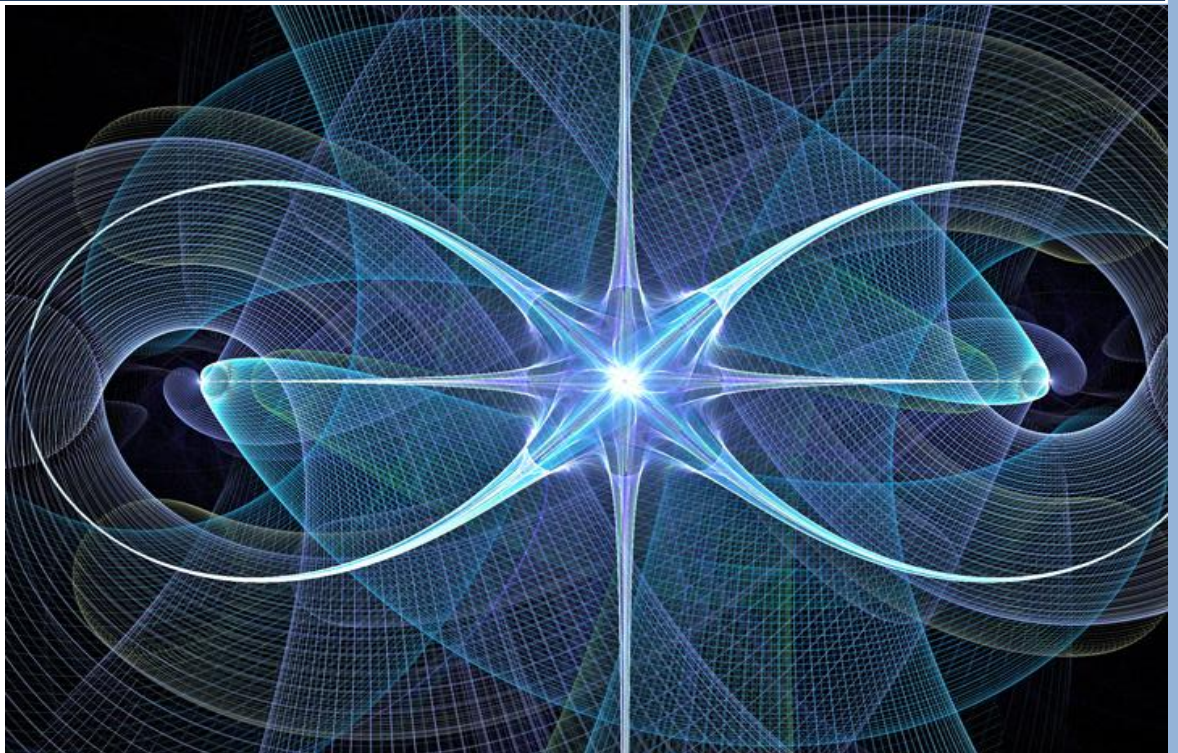


# A Decade of Decoupling for US Energy Utilities: Rate Impacts, Designs, and Observations



Pamela Morgan

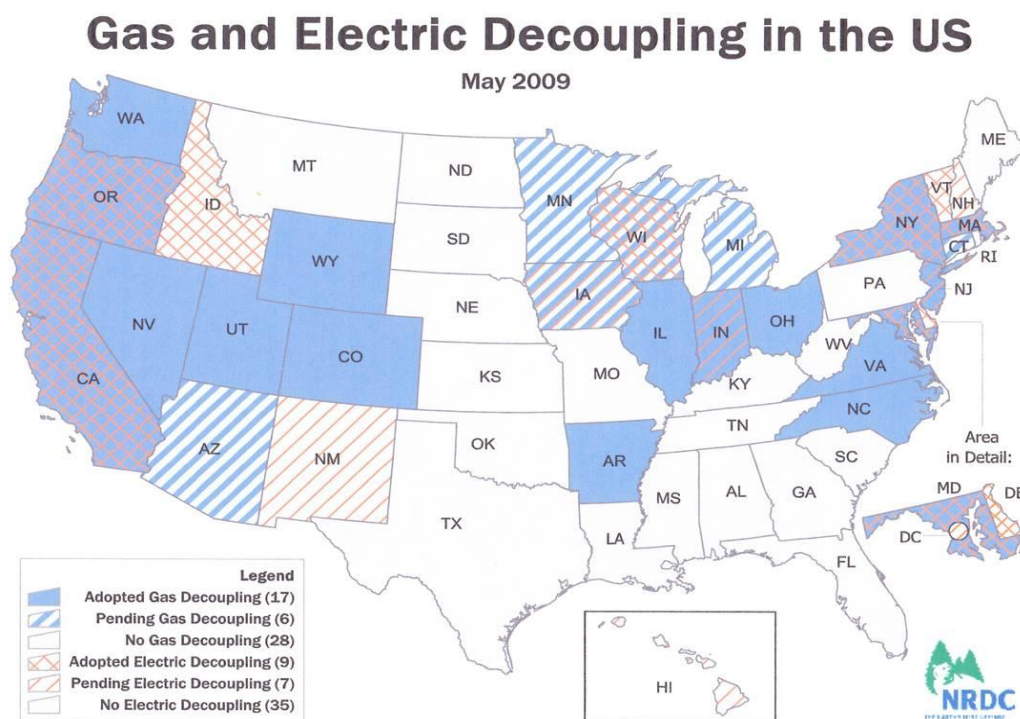
*Graceful Systems LLC*

Revised May 2013

## Summary

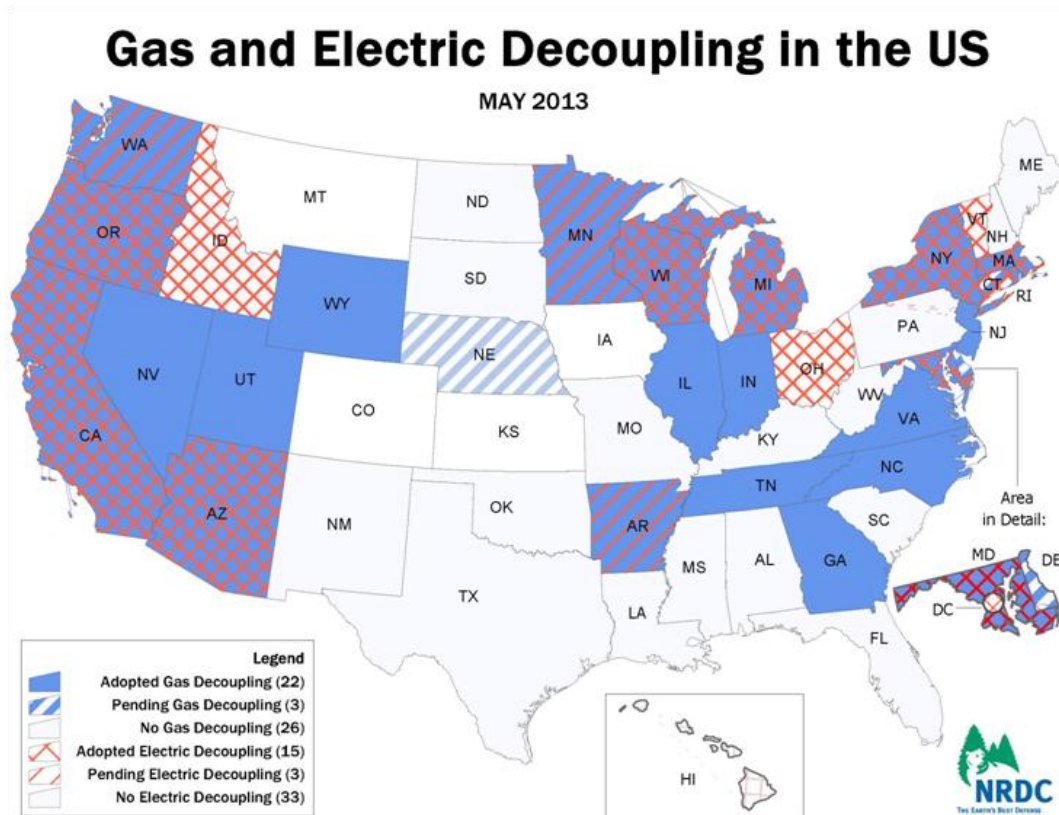
With the turn of the century and its many energy-related events – the western power market crisis, record and unexpected natural gas prices, slowing (electricity) or falling (natural gas) demand, growing concern about climate change – energy utility funding for energy efficiency programs revived after the 1990s lull. Along with renewed funding, that spanned both types of energy utilities and restructured as well as vertically integrated markets, came a serious look at decoupling. Decoupling is a regulatory tool that first appeared in the 1980s as a means of helping utilities overcome the throughput incentive; i.e., the contribution to gross income that occurs with every energy unit sold because the unit (variable) price recovers some of a utility’s fixed costs. A decoupling mechanism separates a utility’s revenues from its unit sales volumes without affecting the design of customer rates.<sup>1</sup> In other words, utility customers continue to pay for service primarily according to the amount of energy they use. The utility’s revenue is based on a formula approved by its regulator.

This report builds on a 2009 report, which summarized the designs and rate impacts associated with the decoupling mechanisms of 28 local natural gas distribution utilities (LDCs) and 12 electric utilities, across 17 states. Much has happened in the three intervening years. This was the map the 2009 report addressed:



<sup>1</sup> Some also use the term “decoupling” to describe rate design changes, such as straight fixed-variable rates that recover all utility fixed costs in a fixed price per billing period and all variable costs according to usage. While these approaches achieve the similar results for utilities as decoupling mechanisms described above, they often do so with significant impact to customers. These impacts include shifting cost recovery within a customer class and weakening incentives to invest in energy efficiency and distributed generation. Moreover, the result can be rigid rate designs that may send wholly inadequate price signals and permit little experimentation. This report addresses only decoupling mechanisms that operate at the regulatory level, leaving rate design largely untouched.

Now covering 26 states and the District of Columbia, including 50 LDCs and 27 electric utilities,<sup>2</sup> this is the map that this report addresses:



This report<sup>3</sup> summarizes the decoupling mechanism designs these utilities use and the rate adjustments they have made under those mechanisms. Some of these utilities make decoupling adjustments monthly; some semi-annually; some annually; and others on an as-needed basis. In total, this report estimates the retail rate impacts of 1269 decoupling mechanism adjustments since 2005.

With respect to decoupling rate adjustments, even though jurisdictions around the U.S. have now performed a vastly greater number of adjustments, the primary conclusions of the prior study remain valid based on this updated and expanded research:

<sup>2</sup> Indication on the map that a given state has adopted decoupling for its gas or electric utilities, or both, does not necessarily mean that every utility in the state has a decoupling mechanism. The detailed state reports that appear after this summary indicate clearly which utilities in each of the states indicated on the map has a decoupling mechanism and whether that mechanism is currently active or has expired. The state reports also include Colorado, which had approved gas decoupling but the mechanism has now expired, and Vermont, which has an alternate form of regulation that can, at times, function as a partial decoupling mechanism. In addition, several of the utilities are combination utilities, including both electricity and natural gas. The count includes a combination utility as two: one for electric and one for natural gas.

<sup>3</sup> This report is a corrected version of the report dated December 2012. That report inadvertently omitted four decoupling mechanisms in Michigan: three for natural gas utilities and one for an electric utility. This report includes those mechanisms in all tables and the Michigan-specific detail is now correct.

- **Decoupling rate adjustments are mostly small – within plus or minus two percent of retail rates.** Across the total of all utilities and rate adjustment frequencies, 64% of all adjustments are within plus or minus 2% of the retail rate. This amounts to about \$2.30 per month for the average electric customer, and about \$1.40 per month for the average natural gas customer.<sup>4</sup> About 80% are within plus or minus 3%. The primary distinction on size variation exists between mechanisms that adjust monthly and those that adjust on some other basis, most commonly annually. For natural gas mechanisms that adjust monthly, the adjustments are within plus or minus 2% only half of the time; for electric monthly decoupling mechanisms, this is 65% of the time. Electric decoupling mechanisms that adjust other than monthly have been within plus or minus 2% most of the time – 85%. Gas mechanisms that adjust other than monthly have stayed within this range 75% of the time. In other words, the more frequent adjustments yield more volatile rate changes.
- **Decoupling mechanism adjustments yield both refunds and surcharges.**<sup>5</sup> Across all electric and gas utilities and all adjustment frequencies, 63% were surcharges and 37% were refunds. There are many reasons that actual revenues can deviate from the revenues assumed in ratemaking. Most of the mechanisms do not adjust revenues to remove, or normalize, the effects of weather.<sup>6</sup> If the mechanism does not normalize weather, the primary cause of greater and lower sales volumes, particularly on a monthly basis or for residential rate schedules, is usually weather effects. Other causes include energy efficiency, programmatic and otherwise, customer conservation, price elasticity, and economic conditions. Regardless of the particular combination of causes for any given adjustment, no pattern of either rate increases or decreases emerges.

Figure 1, below, summarizes the distribution of rate adjustments due to decoupling from 2005 to 2011,<sup>7</sup> followed by the table<sup>8</sup> that supports the chart.

---

<sup>4</sup> The electric calculation uses an average monthly consumption of 1000 kWh and the 2010 annual average residential price of 11.54¢/kWh from the Energy Information Administration (EIA). An average monthly consumption does not make as much sense for natural gas customers because usage is seasonal. EIA’s 2010 report on Trends in U.S. Residential Natural Gas Consumption reported a 2009 average annual use of 74 Mcf for residential customers. Spreading this over 12 months is 6.16 Mcf, which when multiplied by the 2010 average annual rate of \$11.39/Mcf is about \$70.

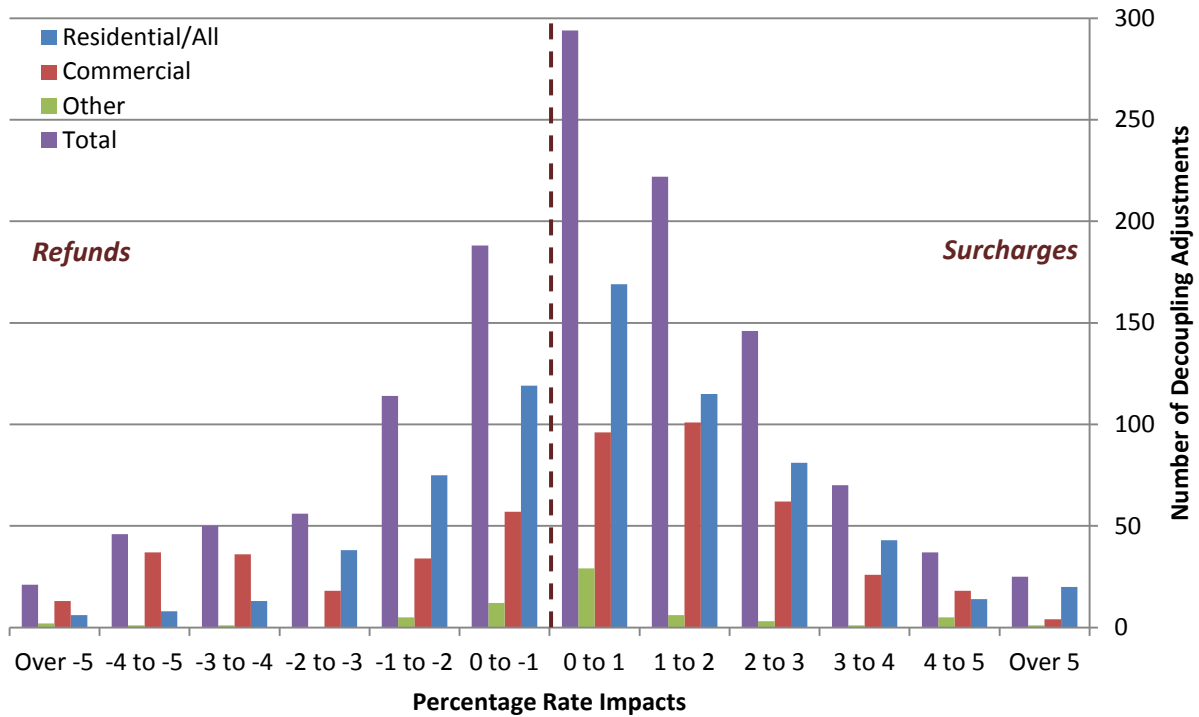
<sup>5</sup> The calculations are not the actual rate changes that occurred because this is usually impossible to determine unless the decoupling adjustment is occurring by itself and the utility calculates the rate change in its filing. Otherwise, the actual rate change depends on what rate adjustments might be ending (including a prior decoupling adjustment) and what new ones other than decoupling might be starting. See the section on methodology for more information.

<sup>6</sup> For natural gas utilities, it is common that a separate mechanism adjusts rates for weather variations for the winter heating season months only.

<sup>7</sup> This chart and table show “All” adjustments as a percentage of retail rates, regardless whether gas or electric, monthly or annual. Adjustments done either just for residential customers or for the entire customer base appear under the category of “Residential/All.” The “Commercial” category captures the customer class often referred to as general service or small general service. “Other” includes the few decoupling mechanism adjustments found that applied to industrial or larger commercial customers. For some utilities, the study recorded only the residential and general service or small commercial adjustments, even though the mechanisms applied to other rate schedules. This was done to keep the number somewhat manageable and because retail rate detail at that level is not available.

<sup>8</sup> In all of these tables, the positive number ranges mean that customers received surcharges while the negative number ranges mean that customers received refunds.

## Total Utility Decoupling Adjustment Rate Impacts



Adjustment Amount	Residential/All	Commercial	Other	Total
Over 5	20	4	1	25
4 to 5	14	18	5	37
3 to 4	43	26	1	70
2 to 3	81	62	3	146
1 to 2	115	101	6	222
0 to 1	169	96	29	294
0 to -1	119	57	12	188
-1 to -2	75	34	5	114
-2 to -3	38	18		56
-3 to -4	13	36	1	50
-4 to -5	8	37	1	46
Over -5	6	13	2	21

In addition, this report updates the summary of the features various states and utilities have used in constructing their decoupling mechanisms. Although there are interesting variations, a notable similarity has emerged in designs, with differentiation depending on the utility's status as either a distribution only utility or a vertically integrated<sup>9</sup> electric utility. This report also reviews state decisions whether or not to reduce a utility's authorized return on common equity (ROE) in conjunction with the

<sup>9</sup> For purposes of this report, vertically-integrated utility refers to any utility that owns at least some of the generation it uses to provide retail service, whether or not it owns a majority or all. Thus, the report considers the California utilities vertically integrated even though they purchase a significant amount of generation.

adoption of decoupling for that utility, the amount of any such reduction and the reasons why and why not. The conclusion discusses observations made on the topic of decoupling during the preparation of this report.

Immediately below is a brief explanation of “decoupling”<sup>10</sup> as used in this report, followed by a short description of the methodology used to calculate rate adjustments and a summary of the findings. The discussions of features and ROE follow, with the conclusion. Decoupling information on a state-by-state basis is attached, along with the table showing the ROE reduction made, if any, in each of the cases in which a commission adopted a decoupling mechanism.

## Decoupling

Decoupling, as used in this study, is a regulatory mechanism that adjusts rates periodically to ensure that the amount a utility books as revenue for fixed cost recovery is no more and no less than the amount of revenue authorized by the regulator for that cost coverage. Under traditional ratemaking methodologies, a utility’s revenues result from the combination of its customer accounts, customer energy use (in therms or kilowatt-hours) and customer demand (this usually applies only to commercial customers with larger usage and industrial customers) and the rates the regulator has approved. For residential and smaller-usage commercial customers, most of the utility’s revenue will derive from energy use. This is what causes the throughput incentive: the more energy customers use, the more revenue the utility collects and, to the extent this revenue exceeds variable costs, the better its financial performance.

Decoupling changes the driver of revenue from energy use to a basis approved by the regulator in the decoupling mechanism design. Some mechanisms use the revenue authorized in the utility’s last general rate case; others adjust that for specific cost changes or according to a formula, and still others calculate revenue on a per-customer account basis rather than as a single dollar amount.

A decoupling mechanism does not affect the design of customer utility rates. For example, most states design rates for customers with relatively low levels of use such that the biggest driver of a customer’s bill is the amount of energy they use. Such a design provides the best incentive for customers to conserve or use energy more efficiently because the reduced consumption translates directly into a reduced bill.

On some regular basis, a decoupling mechanism causes a rate adjustment to ensure that customers, in effect, receive refunds or pay surcharges based on whether the revenues the utility actually received from customers were less or greater than the revenues the mechanism calculates. This difference can occur for many reasons, primary among which are weather, economic conditions, energy efficiency programs and incentives, and customer behavior that cause the use of electricity or natural gas to differ from amounts assumed in the ratemaking process.

---

<sup>10</sup> For a more in-depth explanation of decoupling and decoupling mechanisms, see Regulatory Assistance Project, *Revenue Regulation and Decoupling: A Guide to Theory and Application*, June 2011, [www.raponline.org/document/download/id/902](http://www.raponline.org/document/download/id/902); National Action Plan for Energy Efficiency, *Aligning Utility Incentives with Investments in Energy Efficiency*, November 2007, [www.epa.gov/cleanenergy/energy-programs/suca/resources.html](http://www.epa.gov/cleanenergy/energy-programs/suca/resources.html); Natural Resources Defense Council, *Removing Disincentives to Utility Energy Efficiency Efforts*, May 2012, [www.nrdc.org/energy/decoupling/](http://www.nrdc.org/energy/decoupling/); Sullivan, D., D. Wang and D. Bennett, “Essential to Energy Efficiency but Easy to Explain: Frequently Asked Questions about Decoupling,” *The Electricity Journal*, Vol 24, Issue 8, October 2011.

The overwhelming majority of decoupling mechanisms cover only a utility’s fixed costs associated with local delivery of natural gas or electricity.<sup>11</sup> Seven electric utility decoupling mechanisms, however, include the fixed costs associated with generating plants owned by the utility or other supply-related fixed costs.<sup>12</sup>

## Methodology

Rate adjustments made pursuant to decoupling mechanisms are reported here as a percentage of retail rates. For a few utilities, as noted in footnotes, this percentage rate change was either specified in the adjustment filing or provided by the utility for purposes of this study. For most of the adjustments, however, utility filings provided with the adjustment but not the retail rate. To estimate the rate impact, the report uses data from the Energy Information Administration (EIA). For gas utilities, the data is generally the appropriate class (residential, commercial or industrial) for the year of the adjustment. 2012 is an average of the months to date. For gas utilities that make monthly decoupling adjustments, the study used monthly EIA gas prices. For months that did not have a retail price, the study uses the price from the month before. For electric utilities, utility specific retail prices are available for years before 2011. For 2011 and 2012 adjustments, the study uses statewide data except as noted. All data on the adjustments are from utility filings, with any additional calculations noted. The resulting adjustment percentages should not be viewed as precise; these are estimates that are correct in general magnitude, not tenths or hundredths of a percentage point.

Moreover, regardless of whether the rate impact is from the utility or calculated from EIA data, the percentage shown is not necessarily what customers experienced. Experienced rate changes would vary depending on whether the prior decoupling adjustment was more or less than the adjustment being put into place. For example, if the prior adjustment was a refund of 0.02 cents per kWh and the new adjustment is a refund of 0.01 cents per kWh, customers will experience a rate increase, even though the adjustment is negative because the prior adjustment terminates. Experienced rate changes may also depend on whether the utility was changing rates for any other adjustment clauses at the time, as is often the case.

## Summary Tables and Charts

Below are chart/table sets for gas utilities that make decoupling adjustments monthly and those that make decoupling adjustments annually or on some frequency other than monthly, and the same two sets for electric utilities. Overall, the charts reveal some differences in the distribution of surcharges and refunds and the overall rate impacts between (1) gas utilities and electric utilities; and (2) decoupling mechanisms that make monthly rate adjustments and those that make adjustments on some other basis. The table below summarizes these differences:

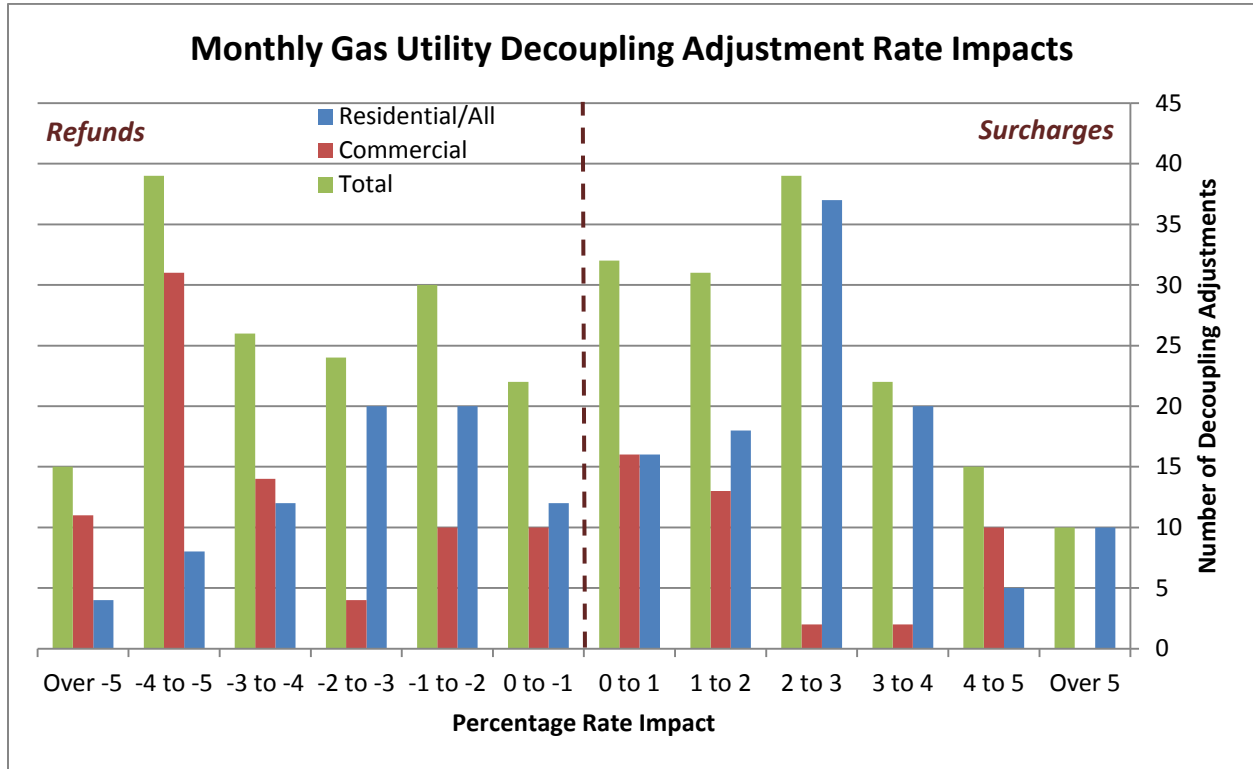
Frequency Of	Gas Utilities		Electric Utilities	
	Surcharges	Refunds	Surcharges	Refunds
Mechanisms Adjusting Monthly	49%	51%	66%	34%
Mechanisms Adjusting “Other”	65%	30%	64%	36%

<sup>11</sup> For natural gas utilities, these fixed costs are virtually all of their fixed costs, although some pipeline-related fixed costs may flow through purchased gas cost adjustment clauses. For electric utilities, the limitation to distribution fixed costs stems from state retail market restructuring, which resulted in electric utilities that do not own generation or, if they do so, do not include such generation in revenue requirement in a traditional sense.

<sup>12</sup> This could include the fixed costs of transmission as well.

The charts and tables below follow this order:

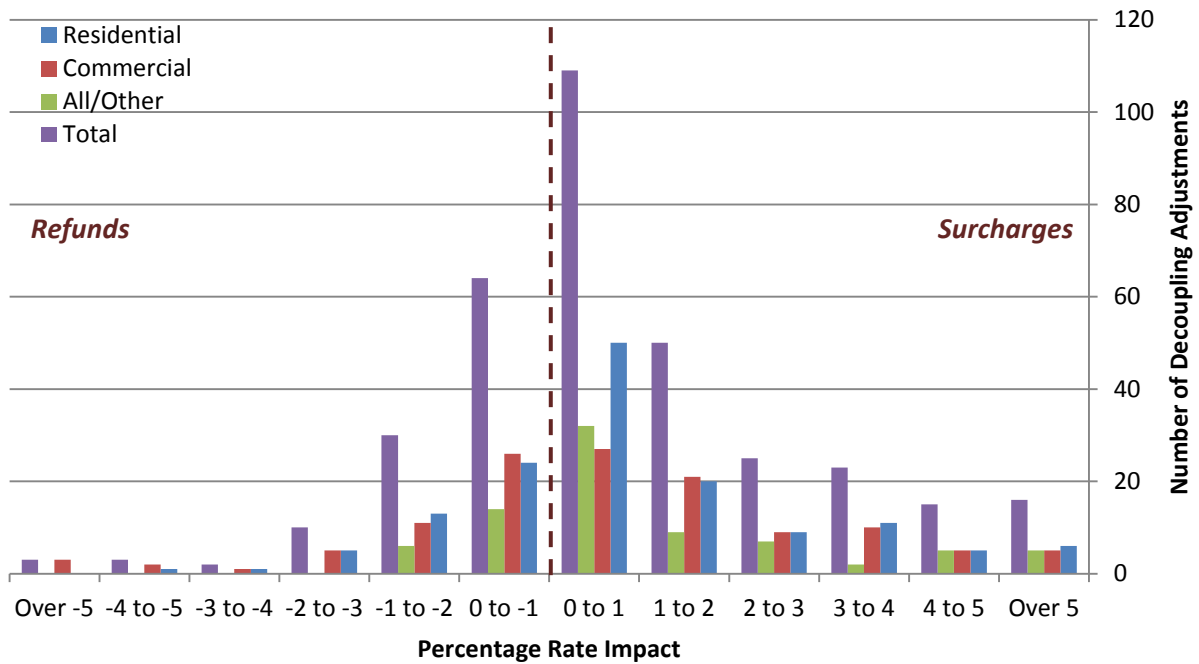
- Monthly gas utility decoupling mechanisms
- Annual and other gas utility decoupling mechanisms
- Monthly electric utility decoupling mechanisms
- Annual and other electric utility decoupling mechanisms



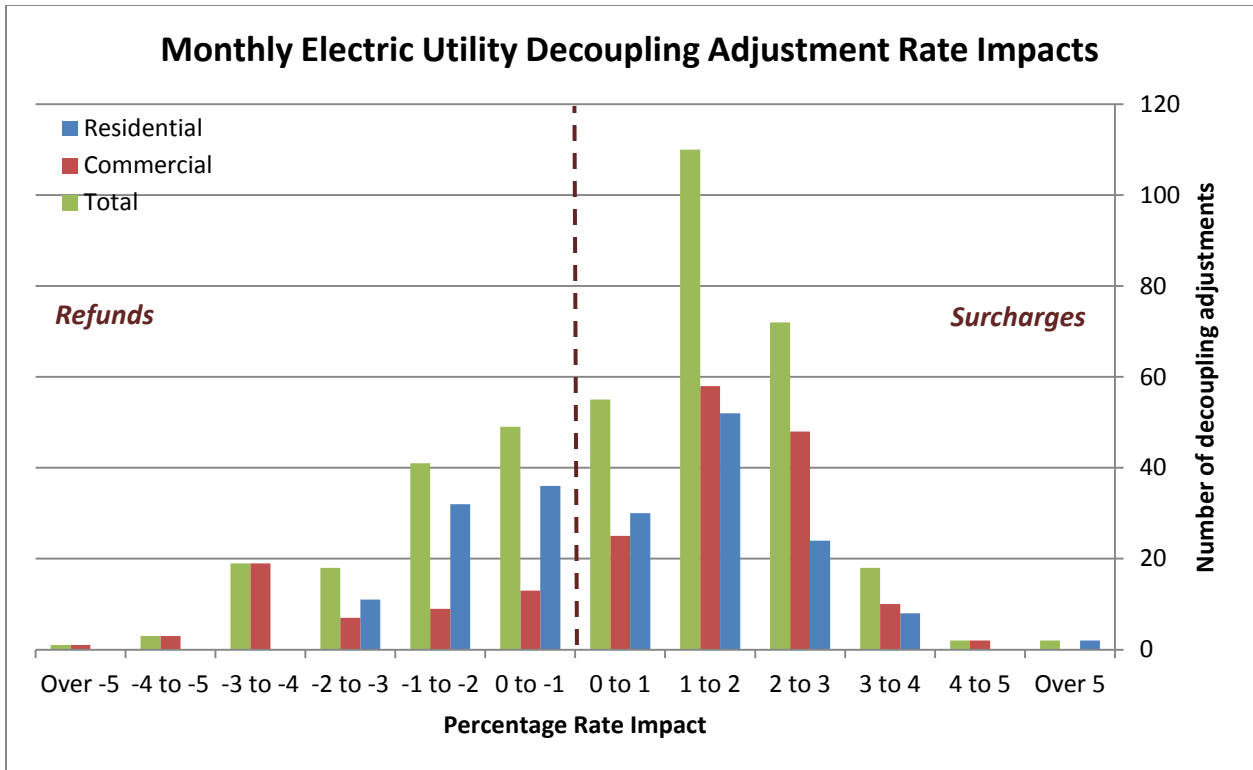
Adjustment Amount %	Residential/All	Commercial	Total
Over 5	10		
4 to 5	5	10	15
3 to 4	20	2	22
2 to 3	37	2	39
1 to 2	18	13	31
0 to 1	16	16	32
0 to -1	12	10	22
-1 to -2	20	10	30
-2 to -3	20	4	24
-3 to -4	12	14	26
-4 to -5	8	31	39
Over -5	4	11	15



## Annual and Other Gas Utility Decoupling Adjustment Rate Impacts

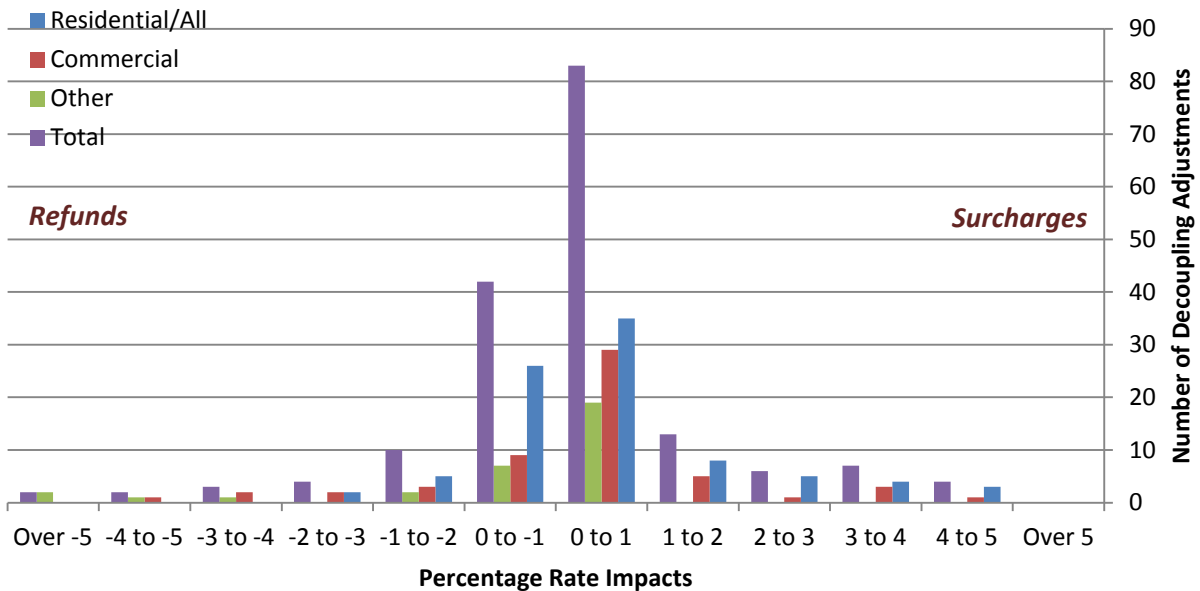


Adjustment Amount	Residential/All	Commercial	All/Other	Total
Over 5	8	4	1	13
4 to 5	6	5	5	16
3 to 4	11	11	1	23
2 to 3	15	11	3	29
1 to 2	37	25	6	68
0 to 1	88	26	10	124
0 to -1	45	25	5	75
-1 to -2	18	12	3	33
-2 to -3	5	5		10
-3 to -4		1		1
-4 to -5	1	2		3
Over -5	2	1		3



Adjustment Amount %	Residential	Commercial	Total
Over 5	2		2
4 to 5		2	2
3 to 4	8	10	18
2 to 3	24	48	72
1 to 2	52	58	110
0 to 1	30	25	55
0 to -1	36	13	49
-1 to -2	32	9	41
-2 to -3	11	7	18
-3 to -4		19	19
-4 to -5		3	3
Over -5		1	1

## Annual and Other Electric Utility Decoupling Adjustment Rate Impacts



Adjustment Amount %	Residential/All	Commercial	Other	Total
Over 5				
4 to 5	3	1		4
3 to 4	4	2		6
2 to 3	5	1		6
1 to 2	7	5		12
0 to 1	34	29	19	82
0 to -1	26	9	7	42
-1 to -2	5	3	2	10
-2 to -3	2	1		3
-3 to -4		2	1	3
-4 to -5		1	1	2
Over -5			2	2

### Decoupling Mechanism Design Features

Any state or utility considering decoupling must generally answer at least five questions:

- Should the authorized revenue used to calculate the decoupling adjustment (actual revenue less authorized revenue) change from year to year by any means other than a general rate case?
- How often should we make a decoupling adjustment?
- Should the actual revenues used in the mechanism be adjusted to remove the revenue effects of sales resulting from weather that is warmer or colder than the weather assumed in setting rates?

- When we compare actual revenues to authorized revenues, should we do that on an overall utility basis or by customer class or rate schedule?
- Should there be any limits on the size of decoupling adjustments that occur and, if there are limits, what should happen to refund or surcharge amounts in excess of the limits? Should the decoupling apply to the full difference between actual and authorized revenues or only some part of it?

The table below summarizes the numbers of mechanisms that have answered these questions in different ways, sorted by electric and gas utilities. The notes following the table explain the terms used, such as “revenue-per-customer” and “attrition adjustment.”

Feature	Gas Decoupling	Electric Decoupling	Comments
Revenue change between rate cases			
Revenue-per-customer <sup>1</sup>	46	15	Predominantly used by natural gas utilities and distribution-only electric utilities, although also vertically-integrated utilities in Idaho, Oregon, Michigan and Wisconsin.
Attrition adjustment <sup>2</sup>	13	11	California allows the most complete attrition adjustment but Hawaii, Massachusetts, New York, and Rhode Island allow some updating of the revenue requirement.
No change		3	
Timing of Rate True-ups			
Annual	34	19	
Semi-annual/quarterly/no set schedule	8		
Monthly	7	4	Illinois, Maryland, Virginia and Washington D.C. require monthly adjustments under their utilities’ decoupling mechanisms.
Triggers <sup>3</sup>	6	5	New York only
Weather <sup>4</sup>			
Not weather-adjusted	35	21	Weather can vary considerably from the “normal” assumed in ratemaking, particularly on a monthly basis.
Weather-adjusted	14	2	
Per class calculation and adjustments <sup>6</sup>	40	15	
Limit on adjustments and/or dead-band <sup>5</sup>	14	5	

Notes to table

1. “Revenue per customer” means that the decoupling mechanism calculates the authorized revenue to which the utility will reconcile its actual revenues by dividing the last approved fixed cost revenue requirement by the number of customer accounts assumed in that ratemaking process, and then multiplying the per-customer amount by the number of customers in the current decoupling period. For example, if the authorized fixed cost revenue requirement was \$1 billion and the ratemaking number of accounts was 1 million, the fixed cost per customer amount would be \$1000/year. If, during a given decoupling year, the actual number of customer accounts was 1,050,000, the utility’s authorized revenue would be \$1.05 billion. To the extent actual (weather-adjusted or not) revenues exceeded this, it would refund the difference; if actual revenues were less than this, it would recover the difference.
2. “Attrition adjustment” means that the utility has some means (such as a formula) of adjusting its authorized fixed cost revenue requirement for changes other than a general rate case. Thus, the comparison of actual revenues or actual per customer revenues is to an updated “authorized” revenue amount. This may or may not occur through the decoupling mechanism.
3. “Triggers” refers to the feature included in most of the New York utilities’ decoupling mechanisms that allow and/or require that the utility file for a decoupling adjustment when the accumulated balance (positive or negative) reaches a certain threshold. This feature largely negates the need for the cap on adjustments discussed below.
4. “Weather” refers to revenue variances attributable to actual weather differing from the weather conditions assumed in the ratemaking process. If a decoupling mechanism uses actual revenues that are not weather-adjusted, that means that revenue variances attributable to weather will affect the size of the customer refund or surcharge.
5. “Per class calculation and spread of adjustments” means that the mechanism determines the difference between the authorized fixed cost revenue and the actual revenue on a per class or per rate schedule basis and refunds or surcharges the resulting amount only to that rate schedule or customer class. Included in the count are utilities for which the decoupling mechanism applies only to one customer class or rate schedule. Only eight utilities have mechanisms that spread the decoupling adjustment to all customer classes equally.
6. “Limit on adjustments or a dead-band” refers to features in a given decoupling mechanism that limit the size of any (or a cumulative set of) customer refund or surcharge, or in the case of a dead-band, exclude a certain amount of the variance (again, refund or surcharge) before calculating the positive or negative decoupling rate increment. For most of the mechanisms that have a limit on the size of decoupling adjustments, any amount not refunded or surcharged carries over to the next decoupling period. That is not always the case, however. Most mechanisms with this feature set limits in terms of a set percentage of overall revenues but a few use fixed dollar amounts.

Designing decoupling mechanism to calculate refunds or surcharges on a customer class-by-customer class basis is common. Not infrequently this design choice appears in conjunction with exempting the industrial and other large-use customer classes from the mechanism altogether. While this design choice guards against any change in customer class cost allocations between general rate cases, it requires considerable confidence in the cost allocations that exist and can result in one customer class receiving a rate increase while another receives a decrease. At least one commission spread a decoupling surcharge across all customers notwithstanding the tariff requirement of a class-by-class spread because of discomfort with the cost allocations and the disparate impacts on the customer classes covered by the mechanism.

Fewer states or utilities have found a need to set limits or dead-bands on the effectiveness of a decoupling mechanism. For some that do, the limits are simply a rate management tool; refund or surcharge balances not included in adjustments carry forward to future periods. For others, however, this feature acts as a limit to the decoupling mechanism’s effectiveness in addressing the throughput incentive. This occurs if the limits foreclose the refund or surcharge of some revenue variances, whether those fall within a dead-band, are screened away,<sup>13</sup> or fall outside the set limits.

Beyond these five categorical choices, states and utilities have included unique or uncommon features in decoupling mechanisms. Four utilities have (or had – two of these mechanisms have since expired) decoupling that provides only for surcharges, not refunds. One utility makes a price elasticity adjustment along with its decoupling true-up, anticipating the effect that the commodity cost change may have on demand. Moreover, considerable variation exists among utilities in the extent to which certain of the costs included in the fixed cost revenue requirement may be subject to automatic cost recovery clauses. As with any regulatory matter, the response crafted to a given issue such as the throughput incentive will depend on the state and the utility’s circumstances, history, and preferences.

### The ROE Issue

Although a few exceptions exist, almost every order approving a utility decoupling mechanism addresses the argument by one or more parties that the adoption of decoupling requires a reduction in the utility’s authorized ROE. At the heart of the argument are two questions: (1) does decoupling reduce a utility’s business risk and, if so can one quantify this reduction? and (2) assuming one can quantify the reduction in risk, can one apply this quantification in some mechanical way to the overall determination of an appropriate ROE?

The table below summarizes the commission decisions on the ROE issue:

ROE Reduction	Number of Decisions <sup>14</sup>	Result of Settlement Agreement?
None	60	29
10 basis points	8	4
25 basis points	3	1
50 basis points	4	
Total	75	34

As the table demonstrates, the large majority of decisions adopting decoupling make no ROE reduction. Of the reductions that occurred, 10 basis points<sup>15</sup> was the most common amount. The largest reduction – 50 basis points – is limited to the jurisdictions of Maryland and Washington D.C. Maryland, with three of these decisions, has not imposed an ROE reduction in two other cases, one of which concerned a settlement agreement and one that did not. One of the three decisions making a 25-basis point reduction concerned adoption of a settlement agreement; the other two did not. Almost half of the cases including a 10-basis point reduction were approvals of settlement agreements.

<sup>13</sup> Washington applies a 45% factor to the revenue variation Avista calculates to eliminate revenue variation that may relate to causes other than the utility’s energy efficiency efforts.

<sup>14</sup> Two of the decisions cover combination utilities. For purposes of this table, I have counted the combination utility as only one because the order applied to both sides of the company.

<sup>15</sup> Basis points are hundredths of a percent. Thus, 9.10% is 910 basis points; 50 basis points is 0.5%.

Just over half of the time a utility has adopted decoupling, it has been as the result of commission approval of multi-party settlement agreements. It is impossible to know what the settling parties discussed in the course of reaching a settlement but one can conclude that the level of benefits to the utility and customers satisfied all signing parties. Settlements resolved the issue in favor of no ROE reduction in Arkansas, Colorado, Georgia, Idaho, Indiana, Maryland (for Washington Gas Light), Michigan (for Upper Peninsula Power), New Jersey, New York, North Carolina, Ohio, Oregon, Utah, Washington, and Wisconsin.<sup>16</sup> In virtually all these cases, the commission's consideration of the issue is limited to a determination whether the settlement in its entirety is in the public interest.

The next most common reason for the lack of an ROE reduction is Commission rejection of making such an adjustment separately from all of the other considerations that result in an ROE decision. In Massachusetts, Connecticut and Hawaii, the Commissions found that decoupling reduces the utility's business risk but declined any specific quantification and considered this along with model results, comparisons to proxy companies, and other considerations such as management quality and public policy changes in choosing an ROE within the range to which experts had testified. Related reasons against making an ROE reduction were Wyoming's finding that there was no logical basis for a specific amount, Minnesota's conclusion that the risk reduction was small, and New York's finding that decoupling mechanisms were becoming commonplace and, thus, were already factored into the ROE models.

Other reasons provided against making an ROE reduction were that:

- The decoupling mechanism was a pilot program and the Commission could address the ROE issue if and when it became permanent (Michigan)
- The Commission had already significantly limited the mechanism and the evidence offered applied only to "full" mechanisms (Washington)
- The decoupling mechanisms were considered under specific statutory authority and no party raised the ROE issue or it was not found relevant (Virginia and Rhode Island)
- Other risk changes offset the decoupling ROE effect (New York – Consolidated Edison)

Among the handful of regulatory decisions making an ROE reduction for decoupling outside of a settlement, the reasoning generally centers on a conclusion that a decoupling mechanism must reduce risk because the revenue the utility will book is now more certain. Variations of this appear in the cases listed in the table from Illinois, Maryland, New York, Oregon, Tennessee and Washington D.C. Some cases note that decoupling mechanisms are not yet widespread among the proxy group used to identify the range of reasonable ROEs for a given utility (New York), although other commissions have found comparisons to proxy groups inconclusive because of the lack of uniformity among decoupling mechanisms (Nevada) and a few cite the number of proxy companies with decoupling as a reason for declining to make an ROE reduction. Other decisions making reductions note that one or more witnesses, including witnesses for the utility, actually provided different estimates of the required ROE with and without the decoupling mechanism (Washington D.C.) or chose an ROE reduction somewhere between the amount supported by the utility and that supported by other parties (Maryland, Nevada).

The two primary findings of this study shed some light on the empirical questions involved in the ROE issue.

---

<sup>16</sup> On the other hand, settlements included an ROE reduction in Arizona, Arkansas, Maryland, and New York (for St. Lawrence Gas). In a few other states – notably California with its six decoupled utilities – it is unclear whether the adoption of decoupling occurred through a settlement.

First, it is clear that decoupling adjustments are both surcharges for under-collections of revenues for fixed costs and refunds of over-collections of such revenues. In the refund situation, the utility has foregone the opportunity to collect more revenue (for fixed costs) than the amount authorized in its last general rate case. While opponents of decoupling tend to testify extensively about the risk reduction associated with the possibility of surcharges, acknowledgements of lost opportunity associated with possible refunds are far more infrequent. Whether these changes in risk and opportunity affect income depends on whether those fixed costs are the same, less or more than the authorized amount. Fixed costs are not necessarily stable between rate cases; they vary, just on bases other than usage. The size of a utility's construction program will affect the change in its "fixed" interest and depreciation costs. Inflation, the presence or absence of storms and other such events will affect operations and maintenance expenses. Without looking at substantial amounts of empirical data, it is difficult to conclude that the risk of under-collecting fixed-cost revenue is greater than the lost opportunity of over-collecting fixed costs, assessed in consideration of changes between authorized and actual prudent fixed costs.

Second, regardless whether refund or surcharge, decoupling adjustments are, by and large, small. It appears that neither the under-recovery risk reduction or over-recovery lost opportunity are very significant. Given the relatively small amounts of the decoupling adjustments, however, it is not apparent that this reduction is very significant.

A number of commissions addressing the ROE issue have noted the absence of empirical evidence regarding how, if at all, decoupling changes a utility's business risk. As noted previously, there is now one empirical study concluding that decoupling may actually increase a utility's overall business risk to some extent. "The Impact of Decoupling on the Cost of Capital – An Empirical Investigation," a 2011 Discussion Paper by the Brattle Group and authored by Joseph B. Wharton, Michael J. Vilbert, Richard E. Goldberg and Tony Brown. Perhaps additional empirical work will help put the controversy to rest. In the meantime, commissions should keep in mind that:

- Decoupling adjustments will be both surcharges and refunds
- The actual adjustments are likely to be small
- Most commissions have declined to make an ROE reduction in connection with the adoption of decoupling.

## Concluding Observations

The vast amount of data and number of decisions reviewed in the preparation of this report lend themselves to observations and conclusions. The most significant of these are as follows:

- **The debate over decoupling is generally not about the money.**<sup>17</sup> As the above summary demonstrates and the detail in this report affirms over and over again, the rate impacts of decoupling are small to miniscule. The amounts that flow through utility cost adjustment clauses, such as power cost or purchased gas adjustment clauses or trackers for capital additions, environmental remediation expenses or any of a myriad of other large costs dwarf decoupling adjustments.

---

<sup>17</sup> Some customers, of course, resist any increase in rates, regardless how small or temporary, but decoupling debates far more often center on the philosophy of the matter than the size of possible rate increases – and decreases – that may occur.



- **If it's not about the money, it's hard to make a case that the risk reduction to utilities from decoupling requires a reduction in ROE.** This issue alone has probably consumed more pages of testimony, hours of cross-examination and commission time than any other associated with decoupling. The reductions proposed are external to the methodologies by which, along with a heavy dose of judgment, commissions usually determine ROE. The only study to date quantifying the change in capital requirements of decoupled utilities points the other way.<sup>18</sup>
- **By and large, we are missing what should be the real debate about decoupling.** In the best case scenario now, what accompanies a decoupling debate is identification of utility energy efficiency programs and the energy savings goals the utility must meet through those programs. While energy efficiency programs are of great importance and deserve the support of policies that affect their success or failure, such as removing the throughput incentive, this is not all that is at stake. Decoupling is a tool, a path if you will, to somewhere. What a decoupling decision asks that we consider is: where is this path going? What “utility” – in the dictionary sense of the word – is it that we want from utilities in the 21<sup>st</sup> century? Is it the sale of as much energy as they can get people to buy? Is it the highest possible use of the physical infrastructure that exists? Is it support of an infant energy services industry that may or may not blossom depending on our choices for what a utility should or shouldn't do? The controversy over rate impacts and ROE effects distracts us, unintentionally or not, from holding this vital conversation.

Decoupling is challenging in a way other regulatory adjustment clauses – such as power or purchased gas adjustments, environmental cost true-ups, and storm cost trackers – are not. Decoupling requires that we consider the utility business model: how should a utility make money in the short term?<sup>19</sup> It has been simple for many decades to have utilities make money according to commodity sales. This worked particularly well during the first half of the 20<sup>th</sup> century when steadily rising commodity sales helped finance the build-out of universal electric service and widespread natural gas service. Grounding the business model in commodity sales came under fire when the cost of new commodity supply began to exceed the historical or embedded cost. New sales now held the potential of raising costs for everyone<sup>20</sup> Although numerous regulatory policies were put in place to adjust to the new reality, however, the fundamental business tie between selling more and greater profitability remained.

For some, this was proper because rising commodity sales signaled to them that the utility was “competitive.” For others, rising sales (or the potential thereof) enabled comfort that the utility's rates were just and reasonable. Given these beliefs, it is no wonder this regulatory tool causes discomfort. The hope of many urging adoption of decoupling is that sales will fall, not rise, preferably because of widespread adoption of cost-effective energy efficiency measures. How, then, will we know whether a utility is competitive or has reasonable rates? We will need different indicators of competitiveness and reasonableness. And, indeed, we do. That is precisely the point. Considering adoption of decoupling is an invitation to think and converse about what success should mean for a utility in the next several decades. What results will tell us that the utility is competitive and that what it charges for the services

---

<sup>18</sup> See “The Impact of Decoupling on the Cost of Capital – An Empirical Investigation,” a 2011 Discussion Paper by the Brattle Group and authored by Joseph B. Wharton, Michael J. Vilbert, Richard E. Goldberg and Tony Brown.

<sup>19</sup> Decoupling does not address the long-term business model, which determines the size and duration of the income opportunity that a utility will have as a result of selling electricity or natural gas commodities at regulated rates.

<sup>20</sup> For electric utilities, whether the potential was realized depended on how long a utility could avoid adding new supplies. If it had a significant amount of excess generation, the new sales – in the short term – lowered costs for everyone. For natural gas, the effect of increasing sales on cost depended on an increasingly volatile market.

it offers – which may be far more than just the sale of kWh or therms – is reasonable? Perhaps the next decoupling report will describe the results of such thinking and conversation.

## ***A State-By-State Look At Decoupling***

### **Arizona**

Arizona presently has decoupling in place for one gas utility. On January 6, 2012, the Arizona Corporation Commission (ACC) adopted decoupling for Southwest Gas Company in Docket No. G-01551A-10-0458, decision # 72723, approving a stipulation containing the mechanism. The terms of the Stipulation indicate that Southwest Gas agreed to a 25 basis point reduction in its authorized return on common equity (ROE) as part of the settlement, along with a one-time \$2.3 million revenue requirement reduction.

The decoupling mechanism appears in Arizona Gas Tariff No. 7, sheet 92 as the “Energy Efficiency Enabling Provision.” For November through April, the mechanism includes a weather adjustment, calculating the per-customer margin revenue differences of actual versus normal (rate case” temperatures and making a volume adjustment on each customer’s bill. The decoupling component applies year-round and calculates, per rate schedule, the difference between actual billed margin per customer and authorized margin per customer (stated in the tariff). The utility may not recover any surcharges that would raise its earnings above the authorized ROE, and there is a 5 percent cap on adjustments in any one year, with any balance carried forward to future years without interest. The first adjustment filing under this tariff will not occur until 2013.

For one of its major electric utilities – Arizona Public Service Company – and another gas utility – UNS Gas Company, the ACC instead approved lost revenue recovery mechanisms that account only for margins lost as a result of compliance with Arizona’s energy efficiency and distributed generation standards. APS Docket No. E-01345A-11-0224; UNS Gas Docket No. G-04204A-11-0158.

### **Arkansas**

Beginning in 2007, Arkansas’ three natural gas utilities put in place decoupling tariffs known as Billing Determinant Adjustments for a three-year trial period. Arkansas Oklahoma – Case No. 07-026-U, Order No. 7 (November 2007) (by settlement agreement; 10 basis point ROE reduction included); Arkansas Western – Case No. 06-124-U, Order No. 6 (July 2007) (by settlement agreement; 25 basis point ROE reduction included); CenterPoint Energy Resources – Case No. 06-161-U, Order No. 6 (October 2007) (by settlement agreement; 10 basis point ROE reduction included). Arkansas Oklahoma’s tariff has now expired. Arkansas Western’s Billing Determinant Adjustment Tariff, Rider No. 3.6 expires December 31, 2013. CenterPoint Energy Resources’ Billing Determinant Adjustment Tariff, Rider No. 6 extends through March 31, 2015. Both tariffs reconcile actual weather-adjusted revenues to rate case revenues for the residential and small business classes only and authorize a surcharge, specific to each class, for under-recovery (net across all schedules). There is no refund for over-recovery.

In 2010, the Commission approved lost revenue recovery for all utilities as part of an order on energy efficiency. Docket No. 08-137-U, Order No. 14. The Order modified the existing BDA’s for gas utilities to ensure that these riders did not double-collect. See, e.g. Docket No. 07-078-TF for Arkansas Western Gas Company, Order No. 26, June 30, 2011.

Neither Arkansas Oklahoma nor Arkansas Western made any adjustments because the amounts accrued under their mechanisms would have resulted in refunds, rather than surcharges. The table below shows the adjustments for CenterPoint Energy Resources.

<b>CenterPoint Energy Resources</b>			
	Adjustment \$/ Ccf	Retail Price \$ per Mcf	Adjustment %
2008			
Residential	0		
Small Commercial	0		
2009			
Residential	0.003014 <sup>21</sup>	13.39	0.23
Small Commercial	0.002555	10.72	0.24
2010			
Residential	0.025905	11.53	2.25
Small Commercial	0	8.89	0
2011			
Residential	0.003923	13.15	0.30
Small Commercial	0		

## California

California has had decoupling in place for its electric and gas utilities for many years, both prior to and after the state's utility market restructuring efforts of the late 1990s. For all of the utilities except Southwest Gas, the decoupling mechanism is not a separate tariff but, rather, part of the broader true-up processes that occur under comprehensive regulatory frameworks. Southwest Gas has the Core Fixed Cost Adjustment Mechanism, which appears as a line item in the cost of gas.

The orders adopting decoupling for the various utilities post-restructuring are in the following cases:

- Pacific Gas & Electric (electric): Case A.02-11-017 et al.
- Pacific Gas & Electric (gas): Case A.02-11-017 et al.
- Southern California Edison: Case A.93-120-29
- San Diego Gas & Electric (electric): Case A.02-12-027
- San Diego Gas & Electric (gas): A.02-12-027
- SoCal Gas: A.02-12-027
- Southwest Gas: A.02-02-012

None of the orders include an ROE reduction in connection with the approval of decoupling.

Because decoupling is intertwined with the regulatory framework, determining the adjustment requires calculations best performed by the utilities. Thus, all information in the tables below is from the respective utilities.

---

<sup>21</sup> In many cases, the tables include adjustments that include up to six figures to the right of the decimal point. This is common in utility ratemaking and this report leaves these as stated in the filings rather than round them to the nearest hundredth.

<b>Pacific Gas &amp; Electric - Gas</b>			
Year	Delivery Revenue Requirement (\$ millions)	Decoupling Adjustment (\$ millions)	% of Delivery Revenue
2006	1027	22.85	2.2%
2007	1027	85.86	8.4%
2008	1069	33.64	3.1%
2009	1091	62.42	5.7%
2010	1,113	71.21	6.4%
2011	1,119	21.30	1.9%
2012	1,210	-11.62	-1.0%

<b>Pacific Gas &amp; Electric - Electric</b>			
Year	Delivery Revenue Requirement (\$ millions)	Decoupling Adjustment (\$ millions)	% of Delivery Revenue
2005	8925	-127.73	-1.43%
2006	9933	224.6	2.26%
2007	10409	217.27	2.09%
2008	10261	40.32	0.39%
2009	11169	103.55	0.93%
2010	11224	465.56	4.15%
2011	10306	383.9	3.73%
2012	11032	403.04	3.65%

<b>Southern California Edison</b>		
Year	Revenue Requirement Allowed to Actual (\$ millions)	Decoupling Adjustment %
2004	Not available	-2.1
2005	Not available	-2.1
2006	Not available	0.1
2007	Not available	-1
2008	64,843	1.6
2009	-69,668	-1.4
2010	78,672	1.6
2011	-76,253	-1.4
2012	-2918	-0.1

<b>Southwest Gas – Northern California</b>			
Year	Decoupling Adjustment	Average Rate	% of Rate
2005	0.00400	1.18	0.300
2006	(0.01000)	1.35	(0.070)
2007	(0.00060)	1.25	0.000
2008	(0.01600)	1.25	(0.013)

Southwest Gas – Northern California			
2009	(0.05090)	1.06	(0.048)
2010	0.01375	1.08	0.013
2011	0.01001	1.03	0.010
2012	(0.03688)	0.82	(0.045)

Southwest Gas – Southern California			
Year	Decoupling Adjustment	Average Rate	% of Rate
2005	0.05000	1.07	4.700
2006	0.01000	1.30	0.800
2007	0.00400	1.25	0.300
2008	0.01000	1.17	0.900
2009	0.01349	1.18	0.011
2010	0.03692	1.16	0.032
2011	0.04537	1.52	0.030
2012	0.03378	1.02	0.033

Southwest Gas – Lake Tahoe			
Year	Decoupling Adjustment	Average Rate	% of Rate
2010	0.01938	1.06	0.018
2011	0.01665	0.91	0.018
2012	0.00095	0.82	0.001

San Diego Gas & Electric (Electric)			
Year	Rate (¢/kWh)	Decoupling Adjustment (¢/kWh)	Decoupling Adjustment (%)
2005	13.773	-0.055	-0.40%
2006	13.935	-0.21	-1.50%
2007	13.997	-0.051	-0.36%
2008	13.606	0.044	0.32%
2009	16.726	0.128	0.76%
2010	16.107	0.00135	0.008
2011	15.957	0.00183	0.012
2012	15.449	-0.0018	-0.012

San Diego Gas & Electric (Gas) and Southern California Gas			
Year	Rate (¢/therm)	Decoupling Adjustment (¢/therm)	Decoupling Adjustment (%)
2006			
Core	48.3	0.012	0.02%
Non-Core	5.4	0	0

<b>San Diego Gas &amp; Electric (Gas) and Southern California Gas</b>			
2007			
Core	50.2	0.024	0.05%
Non-Core	4.9	-0.001	-0.01%
2008			
Core	51.5	0.001	0.00%
Non-Core	3.6	-0.001	-0.04%
2009			
Core	41.9	0.19	0.40%
Non-Core	5.5	0.03	0.60%
2010			
Core	44.2	0.23	0.50%
Non-Core	5.8	0.03	0.60%
2011			
Core	46.3	0.33	0.70%
Non-Core	6.2	0.05	0.80%

## Colorado

Colorado has approved decoupling only for the gas side of Public Service of Colorado, in Case No. 06S-656G (June 2007). The order did not make an ROE reduction for the approval of decoupling. The decoupling tariff (Partial Decoupling Rate Adjustment Sheet 51), which has now expired, compared the authorized margin revenue per customer to the actual, weather-normalized margin per customer. The utility was allowed to recover only differences greater than or equal to a 1.3% decline in the use per customer (cumulates every year of mechanism) and increases in use-per-customer accrued to offset losses in use-per-customer in prior or future years. The mechanism did not apply if margin per customer rose because of increased use.

During the three years the mechanism was in place, the utility did not make any adjustments because, for each year, its margin-per-customer rose.

<b>Public Service Company of Colorado</b>		
Year	Decoupling Adjustment	Decoupling Adjustment Made?
2007	-910,686	no
2008	-4,124,799	no
2009	-11,399,835	no

## Connecticut

In 2007, Connecticut passed legislation requiring that the Commission adopt decoupling mechanisms for the states' electric and natural gas utilities. CT Public Act No. 07-242. To date, United Illuminating is the only utility with a mechanism in place. The Commission approved the decoupling mechanism as a two-year pilot in 2009, Docket No. 08-07-04, and has subsequently extended it through the utility's next general rate case. The mechanism, found in Decoupling Rider, C.P.U.C.A. No. 598, reconciles actual,

non-weather adjusted revenues to ratemaking revenues. Refunds or surcharges are allocated to all classes based on revenue. No adjustment occurs if the revenue difference is \$1 million or less and amounts accrued for adjustments do not incur carrying charges. The Commission has not made an explicit ROE reduction for the presence of the decoupling mechanism.

These are the adjustments made to date:

<b>United Illuminating</b>			
Year	Adjustment (cents/kWh)	Retail Price (cents/kWh)	Adjustment %
2009	0.02907	22.1	0.13%
2010	-0.0253	21.6	-0.12%
2011	0.0791	21.6	0.37%

## Georgia

Georgia recently approved a decoupling mechanism for Atmos Energy (a local natural gas distribution company) in Docket No. 34734 (January 2012), adopting a stipulation. The Georgia Rate Adjustment Mechanism, Tariff Sheet 33, compares actual non-gas revenue to authorized non-gas revenue and requires refunds or surcharges depending on the difference. Authorized revenues change annually according to a comparison of a historic test year and a forward-looking test year and the adjustments necessary to bring authorized revenues up to a 10.5% ROE or down to a 10.9% ROE (20 basis points to either side of the authorized 10.7%). There have not been any rate adjustments yet under this tariff.

## Hawaii

The Commission approved a decoupling mechanism for Hawaiian Electric (HECO) in August 2010, after an investigation into the appropriateness of decoupling and its design. Docket No. 2008-0274 (opening investigation into decoupling) Final Order August 2010; Docket No. 2008-0083 (generate rate case including adoption of decoupling mechanism) Final Order December 2010. The general rate case order made no explicit ROE adjustment for decoupling but did note that the 10% ROE authorized took into account all of the rate mechanisms in place for the utility. HECO's tariff, the Revenue Balancing Account, Revised Sheet 92, took effect March 1, 2011. It compares actual adjusted revenue to a target revenue, which is based on the last test year with adjustments for escalation in O&M and rate base changes. Accrued amounts include carrying charges.

<b>Hawaiian Electric Company</b>			
Year	Decoupling Adjustment (cents/kWh)	Retail Rate	Decoupling %
2011	0.1995	31.49	0.63%
2012	0.3894	36.41	1.07%

The 2011 adjustment took effect June 1 but was reduced to \$0 on July 26, 2011 when the Commission granted HECO an interim rate increase of \$53.2 million in a 2011 test year general rate case. The 2012 Adjustment runs from June 1, 2012 through May 31, 2013. About 25% of the total relates to the portion of the decoupling mechanism that updates O&M and rate base.



## Idaho

The Commission approved a three-year experimental decoupling mechanism for Idaho Power Company, an electric utility, in Case No. IPC-E-04-15, Order No. 30267. The Commission extended it for an additional two years in Order No. 31063 and made the mechanism permanent in Case No. IPC-E-11-19, Order No. 32505 (March 2012). The tariff, schedule 54, is a revenue-per-customer mechanism, comparing actual, weather-adjusted revenue per customer to authorized revenue per customer, using fixed costs from the rate case. Adjustments are capped at 3% over the previous year, with carry-over to subsequent years. Although the mechanism specifies calculating and refunding/charging any adjustment on a per class basis, the Commission departed from this in the first two adjustments because of concern regarding the lack of current cost of service studies to support the underlying cost allocations.

<b>Idaho Power Company<sup>22</sup></b>			
	Adjustment Rate	Retail Rate	Decoupling Adjustment %
<b>2007</b>			
Residential	-0.0457	5.9	-0.77%
Commercial	-0.0457	4.28	-1.07%
<b>2008</b>			
Residential	0.0529	6.7	0.90%
Commercial	0.0529	5.1	1.04%
<b>2009</b>			
Residential	0.122	7.7	1.58%
Commercial	0.1535	6.03	2.55%
<b>2010</b>			
Residential	0.18	7.85	2.29%
Commercial	0.2273	6.13	3.71%
<b>2011</b>			
Residential	0.2028	7.85	2.58%
Commercial	0.2597	6.13	4.24%

## Illinois

The Commission has approved decoupling for two of Illinois' gas utilities: Peoples Gas & Coke and North Shore Gas, in Case No. 07-0241/07-0242 (Consolidated) (February 2008). The Order approving the decoupling adjustments reduced the utilities' ROE by 10 basis points. This is a four-year pilot only; to continue, the utility must make a general rate filing in which the Commission extends the program. The tariffs – Volume Balancing Adjustment (VBA), sheets 60-64 for North Shore Gas and Volume Balancing Adjustment (VBA), Sheets 61-65 for Peoples Gas – compare actual, non-weather-adjusted margin revenue per customer to ratemaking margin revenue per customer, on a per-class basis. Adjustments occur monthly but the utilities also make an annual reconciliation filing.

<sup>22</sup> All numbers provided by the utility.

North Shore Gas <sup>23</sup>						
Year	Decoupling Adjustment	Therms	Annualized Therms	Adj/Therm	Retail Price	Adjustment %
2009						
Residential	(547,804.00)	120190873	159853861	(0.003427)	8.97	-0.038%
Commercial	(327,782.00)	75056288	99824863	(0.003284)	8.66	-0.038%
2010						
Residential	(898,009.00)	94852140	126153346	(0.007118)	9.39	-0.076%
Commercial	(130,997.00)	35,529,162	47253785	(0.002772)	8.76	-0.032%
2011						
Residential	66,782.00	96841447	128799125	0.000518	8.6	0.006%
Commercial	(987,442.00)	51327651	68265776	(0.014465)	8.12	-0.178%

Peoples Gas & Coke						
Year	Decoupling Adjustment	Therms	Annualized Therms	Adj/Therm	Retail Price	Adjustment %
2009						
Residential	2,035,714.00	437062567	568181337	0.003583	8.97	0.040%
Commercial	(2,217,245.00)	319190546	424523426	(0.005223)	8.66	-0.060%
2010						
Residential	(3,912,353.00)	339228970	440997661	(0.008872)	9.39	-0.094%
Commercial	(2,602,899.00)	205188433	272900616	(0.009538)	8.76	-0.109%
2011						
Residential	4,866,068.00	358202970	465663861	0.010450	8.6	0.122%
Commercial	(3,595,230.00)	360315843	479220071	(0.007502)	8.12	-0.092%

## Indiana

Three of Indiana's gas utilities have decoupling mechanisms in place: Vectren Indiana Gas through Case No. 42943 (December 2006); Vectren Southern Indiana Gas through Case No. 42943 (December 2006); and Citizen's Gas & Coke through Case No. 42767 (April 2007). None of the orders approving decoupling included an ROE adjustment. For both Vectren companies, the tariff – Energy Efficiency Rider, Sheet 38 -- compares actual, non-weather-adjusted margin revenues per customer to ratemaking margin revenues per customer, with an adjustment for customer additions and reductions. The mechanism designs into a rate adjustment only 85% of this difference amount (positive or negative). Earnings are capped at the allowed return on common equity, with earnings shortfalls from prior periods allowed to offset potential returns to customers. The mechanism operates on a per class basis. The utility also has

<sup>23</sup> Calculations above are based on the annual revenue difference calculated for the prior year and estimated therm sales for the refund/surcharge year (the utilities do this over nine months and provide only that period of estimated sales). The adjusted column above multiplies this by 1.33 because the excluded months are the first quarter of the year when heat related sales are likely to be higher.

a separate weather adjustment tariff that applies only during the seven winter months. For Citizens Gas & Coke, the tariff -- Rider E, page 505 – is identical except that the 85% limitation does not apply.

<b>Vectren North (Indiana Gas)</b>				
	Adjustment (\$/therm)	Retail Rate	Retail Rate (\$/therm)	Adjustment %
<b>2007</b>				
Residential	0.00155	11.22	1.09	0.142%
General	0.00012	10.2	1.00	0.012%
<b>2008</b>				
Residential	0.01705	12.65	1.23	1.382%
General	0.00344	11.14	1.09	0.317%
<b>2009</b>				
Residential	0.00364	10.81	1.05	0.345%
General	-0.00762	9.18	0.90	-0.851%
<b>2010</b>				
Residential	-0.00006	8.62	0.84	-0.007%
General	-0.00467	7.54	0.74	-0.635%
<b>2011</b>				
Residential	0.00932	9.43	0.92	1.013%
General	0.00448	7.98	0.78	0.575%
<b>2012</b>				
Residential	0.009	12.19	1.19	0.757%
General	0.00255	9.49	0.93	0.275%

<b>Vectren South (Southern Indiana Gas)</b>				
	Adjustment (\$/therm)	Retail Rate	Retail Rate (\$/therm)	Adjustment %
<b>2008</b>				
Residential	0.0085	12.65	1.23	0.689%
General	0.00346	11.14	1.09	0.318%
<b>2009</b>				
Residential	0.00152	10.81	1.05	0.144%
General	-0.00469	9.18	0.90	-0.524%
<b>2010</b>				
Residential	0.00918	8.62	0.84	1.092%
General	-0.00335	7.54	0.74	-0.455%
<b>2011</b>				
Residential	0.01602	9.43	0.92	1.741%
General	0.00713	7.98	0.78	0.916%
<b>2012</b>				
Residential	0.01807	12.19	1.19	1.519%
General	0.0087	9.49	0.93	0.940%

<b>Citizens Gas &amp; Coke</b>				
	Adjustment (\$/therm)	Retail Rate	Retail Rate (\$/therm)	Adjustment %
<b>2008</b>				
Res Non-Heat	0.002	12.65	1.23	0.162%
Res Heat	-0.0002	12.65	1.23	-0.016%
General Non-Heat	-0.0006	11.14	1.09	-0.055%
General Heat	0	11.13	1.09	0.000%
<b>2009</b>				
Res Non-Heat	0.0133	10.81	1.05	1.261%
Res Heat	0.0223	10.81	1.05	2.114%
General Non-Heat	0.0157	9.18	0.90	1.753%
General Heat	0.0212	9.18	0.90	2.367%
<b>2010</b>				
Res Non-Heat	-0.0053	8.62	0.84	-0.630%
Res Heat	0.0129	8.62	0.84	1.534%
General Non-Heat	0.0114	7.54	0.74	1.550%
General Heat	0.0024	7.54	0.74	0.326%
<b>2011</b>				
Res Non-Heat	0.0163	9.43	0.92	1.772%
Res Heat	0.0214	9.43	0.92	2.326%
General Non-Heat	-0.0214	7.98	0.78	-2.749%
General Heat	0.0173	7.98	0.78	2.222%
<b>2012</b>				
Res Non-Heat	0.0212	12.19	1.19	1.783%
Res Heat	0.0178	12.19	1.19	1.497%
General Non-Heat	-0.0218	9.49	0.93	-2.355%
General Heat	0.0126	9.49	0.93	1.361%

## Maryland

Maryland has approved decoupling for two gas utilities – Baltimore Gas & Electric (Case 9036, December 2005) and Washington Gas Light (Case 8990, July 2005) – and three electric utilities – PEPCO (Case 9092, July 2007), Delmarva (Case 9093, July 2007) , and Baltimore Gas & Electric (Letter Order November 2007). All of the decoupling mechanisms adjust monthly.

The decoupling mechanisms for the gas utilities are both similar. They each compare actual, non-weather-adjusted distribution revenue to ratemaking distribution revenue, adjusting for net customers added, by rate schedule. For Washington Gas Light (Revenue Normalization Adjustment, General Service Provisions No. 30), the maximum rate change allowed per month is 5¢, with any adjustment amount in excess of that carried over to future periods. For BG&E (Monthly Rate Adjustment, Rider 8) the maximum rate change allowed per month is 10%, with any adjustment amount in excess of that carried over to future periods. Although the Commission made a 50 basis point ROE reduction for BG&E

upon adopting the gas decoupling mechanism in 2000, it reversed this in 2005 and made no ROE adjustment for Washington Gas Light.

Similarly, the electric utility decoupling mechanisms are also all the same. Each compares actual, non-weather-adjusted distribution revenue to ratemaking distribution revenue, adjusted for net customers added, by rate schedule. The maximum rate change allowed per month is 10%, with any adjustment amount in excess of that carried over to future periods. PEPCO's tariff is the Bill Stabilization Adjustment Rider, page 47; Delmarva's tariff is the Bill Stabilization Adjustment Rider, Leaf 102; and BG&E's tariff is the Monthly Rate Adjustment, Rider 25. Both PEPCO and Delmarva received 50 basis point ROE reductions upon the adoption of their decoupling mechanisms. Although the Commission had initially not made such a reduction for BG&E, it did so in the utility's most recent rate case (Case 9230).

The tables below show the monthly decoupling adjustments for these utilities, from 2006 through 2012 for the gas utilities, 2008 through 2012 for BG&E (electric) and PEPCO and 2009 through 2012 for Delmarva.

<b>Baltimore Gas &amp; Electric (Gas) 2007</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>January</b>				
Residential	-0.01	15.46	1.51	-0.663%
General Service	0.0174	13.17	1.28	1.354%
<b>February</b>				
Residential	0.0397	12.92	1.26	3.150%
General Service	0.0159	12.2	1.19	1.336%
<b>March</b>				
Residential		14.82	1.45	0.000%
General Service		13.14	1.28	0.000%
<b>April</b>				
Residential		14.55	1.42	0.000%
General Service		12.04	1.17	0.000%
<b>May</b>				
Residential	0.0196	18.32	1.79	1.097%
General Service	-0.05	12.31	1.20	-4.163%
<b>June</b>				
Residential	-0.05	20.32	1.98	-2.522%
General Service	-0.05	11.87	1.16	-4.318%
<b>July</b>				
Residential	-0.05	21.54	2.10	-2.379%
General Service	-0.05	11.83	1.15	-4.332%
<b>August</b>				
Residential	-0.05	21.22	2.07	-2.415%
General Service	-0.05	11.32	1.10	-4.527%

<b>Baltimore Gas &amp; Electric (Gas) 2007</b>				
September				
Residential	-0.05	20.94	2.04	-2.447%
General Service	-0.05	11	1.07	-4.659%
October				
Residential	-0.05	19.6	1.91	-2.615%
General Service	-0.05	12.48	1.22	-4.107%
November				
Residential	-0.05	14.7	1.43	-3.486%
General Service	-0.05	11.85	1.16	-4.325%
December				
Residential	-0.05	14.26	1.39	-3.594%
General Service	-0.05	12.4	1.21	-4.133%

<b>Baltimore Gas &amp; Electric (Gas) 2008</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	-0.05	14.29	1.39	-3.586%
General Service	-0.0417	12.59	1.23	-3.395%
February				
Residential	0.0073	14.2	1.39	0.527%
General Service	0.0193	12.43	1.21	1.592%
March				
Residential	0.05	14.95	1.46	3.428%
General Service	0.05	12.79	1.25	4.007%
April				
Residential	0.0343	17.91	1.75	1.963%
General Service	0.0416	13.4	1.31	3.182%
May				
Residential	0.05	20.3	1.98	2.525%
General Service	0.004	14.15	1.38	0.290%
June				
Residential	0.05	24.15	2.36	2.122%
General Service	-0.05	15.29	1.49	-3.352%
July				
Residential	-0.05	27.83	2.72	-1.842%
General Service	-0.05	15.95	1.56	-3.213%
August				
Residential	0.05	24.01	2.34	2.135%
General Service	-0.05	14.2	1.39	-3.609%

<b>Baltimore Gas &amp; Electric (Gas) 2008</b>				
September				
Residential	0.0272	23.02	2.25	1.211%
General Service	-0.05	13.48	1.32	-3.802%
October				
Residential		16.63	1.62	0.000%
General Service		12.26	1.20	0.000%
November				
Residential		14.93	1.46	0.000%
General Service		12.4	1.21	0.000%
December				
Residential	-0.024	15.35	1.50	-1.603%
General Service	-0.0323	13.12	1.28	-2.523%

<b>Baltimore Gas &amp; Electric (Gas) 2009</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	-0.0251	14.38	1.40	-1.789%
General Service	-0.0187	12.2	1.19	-1.571%
February				
Residential	-0.0005	13.65	1.33	-0.038%
General Service	0.0212	12.12	1.18	1.793%
March				
Residential	-0.0272	13.4	1.31	-2.081%
General Service	0.0129	11.26	1.10	1.174%
April				
Residential	0.008	14.27	1.39	0.575%
General Service	-0.0205	10.7	1.04	-1.964%
May				
Residential	-0.0258	15.88	1.55	-1.665%
General Service	-0.05	10.57	1.03	-4.849%
June				
Residential	0.05	19.83	1.93	2.584%
General Service	-0.05	10.44	1.02	-4.909%
July				
Residential	0.05	20.16	1.97	2.542%
General Service	-0.05	10.07	0.98	-5.089%
August				
Residential	0.05	20.37	1.99	2.516%
General Service	-0.05	9.69	0.95	-5.289%

<b>Baltimore Gas &amp; Electric (Gas) 2009</b>				
September				
Residential	0.05	19.18	1.87	2.672%
General Service	-0.05	9.32	0.91	-5.499%
October				
Residential	0.05	14.29	1.39	3.586%
General Service	-0.05	9.88	0.96	-5.187%
November				
Residential	-0.0027	11.4	1.11	-0.243%
General Service	-0.05	10.48	1.02	-4.890%
December				
Residential	-0.011	10.82	1.06	-1.042%
General Service	-0.0173	9.72	0.95	-1.824%

<b>Baltimore Gas &amp; Electric (Gas) 2010</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	0.0146	11.54	1.13	1.297%
General Service	0.0032	10.33	1.01	0.318%
February				
Residential		11.21	1.09	0.000%
General Service		10.1	0.99	0.000%
March				
Residential	-0.023	12.13	1.18	-1.944%
General Service	0.0035	10.29	1.00	0.349%
April				
Residential	-0.019	15.21	1.48	-1.280%
General Service	-0.0185	9.89	0.96	-1.917%
May				
Residential		16.02	1.56	0.000%
General Service		9.89	0.96	0.000%
June				
Residential	0.05	19.85	1.94	2.582%
General Service	-0.0375	10.53	1.03	-3.650%
July				
Residential	0.0158	20.78	2.03	0.779%
General Service	-0.05	10.66	1.04	-4.808%
August				
Residential	0.05	22.58	2.20	2.270%
General Service	-0.0355	10.82	1.06	-3.363%



<b>Baltimore Gas &amp; Electric (Gas) 2010</b>				
<b>September</b>				
Residential	0.05	20.79	2.03	2.465%
General Service	0.0208	10.34	1.01	2.062%
<b>October</b>				
Residential	0.05	15.14	1.48	3.385%
General Service	0.0169	9.35	0.91	1.853%
<b>November</b>				
Residential	0.05	11.86	1.16	4.321%
General Service	0.0066	9.24	0.90	0.732%
<b>December</b>				
Residential	0.0469	10.11	0.99	4.755%
General Service	0.0062	8.82	0.86	0.721%

<b>Baltimore Gas &amp; Electric (Gas) 2011</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>January</b>				
Residential	0.019	10.44	1.02	1.865%
General Service	-0.0083	9.56	0.93	-0.890%
<b>February</b>				
Residential	-0.05	11.28	1.10	-4.543%
General Service	-0.05	9.96	0.97	-5.146%
<b>March</b>				
Residential	-0.05	11.25	1.10	-4.556%
General Service	-0.0438	9.86	0.96	-4.553%
<b>April</b>				
Residential	-0.05	12.58	1.23	-4.074%
General Service	-0.05	10.06	0.98	-5.094%
<b>May</b>				
Residential	-0.05	15.97	1.56	-3.209%
General Service	-0.0332	11.96	1.17	-2.845%
<b>June</b>				
Residential	-0.05	19.53	1.91	-2.624%
General Service	-0.05	11.89	1.16	-4.310%
<b>July</b>				
Residential	-0.05	20.13	1.96	-2.546%
General Service	0.0212	13.43	1.31	1.618%
<b>August</b>				
Residential	-0.05	19.24	1.88	-2.664%
General Service	-0.0491	11.95	1.17	-4.212%

<b>Baltimore Gas &amp; Electric (Gas) 2011</b>				
September				
Residential	-0.05	18.63	1.82	-2.751%
General Service	-0.0198	12.13	1.18	-1.673%
October				
Residential	-0.05	12.88	1.26	-3.979%
General Service	-0.05	10.85	1.06	-4.724%
November				
Residential	-0.05	12.88	1.26	-3.979%
General Service	0.0061	10.32	1.01	0.606%
December				
Residential	-0.05	11.86	1.16	-4.321%
General Service	-0.0098	10.36	1.01	-0.970%

<b>Baltimore Gas &amp; Electric (Gas) 2012</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	-0.0091	11.39	1.11	-0.819%
General Service	-0.0096	10.03	0.98	-0.981%
February				
Residential	0.0096	11.12	1.08	0.885%
General Service	0.0026	9.72	0.95	0.274%
March				
Residential	0.0414	13.7	1.34	3.097%
General Service	0.0092	11.17	1.09	0.844%
April				
Residential	0.0392	13.97	1.36	2.876%
General Service	-0.0077	11.09	1.08	-0.712%
May				
Residential	0.05	16.18	1.58	3.167%
General Service	0.05	10.85	1.06	4.724%
June				
Residential	0.05	17.91	1.75	2.862%
General Service	-0.0061	11.4	1.11	-0.548%
July				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%
August				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%

<b>Baltimore Gas &amp; Electric (Gas) 2012</b>				
September				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%

<b>Washington Gas Light 2007</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	0.0064	15.46	1.51	0.424%
General Service	-0.0031	13.17	1.28	-0.241%
February				
Residential	0.05	12.92	1.26	3.967%
General Service	0.0359	12.2	1.19	3.016%
March				
Residential	0.05	14.82	1.45	3.458%
General Service	0.0499	13.14	1.28	3.893%
April				
Residential	0.031	14.55	1.42	2.184%
General Service	-0.05	12.04	1.17	-4.257%
May				
Residential	-0.05	18.32	1.79	-2.797%
General Service	-0.05	12.31	1.20	-4.163%
June				
Residential	-0.05	20.32	1.98	-2.522%
General Service	-0.05	11.87	1.16	-4.318%
July				
Residential	-0.05	21.54	2.10	-2.379%
General Service	-0.05	11.83	1.15	-4.332%
August				
Residential	-0.05	21.22	2.07	-2.415%
General Service	-0.05	11.32	1.10	-4.527%
September				
Residential	-0.05	20.94	2.04	-2.447%
General Service	-0.05	11	1.07	-4.659%
October				
Residential		19.6	1.91	0.000%
General Service		12.48	1.22	0.000%
November				
Residential	-0.0212	14.7	1.43	-1.478%
General Service	-0.05	11.85	1.16	-4.325%

Washington Gas Light 2007				
December				
Residential	0.0323	14.26	1.39	2.322%
General Service	-0.05	12.4	1.21	-4.133%

Washington Gas Light 2008				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	0.0343	14.29	1.39	2.460%
General Service	-0.0361	12.59	1.23	-2.939%
February				
Residential	-0.004	14.2	1.39	-0.289%
General Service	-0.0115	12.43	1.21	-0.948%
March				
Residential	0.05	14.95	1.46	3.428%
General Service	0.05	12.79	1.25	4.007%
April				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	13.4	1.31	3.825%
May				
Residential	-0.0217	20.3	1.98	-1.096%
General Service	-0.05	14.15	1.38	-3.622%
June				
Residential	0.0158	24.15	2.36	0.671%
General Service	-0.0223	15.29	1.49	-1.495%
July				
Residential	-0.0398	27.83	2.72	-1.466%
General Service	0.0088	15.95	1.56	0.566%
August				
Residential	-0.05	24.01	2.34	-2.135%
General Service	0.0312	14.2	1.39	2.252%
September				
Residential	-0.05	23.02	2.25	-2.226%
General Service	-0.0263	13.48	1.32	-2.000%
October				
Residential	0.0094	16.63	1.62	0.579%
General Service	-0.0135	12.26	1.20	-1.129%
November				
Residential	0.0047	14.93	1.46	0.323%
General Service	-0.0103	12.4	1.21	-0.851%

Washington Gas Light 2008				
December				
Residential	-0.0147	15.35	1.50	-0.982%
General Service	-0.0135	13.12	1.28	-1.055%

Washington Gas Light 2009				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	-0.0269	14.38	1.40	-1.917%
General Service	-0.0208	12.2	1.19	-1.748%
February			0.00	
Residential	-0.0494	13.65	1.33	-3.710%
General Service	-0.0309	12.12	1.18	-2.613%
March			0.00	
Residential	0.0344	13.4	1.31	2.631%
General Service	0.0245	11.26	1.10	2.230%
April			0.00	
Residential	0.0017	14.27	1.39	0.122%
General Service	0.0052	10.7	1.04	0.498%
May			0.00	
Residential	-0.05	15.88	1.55	-3.227%
General Service	-0.0386	10.57	1.03	-3.743%
June			0.00	
Residential	-0.05	19.83	1.93	-2.584%
General Service	-0.05	10.44	1.02	-4.909%
July			0.00	
Residential	-0.05	20.16	1.97	-2.542%
General Service	0.0384	10.07	0.98	3.909%
August			0.00	
Residential	-0.05	20.37	1.99	-2.516%
General Service	0.0266	9.69	0.95	2.814%
September			0.00	
Residential	-0.05	19.18	1.87	-2.672%
General Service	-0.0151	9.32	0.91	-1.661%
October			0.00	
Residential	-0.05	14.29	1.39	-3.586%
General Service	-0.0034	9.88	0.96	-0.353%
November			0.00	
Residential	0.0061	11.4	1.11	0.548%
General Service	-0.0062	10.48	1.02	-0.606%

December			0.00	
Residential		10.82	1.06	0.000%
General Service		9.72	0.95	0.000%

<b>Washington Gas Light 2010</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>January</b>				
Residential	-0.0205	11.54	1.13	-1.821%
General Service	-0.0182	10.33	1.01	-1.806%
<b>February</b>				
Residential	-0.0021	11.21	1.09	-0.192%
General Service	-0.0011	10.1	0.99	-0.112%
<b>March</b>				
Residential	-0.0081	12.13	1.18	-0.684%
General Service	-0.0004	10.29	1.00	-0.040%
<b>April</b>				
Residential	0.0107	15.21	1.48	0.721%
General Service	0.0175	9.89	0.96	1.814%
<b>May</b>				
Residential	-0.05	16.02	1.56	-3.199%
General Service	-0.05	9.89	0.96	-5.182%
<b>June</b>				
Residential	0.05	19.85	1.94	2.582%
General Service	0.05	10.53	1.03	4.867%
<b>July</b>				
Residential	0.05	20.78	2.03	2.466%
General Service	0.0173	10.66	1.04	1.663%
<b>August</b>				
Residential	0.05	22.58	2.20	2.270%
General Service	0.0439	10.82	1.06	4.159%
<b>September</b>				
Residential	0.05	20.79	2.03	2.465%
General Service	-0.0099	10.34	1.01	-0.981%
<b>October</b>				
Residential	0.05	15.14	1.48	3.385%
General Service	-0.0317	9.35	0.91	-3.475%
<b>November</b>				
Residential	-0.0264	11.86	1.16	-2.282%
General Service	0.05	9.24	0.90	5.547%

Washington Gas Light 2010				
December				
Residential	-0.0148	10.11	0.99	-1.500%
General Service	-0.0155	8.82	0.86	-1.801%

Washington Gas Light 2011				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Residential	-0.0099	10.44	1.02	-0.972%
General Service	-0.0079	9.56	0.93	-0.847%
February				
Residential	-0.0323	11.28	1.10	-2.935%
General Service	-0.0266	9.96	0.97	-2.737%
March				
Residential	-0.0273	11.25	1.10	-2.487%
General Service	-0.0214	9.86	0.96	-2.225%
April				
Residential	0.013	12.58	1.23	1.059%
General Service	-0.0004	10.06	0.98	-0.041%
May				
Residential	-0.0279	15.97	1.56	-1.791%
General Service	-0.0305	11.96	1.17	-2.614%
June				
Residential	-0.05	19.53	1.91	-2.624%
General Service	-0.0366	11.89	1.16	-3.155%
July				
Residential	-0.0137	20.13	1.96	-0.698%
General Service	-0.0487	13.43	1.31	-3.717%
August				
Residential	0.0169	19.24	1.88	0.900%
General Service	0.0476	11.95	1.17	4.083%
September				
Residential	0.0486	18.63	1.82	2.674%
General Service	-0.0214	12.13	1.18	-1.808%
October				
Residential	0.0211	12.88	1.26	1.679%
General Service	0.0092	10.85	1.06	0.869%
November				
Residential	0.0066	12.88	1.26	0.525%
General Service	-0.0066	10.32	1.01	-0.656%

December				
Residential	-0.0243	11.86	1.16	-2.100%
General Service	-0.014	10.36	1.01	-1.385%

<b>Washington Gas Light 2012</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>January</b>				
Residential	0.0007	11.39	1.11	0.063%
General Service	0.0007	10.03	0.98	0.072%
<b>February</b>				
Residential	0.0395	11.12	1.08	3.641%
General Service	0.0325	9.72	0.95	3.427%
<b>March</b>				
Residential	0.05	13.7	1.34	3.741%
General Service	0.05	11.17	1.09	4.588%
<b>April</b>				
Residential	0.05	13.97	1.36	3.669%
General Service	0.05	11.09	1.08	4.621%
<b>May</b>				
Residential	0.05	16.18	1.58	3.167%
General Service	0.05	10.85	1.06	4.724%
<b>June</b>				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%
<b>July</b>				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%
<b>August</b>				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%
<b>September</b>				
Residential	0.05	17.91	1.75	2.862%
General Service	0.05	11.4	1.11	4.496%



<b>Potomac Electric Company 2008</b>			
2008	Adjustment cents/kWh	Retail Rate cents/kWh	Adjustment %
<b>March</b>			
Residential	0.1557	14.9	1.045%
General Service	0.245	14.87	1.648%
<b>April</b>			
Residential	-0.1444	14.9	-0.969%
General Service	-0.1197	14.87	-0.805%
<b>May</b>			
Residential	0.0669	14.9	0.449%
General Service	0.0488	14.87	0.328%
<b>June</b>			
Residential	-0.0402	14.9	-0.270%
General Service	-0.0291	14.87	-0.196%
<b>July</b>			
Residential	-0.0093	14.9	-0.062%
General Service	-0.037	14.87	-0.249%
<b>August</b>			
Residential	0.0253	14.9	0.170%
General Service	0.0222	14.87	0.149%
<b>September</b>			
Residential	0.1865	14.9	1.252%
General Service	0.1119	14.87	0.753%
<b>October</b>			
Residential	0.3881	14.9	2.605%
General Service	0.3647	14.87	2.453%
<b>November</b>			
Residential	0.2817	14.9	1.891%
General Service	-0.0111	14.87	-0.075%
<b>December</b>			
Residential	0.244	14.9	1.638%
General Service	0.2407	14.87	1.619%

<b>Washington Gas Light 2009</b>			
	Adjustment cents/kWh	Retail Rate cents/kWh	Adjustment %
<b>January</b>			
Residential	0.2355	15.76	1.494%
General Service	0.2027	11.93	1.699%
<b>February</b>			
Residential	0.2149	15.76	1.364%
General Service	0.2476	11.93	2.075%

<b>Washington Gas Light 2009</b>			
March			
Residential	-0.0336	15.76	-0.213%
General Service	-0.0219	11.93	-0.184%
April			
Residential	-0.271	15.76	-1.720%
General Service	-0.2444	11.93	-2.049%
May			
Residential	-0.021	15.76	-0.133%
General Service	-0.0242	11.93	-0.203%
June			
Residential	0.035	15.76	0.222%
General Service	0.0792	11.93	0.664%
July			
Residential	-0.0744	15.76	-0.472%
General Service	0.0978	11.93	0.820%
August			
Residential	0.0684	15.76	0.434%
General Service	0.3451	11.93	2.893%
September			
Residential	0.3769	15.76	2.391%
General Service	0.4034	11.93	3.381%
October			
Residential	0.3881	15.76	2.463%
General Service	0.4032	11.93	3.380%
November			
Residential	0.2817	15.76	1.787%
General Service	0.258	11.93	2.163%
December			
Residential	0.244	15.76	1.548%
General Service	0.2407	11.93	2.018%

<b>Washington Gas Light 2010</b>			
	Adjustment cents/kWh	Retail Rate cents/kWh	Adjustment %
January			
Residential	0.2355	15.69	1.501%
General Service	0.2372	12.04	1.970%
February			
Residential	0.2525	15.69	1.609%
General Service	0.2473	12.04	2.054%

<b>Washington Gas Light 2010</b>			
March			
Residential	0.2476	15.69	1.578%
General Service	0.2434	12.04	2.022%
April			
Residential	0.0541	15.69	0.345%
General Service	0.2491	12.04	2.069%
May			
Residential	0.1403	15.69	0.894%
General Service	0.2558	12.04	2.125%
June			
Residential	0.795	15.69	5.067%
General Service	0.3293	12.04	2.735%
July			
Residential	-0.0562	15.69	-0.358%
General Service	0.3001	12.04	2.493%
August			
Residential	-0.2128	15.69	-1.356%
General Service	0.3944	12.04	3.276%
September			
Residential	-0.3039	15.69	-1.937%
General Service	0.3154	12.04	2.620%
October			
Residential	0.0585	15.69	0.373%
General Service	0.4475	12.04	3.717%
November			
Residential	0.2066	15.69	1.317%
General Service	0.2503	12.04	2.079%
December			
Residential	-0.1788	15.69	-1.140%
General Service	0.2668	12.04	2.216%

<b>Washington Gas Light 2011</b>			
	Adjustment cents/kWh	Retail Rate cents/kWh	Adjustment %
January			
Residential	0.0882	13.65	0.646%
General Service	0.0736	11.56	0.637%
February			
Residential	-0.0634	13.65	-0.464%
General Service	0.2306	11.56	1.995%

<b>Washington Gas Light 2011</b>			
March			
Residential	-0.1311	13.65	-0.960%
General Service	0.236	11.56	2.042%
April			
Residential	0.2578	13.65	1.889%
General Service	0.2615	11.56	2.262%
May			
Residential	0.3021	13.65	2.213%
General Service	0.271	11.56	2.344%
June			
Residential	0.054	13.65	0.396%
General Service	0.4413	11.56	3.817%
July			
Residential	0.0524	13.65	0.384%
General Service	0.3696	11.56	3.197%
August			
Residential	-0.4156	13.65	-3.045%
General Service	0.2506	11.56	2.168%
September			
Residential	-0.4158	13.65	-3.046%
General Service	-0.4379	11.56	-3.788%
October			
Residential	-0.445	13.65	-3.260%
General Service	0.2091	11.56	1.809%
November			
Residential	-0.2557	13.65	-1.873%
General Service	0.2503	11.56	2.165%
December			
Residential	-0.0003	13.65	-0.002%
General Service	0.2668	11.56	2.308%

<b>Washington Gas Light 2012</b>			
	Adjustment cents/kWh	Retail Rate cents/kWh	Adjustment %
January			
Residential	0.0618	12.91	0.479%
General Service	0.2446	10.64	2.299%
February			
Residential	0.1738	12.91	1.346%
General Service	0.2526	10.64	2.374%

Washington Gas Light 2012			
March			
Residential	0.2747	12.91	2.128%
General Service	0.2568	10.64	2.414%
April			
Residential	0.29	12.91	2.246%
General Service	0.2615	10.64	2.458%
May			
Residential	0.3021	12.91	2.340%
General Service	0.271	10.64	2.547%
June			
Residential	0.437	12.91	3.385%
General Service	0.4413	10.64	4.148%
July			
Residential	0.4096	12.91	3.173%
General Service	0.3696	10.64	3.474%
August			
Residential	-0.1257	12.91	-0.974%
General Service	0.4404	10.64	4.139%

Delmarva 2008			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
March			
Residential	0.00252	0.1486	1.696%
General Service	0.002546	0.1317	1.933%
April			
Residential	-0.001136	0.1486	-0.764%
General Service	0.001567	0.1317	1.190%
May			
Residential	0.002758	0.1486	1.856%
General Service	0.002683	0.1317	2.037%
June			
Residential	0.00352	0.1486	2.369%
General Service	0.002547	0.1317	1.934%
July			
Residential	0.001852	0.1486	1.246%
General Service	0.002302	0.1317	1.748%
August			
Residential	0.000472	0.1486	0.318%
General Service	0.002288	0.1317	1.737%

<b>Delmarva 2008</b>			
September			
Residential	0.00101	0.1486	0.680%
General Service	0.00231	0.1317	1.754%
October			
Residential	0.003499	0.1486	2.355%
General Service	0.002402	0.1317	1.824%
November			
Residential	0.00364	0.1486	2.450%
General Service	0.002845	0.1317	2.160%
December			
Residential	0.003243	0.1486	2.182%
General Service	0.002306	0.1317	1.751%

<b>Delmarva 2009</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	0.003039	0.1449	2.097%
General Service	0.002387	0.145	1.646%
February			
Residential	0.002525	0.1449	1.743%
General Service	0.001885	0.145	1.300%
March			
Residential		0.1449	0.000%
General Service		0.145	0.000%
April			
Residential	-0.003369	0.1449	-2.325%
General Service	0.002577	0.145	1.777%
May			
Residential	0.001649	0.1449	1.138%
General Service	0.002623	0.145	1.809%
June			
Residential	0.003474	0.1449	2.398%
General Service	0.002517	0.145	1.736%
July			
Residential	0.000693	0.1449	0.478%
General Service	0.002348	0.145	1.619%
August			
Residential	0.001589	0.1449	1.097%
General Service	0.002288	0.145	1.578%

<b>Delmarva 2009</b>			
September			
Residential	0.003267	0.1449	2.255%
General Service	0.00231	0.145	1.593%
October			
Residential	0.003499	0.1449	2.415%
General Service	0.002402	0.145	1.657%
November			
Residential	0.003647	0.1449	2.517%
General Service	0.002845	0.145	1.962%
December			
Residential	0.003243	0.1449	2.238%
General Service	0.002306	0.145	1.590%

<b>Delmarva 2010</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	0.003039	0.1487	2.044%
General Service	0.002387	0.1221	1.955%
February			
Residential	0.003633	0.1487	2.443%
General Service	0.002768	0.1221	2.267%
March			
Residential	0.003681	0.1487	2.475%
General Service	0.002816	0.1221	2.306%
April			
Residential	-0.001255	0.1487	-0.844%
General Service	0.002958	0.1221	2.423%
May			
Residential	-0.004046	0.1487	-2.721%
General Service	0.002919	0.1221	2.391%
June			
Residential	0.000549	0.1487	0.369%
General Service	0.002821	0.1221	2.310%
July			
Residential	0.000271	0.1487	0.182%
General Service	0.000436	0.1221	0.357%
August			
Residential	-0.001115	0.1487	-0.750%
General Service	-0.000562	0.1221	-0.460%

<b>Delmarva 2010</b>			
September			
Residential	-0.00333	0.1487	-2.239%
General Service	-0.001791	0.1221	-1.467%
October			
Residential	-0.003945	0.1487	-2.653%
General Service	-0.00003	0.1221	-0.025%
November			
Residential	-0.003934	0.1487	-2.646%
General Service	-0.00778	0.1221	-6.372%
December			
Residential	-0.002417	0.1487	-1.625%
General Service	0.000255	0.1221	0.209%

<b>Delmarva 2011</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	0.001402	0.1356	1.034%
General Service	0.000452	0.1156	0.391%
February			
Residential	0.001617	0.1356	1.192%
General Service	0.000663	0.1156	0.574%
March			
Residential	-0.003681	0.1356	-2.715%
General Service	-0.00204	0.1156	-1.765%
April			
Residential	-0.00385	0.1356	-2.839%
General Service	0.001503	0.1156	1.300%
May			
Residential	-0.004046	0.1356	-2.984%
General Service	0.001106	0.1156	0.957%
June			
Residential	-0.001353	0.1356	-0.998%
General Service	0.001062	0.1156	0.919%
July			
Residential	-0.000707	0.1356	-0.521%
General Service	-0.000239	0.1156	-0.207%
August			
Residential	-0.002213	0.1356	-1.632%
General Service	-0.00011	0.1156	-0.095%



<b>Delmarva 2011</b>			
September			
Residential	0.001111	0.1356	0.819%
General Service	0.001126	0.1156	0.974%
October			
Residential	-0.000904	0.1356	-0.667%
General Service	-0.001733	0.1156	-1.499%
November			
Residential	0.002123	0.1356	1.566%
General Service	0.001055	0.1156	0.913%
December			
Residential	0.0078	0.1356	5.752%
General Service	0.00306	0.1156	2.647%

<b>Delmarva 2012</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	-0.000602	0.1291	-0.466%
General Service	0.001165	0.1064	1.095%
February			
Residential	0.003777	0.1291	2.926%
General Service	0.003169	0.1064	2.978%
March			
Residential	0.003802	0.1291	2.945%
General Service	0.002331	0.1064	2.191%
April			
Residential	0.004097	0.1291	3.174%
General Service	0.003234	0.1064	3.039%
May			
Residential	0.004257	0.1291	3.297%
General Service	-0.003287	0.1064	-3.089%
June			
Residential	0.004069	0.1291	3.152%
General Service	0.003053	0.1064	2.869%
July			
Residential	0.003833	0.1291	2.969%
General Service	-0.001963	0.1064	-1.845%
August			
Residential	0.003827	0.1291	2.964%
General Service	0.002663	0.1064	2.503%

<b>Delmarva 2012</b>			
September			
Residential	0.003906	0.1291	3.026%
General Service	0.002829	0.1064	2.659%
October			
Residential	0.004501	0.1291	3.486%
General Service	0.001637	0.1064	1.539%

<b>Baltimore Gas &amp; Electric (Electric) 2008</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
March			
Residential	0.00172	0.1477	1.165%
General Service	0.0023	0.1526	1.507%
April			
Residential	0.00016	0.1477	0.108%
General Service	0.00146	0.1526	0.957%
May			
Residential	0.00066	0.1477	0.447%
General Service	0.0023	0.1526	1.507%
June			
Residential	-0.00066	0.1477	-0.447%
General Service	0.0023	0.1526	1.507%
July			
Residential	0.00158	0.1477	1.070%
General Service	0.0023	0.1526	1.507%
August			
Residential	-0.0004	0.1477	-0.271%
General Service	0.00214	0.1526	1.402%
September			
Residential	0.00237	0.1477	1.605%
General Service	0.0023	0.1526	1.507%
October			
Residential	0.00237	0.1477	1.605%
General Service	0.00143	0.1526	0.937%
November			
Residential	0.00237	0.1477	1.605%
General Service	0.0014	0.1526	0.917%
December			
Residential	0.00445	0.1477	3.013%
General Service	0.0023	0.1526	1.507%

<b>Baltimore Gas &amp; Electric (Electric) 2009</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
<b>January</b>			
Residential	0.00035	0.1579	0.222%
General Service	-0.00073	0.1346	-0.542%
<b>February</b>			
Residential	0.00025	0.1579	0.158%
General Service	0.0023	0.1346	1.709%
<b>March</b>			
Residential	-0.00237	0.1579	-1.501%
General Service	0.0023	0.1346	1.709%
<b>April</b>			
Residential	-0.00237	0.1579	-1.501%
General Service	0.0023	0.1346	1.709%
<b>May</b>			
Residential	0.00234	0.1579	1.482%
General Service	0.00132	0.1346	0.981%
<b>June</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.0023	0.1346	1.709%
<b>July</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.0023	0.1346	1.709%
<b>August</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.0019	0.1346	1.412%
<b>September</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.0023	0.1346	1.709%
<b>October</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.00124	0.1346	0.921%
<b>November</b>			
Residential	0.00237	0.1579	1.501%
General Service	0.0023	0.1346	1.709%
<b>December</b>			
Residential	0.00156	0.1579	0.988%
General Service	0.00204	0.1346	1.516%

<b>Baltimore Gas &amp; Electric (Electric) 2010</b>			
2010	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
<b>January</b>			
Residential	0.00203	0.1465	1.386%
General Service	0.0023	0.1261	1.824%
<b>February</b>			
Residential	-0.00142	0.1465	-0.969%
General Service	0.0023	0.1261	1.824%
<b>March</b>			
Residential	-0.00237	0.1465	-1.618%
General Service	0.0023	0.1261	1.824%
<b>April</b>			
Residential	-0.00237	0.1465	-1.618%
General Service	0.0023	0.1261	1.824%
<b>May</b>			
Residential	0.00192	0.1465	1.311%
General Service	0.0023	0.1261	1.824%
<b>June</b>			
Residential	0.00191	0.1465	1.304%
General Service	0.0023	0.1261	1.824%
<b>July</b>			
Residential	0.00095	0.1465	0.648%
General Service	0.0023	0.1261	1.824%
<b>August</b>			
Residential	-0.00176	0.1465	-1.201%
General Service	0.00224	0.1261	1.776%
<b>September</b>			
Residential	-0.00237	0.1465	-1.618%
General Service	0.00116	0.1261	0.920%
<b>October</b>			
Residential	-0.00237	0.1465	-1.618%
General Service	0.00081	0.1261	0.642%
<b>November</b>			
Residential	-0.00237	0.1465	-1.618%
General Service	0.00098	0.1261	0.777%
<b>December</b>			
Residential	-0.00079	0.1465	-0.539%
General Service	0.00229	0.1261	1.816%

<b>Baltimore Gas &amp; Electric (Electric) 2011</b>			
	Adjustment \$/kWh	Retail Rate \$/kWh	Adjustment %
<b>January</b>			
Residential	-0.0013	0.1365	-0.952%
General Service	0.0023	0.1156	1.990%
<b>February</b>			
Residential	-0.00253	0.1365	-1.853%
General Service	-0.0002	0.1156	-0.173%
<b>March</b>			
Residential	-0.00018	0.1365	-0.132%
General Service	-0.00063	0.1156	-0.545%
<b>April</b>			
Residential	0.0011	0.1365	0.806%
General Service	-0.00262	0.1156	-2.266%
<b>May</b>			
Residential	0.0001	0.1365	0.073%
General Service	-0.0016	0.1156	-1.384%
<b>June</b>			
Residential	0.00226	0.1365	1.656%
General Service	0.00042	0.1156	0.363%
<b>July</b>			
Residential	0.00253	0.1365	1.853%
General Service	0.00209	0.1156	1.808%
<b>August</b>			
Residential	-0.00007	0.1365	-0.051%
General Service	-0.00157	0.1156	-1.358%
<b>September</b>			
Residential	-0.00253	0.1365	-1.853%
General Service	-0.00177	0.1156	-1.531%
<b>October</b>			
Residential	0.00228	0.1365	1.670%
General Service	0.00262	0.1156	2.266%
<b>November</b>			
Residential	-0.00059	0.1365	-0.432%
General Service	0.00262	0.1156	2.266%
<b>December</b>			
Residential	0.00071	0.1365	0.520%
General Service	0.00262	0.1156	2.266%

<b>Baltimore Gas &amp; Electric (Electric) 2012</b>			
2012	Adjustment cents/kWh	Retail Rate	Adjustment %
<b>January</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>February</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>March</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>April</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>May</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>June</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>July</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.00262	0.1064	2.462%
<b>August</b>			
Residential	0.00253	0.1291	1.960%
General Service	0.0016	0.1064	1.504%

## **Massachusetts**

The Commission adopted decoupling as a statewide regulatory policy in 2008; in the subsequent years, individual utilities filed decoupling tariffs, often as part of a general rate case.

The electric utilities with decoupling mechanisms are:

- Fitchberg Gas & Electric (electric); Docket D.P.U. 11-01 (August 2011); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 203
- Massachusetts Electric and Western Electric (National Grid); Docket D.P.U. 09-39 (August 2011); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 1165
- Western Massachusetts Electric; Docket D.P.U. 10-70 (January 2011); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 1050

Although the Commission considered the effects of decoupling on ROE in each case, it did not make an explicit ROE adjustment for the decoupling mechanisms. The mechanisms for Fitchberg and Western Massachusetts are identical. In each, the utility compares authorized distribution revenue to actual

distribution revenue, by class, and calculates an adjustment for any difference. Adjustments cannot exceed 1% of revenue and amounts not surcharged or refunded are carried forward to a future year. The mechanism for the National Grid companies is similar, but includes a recalculation of distribution authorized revenues each year to account for capital additions and a 50% sharing for earnings above the authorized ROE. The cap on any year's adjustments is 3%.

The gas utilities with decoupling mechanisms are:

- Bay State Gas; Docket No. D.P.U. 09-30 (October 2009); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 104
- Fitchberg Gas & Electric (gas); Docket D.P.U. 11-01 (August 2011); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 164
- Boston Gas and Colonial Gas; Docket No. D.P.U. 10-55 (November 2010); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 5
- New England Gas; Docket D.P.U. 10-114 (March 2011); Revenue Decoupling Adjustment Clause, M.D.P.U. No. 1025

The gas decoupling mechanisms are all similar. Each compares on a semi-annual basis (for peak and non-peak gas seasons) actual to authorized non-gas revenues per customer for all classes and calculates adjustments for any difference, with peak season adjustments applying in the following peak season and similarly for non-peak adjustments. The cap on any one adjustment is 3%, with amounts over deferred for later recovery.

Adjustments are in the tables below.

<b>Fitchberg Gas &amp; Electric (Electric)</b>			
Year	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2012			
All	0.06	13.96	0.430%

<b>Massachusetts Electric and Nantucket Electric</b>			
Year	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2011			
All	-0.015	14.29	-0.105%
2012			
All	0.044	13.96	0.315%

<b>Western Massachusetts Electric</b>			
Year	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2012			
All	-0.133	13.96	-0.953%

<b>Bay State Gas</b>				
Year	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
May-11				
All	0.027	12.15	1.19	2.278%
Nov-11				
All	-0.0147	12.17	1.19	-1.238%
May-12				
All	0.0155	12.06	1.18	1.317%

<b>Boston Gas and Colonial Gas</b>				
Year	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
Nov-11				
Boston Gas	-0.0181	12.17	1.19	-1.524%
Colonial Gas	-0.0172	12.17	1.19	-1.449%
May-12				
Boston Gas	0.0045	12.06	1.18	0.382%
Colonial Gas	0.0141	12.06	1.18	1.198%

<b>New England Gas</b>				
Year	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
May-12				
All	0.0252	12.06	1.18	2.142%

<b>Fitchberg Gas &amp; Electric (gas)</b>				
Year	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
May-12				
All	0.0006	12.06	1.18	0.051%

## Michigan

### Electric Utility Decoupling

The Michigan Commission has approved decoupling mechanisms for the state's two large electric utilities – Consumers Power (Case No. U-15645, November 2009, and Case No. U-16191 continuing decoupling, November 2010) and Detroit Edison (Case No. U-15768, January 2010) – and a third – Upper Peninsula Power Company (Case No. U-15988, December 2009). No adjustments occurred under the Detroit Edison or Consumers Power mechanisms because of a Michigan Court of Appeals ruling in 2012 finding the Commission did not have authority to adopt these mechanisms. Upper Peninsula has made one adjustment under its mechanism; the second is pending with a party to the settlement agreement



under which the mechanism was approved moving that the Commission dismiss the filing given the Detroit Edison court decision.

All three decoupling mechanisms calculated adjustments using comparisons of authorized to actual (not weather adjusted) non-fuel revenue per customer, by customer class. For Detroit Edison, the decoupling mechanism operated in tandem with a similar mechanism that accounted for revenues changes from customer movement between retail access and bundled service. For Consumers Power, the decoupling mechanism covered these revenue changes along with all others. None of the decisions made an ROE adjustment in connection with the decoupling mechanisms.

Although the summary tables do not include adjustments for either Detroit Edison or Consumers Power, the tables below show the adjustment the utilities filed for informational purposes. Consumers Power filed its adjustments two ways because of anomalous results. In customer classes with relatively few numbers of customers and widely varying usage, movement between rate schedules (such as between direct access and bundled or between different types of bundled service) can cause significant changes in use per customer and, thus, the revenue per customer calculations. As the table for Consumers Power shows, the revenue per customer model resulted in some widely varying adjustments and Consumers proposed an alternate (B) spread of the revenue shortfall based on total class revenue requirements rather than changes in revenue per customer by class. The very large residential refund included in Detroit Edison's only decoupling filing stemmed primarily from weather, which was warmer than normal during the period covered.

<b>Detroit Edison Revised Sheet No. C-76.01</b>			
	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2011			
Residential	-1.557	12.73	-12.231%
Commercial	0.039	10.28	0.379%
Industrial	0.039	7.69	0.507%

<b>Consumers Power Sheet No. D-2.00</b>			
	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2011 (A)			
Residential	-0.000599	12.73	-0.00471%
Secondary	0.000499	10.28	0.00485%
Primary	0.002052	7.69	0.02668%
2011 (B)			
Residential	0.001102	12.73	0.00866%
Secondary	0.00077	10.28	0.00749%
Primary	0.000483	7.69	0.00628%
2012 (A)			
Residential	-0.000503	13.79	-0.00365%
Secondary	0.00096	10.81	0.00888%
Primary	0.002515	7.91	0.03180%

Consumers Power Sheet No. D-2.00			
2012 (B)			
Residential	0.002711	13.79	0.01966%
Secondary	0.000746	10.81	0.00690%
Primary	-0.000031	7.91	-0.00039%

The table below shows Peninsula Power's filed adjustments. As noted, the adjustment for 2012 is still pending.

Peninsula Power Company Original Sheet D-75.0			
	Decoupling Adjustment ¢/kWh	Retail Rate ¢/kWh	Decoupling Adjustment %
2011			
Residential	0.223	12.73	1.752%
Secondary	0.347	10.28	3.375%
2012			
Residential	0.091 (pending)	13.79	0.660%
Secondary	-0.272 (pending)	10.81	-2.516%

#### Natural Gas Utility Decoupling

The Michigan Commission has approved decoupling mechanisms for three of the state's natural gas utilities: Consumers Energy (Case No. U-15986, May 2010; terminated in Case No. U-16855, June 2012); Michigan Consolidated Gas (Case No. U-15985, June 2010; revised in Case No. U-16999, April 2012, but not in effect until November 2013); and Michigan Gas Utilities (Case No. U-15990, July 2010). All of the mechanisms reconcile weather-normalized sales per customer to authorized sales per customer by customer class or rate schedule. Michigan Consolidated Gas' new mechanism will replace this design with one that compares weather-normalized revenues to authorized revenues per customer class or rate schedule and adds caps on refunds or surcharges based on the cumulative effects of 150% of the utility's energy efficiency targets for each year that the mechanism operates without the utility filing a general rate case.

Michigan Gas Utility Original Sheet D-1.02			
	Decoupling Adjustment \$/Mcf	Retail Rate \$/Mcf	Decoupling Adjustment %
2011			
Residential	-0.05192	10.47	-0.4959%
Multi-Family I	0.27572	10.47	2.6334%
Small Gen'l Service	0.27572	9.14	3.0166%
Multi-Family II	-0.013588	10.47	-0.1298%
2012			
Residential	-0.04603	11.4	-0.4038%
Multi-Family I	0.013044	11.4	0.1144%
Small Gen'l Service	0.013044	8.87	0.1471%
Multi-Family II	0.00174	11.4	0.0153%

<b>Michigan Consolidated Gas Eighteenth Revised Sheet No. D-2.00</b>			
	Decoupling Adjustment \$/Ccf	Retail Rate \$/Mcf	Decoupling Adjustment %
<b>2011</b>			
Residential	0.0119	10.47	1.137%
Low Income	0.01832	10.47	1.750%
Multi-Family I	-0.06957	10.47	-6.645%
Multi-Family II	-0.00238	10.47	-0.227%
General Service	0.01971	9.14	2.156%
<b>2012</b>			
Residential	0.00492	11.4	0.432%
Low Income	0.01017	11.4	0.892%
Multi-Family I	-0.06493	11.4	-5.696%
Multi-Family II	-0.005	11.4	-0.439%
General Service	0.0077	8.87	0.868%

<b>Consumers Energy Eleventh Revised Sheet No. D-1.10</b>			
	Decoupling Adjustment \$/Mcf	Retail Rate \$/Mcf	Decoupling Adjustment %
<b>2012*</b>			
Residential	0.0425	11.4	0.373%
General Service	0.1123	8.87	1.266%
Transportation	0.0346	8.87	0.390%
<b>2013</b>			
Residential	0.1254	Still pending	Still pending
General Service	0.0039	Still pending	Still pending
Transportation	0.041	Still pending	Still pending

\* Note: Consumers Energy actually recovered the amounts shown for 2012 over just three months, because of its need to collect the amounts due within 24 months from accrual or incur a write-off (notwithstanding the later recovery). I have calculated the effect of the adjustment as if it had been collected over the entire year, using the utility's application adjustments, to be consistent with other adjustments in this report.

## Minnesota

Minnesota has approved decoupling for one of its gas utilities, CenterPoint Energy, in Docket GR-08-1075 (January 2010). The Commission did not adjust ROE for the decoupling mechanism. The CenterPoint tariff (Conservation Enabling Rider, Page 27) compares actual, weather-adjusted revenue per customer to authorized revenue per customer for the residential and small commercial classes and calculates adjustments from any difference. There is a 3% limit on surcharges. The Commission originally adopted an inverted rate structure for CenterPoint along with the decoupling mechanism but abandoned it in November 2010 following considerable adverse response.

<b>CenterPoint Energy</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
2010				
Residential	-0.00173	8.76	0.8546	-0.20%
Commercial A	0.01136	7.43	0.7249	1.57%
Commercial B	-0.00077	7.43	0.7249	-0.11%
Commercial C	-0.00531	7.43	0.7249	-0.73%
2010 (rev. 11/2010)				
Residential	-0.00385	8.76	0.8546	-0.45%
Commercial A	0.00951	7.43	0.7249	1.31%
Commercial B	-0.00377	7.43	0.7249	-0.52%
Commercial C	-0.00583	7.43	0.7249	-0.80%
2011				
Residential	-0.00249	8.66	0.8449	-0.29%
Commercial A	0.00002	7.6	0.7415	0.00%
Commercial B	-0.01281	7.6	0.7415	-1.73%
Commercial C	-0.01203	7.6	0.7415	-1.62%

## Nevada

The Nevada Commission approved decoupling for Southwest Gas in Docket No. 09-04003 (October 2009), lowering the utility's allowed ROE by 25 basis points in conjunction with the mechanism. Southwest Gas' tariff (P.U.C.N. Sheet No. 88 General Revenues Adjustment Provision) compares actual to authorized per-customer-revenue by class of customer and calculates adjustments from any difference. The utility makes separate calculations for its northern and southern Nevada service territory areas.

<b>Southwest Gas</b>				
	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
2010 South Nevada				
Residential SFH	0.00305	12.25	1.195122	0.255%
Residential MFH	-0.01136	12.25	1.195122	-0.951%
General Small	0.01646	9.77	0.953171	1.727%
General Medium	-0.00547	9.77	0.953171	-0.574%
General Large	0.00103	9.77	0.953171	0.108%
North Nevada				
Residential SFH	-0.022	12.25	1.195122	-1.841%
Residential MFH	-0.02418	12.25	1.195122	-2.023%
General Small	-0.06688	9.77	0.953171	-7.017%
General Medium	-0.02315	9.77	0.953171	-2.429%
General Large	-0.01498	9.77	0.953171	-1.572%

Southwest Gas				
South Nevada 2011				
Residential SFH	0.01177	10.66	1.040000	1.132%
Residential MFH	-0.00394	10.66	1.040000	-0.379%
General Small	0.07031	8.05	0.785366	8.953%
General Medium	0.00285	8.05	0.785366	0.363%
General Large	-0.00251	8.05	0.785366	-0.320%
North Nevada				
Residential SFH	-0.0171	10.66	1.040000	-1.644%
Residential MFH	-0.01963	10.66	1.040000	-1.888%
General Small	-0.03397	8.05	0.785366	-4.325%
General Medium	-0.01264	8.05	0.785366	-1.609%
General Large	-0.01423	8.05	0.785366	-1.812%

## New Jersey

The New Jersey Commission has approved decoupling mechanisms for two of its gas utilities: for New Jersey Natural Gas Company in Order No. GR05121020 (October 2006) and Docket No. GR05121020 (January 2010) extending the mechanism through 2013; and for South Jersey Gas Company in Docket No. GR05121019 (October 2006) and Docket No. GR05121019 (January 2010) extending the mechanism through 2013. Neither utility received a downward ROE adjustment as a result of the adoption of decoupling. Both of the mechanisms (Conservation Incentive Program, Rider I for New Jersey Natural Gas and Conservation Incentive Program, Rider M, Sheet 97c for South Jersey Gas) operate in the same way: a comparison of authorized margin revenue per customer to actual, non-weather adjusted margin revenue per customer, adjusted for net customers added, on a per rate schedule basis. The recovery of any deficiency that is not related to weather (calculated pursuant to a separate schedule – Rider D) is limited to the amount of offsetting revenue from the sale of surplus gas. Neither may collect a surcharge if it would thereby earn more than its allowed ROE but any amounts excluded carry over.

South Jersey Gas Company				
	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
2007				
Residential	0.0443	14.48	1.41	3.136%
General	0.0392	12.1	1.18	3.321%
General Large	-0.0037	9.63	0.94	-0.394%
2008				
Residential	0.0707	15.21	1.48	4.764%
General	0.0684	13.38	1.31	5.240%
General Large	0.0062	12.76	1.24	0.498%
2009				
Residential	0.0394	14.54	1.42	2.778%
General	0.0797	10.2	1.00	8.009%
General Large	-0.0012	8.96	0.87	-0.137%

South Jersey Gas Company				
2010				
Residential	0.0441	12.84	1.25	3.520%
General	0.0422	10.11	0.99	4.278%
General Large	0.0046	9.63	0.94	0.490%
2011				
Residential	0.0095	10.16	0.99	0.958%
General	0.0002	9.54	0.93	0.021%
General Large	0.0018	8.49	0.83	0.217%

New Jersey Natural Gas Company				
	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
2008				
Residential	0.0261	15.21	1.48	1.759%
General	0.0248	13.38	1.31	1.900%
2009				
Residential	0.0378	14.54	1.42	2.665%
General	0.0424	10.2	1.00	4.261%
General Large	0.0424	8.96	0.87	4.850%
2010				
Residential	0.0079	12.84	1.25	0.631%
General	0.00184	10.11	0.99	0.187%
General Large	0.026	9.63	0.94	2.767%
2011				
Residential	0.0179	10.16	0.99	1.806%
General	0.0339	9.54	0.93	3.642%
Gen' Large	0.0278	8.49	0.83	3.356%

## New York

The New York adopted decoupling as a regulatory policy in April 2007. Over the next several years, utilities adopted decoupling mechanisms as they came in for general rate cases. New York also has what it calls “rate plans” in place for many of its utilities. These plans may set two years’ worth of revenue requirements and a methodology for establishing a third year. Most of the decoupling mechanisms use these adjusted revenue requirements for the authorized revenues to which they compare actual revenues; the remainder use the unadjusted revenues authorized in their last general rate case. Although most of the decoupling mechanisms produce an adjustment annually, several of the utilities, including Central Hudson, Consolidated Edison and Niagara Mohawk, have the ability to file for an immediate change in the adjustment if the amount accruing for surcharge or refund exceeds a specified level. This has resulted in some utilities filing revised adjustments much more frequently than others.

The electric utilities with decoupling mechanisms are:

- Central Hudson, approved in Docket No. 09-E-0588 with an ROE adjustment of 10 basis points; Tariff: PSC 15, Leaf 163.5.4
- Consolidated Edison Docket, approved in Docket No. 09-E-0428 with no ROE adjustment; Tariff: PSC 10, Leaf 349
- Niagara Mohawk, approved in Docket No. 10-E-0050 with no ROE adjustment; Tariff: PSC 220, Leaf 263.2
- New York State Electric & Gas, approved in Docket No. 09-E-0715 with no ROE adjustment; Tariff: PSC 120, Leaf 21
- Orange & Rockland, approved in Docket No. 10-E-0050 with no ROE adjustment; Tariff: PSC 220, Leaf 263.2
- Rochester Gas & Electric in Docket No. 09-E-0717 with no ROE Adjustment; Tariff: PSC 19, Leaf 81.1

The gas utilities with decoupling mechanisms are:

- Consolidated Edison, approved in Docket No. 09-G-0795 with no ROE adjustment; Tariff: PSC 9, Leaf 181.1
- Central Hudson, approved in Docket No. 09-G-0589 with an ROE Adjustment of 10 basis points, based on observation most companies in its peer group did not have decoupling mechanisms; Tariff: PSC 12, Leaf 129
- Niagara Mohawk, approved in Docket No. 08-G-0609 with no ROE Adjustment; Tariff: PSC 219, Leaf 122.2
- National Fuel Gas Distribution, approved in Docket No. 07-G-0141 with no ROE Adjustment; Tariff: PSC 8, Leaf 148.9
- Corning Gas, approved in Docket No 08-G-1137 with no ROE Adjustment; Tariff: PSC 4, Leaf 75.3
- New York State Electric & Gas, approved in Docket No. 09-G-0716 with no ROE adjustment; Tariff: PSC 90, Leaf 105.2 (this applies to PSC 87 (bundled sales) and PSC 88 (transportation))
- Orange & Rockland, approved in Docket No. 08-G-1398 with no ROE adjustment; Tariff: PSC 4, Leaf 113.1
- KeySpan Gas and Brooklyn Union Gas, approved in Docket Nos. 06-G-1185/86 with no ROE adjustment; Tariff: PSC 1, Leaf 119.52 (Keyspan) and PSC 12, Leaf 138.52 (Brooklyn Union)
- Rochester Gas & Electric, approved in Docket No. 09-G-0718 with no ROE adjustment; Tariff: PSC 16, Leaf 127.46.2
- St. Lawrence Gas, approved in Docket No. 08-G-1392 with an ROE adjustment of 10 basis points, per a settlement; Tariff: PSC 3, Leaf 191.1

<b>Central Hudson (Electric)</b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
Oct-09			
Residential	0.00213	15.81	0.013%
Non-Demand	0.00141	12.12	0.012%
Primary Demand	0.00008	12.12	0.001%
Secondary Demand	0.00015	12.12	0.001%

<b>Central Hudson (Electric)</b>			
Aug-10			
Residential	0.00304	16.51	0.018%
Non-Demand	0.00197	12.64	0.016%
Primary Demand	0	12.64	0.000%
Secondary Demand	-0.00014	12.64	-0.001%
Oct-10			
Residential	0.0091	16.51	0.055%
Non-Demand	0.00056	12.64	0.004%
Primary Demand	-0.00008	12.64	-0.001%
Secondary Demand	0.01143	12.64	0.090%
Oct-11			
Residential	-0.00187	17.88	-0.010%
Non-Demand	0.00029	15.54	0.002%
Primary Demand	0.00139	15.54	0.009%
Secondary Demand	0.00123	15.54	0.008%
Apr-12			
Residential	-0.00079	17.12	-0.005%
Non-Demand	0.00145	14.72	0.010%
Primary Demand	0.00336	14.72	0.023%
Secondary Demand	0.00262	14.72	0.018%
Aug-12			
Residential	0.00095	17.12	0.006%
Non-Demand	0.00116	14.72	0.008%
Primary Demand	0.00197	14.72	0.013%
Secondary Demand	0.00139	14.72	0.009%

<b>Consolidated Edison (Electric)<sup>24</sup></b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
Nov-08			
Residential	-0.1502	24.18	-0.621%
General Small	-0.0071	21.2	-0.033%
General Large	0.1178	19.56	0.602%

<sup>24</sup> A general large price for 2011 was not available. The table uses the ratio from the prior year - 93% of the general small rate. The New York average industrial price – used in some of the other tables – seemed likely too low.



Consolidated Edison (Electric)			
May-09			
Residential	0.0711	23.58	0.302%
General Small	-0.0292	19.64	-0.149%
General Large	-0.0061	18.05	-0.034%
Aug-09			
Residential	0.4814	23.58	2.042%
General Small	0.138	19.64	0.703%
General Large	0.116	18.05	0.643%
Nov-09			
Residential	0.7295	23.58	3.094%
General Small	0.1953	19.64	0.994%
General Large	0.11	18.05	0.609%
Feb-10			
Residential	1.2632	25.85	4.887%
General Small	0.2749	20.38	1.349%
General Large	0.1314	18.92	0.695%
Apr-10			
Residential	1.2632	25.85	4.887%
General Small	0.2749	20.38	1.349%
General Large	0.1274	18.92	0.673%
4/16/2010			
Residential	0.8529	25.85	3.299%
General Small	0.1077	20.38	0.528%
General Large	0.0147	18.92	0.078%
May-10			
Residential	0.2605	25.85	1.008%
General Small	0.0231	20.38	0.113%
General Large	-0.0131	18.92	-0.069%
Aug-10			
Residential	-0.1371	25.85	-0.530%
General Small	-0.6707	20.38	-3.291%
General Large	-1.0901	18.92	-5.762%
Sep-10			
Residential	-0.0104	25.85	-0.040%
General Small	-0.708	20.38	-3.474%
General Large	-0.6693	18.92	-3.538%
Oct-10			
Residential	-0.4169	25.85	-1.613%
General Small	0.07374	20.38	0.362%
General Large	-0.7745	18.92	-4.094%

<b>Consolidated Edison (Electric)</b>			
Nov-10			
Residential	-0.0669	25.85	-0.259%
General Small	-0.0626	20.38	-0.307%
General Large	-0.0943	18.92	-0.498%
May-11			
Residential	0.0907	17.88	0.507%
General Small	-0.2222	15.54	-1.430%
General Large	-0.2133	14.45	-1.476%
Sep-11			
Residential	-0.1033	17.88	-0.578%
General Small	-0.6916	15.54	-4.450%
General Large	-1.0475	14.45	-7.248%
Nov-11			
Residential	0.118	17.88	0.660%
General Small	-0.0377	15.54	-0.243%
General Large	-0.1941	14.45	-1.343%

<b>Niagara Mohawk (Electric)</b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
Jul-11			
Residential	-0.00305	17.88	-0.017%
Feb-12			
Residential	-0.0013	17.12	-0.008%
Small General Service	-0.00044	14.72	-0.003%

<b>New York State Electric &amp; Gas (Electric)</b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
Nov-11			
Residential	-0.002045	17.12	-0.012%
General Service	-0.000067	14.72	0.000%

<b>Rochester Gas &amp; Electric (Electric)</b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
Sep-11			
Residential	-0.00465	17.12	-0.027%
Nov-11			
Residential	-0.000273	17.12	-0.002%
General Service	-0.000185	14.72	-0.001%

<b>Orange &amp; Rockland (Electric)</b>			
	RDM Adjustment	Retail Rate \$/kWh	RDM Adjustment %
<b>Sep-08</b>			
Residential	0.00028	18.12	0.002%
Small General Service	0.0003	14.7	0.002%
General Service	0.00011	11.64	0.001%
<b>Dec-08</b>			
Residential	0.00164	18.12	0.009%
Small General Service	0.00061	14.7	0.004%
General Service	0.00026	11.64	0.002%
<b>Aug-09</b>			
Residential	0.00156	17.63	0.009%
Small General Service	0.00115	13.09	0.009%
General Service	0.00037	7.59	0.005%
<b>Sep-09</b>			
Residential	0.0035	17.63	0.020%
Small General Service	0.00209	13.09	0.016%
General Service	0.00056	7.59	0.007%
<b>Jan-10</b>			
Residential	0.00515	18.88	0.027%
Small General Service	0.00271	14.31	0.019%
General Service	0.00013	8.08	0.002%
<b>Aug-10</b>			
Residential	0.00189	18.88	0.010%
Small General Service	0.00194	14.31	0.014%
General Service	0.00044	8.08	0.005%
<b>Jun-11</b>			
Residential	0.00272	17.88	0.015%
Small General Service	0.00336	15.54	0.022%
General Service	0.00048	8.07	0.006%
<b>Aug-11</b>			
Residential	0.00077	17.88	0.004%
Small General Service	0.00215	15.54	0.014%
General Service	0.00058	8.07	0.007%
<b>Sep-11</b>			
Residential	0.00136	17.88	0.008%
Small General Service	0.00222	15.54	0.014%
General Service	0.00163	8.07	0.020%
<b>Apr-12</b>			
Residential	0.00136	17.12	0.008%
Small General Service	0.00222	14.72	0.015%
General Service	0.00163	6.81	0.024%

Orange & Rockland (Electric)			
Aug-12			
Residential	-0.00118	17.12	-0.007%
Small General Service	-0.00277	14.72	-0.019%
General Service	0.00285	6.81	0.042%

Consolidated Edison (Gas)				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Jun-08				
General Service	0.017675	12.86	1.25	1.409%
General Service - Heat	0.015429	12.86	1.25	1.230%
Residential Heat <4 units	0.053515	16.78	1.64	3.269%
Residential Heat > 4 units	-0.006065	16.78	1.64	-0.370%
Nov-08				
General Service	0.022403	12.86	1.25	1.786%
General Service - Heat	0.005226	12.86	1.25	0.417%
Residential Heat <4 units	0.042244	16.78	1.64	2.580%
Residential Heat > 4 units	-0.019822	16.78	1.64	-1.211%
Jun-09				
General Service	0.043801	10.72	1.05	4.188%
General Service - Heat	0.036944	10.72	1.05	3.532%
Residential Heat <4 units	0.105825	15.05	1.47	7.207%
Residential Heat > 4 units	-0.019169	15.05	1.47	-1.306%
Oct-09				
General Service	0.021398	10.72	1.05	2.046%
General Service - Heat	0.031718	10.72	1.05	3.033%
Residential Heat <4 units	0.063581	15.05	1.47	4.330%
Residential Heat > 4 units	0.000653	15.05	1.47	0.044%
Nov-09				
General Service	0.023511	10.72	1.05	2.248%
General Service - Heat	0.021304	10.72	1.05	2.037%
Residential Heat <4 units	0.062294	15.05	1.47	4.243%
Residential Heat > 4 units	-0.008936	15.05	1.47	-0.609%
Jan-10				
General Service	0.0513	10.88	1.06	4.833%
General Service - Heat	0.042481	10.88	1.06	4.002%
Residential Heat <4 units	0.148421	14.04	1.37	10.836%
Residential Heat > 4 units	-0.0309	14.04	1.37	-2.256%

<b>Consolidated Edison (Gas)</b>				
Nov-10				
General Service	0.002233	10.88	1.06	0.210%
General Service - Heat	0.000197	10.88	1.06	0.019%
Residential Heat <4 units	0.026096	14.04	1.37	1.905%
Residential Heat > 4 units	-0.021983	14.04	1.37	-1.605%
Nov-11			0.00	
General Service	-0.014855	9.37	0.91	-1.625%
General Service - Heat	-0.011081	9.37	0.91	-1.212%
Residential Heat <4 units	-0.023599	13.64	1.33	-1.773%
Residential Heat > 4 units	-0.015729	13.64	1.33	-1.182%
May-12				
General Service	-0.0105	7.05	0.69	-1.527%
General Service - Heat	-0.028878	7.05	0.69	-4.199%
Residential Heat <4 units	-0.029645	14.22	1.39	-2.137%
Residential Heat > 4 units	-0.055757	14.22	1.39	-4.019%

<b>Corning Gas</b>			
	Decoupling Adjustment \$/Mcf	Retail Rate \$/Mcf	Decoupling Adjustment %
Jan-11			
Residential 1 Corning	0.02357	13.64	0.173%
Residential 14 Corning	0.00229	13.64	0.017%
Residential 1 Hammondsport	-0.0932	13.64	-0.683%
Residential 7 Hammondsport	-0.30455	13.64	-2.233%
Jan-12			
Residential 1 Corning	-0.08184	14.22	-0.576%
Residential 14 Corning	-0.11354	14.22	-0.798%
Residential 1 Hammondsport	-0.21382	14.22	-1.504%
Residential 7 Hammondsport	-0.06315	14.22	-0.444%

<b>Niagara Mohawk (Gas)</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Aug-10				
Residential	0.00805	14.04	1.37	0.588%
Commercial	0.01385	10.88	1.06	1.305%
Industrial	0.03816	8.55	0.83	4.575%
Jan-11				
Residential	0.00245	13.64	1.33	0.184%
Commercial	0.01385	9.37	0.91	1.515%
Industrial	0.03816	8.25	0.80	4.741%

Niagara Mohawk (Gas)				
Aug-11				
Residential	0.0035	13.64	1.33	0.263%
Commercial	0.01298	9.37	0.91	1.420%
Industrial	0.04008	8.25	0.80	4.980%
Jan-12				
Residential	0.0035	14.22	1.39	0.252%
Commercial	0.01298	7.05	0.69	1.887%
Industrial	0.04008	7.51	0.73	5.470%
Aug-12				
Residential	0.00537	14.22	1.39	0.387%
Commercial	0.02191	7.05	0.69	3.185%
Industrial	0.00509	7.51	0.73	0.695%

Central Hudson (Gas)				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Aug-10				
Residential	0.0266	14.04	1.37	1.942%
Commercial	0.01541	10.88	1.06	1.452%
Jun-11				
Residential	0.00492	13.64	1.33	0.370%
Commercial	-0.00151	9.37	0.91	-0.165%
Aug-11				
Residential	-0.02168	13.64	1.33	-1.629%
Commercial	-0.01692	9.37	0.91	-1.851%
Aug-12				
Residential	-0.01151	14.22	1.39	-0.830%
Commercial	-0.00405	7.05	0.69	-0.589%

National Fuel Gas Distribution				
	Decoupling Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Decoupling Adjustment %
Mar-09				
All	-0.00082	12.89	1.29	-0.06%
Mar-10				
All	0.0084	12.46	1.25	0.67%
Mar-11				
All	0.00354	11.51	1.15	0.31%
Mar-12				
All	-0.00082	10.64	1.06	-0.08%

<b>New York State Electric &amp; Gas (Gas)</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Feb-11				
General Service	-0.01819	9.37	0.91	-1.990%
Nov-11				
Residential	-0.003498	13.64	1.33	-0.263%
General Service	-0.017152	9.37	0.91	-1.876%

<b>Orange &amp; Rockland (Gas)</b>				
	Decoupling Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Decoupling Adjustment %
Dec-10				
Residential	0.0026	14.04	1.40	0.185%
General Service	0.01497	10.88	1.09	1.376%
Dec-11				
Residential	0.00944	13.64	1.36	0.692%
General Service	0.00488	9.37	0.94	0.521%
Apr-12				
Residential	0.06176	14.22	1.42	4.343%
General Service	0.04392	7.05	0.71	6.230%

<b>Rochester Gas &amp; Electric (Gas)</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Jun-11				
Residential	0.04942	13.64	1.33	3.714%
Nov-11				
Residential	-0.002445	13.64	1.33	-0.184%
General Service	-0.002697	9.37	0.91	-0.295%

<b>Brooklyn Union Gas</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
May-11				
All	0.011	11.51	1.12	0.98%
May-12				
All	0.0051	10.64	1.04	0.49%

<b>KeySpan Gas Distribution</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
May-11				
All	-0.0039	11.51	1.12	-0.35%
May-12				
All	-0.0067	10.64	1.04	-0.64%

<b>St. Lawrence Gas</b>				
	Decoupling Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
Apr-11				
All	0.014657	11.51	1.12	1.31%
Jun-11				
All	0.013893	11.51	1.12	1.24%
Apr-12				
All	0.012631	10.64	1.04	1.21%

## North Carolina

North Carolina has approved decoupling for two of its gas utilities: Public Service of North Carolina in Docket No. G-5, Sub 495 (October 2008) and Piedmont Gas in Docket G-9, Sub 499 Final Order (November 2005) extended in G-9, Sub 550 (November 2008). In none of the order did the Commission make an ROE adjustment for the decoupling mechanisms. Both tariffs – Rider C for North Carolina Public Service and the Customer Utilization Tracker (CUT) (now called Margin Decoupling Tracker Appendix C) for Piedmont Gas – operate similarly, comparing actual, non-weather adjusted margin per customer to the authorized margin per customer, by rate schedule, to calculate adjustments, which occur semi-annually.

<b>North Carolina Public Service Company<sup>25</sup></b>			
	Decoupling Adjustment \$/therm	Retail Rate \$/therm	Decoupling Adjustment %
Apr-09			
Residential	-0.0029	1.10179	-0.26%
Small General	-0.00051	0.99271	-0.05%
Oct-09			
Residential	0.01737	1.02322	1.70%
Small General	0.00685	0.86379	0.79%
Apr-10			
Residential	-0.01437	1.06451	-1.35%
Small General	-0.01035	0.89978	-1.15%

<sup>25</sup> The retail rate and adjustment percentage are from the utility filings.



North Carolina Public Service Company			
Oct-10			
Residential	0.00012	1.05014	0.01%
Small General	-0.00504	0.88943	-0.57%
Apr-11			
Residential	-0.0237	0.98749	-2.40%
Small General	-0.01312	0.81519	-1.61%
Oct-11			
Residential	0.03481	0.96379	3.61%
Small General	0.01748	0.80207	2.18%
Apr-12			
Residential	0.04674	0.89824	5.20%
Small General	0.02691	0.70429	3.82%

Piedmont Gas Company				
	Decoupling Adjustment \$/therm	Retail Rate	Retail Rate \$/therm	Decoupling Adjustment %
Apr-06				
Residential	0.02262	15.09	1.47	1.536%
Small Commercial	0.0123	12.6	1.23	1.001%
Medium Commercial	0.00086	12.6	1.23	0.070%
Nov-06				
Residential	0.05181	15.71	1.53	3.380%
Small Commercial	0.02339	13.78	1.34	1.740%
Medium Commercial	0.011389	13.78	1.34	0.847%
Apr-07				
Residential	0.07791	15.35	1.50	5.202%
Small Commercial	0.04127	12.34	1.20	3.428%
Medium Commercial	0.00996	12.34	1.20	0.827%
Nov-07				
Residential	0.06153	15.81	1.54	3.989%
Small Commercial	0.03118	13.09	1.28	2.442%
Medium Commercial	0.01213	13.09	1.28	0.950%
Apr-08				
Residential	0.08471	17.2	1.68	5.048%
Small Commercial	0.04732	14.16	1.38	3.425%
Medium Commercial	0.01452	14.16	1.38	1.051%
Nov-08				
Residential	0.07494	15.39	1.50	4.991%
Small Commercial	0.03819	14.12	1.38	2.772%
Medium Commercial	0.02394	14.12	1.38	1.738%

<b>Piedmont Gas Company</b>				
Apr-09				
Residential	0.04659	15.81	1.54	3.021%
Small Commercial	0.02293	12	1.17	1.959%
Medium Commercial	0.02124	12	1.17	1.814%
Nov-09				
Residential	0.0087	13.58	1.32	0.657%
Small Commercial	-0.00395	11.56	1.13	-0.350%
Medium Commercial	0.02116	11.56	1.13	1.876%
Apr-10				
Residential	-0.00467	19.11	1.86	-0.250%
Small Commercial	-0.00899	11.72	1.14	-0.786%
Medium Commercial	0.01944	11.72	1.14	1.700%
Nov-10				
Residential	-0.01827	12.02	1.17	-1.558%
Small Commercial	-0.02077	9.62	0.94	-2.213%
Medium Commercial	0.01944	9.62	0.94	2.071%
Apr-11				
Residential	-0.02487	14.73	1.44	-1.731%
Small Commercial	-0.02438	10.45	1.02	-2.391%
Medium Commercial	0.01587	10.45	1.02	1.557%
Nov-11				
Residential	-0.00112	11.81	1.15	-0.097%
Small Commercial	-0.0163	9.84	0.96	-1.698%
Medium Commercial	0.02542	9.84	0.96	2.648%
Apr-12				
Residential	0.04319	15.14	1.48	2.924%
Small Commercial	0.01235	8.45	0.82	1.498%
Medium Commercial	0.03611	8.45	0.82	4.380%

## Ohio

The Ohio Commission recently approved decoupling mechanisms for two of its electric utilities: AEP Ohio, Case No. 11-5905-EL-RDR (May 2012), and Duke Energy Ohio, Case No. 11-5905-EL-RDR (May 2012). In neither case, which were not general rate cases but dockets specific to decoupling, did the Commission include an ROE adjustment in conjunction with the decoupling approval. Both are three-year pilot programs and both calculate adjustments by comparing authorized distribution revenues and actual distribution revenues for the residential and small commercial classes. Adjustments under the tariffs will occur annually, based on the prior year's difference. There is a 3% cap on any surcharge, but amounts not recovered carry forward to future years. The AEP Ohio tariff is P.U.C.O. No. 20, Pilot Throughput Balancing Adjustment Rider, Original Sheet 464-1D; Duke's is Rider DDR Distribution Decoupling Rider P.U.C.O. Electric No. 19, Sheet No. 117. The first adjustments under these mechanisms should occur in June 2013.

## Oregon

Oregon has had decoupling in place for two of its gas utilities for a number of years. The mechanism for Northwest Natural Gas Company was approved in Docket UG 143, September 2002 and re-approved in August 2005 in UG 163 and September 2007 in UG 152/163. A request to extend the mechanism further is pending in the utility's current rate case. Northwest Natural's decoupling mechanism uses a straight-forward revenue-per-customer design, but expected revenues are updated annually through a forecast of the price elasticity effects of the change in the cost of gas. Cascade Natural Gas' decoupling mechanism was approved in Docket UG 167 in April 2006 and extended in UM 1283 to September 2012; a request to extend it further is pending. This decoupling mechanism also uses the revenue-per-customer design, and an earnings sharing applies once the utility's earnings exceed 175 basis points over its allowed ROE. For neither utility has the Oregon Commission explicitly lowered ROE to account for the decoupling mechanism.

Only one of Oregon's electric utilities presently has decoupling.<sup>26</sup> In January 2009, Docket UE 197, the Commission approved a decoupling mechanism for Portland General Electric, lowering PGE's allowed ROE by 10 basis points in conjunction with approving the mechanism. The tariff (Schedule 123) calculates adjustments by comparing actual, weather-adjusted fixed cost revenue per customer for residential and small general service to the authorized fixed cost revenue per customer, by customer class. Decoupling adjustments are limited to two percent per year, positive or negative, and amounts in excess of this do not roll over to future periods.

Adjustments under the decoupling mechanisms are as follows.

<b>Cascade Natural Gas</b>				
	Decoupling Adjustment (\$/therm)	Retail Rate (\$/Mcf)	Retail Rate (\$/therm)	Decoupling %
<b>2006</b>				
Residential				0.940%
Commercial				0.660%
<b>2007</b>				
Residential	0.03231	14.65	1.43	2.261%
Commercial	0.02472	12.46	1.22	2.034%
<b>2008</b>				
Residential	-0.03885	13.89	1.36	-2.867%
Commercial	-0.03705	11.57	1.13	-3.282%
<b>2009</b>				
Residential	0.01813	14.52	1.42	0.164%
Commercial	0.01319	11.86	1.16	0.782%
<b>2010</b>				
Residential	0.00232	12.49	1.22	-0.128%
Commercial	0.00905	10.1	0.99	0.365%

<sup>26</sup> Both Portland General Electric and PacifiCorp had decoupling mechanisms during part of the 1990s. These mechanisms are not covered in this report but adjustments from the PacifiCorp mechanism are available in the 2009 version of this report, which can be found at [link to RAP]

Cascade Natural Gas				
2011				
Residential	-0.00156	12.62	1.23	-0.127%
Commercial	0.0036	9.81	0.96	0.376%
2012				
Residential	-0.01355	12.92	1.26	-1.075%
Commercial	-0.01355	9.4	0.92	-1.478%

Northwest Natural Gas Company						
	Price Elasticity Adjustment	Decoupling True-Up	Total Decoupling Adjustments	Retail Rate	Retail Rate	Decoupling
	\$/therm	\$/therm	(\$/therm)	(\$/Mcf)	(\$/therm)	%
2005						
Residential	0.00978	0.01265	0.02243	12.9	1.26	1.782%
Commercial	0.00742	0.00846	0.01588	10.42	1.02	1.562%
2006						
Residential	0.00478	-0.00212	0.00266	14.53	1.42	0.188%
Commercial	0.00226	-0.00696	-0.0047	12.94	1.26	-0.372%
2007						
Residential	-0.00413	0.00767	0.00354	14.65	1.43	0.248%
Commercial	-0.00156	-0.00853	-0.01009	12.46	1.22	-0.830%
2008						
Residential	0.01872	0.00427	0.02299	13.89	1.36	1.697%
Commercial	0.01094	-0.01646	-0.00552	11.57	1.13	-0.489%
2009						
Residential	-0.01277	0.03311	0.03311	14.52	1.42	2.337%
Commercial	-0.00595	0.00258	0.00258	11.86	1.16	0.223%
2010						
Residential	0.00044	0.0412	0.04164	12.49	1.22	3.417%
Commercial	0	0.01253	0.01253	10.1	0.99	1.272%
2011						
Residential	-0.00044	0.04768	0.04724	12.62	1.23	3.837%
Commercial	-0.00062	0.01048	0.00986	9.81	0.96	1.030%
2012						
Residential		0.03869	0.03869	12.92	1.26	3.069%
Commercial		0.00639	0.00639	9.4	0.92	0.697%

Portland General Electric			
	Decoupling Adjustment ¢/kWh	Retail Rate	Decoupling Adjustment %
2010			
Residential	-0.048	10.1	-0.475%
Commercial	0.125	8.47	1.476%
2011			
Residential	0.051	9.43	0.541%
Commercial	0.149	8.18	1.822%
2012			
Residential	0.005	9.8	0.051%
Commercial	-0.155	8.37	-1.852%

## Rhode Island

Rhode Island has approved decoupling for both the electricity and natural gas operations of Narragansett Electric Company (a National Grid company), pursuant to state legislation. Docket 4206 (April 2011 – written order available May 2012). The Distribution Adjustment Charge (“DAC”) tariff R.I.P.U.C. NG-Gas No. 101, Section 3, Schedule A applies to the gas sales and RDM Provision R.I.P.U.C. No. 2073 to the electric. The gas decoupling mechanism is a revenue-per-customer true-up that compares actual revenues per customer to the target revenues calculated by updating the last authorized revenues for numerous adjustments, including infrastructure, safety, and reliability expenses, low income assistance, environmental response and pension costs, and capital additions. The update adjustments occur on a forecast basis. The electric decoupling mechanism does not include an update of authorized revenues but simply compares actual and authorized distribution revenues to calculate the decoupling adjustment, although the Commission may approve additions to the authorized revenues. Both mechanisms adjust annually and have only one adjustment to date.

Narragansett Electric Company (Gas)				
	Decoupling adjustment rate \$/therm	Retail Rate \$/mCf	Retail Rate \$/therm	Decoupling adjustment %
2012				
	0.0421	16.16	1.58	2.670%

Narragansett Electric Company (Electric)			
	Decoupling adjustment rate \$/kWh	Retail Rate \$/kWh	Decoupling adjustment %
2012			
	-0.00014	0.1352	-0.1036%

## Tennessee

Tennessee approved decoupling for the Chattanooga Natural Gas Company in Docket No. 09-00183 (November 2010), reducing the utility's allowed ROE by 25 basis point in conjunction with the approval. The mechanism (Alignment and Usage Adjustment: Original Sheet No. 57) calculates adjustments by comparing actual base revenue per customer to test year base revenue per customer, for residential and small general service customers. There is a 2% cap on accruals which, as the table below shows, has limited adjustments, in one case significantly. Amounts not included in adjustments carry forward to future years. The capped numbers were used in the summary tables.

<b>Chattanooga Natural Gas Company<sup>27</sup></b>						
	Adjustment Rate (cap)	Adjustment Rate (no cap)	Retail Rate \$/mCf	Retail Rate \$/therm	Adjustment % (cap)	Adjustment % (no cap)
<b>2011</b>						
Residential	-0.0074	-0.0077	10.16	0.99	-0.0728%	-0.776%
Commercial	0.0093	0.0166	8.88	0.87	0.1047%	1.917%
<b>2012</b>						
Residential	0.0088	0.0229	13.77	1.34	0.0639%	1.702%
Commercial	0.0112	0.0950	8.66	0.84	0.1293%	11.248%

## Utah

The Utah Commission approved decoupling for Questar Gas Company in Docket No. 05-057-T01 (October 2006). Although initially in place as three-year pilot, the Commission made it permanent in Docket No. 09-057-16 (June 2010). There was no ROE adjustment in conjunction with the decoupling. The mechanism (2.08 Conservation Enabling Tariff) compares actual, non-weather adjusted margin revenues per customer with ratemaking margin revenues per customer, only for the general service class. Accruals to the balancing account per year are capped at 5% of gross revenues per twelve-month period and amortizations are limited to 2.5%.

<b>Questar Gas Company</b>			
	Block/Dth	Decoupling Adjustment \$/therm	Decoupling Adjustment % <sup>28</sup>
Jul-06			
			0.27
Apr-07			
			0.36
Sep-07			
			-0.47

<sup>27</sup> All data supplied by the utility.

<sup>28</sup> As stated in utility filings.

Questar Gas Company				
Apr-08				
				0.01
Jul-08				
GS1	Block / Dth			-0.47
Winter	Block #1	0-45	-0.04031	
	Block #2	Over 45	-0.01674	
Summer	Block #1	0-45	-0.03395	
	Block #2	Over 45	-0.0126	
Nov-08				
GS1	Block / Dth			0.01
Summer	Block #1	0-45	0.00079	
	Block #2	Over 45	0.00029	
Winter	Block #1	0-45	0.00094	
	Block #2	Over 45	0.00039	
Mar-09				
GS1	Block / Dth			0
Summer	Block #1	0-45	0.00492	
	Block #2	Over 45	0.00728	
Winter	Block #1	0-45	0.00584	
	Block #2	Over 45	0.00242	
Oct-09				
GS1	Block / Dth			0.2
Summer	Block #1	0-45	0.01962	
	Block #2	Over 45	0.00728	
Winter	Block #1	0-45	0.0233	
	Block #2	Over 45	0.00967	
Aug-10				
GS1	Block / Dth			0.75
Summer	Block #1	0-45	-0.03643	
	Block #2	Over 45	-0.01352	
Winter	Block #1	0-45	-0.04325	
	Block #2	Over 45	-0.01796	
Jan-11				
GS1	Block / Dth			0.2
Summer	Block #1	0-45	-0.03499	
	Block #2	Over 45	-0.01299	
Winter	Block #1	0-45	-0.04154	
	Block #2	Over 45	-0.01725	

Questar Gas Company				
May-11				
GS1	Block / Dth			-0.32
Summer	Block #1	0-45	-0.0599	
	Block #2	Over 45	-0.02242	
Winter	Block #1	0-45	-0.07112	
	Block #2	Over 45	-0.02953	
Oct-11				
GS1	Block / Dth			0.52
Summer	Block #1	0-45	-0.01994	
	Block #2	Over 45	-0.0094	
Winter	Block #1	0-45	-0.02368	
	Block #2	Over 45	-0.00983	
Sep-12				
GS1	Block / Dth			-0.11
Summer	Block #1	0-45	-0.02758	
	Block #2	Over 45	-0.01024	
Winter	Block #1	0-45	-0.03274	
	Block #2	Over 45	-0.01359	

## Vermont

Vermont initially adopted alternative regulatory plans for both Central Vermont Public Service and Central Vermont Public Service in Case No. 7336 (September 2008), revised and extended in various subsequent dockets; and Green Mountain Power in Case No. 7175 and 7176 (December 2006), extended in Docket 7438 and recently revised and extended in Docket 7585 (April 2010). Under both plans, the utilities may adjust rates every year based on forecast costs and sales. This limits any benefit of increased sales during a given year to a partial year, at best. In addition, there is an adjustment mechanism for earnings that fall outside of a dead-band of 75 basis points around the allowed return on common equity. Outside of the dead-band, any excess or shortfall is first shared between the utility and customers and, beyond a certain amount, passed through in full to customers. If consumption reductions have caused revenues to fall, this mechanism may trigger a partial collection of the shortfall from customers. It is not possible to calculate to what extent revenue changes driven by consumption changes have contributed to any adjustment.

## Virginia

Pursuant to an authorizing statute, the Virginia Commission has approved decoupling mechanisms for three natural gas utilities: Virginia Natural Gas in Docket PUE-2008-00064 (December 2008); Columbia Gas of Virginia in Docket PUE-2009-00051 (December 2009), extended in Docket PUE-2012-00013 (August 2012); and Washington Gas Light in Docket PUE-2009-00064 (March 2010). In none of these dockets, which were not general rate case proceedings, did the Commission make an ROE adjustment in conjunction with the decoupling approval. All of the mechanisms make monthly adjustments based on



the difference between actual and authorized distribution revenue per customer; the adjustments lag the monthly difference by two months. The tariffs are:

- Virginia Natural Gas: Rider D Revenue Normalization Adjustment, for residential only – this tariff has now expired
- Columbia Gas of Virginia: Revenue Normalization Adjustment, General Terms and Conditions 12.3, for residential and small commercial customers
- Washington Gas Light: CARE Ratemaking Adjustment, General Service Conditions 30, for residential customers in two separate parts of the service territory

<b>Virginia Natural Gas Company 2009</b>				
	Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Adjustment %
March				
Residential	0.07	11.92	1.19	5.872%
April				
Residential	0.06947	14.37	1.44	4.834%
May				
Residential	-0.06762	16.39	1.64	-4.126%
June				
Residential	0.07	18.23	1.82	3.840%
July				
Residential	0.07	19.74	1.974	3.546%
August				
Residential	0.07	20.5	2.05	3.415%
September				
Residential	0.07	21.74	2.17	3.220%
October				
Residential	0.07	14.98	1.50	4.673%
November				
Residential	0.02425	13.35	1.34	1.816%
December				
Residential	0.01647	12.41	1.24	1.327%

<b>Virginia Natural Gas Company 2010</b>				
	Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Adjustment %
January				
Residential	-0.0142	11.88	1.19	-1.20%
February				
Residential	0.04703	11.75	1.18	4.00%
March				
Residential	0.07	12.46	1.25	5.62%
April				
Residential	0.06528	15.94	1.59	4.10%

Virginia Natural Gas Company 2010				
May				
Residential	-0.15155	16.72	1.67	-9.06%
June				
Residential	0.07	18.92	1.89	3.70%
July				
Residential	0.07	21.45	2.15	3.26%
August				
Residential	0.07	21.98	2.20	3.18%
September				
Residential	0.05533	19.87	1.99	2.78%
October				
Residential	0.07	16.43	1.64	4.26%
November				
Residential	0.02132	12.38	1.24	1.72%
December				
Residential	0.03916	10.56	1.06	3.71%

Virginia Natural Gas Company 2011				
	Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Adjustment %
January				
Residential	-0.0064	11.06	1.11	-0.58%
February				
Residential	0.05427	11.93	1.19	4.55%
March				
Residential	0.07	11.49	1.15	6.09%
April				
Residential	0.04994	13.5	1.35	3.70%
May				
Residential	0.01282	17.59	1.76	0.73%
June				
Residential	0.07	19.36	1.94	3.62%
July				
Residential	0.07	20.82	2.08	3.36%
August				
Residential	0.07	19.11	1.91	3.66%
September				
Residential	0.07	19.11	1.91	3.66%
October				
Residential	0.07	14.77	1.48	4.74%
November				
Residential	0.06083	12.97	1.30	4.69%

Virginia Natural Gas Company 2011				
December				
Residential	0.01856	12.72	1.27	1.46%

Virginia Natural Gas Company 2012				
	Adjustment \$/Ccf	Retail Rate \$/Mcf	Retail Rate \$/Ccf	Adjustment %
January				
Residential	-0.00673	11.99	1.20	-0.56%
February				
Residential	0.02993	11.26	1.126	2.66%

Columbia Gas of Virginia 2010				
	Adjustment \$/Mcf	Retail Rate \$/Mcf		Adjustment %
March				
Residential	0.513	12.46		4.12%
General Service	0	0		
April				
Residential	0.454	15.94		2.85%
General Service	0.119	9.87		1.21%
May				
Residential	0.135	16.72		0.81%
General Service	0.374	9.71		3.85%
June				
Residential	0.871	18.92		4.60%
General Service	0.199	9.62		2.07%
July				
Residential	0.649	21.45		3.03%
General Service	0.431	9.56		4.51%
August				
Residential	0.916	21.98		4.17%
General Service	0.357	9.37		3.81%
September				
Residential	-0.285	19.87		-1.43%
General Service	0.19	9.08		2.09%
October				
Residential	0.176	16.43		1.07%
General Service	0.114	9.22		1.24%
November				
Residential	0.017	12.38		0.14%
General Service	0.09	8.93		1.01%

<b>Columbia Gas of Virginia 2010</b>			
December			
Residential	0.123	10.56	1.16%
General Service	0.107	8.93	1.20%

<b>Columbia Gas of Virginia 2011</b>			
	Adjustment \$/therm	Retail Rate \$/Mcf	Adjustment %
January			
Residential	0.025	11.88	0.21%
General Service	0.111	9.44	1.18%
February			
Residential	-0.07	11.93	-0.59%
General Service	0.102	10.04	1.02%
March			
Residential	0.197	11.49	1.71%
General Service	-0.005	9.35	-0.05%
April			
Residential	0.28	13.5	2.07%
General Service	-0.174	9.86	-1.76%
May			
Residential	1.092	17.59	6.21%
General Service	-0.133	10.39	-1.28%
June			
Residential	0.725	19.36	3.74%
General Service	0.12	10.76	1.12%
July			
Residential	0.762	20.82	3.66%
General Service	0.101	10.15	1.00%
August			
Residential	-0.3	20.82	-1.44%
General Service	0.013	10.31	0.13%
September			
Residential	-0.732	19.11	-3.83%
General Service	0.223	10.53	2.12%
October			
Residential	-0.557	14.77	-3.77%
General Service	-0.029	9.07	-0.32%
November			
Residential	0.1	12.97	0.77%
General Service	0.12	9.29	1.29%

<b>Columbia Gas of Virginia 2011</b>			
December			
Residential	0.105	12.72	0.83%
General Service	0.102	9.29	1.10%

<b>Columbia Gas of Virginia 2012</b>			
	Adjustment \$/therm	Retail Rate \$/Mcf	Adjustment %
January			
Residential	-0.004	11.99	-0.03%
General Service	0.029	9.31	0.31%
February			
Residential	-0.092	11.26	-0.82%
General Service	0.029	8.73	0.33%
March			
Residential	0.032	13.33	0.24%
General Service	-0.105	8.91	-1.18%
April			
Residential	0.389	13.57	2.87%
General Service	-0.058	8.37	-0.69%
May			
Residential	0.454	15.94	2.85%
General Service	0.291	8.48	3.43%
June			
Residential	2.01	19.49	10.31%
General Service	0.088	9.69	0.91%
July			
Residential	0.587	19.49	3.01%
General Service	0.176	9.69	1.82%
August			
Residential	1.061	19.49	5.44%
General Service	0.134	9.69	1.38%
September			
Residential	0.61	19.49	3.13%
General Service	0.297	9.69	3.07%
October			
Residential	0.336	19.49	1.72%
General Service	0.076	9.69	0.78%

<b>Washington Gas Light 2010</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>May</b>				
Virginia	0.0039	16.02	1.56	0.250%
Shenandoah	-0.0949	9.89	0.96	-9.835%
<b>June</b>				
Virginia	-0.0154	19.85	1.94	-0.795%
Shenandoah	0.0542	10.53	1.03	5.276%
<b>July</b>				
Virginia	0.0447	20.78	2.03	2.205%
Shenandoah	0.1307	10.66	1.04	12.567%
<b>August</b>				
Virginia	0.0167	22.58	2.20	0.758%
Shenandoah	-0.0198	10.82	1.06	-1.876%
<b>September</b>				
Virginia	0.0159	20.79	2.03	0.784%
Shenandoah	0.039	10.34	1.01	3.866%
<b>October</b>				
Virginia	0.0057	15.14	1.48	0.386%
Shenandoah	0.0245	9.35	0.91	2.686%
<b>November</b>				
Virginia	-0.002	11.86	1.16	-0.173%
Shenandoah	-0.0171	9.24	0.90	-1.897%
<b>December</b>				
Virginia	-0.0079	10.11	0.99	-0.801%
Shenandoah	0.0238	8.82	0.86	2.766%

<b>Washington Gas Light 2011</b>				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
<b>January</b>				
Virginia	0.0104	10.44	1.02	1.021%
Shenandoah	-0.0492	9.56	0.93	-5.275%
<b>February</b>				
Virginia	0.0196	11.28	1.10	1.781%
Shenandoah	-0.0233	9.96	0.97	-2.398%
<b>March</b>				
Virginia	0.0545	11.25	1.10	4.966%
Shenandoah	-0.0147	9.86	0.96	-1.528%
<b>April</b>				
Virginia	0.0455	12.58	1.23	3.707%
Shenandoah	0.0318	10.06	0.98	3.240%

Washington Gas Light 2011				
May				
Virginia	-0.0459	15.97	1.56	-2.946%
Shenandoah	-0.1869	11.96	1.17	-16.018%
June				
Virginia	0.0322	19.53	1.91	1.690%
Shenandoah	0.1579	11.89	1.16	13.612%
July				
Virginia	0.0391	20.13	1.96	1.991%
Shenandoah	0.0346	13.43	1.31	2.641%
August				
Virginia	0.0325	19.24	1.88	1.731%
Shenandoah	-0.0159	11.95	1.17	-1.364%
September				
Virginia	0.0134	18.63	1.82	0.737%
Shenandoah	0.0345	12.13	1.18	2.915%
October				
Virginia	0.0152	12.88	1.26	1.210%
Shenandoah	-0.0105	10.85	1.06	-0.992%
November				
Virginia	-0.0083	12.88	1.26	-0.661%
Shenandoah	0.0052	10.32	1.01	0.516%
December				
Virginia	0.0034	11.86	1.16	0.294%
Shenandoah	0.0189	10.36	1.01	1.870%

Washington Gas Light 2012				
	Adjustment \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Adjustment %
January				
Virginia	0.0265	11.39	1.11	2.385%
Shenandoah	0.0826	10.03	0.98	8.441%
February				
Virginia	-0.0198	11.12	1.08	-1.825%
Shenandoah	0.0356	9.72	0.95	3.754%
March				
Virginia	0.0525	13.7	1.34	3.928%
Shenandoah	0.1565	11.17	1.09	14.361%
April				
Virginia	0.032	13.97	1.36	2.348%
Shenandoah	0.4846	11.09	1.08	44.789%

<b>Washington Gas Light 2012</b>				
May				
Virginia	-0.1348	16.18	1.58	-8.540%
Shenandoah	0.294	10.85	1.06	27.774%
June				
Virginia	0.0281	17.91	1.75	1.608%
Shenandoah	0.312	11.4	1.11	28.053%
July				
Virginia	-0.0184	17.91	1.75	-1.053%
Shenandoah	0.0226	11.4	1.11	2.032%
August				
Virginia	0.1221	17.91	1.75	6.988%
Shenandoah	0.0762	11.4	1.11	6.851%

### Washington D.C.

The Commission approved decoupling for PEPCO (Potomac Electric Company) in Case 1053 (September 2009). In a general rate case decision the following year, Case 1076 (March 2010), the Commission reduced PEPCO's ROE by 50 basis points because of the decoupling mechanism. PEPCO's Bill Stabilization Rider (Tariff page R-49) applies to most of its schedules and calculates adjustments monthly by comparing actual delivery revenue per customer to the test year normalized revenue per customer within each service class.

<b>Potomac Electric Company 2010</b>			
	Adjustment cents/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	-0.000181	0.1492	-0.121%
General Service	0.001092	0.1402	0.779%
February			
Residential	-0.000105	0.1492	-0.070%
General Service	-0.002146	0.1402	-1.531%
March			
Residential	-0.001171	0.1492	-0.785%
General Service	0.000328	0.1402	0.234%
April			
Residential	-0.001513	0.1492	-1.014%
General Service	-0.002487	0.1402	-1.774%
May			
Residential	0.001572	0.1492	1.054%
General Service	0.002125	0.1402	1.516%
June			
Residential	0.000783	0.1492	0.525%
General Service	-0.005082	0.1402	-3.625%



<b>Potomac Electric Company 2010</b>			
July			
Residential	-0.000715	0.1492	-0.479%
General Service	-0.004904	0.1402	-3.498%
August			
Residential	-0.002227	0.1492	-1.493%
General Service	-0.004956	0.1402	-3.535%
September			
Residential	-0.002392	0.1492	-1.603%
General Service	-0.004839	0.1402	-3.451%
October			
Residential	-0.002396	0.1492	-1.606%
General Service	0.003661	0.1402	2.611%
November			
Residential	-0.002204	0.1492	-1.477%
General Service	-0.004268	0.1402	-3.044%
December			
Residential	-0.002144	0.1492	-1.437%
General Service	-0.004001	0.1402	-2.854%

<b>Potomac Electric Company 2011</b>			
	Adjustment cents/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	-0.001915	0.1399	-1.369%
General Service	-0.003841	0.1323	-2.903%
February			
Residential	-0.001506	0.1399	-1.076%
General Service	-0.003887	0.1323	-2.938%
March			
Residential	-0.002038	0.1399	-1.457%
General Service	-0.004071	0.1323	-3.077%
April			
Residential	-0.002184	0.1399	-1.561%
General Service	-0.004066	0.1323	-3.073%
May			
Residential	0.000016	0.1399	0.011%
General Service	-0.00369	0.1323	-2.789%
June			
Residential	0.00041	0.1399	0.293%
General Service	-0.0052	0.1323	-3.930%

<b>Potomac Electric Company 2011</b>			
July			
Residential	-0.000872	0.1399	-0.623%
General Service	-0.004911	0.1323	-3.712%
August			
Residential	-0.002383	0.1399	-1.703%
General Service	-0.004959	0.1323	-3.748%
September			
Residential	-0.002392	0.1399	-1.710%
General Service	0.004839	0.1323	3.658%
October			
Residential	0.002396	0.1399	1.713%
General Service	0.005006	0.1323	3.784%
November			
Residential	-0.002204	0.1399	-1.575%
General Service	-0.004268	0.1323	-3.226%
December			
Residential	-0.00119	0.1399	-0.851%
General Service	-0.004001	0.1323	-3.024%

<b>Potomac Electric Company 2012</b>			
	Adjustment cents/kWh	Retail Rate \$/kWh	Adjustment %
January			
Residential	-0.001002	0.1236	-0.811%
General Service	-0.003841	0.1221	-3.146%
February			
Residential	0.001628	0.1236	1.317%
General Service	-0.003887	0.1221	-3.183%
March			
Residential	-0.000757	0.1236	-0.612%
General Service	-0.004071	0.1221	-3.334%
April			
Residential	-0.000676	0.1236	-0.547%
General Service	-0.004066	0.1221	-3.330%
May			
Residential	0.000476	0.1236	0.385%
General Service	-0.00369	0.1221	-3.022%
June			
Residential	0.002463	0.1236	1.993%
General Service	-0.0052	0.1221	-4.259%

Potomac Electric Company 2012			
July			
Residential	-0.000388	0.1236	-0.314%
General Service	-0.004911	0.1221	-4.022%
August			
Residential	-0.001782	0.1236	-1.442%
General Service	-0.004959	0.1221	-4.061%
September			
Residential	-0.002312	0.1236	-1.871%
General Service	-0.004839	0.1221	-3.963%

## Washington

The Washington Commission has approved decoupling for two of its natural gas utilities: Cascade Natural Gas in Docket No. UG-060256 Final Order Nos. 05, 06, and 07 (January 2007) and Avista Utilities in Docket No. UG-060518; Final Order (February 2007). The Commission did not adjust allowed ROE for either company in connection with decoupling. Cascade's decoupling mechanism (Rule 21: Conservation Alliance Plan Mechanism) was a three-year pilot that has now expired. The Avista decoupling mechanism (Schedule 159) was extended in Docket No. UG-090135; Final Order (December 2009), although the Commission reduced the recovery of the difference between actual and authorized margin from 90% to 45%. Both of the decoupling mechanisms include an earnings test. This test precluded Cascade from recovering two decoupling surcharges. Avista's also adjusts for revenues associated with new customers and normalizes the effect of weather on sales.

Cascade Natural Gas				
	Decoupling Adjustment \$/Therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling Adjustment %
2008	0.001724	12.28	1.20	0.144%
2009	0.000422	13.11	1.28	0.000% (earnings test cap)
2010		11.37	1.11	0.000%

Avista Utilities (Gas) <sup>29</sup>		
	Decoupling Adjustment \$/Therm	Decoupling Adjustment %
Nov-07	0.257	0.23
Jan-08	0.257	0.23
Nov-08	0.593	0.52

<sup>29</sup> All data supplied by the utility.

Avista Utilities (Gas)		
Jan-09		
	0.593	0.5
Jan-09		
	0.593	0.52
Feb-09		
	0.593	0.51
Jun-09		
	0.593	0.56
Nov-09		
	0.499	0.65
Jan-10		
	0.499	0.65
Apr-10		
	0.499	0.64
Nov-10		
	0.490	0.59
Dec-10		
	0.490	0.57
Jul-11		
	0.490	0.58
Nov-11		
	0.237	0.28
Jan-12		
	0.237	0.27
Mar-12		
	0.237	0.29
Aug-12		
	0.237	0.29
Proposed –11-12		
	0.004	0.00

## Wisconsin

The Wisconsin Commission approved decoupling for Wisconsin Public Service Corporation, both the electric and gas operations, in Docket No. 6690-UR-119 ( June 2009). The Commission did not adjust the utility’s allowed ROE for the decoupling mechanism. The tariffs – Revenue Stabilization Mechanism, E4.70 (electric), G8.20 (gas) – calculate decoupling adjustments by comparing target margin revenue-per-customer with actual margin revenue-per-customer. Electric decoupling adjustments are subject to a \$14 million per year cap; gas to an \$8 million per year cap. The utility calculates the dollar amount each year and defers it; amortization of any adjustment occurs in a general rate case. General rate cases occur every year. Therefore, authorized margin per customer and sales are also updated each year.

Because WPSC makes decoupling adjustments as part of general rate case filings, the calculations below are based on "what if" it made such adjustments based on sales from the year it accrued the decoupling adjustments. The calculations reflect those based on actual decoupling deferrals and the capped decoupling accruals. These are estimates only for purposes of indicating the size of decoupling adjustments.

<b>Wisconsin Public Service (Electric)</b>					
	Derived adjustment \$/kWh	Derived adjustment capped \$/kWh	Retail Rate \$/kWh	Decoupling % actual	Decoupling % capped
2009					
Residential/Small Commercial	0.0048705	0.00168154	0.129	3.78%	1.30%
Commercial	0.0084951	0.00293293	0.0945	8.99%	3.10%
2010					
Residential/Small Commercial	0.0033043	0.00166936	0.1291	2.56%	1.29%
Commercial	0.0056630	0.00286103	0.946	0.60%	0.30%
2011					
Residential/Small Commercial	(0.0018666)	\$ (0.00163719)	0.1288	-1.45%	-1.27%
Commercial	(0.0032565)	\$ (0.00285629)	0.1037	-3.14%	-2.75%

<b>Wisconsin Public Service (gas)</b>						
	Derived adjustment \$/therm	Derived adjustment capped \$/therm	Retail Rate \$/Mcf	Retail Rate \$/therm	Decoupling % actual	Decoupling % capped
2009						
Residential	0.0121666	NA	10.76	1.05	1.16%	
Commercial	0.0299860	NA	8.95	0.87	3.43%	
2010						
Residential	0.0480839	0.02270960	10.34	1.01	4.77%	2.25%
Commercial	0.0569683	0.02690547	8.53	0.83	6.85%	3.23%
2011						
Residential	(0.0091654)	NA	9.77	0.95	-0.96%	
Commercial	(0.0069981)	NA	8.04	0.78	-0.89%	

## Wyoming

Wyoming approved decoupling for Questar Gas in Docket No. 30010-94-GR-08 (June 2009) and extended the mechanism in Docket No. 30010-113-GR-11 (June 2012). The Commission did not adjust the utility's allowed ROE for the decoupling mechanism. The tariff – the Conservation Enabling Tariff, 2.07 – calculates decoupling adjustments by comparing target revenue-per-customer with actual revenue-per-customer, only for the general service class.

Questar Gas				
	Decoupling Amount	Adjustment 1st 45 Dth	Adjustment remainder	Adjustment %
2010				
	\$ 137,552.00	\$0.04505	\$0.02848	0.51
2011				
	\$ 57,097.00	\$0.01879	\$0.01188	-0.31
2012				
	\$ (214,857.00)	(\$0.07045)	(\$0.04453)	-1.07

**Table of State Decisions Regarding ROE Reduction**

State	Type	Docket No.	ROE Adjustment?
<b>Arizona</b>			
Southwest Gas	Gas	G-01551A-10-0458	25 basis points
<b>Arkansas</b>			
Arkansas Oklahoma	Gas	07-026-U	10 basis points
Arkansas Western	Gas	06-124-U	25 basis points
CenterPoint Energy	Gas	06-161-U	10 basis points
<b>California</b>			
PG&E	Electric	NA	No
PG&E	Gas	NA	No
SCE	Electric	NA	No
SDG&E	Electric	NA	No
So Cal Gas	Gas	NA	No
Southwest Gas	Gas	NA	No
<b>Colorado</b>			
Public Service of Colorado	Gas	06S-656G	No
<b>Connecticut</b>			
United Illuminating	Electric	08-07-04	Not Explicit
<b>Georgia</b>			
Atmos Energy	Gas	34734	No
<b>Hawaii</b>			
Hawaii Electric	Electric	2008-0274	Not Explicit
<b>Idaho</b>			
Idaho Power	Electric	IPC-E-04-15	No
<b>Illinois</b>			
North Shore Gas	Gas	07-0241/07-0242 (Cons)	10 basis points
Peoples Gas and Coke	Gas	07-0241/07-0242 (Cons)	10 basis points
<b>Indiana</b>			
Vectren Indiana	Gas	42943	No
Vectren Southern Indiana Gas	Gas	42944	No
Citizen's Gas and Coke	Gas	42767	No
<b>Maryland</b>			
Baltimore Gas & Electric	Gas	8829 9036	50 basis points No
Delmarva	Electric	9093	50 basis points
PEPCO	Electric	9092	50 basis points

State	Type	Docket No.	ROE Adjustment?
Baltimore Gas & Electric	Electric	#21, RR-2135, ML## 108069 & 108061 (letter order from Executive secretary)	No
Washington Gas Light	Gas	8990	No
<b>Massachusetts</b>			
Fitchberg Gas & Electric	Electric & Gas	D.P.U. 11-01	Not explicit
Western Massachusetts Electric	Electric	D.P.U. 10-70	Not explicit
Massachusetts Electric and Nantucket Electric	Electric	D.P.U. 09-39	Not explicit
Bay State Gas	Gas	D.P.U. 09-30	Not explicit
Boston Gas and Colonial Gas	Gas	D.P.U. 10-55	Not explicit
New England Gas	Gas	D.P.U. 10-114	Not explicit
<b>Michigan</b>			
Consumers Power Company	Electric	U-15645	No
Detroit Edison	Electric	U-15768	No
Upper Peninsula Power	Electric	U-15988	No
Michigan Gas Utilities	Gas	U-15990	No
Consumers Energy	Gas	U-15986	No
Mich Con	Gas	U-15985	No
<b>Minnesota</b>			
Centerpoint Energy	Gas	Docket GR-08-1075	No
<b>Nevada</b>			
Southwest Gas	Gas	09-04003	25 basis points
<b>New Jersey</b>			
South Jersey Gas Company	Gas	Order No. GR05121019	No
New Jersey Natural Gas Company	Gas	Order No. GR05121020	No
<b>New York</b>			
Brooklyn Union Gas/Keyspan	Gas	06-G-1185/86	No
Central Hudson	Gas	09-G-0589	10 basis points
Central Hudson	Electric	09-E-0588	10 basis points
Consolidated Edison	Gas	09-G-0795	No
Consolidated Edison	Electric	07-G-0141 09-E-0428	No
Corning Gas	Gas	08-G-1137	No
National Fuel Gas	Gas	07-G-0141	10 basis points



State	Type	Docket No.	ROE Adjustment?
New York State Electric & Gas	Gas	09-G-0716	No
New York State Electric & Gas	Electric	09-E-0715	No
Niagara Mohawk	Gas	08-G-0609	No
Niagara Mohawk	Electric	10-E-0050	No
Orange & Rockland	Gas	08-G-1398	No
Orange & Rockland	Electric	10-E-0050	No
Rochester Gas & Electric	Gas	09-G-0718	No
Rochester Gas & Electric	Electric	09-E-0717	No
St. Lawrence Gas	Gas	08-G-1392	10 basis points
<b>North Carolina</b>			
Piedmont Gas	Gas	G-9, Sub 499	No
Public Service Company of North Carolina	Gas	G-5, Sub 495	No
<b>Ohio</b>			
American Electric Power Ohio	Electric	11-351/2-EL-AIR 11-353/4-EL-ATA	No
Duke Energy Ohio	Electric	11-5905-EL-RDR	No
<b>Oregon</b>			
Cascade Natural Gas	Gas	UG 167	No
Northwest Natural Gas	Gas	UG 163	No
Portland General Electric	Electric	UE-197	10 basis points
<b>Rhode Island</b>			
Narragansett Electric	Electric	4206	No
<b>Tennessee</b>			
Chattanooga Natural Gas	Gas	09-00183	25 basis points
<b>Utah</b>			
Questar Gas	Gas	05-057-T01	No
<b>Virginia</b>			
Columbia Natural Gas	Gas	PUE-2009-00051	No
Virginia Gas	Gas	PUE-2008-00060	No
Washington Gas Light	Gas	PUE-2009-00064	No
<b>Washington</b>			
Cascade Natural Gas	Gas	UG-060256	No
Avista	Gas	UG-060518 UG-090135	No
<b>Washington D. C.</b>			
PEPCO	Electric	1053-E-549	50 basis points

<b>Wisconsin</b>			
Wisconsin Public Service	Electric and Gas	Docket No. 6690-UR-119	No
<b>Wyoming</b>			
Questar Gas	Gas	30010-94-GR-8	No