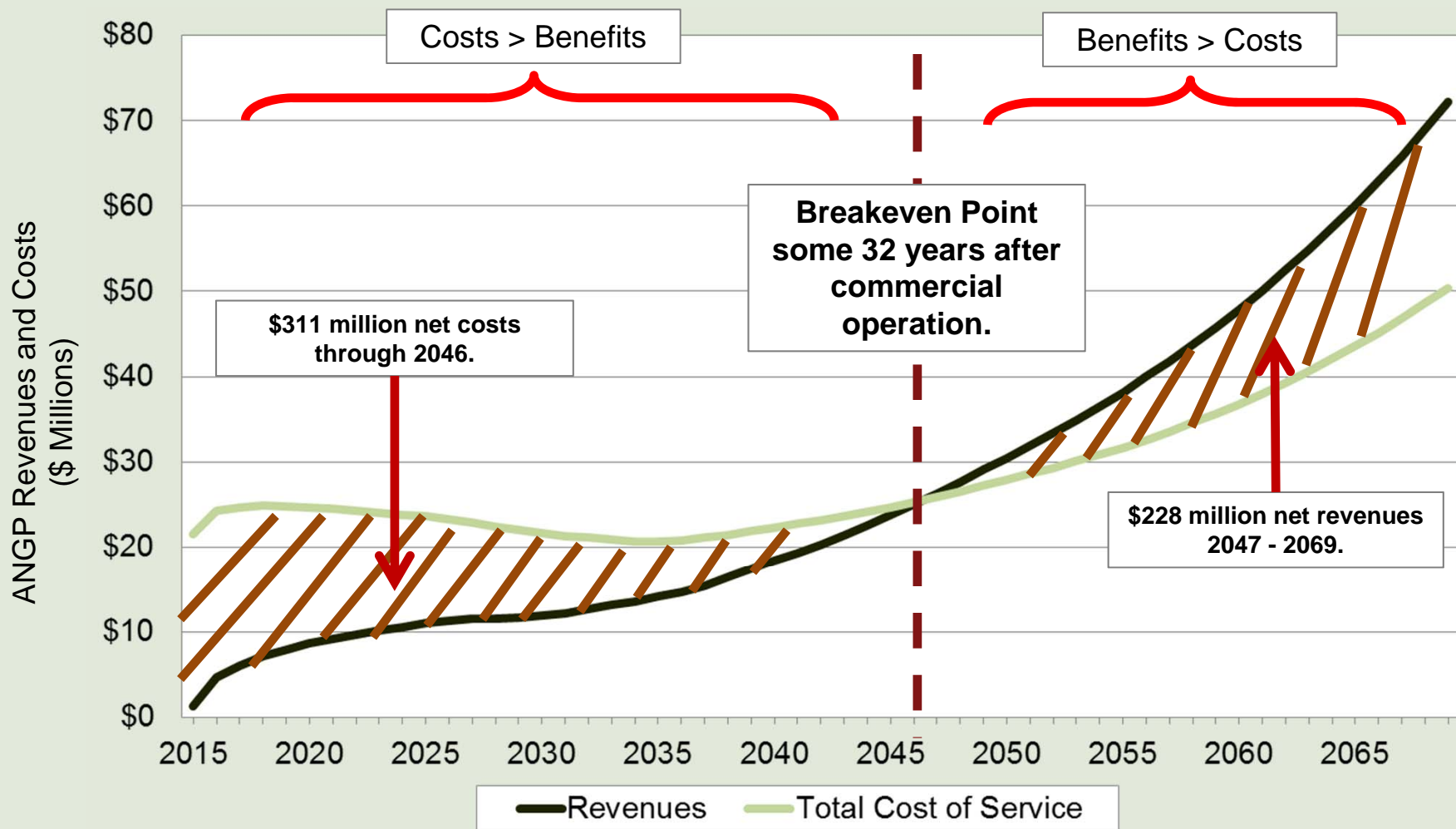


**The ANGP represents the most significant capital investment made by VGS. The currently estimated capital cost comprises approximately 37.2 percent of VGS’ total investment (rate base).**



## VGS-estimated ANGP revenue, cost and break-even statistics.

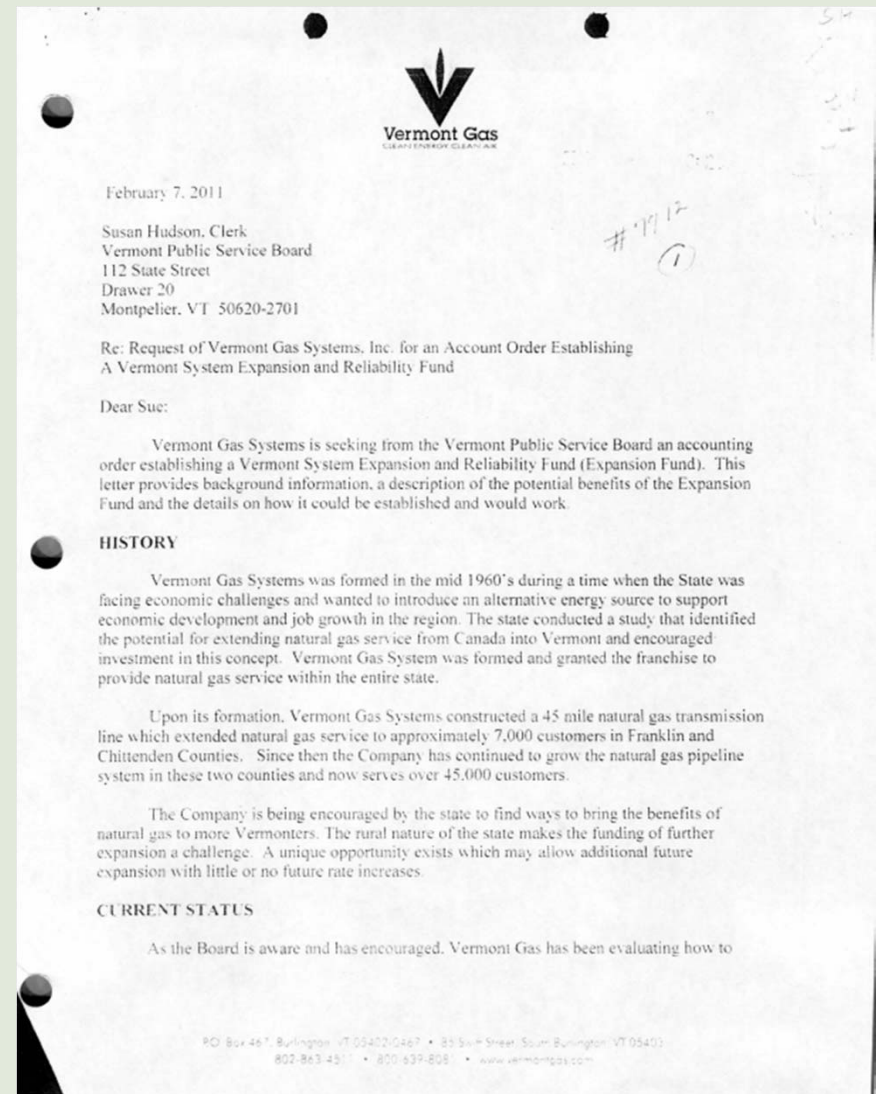
**The ANGP will not breakeven until 2047 (32 years into the project).**



## System Enhancement and Reliability Fund (“SERF”)

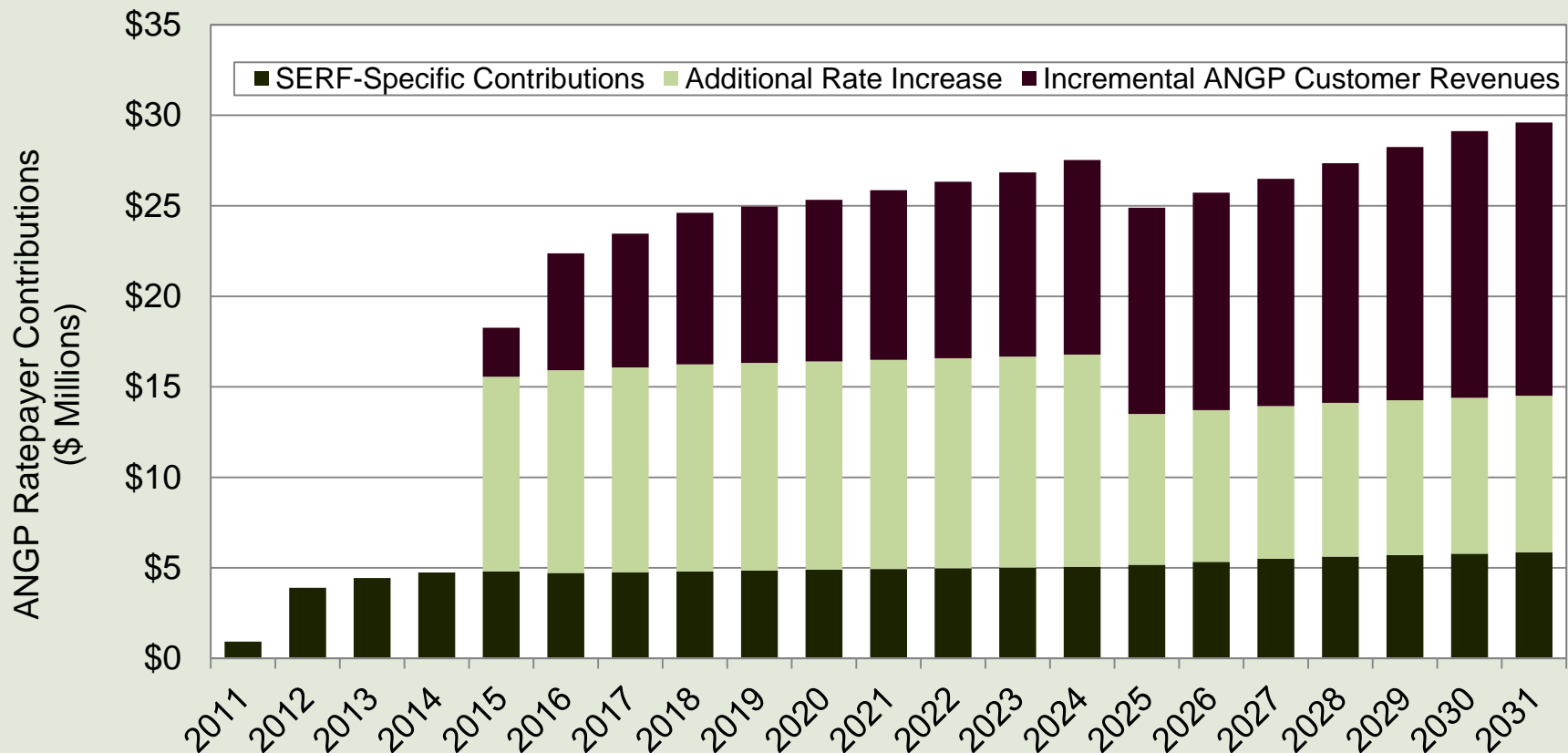
On February 7<sup>th</sup>, 2011, VGS requested an Accounting Order from the Vermont Public Service Board allowing VGS to establish a System Enhancement and Reliability Fund (“SERF”). After 9 separate rate cases over the previous 10 quarters from falling natural gas prices, VGS sought to redirect an upcoming estimated 4.5 percent decrease to overall natural gas rates to an “escrow” fund to be used to fund eventual system expansion projects.

The Department entered into a Memorandum of Understanding with VGS on May 13, 2011, allowing VGS to recover \$4.5 - \$5 million from ratepayers that would have otherwise seen rate decreases in mid-2011. As of September 2016, the SERF fund is estimated to be valued at over \$24 million.



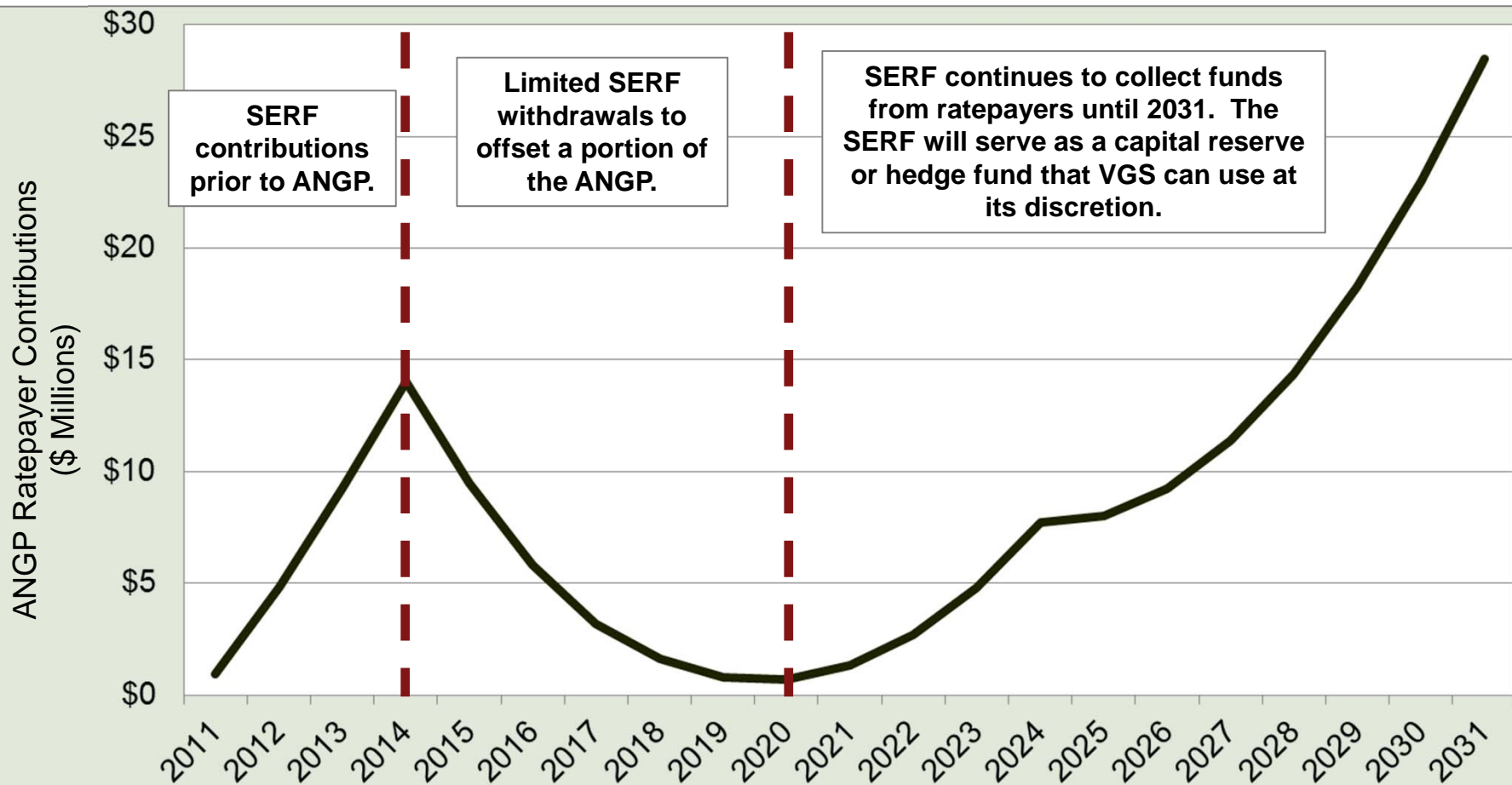
## Forecast ANGP ratepayer financing obligations.

Ratepayers will financially support the ANGP in three ways: (1) base rates increases (20.2 percent); (2) incremental revenues from new customers connected to the ANGP (40.5 percent); and (3) the SERF (39.3 percent).



## VGS' proposed "road to SERFdom"

**VGS will continue to force ratepayers to make contributions to the SERF until 2031, rather than using the funds collected to date, all at one time to reduce ratepayer costs. (Note that figure represents VGS estimates from late 2015)**



Source: Docket No. 7970, November 6, 2015, Testimony of Eileen Simollardes, Copy of Exhibit EMS reb 1 April 2015 EIA at 134.

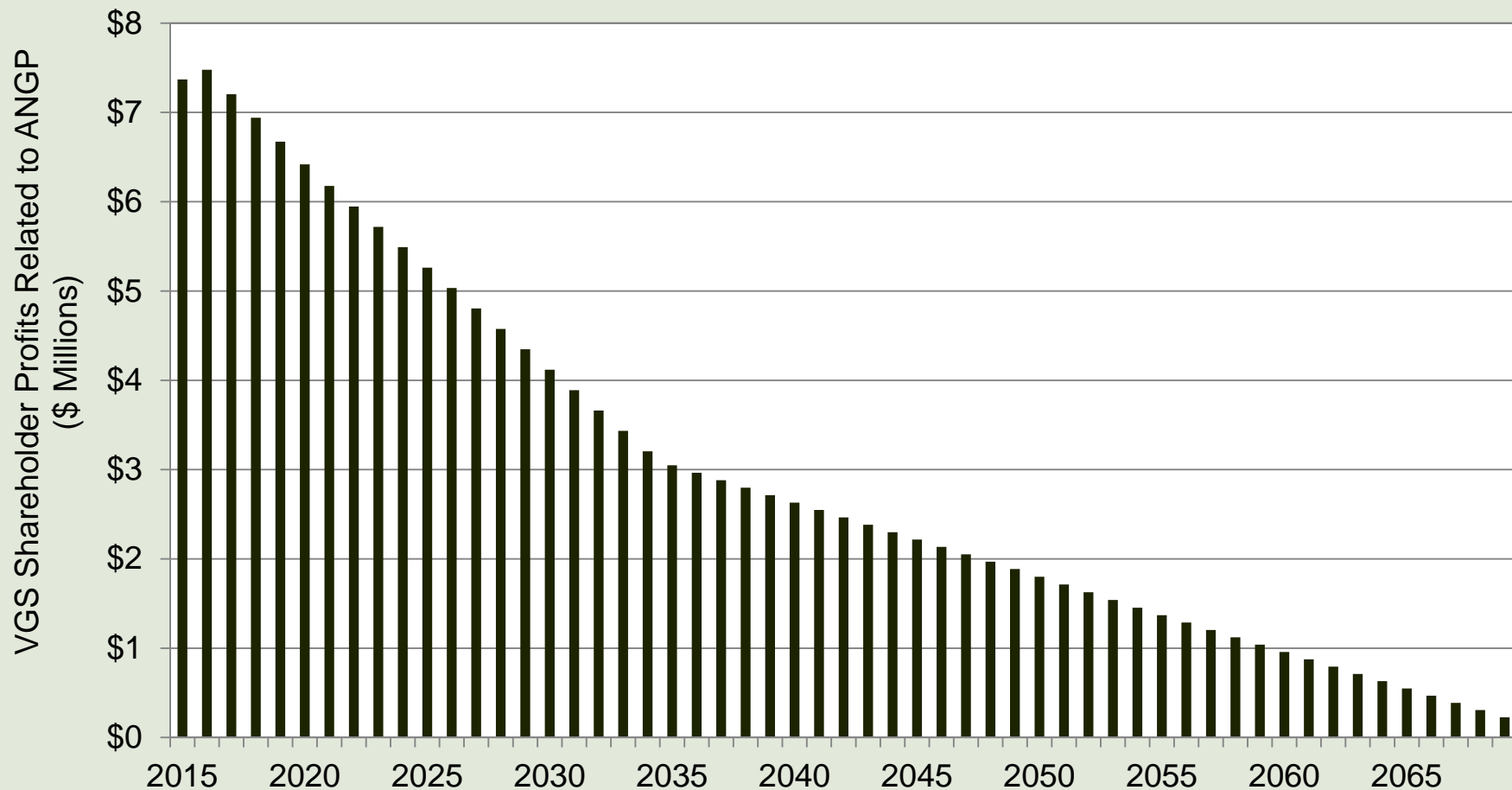
## SERF financing: differences in ratepayer and shareholder benefits

	Applying SERF to Offset Annual ANGP Rate Increases	Applying SERF as Downpayment on ANGP Costs.	Difference in Recovery
Ratepayer Costs	(\$153.44)	(\$135.46)	(\$17.97)
VGS Shareholder Profit	\$106.72	\$96.20	\$10.52

**By applying the SERF to ANGP-related rate increases rather than as a down-payment on the ANGP, Ratepayers will see nearly \$18 million in extra costs associated with the ANGP. Likewise, VGS shareholders will see more than \$10.5 million in additional profits.**

## Annual VGS Shareholder Profits Related to the ANGP

**The ANGP will provide VGS shareholders a 55 year profit stream. This profit stream reaches nearly \$7.5 million in 2016; and is still greater than \$1 million as late as 2060.**



## 5. Conclusions

## Conclusions – Alternative regulation

The Vermont Public Service Board approved an alternative regulation plan (“ARP”) for VGS in 2006 which was renewed in 2009 and is under consideration for renewal in VGS’ currently-pending rate case.

The ARP was adopted under the belief that it would accelerate VGS’ ability to recover its costs (reduce regulatory lag) while at the same time creating administrative and operational efficiency benefits for ratepayers.

This study shows that the ARP has not delivered those ratepayer benefits. Under the ARP:

- VGS customers have seen **considerable base rate increases** that have been masked by decreases in natural gas commodity costs.
- VGS’ residential base rates have increased to **levels that are above the New England regional average** and have stayed above that regional average for close to seven years.
- VGS’ operating costs have become **more inefficient** under alternative regulation and are some of the highest in New England.
- VGS’ administrative costs are some of the **highest in New England**.
- **VGS has become less, not more efficient** since the introduction of alternative regulation.
- **VGS’ rate base have grown** at inexplicably high rates.

Alternative regulation has proved to be a failure for VGS’ customers and needs to be discontinued.

## Conclusions – ANGP

The ARP has allowed VGS to construct the ANGP, a project that alone represents a 37.2 percent increase to VGS' total capital investment base.

The **ANGP is not estimated to breakeven until at least 2047**; and will not recoup cumulative financial expenses until after 2070. **Today's ratepayers will be required to subsidize this natural gas transmission project for close to a 30 year period** before any positive benefits could arise from delivering lower-cost natural gas into Vermont.

VGS' ARP also has allowed the utility to implement a SERF, a fund ostensibly designed to "escrow" ratepayer investment to fund the ANGP.

However, rather than use the funds collected to date to pay for the ANGP, VGS will continue to **force ratepayers to make contributions to the SERF until 2031**—long after the funds are needed to help fund the ANGP.

This study estimated that **VGS' shareholders will receive an \$10.5 million benefit** by use of the SERF in the manner proposed by VGS in its current ARP renewal and base rate case.