BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of a Working Case to Consider Proposals to Create a Revenue Decoupling Mechanism For Utilities	))))	**Case No. AW-2015-0282**

STAFF REPORT

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and for its *Report* in this matter hereby states:

1. On July 22, 2015, the Commission issued an order opening a working docket to consider proposals for a revenue decoupling mechanism. The Commission in that same order directed interested parties to file comments no later than September 1, 2015, and Staff to provide its report no later than November 2, 2015.

2. On September 17, 2015, the interested parties gathered together for a workshop to discuss their personal interests and investments in instituting revenue decoupling for Missouri utilities, facilitated by recognized expert, Richard Sedano of The Regulatory Assistance Project, who gave a presentation entitled, "A Decoupling Foundation." The parties also provided answers to the following questions presented by Staff:

a. Please comment on the legality of decoupling in Missouri.

b. Please comment on your interests and preferences for any of the various aspects related to revenue regulation and decoupling contained in "Revenue Regulation and Decoupling: A Guide to Theory and Application, June 2011,The Regulatory Assistance Project".

c. What is your estimate of the resulting rates based on your preference(s) identified in response to question (b) – customer charge, usage charge?

d. Please provide sources or papers on alternative rate mechanisms, revenue decoupling or similar topics which will further the Commission's knowledge on the subject of the docket.

3. Following the workshop, Staff directed the parties to file additional comments no later than October 2, 2015. Staff reviewed all of the materials provided by the parties to this docket, both prior to and following the workshop; in addition to conducting its own research into other states' practices, the legality of decoupling under Missouri law and existing decoupling mechanisms approved by this Commission. *Staff's Report* is a synopsis of Staff's recommendations based on the submitted materials and its research.

WHEREFORE, Staff provides its *Report* and prays this Commission accept it as a complete and accurate representation of Staff's findings.

/s/ Whitney Payne
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 2nd day of November, 2015, to all counsel of record.

/s/ Whitney Payne

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT ON

MISSOURI AMERICAN WATER COMPANY

STAFF'S INVESTIGATION INTO REVENUE DECOUPLING MECHANISMS

FILE NO. AW-2015-0282

November 2015

JEFFERSON CITY, MISSOURI

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Staff's Investigation into Revenue Decoupling Mechanisms

I. Introduction

On May 1, 2015, the Commission gave Notice of New Proceeding, opening File No. AW-2015-0282, captioned, *In the Matter of a Working Case to Consider Proposals to Create a Revenue Decoupling Mechanism*. On July 22, 2015, the Commission issued its Order Opening a Working Case To Consider Proposals To Implement A Revenue Decoupling Mechanism For Missouri's Utilities (Order). In its Order, the Commission cited Missouri-American Water Company's (MAWC) February 27, 2015 filing of a petition to promulgate a rule to allow water and sewer utilities to petition the Commission to establish a revenue decoupling mechanism. MAWC's petition was given File No. WX-2015-0209. The Commission denied MAWC's petition but indicated it would open a working docket to further investigate revenue decoupling mechanisms. This Working Docket is the result.

In its Order, the Commission directed Staff to investigate the structure and operation of possible decoupling mechanisms and to file a report on its investigation no later than November 2, 2015.

Further in that Order, interested stakeholders were invited to submit comments by September 1, 2015. To facilitate the comments and focus its research, Staff requested that interested stakeholders respond to a handful of questions. Seventeen comments were received by September 1. Besides these written comments, many stakeholders submitted various publications that presented information regarding revenue decoupling and the various types of revenue decoupling mechanisms. These publications also included research of various revenue decoupling mechanisms that have been implemented in other states.

On September 17, 2015, Staff hosted a workshop on decoupling mechanisms. Various stakeholders attended and participated in the workshop[1]. Staff invited Mr. Richard Sedano of the Regulatory Assistance Project to facilitate the discussion. After the workshop, Staff requested

[1] Participants include various utilities, Missouri Energy Development Association (MEDA), Office of the Public Counsel, Consumer Groups, the Division of Energy, Renew Missouri, and State Representatives.

interested stakeholders to respond, by October 2, 2015, to comments made at the workshop. Four additional comments were received in response to this request.

Staff would like to take the time to thank all stakeholders for their comments and submissions. Staff received a tremendous amount of information regarding decoupling. Staff also conducted its own research by contacting dozens of other state utility commissions and receiving information regarding how decoupling works in those states.

Staff's report will take the following path. Staff will provide a brief description and reasoning for decoupling. Staff will then give a brief summary of comments received and of what is happening in other states. Finally, Staff will provide its legal analysis and conclusions.

II. Traditional Ratemaking

Traditional rate of return regulation focuses on the determination of a utility's cost of providing service to its customers. The ultimate determination of that overall cost is also called revenue requirement. This process is accomplished by a complete financial audit and overall investigation in to the utility's books and records. The revenue requirement is generally determined based on the following formula:

> Revenue Requirement = Rate Base * Rate of Return + Operations and Maintenance Expenses + Depreciation + Taxes
>
> Where Rate Base is basically the utilities investment and the Rate of Return is its weighted average cost of capital.

Once the revenue requirement is determined the actual rate that will be charged to the utility's customers must be calculated. This rate structure can take various forms depending on the industry. Generally, any given rate structure has two main components: 1) a fixed customer charge that is charged regardless of usage; and, 2) a commodity charge that is charged based on the level of the customer's usage. Other components may be used, but this report will focus on these two main components.

Theoretically, the customer charge is calculated to collect a portion of the utility's fixed costs to provide service, while the commodity charge is generally designed to collect the variable costs to provide service. Once the appropriate costs have been determined, then the calculation

of each rate is conducted. For the customer charge, the total costs that are assigned to the fixed component are divided by the number of customers. For the commodity charge, the rate analyst computing the rate must determine usage before the actual rate can be calculated. During any given year, usage can be higher or lower based on various factors, such as weather. Due to this fact, a normalized amount of usage must be determined to smooth out the year-to-year variations. Once this normalization is conducted, the remaining total costs that were not used in the customer charge calculation are divided by the normalized usage to determine the commodity charge.

This process is conducted for all of the utility's customer classes and has been used for decades in determining the just and reasonable rates that a utility can charge its customers. This rate gives the utility an opportunity, but not a guarantee to earn its authorized rate of return on its investment. There are many factors that will impact the utility's ability to earn its authorized rate of return. One factor, however, is sales. Ceteris parabus, if actual usage is greater than the normalized amount calculated, then the utility will earn above its authorized rate of return. Conversely, if actual usage is below the normalized amount, then the utility will not earn its authorized rate of return.

Like most businesses, the utility benefits from selling more of its product. The more it sells; the more revenues it collects. The less it sells; the fewer revenues it collects. Again, holding all other factors constant, the utility enjoys higher profits due to higher usage and lower profits due to lower usage.

Historically, the deviation from normalized usage was mainly driven by the vagaries of weather. However, in today's environment, other factors may also be driving the variation of usage. Conservation and energy efficiency initiatives cause customers to find ways to reduce usage; thus, causing actual usage to vary from normalized levels. Revenue decoupling mechanisms (RDMs) attempt to remove, or decouple, the utility's historical revenue collection from the customers' usage patterns.

III. Brief description of decoupling

Revenue decoupling is a generic term used to describe alternatives to traditional rate of return regulation. RDMs can take many forms and not all stakeholders necessarily agree that all of the various mechanisms are truly "revenue decoupling." Further, the water, natural gas, and electric industries are all different and each has its own peculiarities and drivers. Any given revenue decoupling mechanism may or may not be applicable to a certain industry.

Revenue decoupling does not alter the initial process of establishing rates via the traditional rate case process. However, revenue decoupling attempts to allow the utility to collect its Commission-authorized revenues without relying on customer usage levels.

Examples of Revenue Decoupling Mechanisms

A. The simplest alternative to allow the utility to collect Commission-authorized revenues without relying on customer usage levels is to remove the commodity portion of the rate structure completely. This rate structure is known as Straight Fixed Variable rate design. By removing the commodity charge, the only charge would be a customer charge. All costs would be collected from the customers due to a simple fixed customer charge.

B. Increasing the customer charge is a common alternative proposed. According to utilities, the customer charge, as currently calculated, does not collect the amount of fixed costs that the utility incurs. Thus, the argument goes, an increase in the customer charge is needed to more accurately align the amount of revenues collected through the customer charge and the actual amount of fixed costs exhibited by the utility. With a higher fixed charge, some argue customers do not have an economic incentive to conserve.

C. Another method of revenue decoupling is to focus on the utility's commission-approved revenue. In this type of RDM, the rate structure itself is not altered. Instead, the focus is on ensuring that the utility's revenues are protected. Under this type of RDM, there can be either full or partial/limited decoupling. Under full decoupling, the theory is that all revenues would be protected from the vagaries of usage. The most common mechanism for full decoupling is called

"revenue per customer." Generally, this method determines the amount of revenue each customer should contribute to the utility. Instead of calculating a rate that will remain unchanged until the utility's next rate case, the focus is on determining the appropriate amount of revenue to collect from each individual customer. Under partial/limited decoupling, isolated impacts on revenues are established.

Some forms of decoupling may require further calculations or adjustments, such as a periodic adjustment between rate cases. Another example would be to establish a tracker that would be trued-up during the utility's next rate increase.

Criticisms of Revenue Decoupling

Opponents to RDMs point out a few common criticisms. For all of these criticisms, there are counter arguments, some of which are included in the discussion of *Examples of Revenue Decoupling Mechanisms* or below.

A. One issue is that RDMs shift the risk of weather from the utility to the consumer. Changes in usage will result in a change in the commodity rate which means that the rate can increase if usage is below normal. Others point out that the utilities are giving up a potential increase in revenues if usage is greater than the established usage levels. Studies have been conducted to investigate this argument.

B. Another criticism is that depending upon the actual construction of the RDM, consumers could see constant rate increases if usage continually declining. This argument can be somewhat alleviated by altering the timing of changes.

C. A further criticism is that once the utility has a more stable revenue stream, its incentive to lower costs is diminished.

This Report does not endorse or reject any specific RDM and is not an exhaustive look at the various attributes or criticisms of the RDMs, but is meant to highlight that any proposed mechanism needs to be fully vetted to ensure that there are no unintended consequences.

IV. Brief summary of what other states are doing

Decoupling has been implemented in some areas for decades. California implemented its first mechanism in the electricity sector in 1982.

As part of its analysis, Staff collected a variety of documents including reports to state legislatures, testimony of Commission staff members, testimony of members of the Public Advocate groups of states that have implemented decoupling, briefing papers, comments, and Report and Orders. Staff has compiled a list of docket numbers and has collected the Orders and other documents relating to the approval of decoupling for many of the states listed. A summary of the information collected is attached to this report as Attachment 1.

States adopting decoupling

According to the Natural Resources Defense Council (NRDC), (September 2014) twenty-two states have adopted gas decoupling and three states have pending gas decoupling proposals. Seventeen states have adopted electric decoupling and four states have pending electric decoupling proposals. Attachment 2 depicts the maps of both gas and electric decoupling in the United States. The twenty-two states that have adopted gas decoupling mechanisms include: Arizona, Arkansas, California, Georgia, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Jersey, New York, North Carolina, Oregon, Rhode Island, Tennessee, Utah, Virginia, Washington, Wisconsin, and Wyoming. The three states with pending gas decoupling proposals include: Connecticut, Delaware, and Nebraska. The seventeen states that adopted electric decoupling include: Arizona, California, Connecticut, District of Columbia, Hawaii, Idaho, Maine, Maryland, Massachusetts, Michigan, New York, Ohio, Oregon, Rhode Island, Vermont, Washington, and Wisconsin. The four states with pending electric decoupling proposals include: Arkansas, Colorado, New Mexico, and Minnesota.

Three states have adopted water and/or wastewater decoupling: California, Connecticut, and Nevada. New York indicated large water companies have revenue reconciliations which are similar to a revenue decoupling mechanism.

States with Decoupling for Energy Efficiency

The American Council for an Energy-Efficient Economy (ACEEE) produces an annual scorecard to measure the "progress of state policies and programs that save energy while also benefitting the environment and promoting economic growth". "The 2015 State Energy Efficiency Scorecard"[2] was released in October 2015. ACEEE notes ". . . there are three key policy approaches to properly aligning utility incentives and removing barriers to energy efficiency. The first is to ensure that utilities can recover the direct costs associated with energy efficiency programs… The other two mechanisms are fixed cost recovery (decoupling and other lost revenue adjustment mechanisms) and performance incentives... ACEEE prefers the decoupling approach for addressing the throughput incentive and considers LRAMs [lost revenue adjustment mechanism] to be more appropriate as a short-term solution."[3]

Currently 29 states have addressed disincentives for investment in energy efficiency for electric utilities. Of these, 14 have a LRAM and 15 have implemented decoupling. The 14 states that have a lost revenue adjustment mechanism for electric include: Arkansas, Kentucky, Oklahoma, South Dakota, Arizona, Indiana, North Carolina, Louisiana, Mississippi, Missouri, Montana, Nevada, South Carolina, and Kansas. The 15 states that have implemented decoupling for electric utilities include: California, Connecticut, Hawaii, Massachusetts, Minnesota, New York, Rhode Island, Vermont, District of Columbia, Ohio, Maryland, Oregon, Washington, Idaho, and Maine. [4] Ohio currently has both decoupling and a LRAM in place.[5]

To address disincentives for investment in energy efficiency for natural gas utilities, 6 states have implemented a LRAM and 22 have a decoupling mechanism. The 6 states that have implemented a LRAM include: Arkansas, Kentucky, South Dakota, Colorado, Mississippi, and Montana. The 22 states that have implemented decoupling for natural gas include: California, Connecticut, Massachusetts, Minnesota, New York, Rhode Island, Vermont, Michigan, Oklahoma, Arizona, Georgia, Indiana, Maryland, North Carolina, Oregon, Washington, Illinois,

[2] http://aceee.org/sites/default/files/publications/researchreports/u1509.pdf
[3] http://aceee.org 2015 State Scorecard Pages 41-42
[4] http://aceee.org 2015 State Scorecard ACEEE Table 20
[5] http://aceee.org 2015 State Scorecard Page 43

Montana, Tennessee, Utah, Virginia, and Wyoming.[6] Arizona currently has both decoupling and a LRAM in place.[7]

Several states have implemented third-party energy efficiency utilities, or trusts, to administer their energy efficiency programs. Attachment 1 displays this information. Some advocates believe that by moving energy efficiency measures outside of the utility there is no longer a need for revenue decoupling because the utility is no longer in a position to obstruct energy efficiency investment. Other states believe it is beneficial to incorporate third-party administrators with a decoupling mechanism. "Vermont and Oregon have found that revenue decoupling is a useful addition to a framework that includes a third-party provider, because utilities affect energy efficiency in many more ways than simply making grants and loans to consumers for energy efficiency measures."[8]

Summary of State Analysis

Most states handled requests for decoupling during the processing of a rate case and individual requests were examined and often modified on a case-by-case basis. Weather was often a factor for an adjustment. States had different cycles on when they preferred to make adjustments - some states adjust monthly while most often, the adjustments are made quarterly. Customer education was mentioned over and over as an important step to try and minimize customer complaint.

V. Summary of Stakeholder Comments

On August 5, 2015, the Commission issued a Notice Scheduling Workshop and Requesting Responses, in which it invited stakeholders to respond to various questions posed by Staff. Following is a summary of comments received.

Initial Comments

- Renew Missouri
    - Strongly supports decoupling

[6] http://aceee.org 2015 State Scorecard ACEEE Table 20
[7] http://aceee.org 2015 State Scorecard Page 43
[8] www.raponline.org

- Believes it can mitigate problems with throughput disincentive
- Need to balance customer-utility risks – performance metrics should do
- Implement performance metrics with decoupling mechanism
- Believes decoupling is legal under MEEIA
- Supports full decoupling as defined by RAP – specifically revenue per customer method
- Decoupling changes utility to service based company
- Opposed to decoupling methods that increase fixed charges

- Missouri-American Water Company (MAWC)
  - Supports decoupling for water utilities
  - Volumetric sales are so important, MAWC is dis-incented to promote energy efficiency
  - Declining water usage makes revenue unpredictable
  - Water usage varies with weather but weather cannot be normalized as applied to water utilities
  - Believes Commission has legal authority to implement separation of revenues from volume sold
  - MAWC's proposed revenue stabilization mechanism would apply to these classes: residential, commercial, sale for resale, public authority customer classes
  - "A Decade of Decoupling for US Energy Utilities"
    - Commissions should keep in mind: 1) decoupling adjustments will be both surcharges and refunds; 2) the actual adjustments are likely to be small; 3) most commissions have declined to make a return on common equity (ROE) reduction in connection with the adoption of decoupling
    - Includes "State by State Look at Decoupling"
      - May or may not include ROE adjustment, varies by state
      - May have separate weather related adjustment for certain periods

- Wal-Mart Stores East, LP/Sam's East, Inc.
  - Focus on electricity because that is the largest bill for the company

- Decoupling should be implemented separately for each customer class
- As to demand-metered customer classes, there should be changes to tariffed rate design as opposed to approved vs. actual mechanism
    - Approved vs. actual mechanisms take a utility's approved revenues and actual revenues for a given period and reconciles them with each other, either crediting or charging ratepayers for the difference on a single per-kilowatt hour rate. This occasionally results in ratepayers paying more than their cost of service and more toward a company's fixed costs, as well as could result in further overpayment.
- Cost of capital should reflect reduction in business risk resulting from decoupling
- Utility's rates/prices should reflect underlying costs
- Customers who are overpaying should not be exposed to risk of further overpayment resulting from decoupling
- Opposes hours-use rate design because they purposefully under recover demand related costs through demand charge and spread recovery of the costs among the energy charges
- Risk mitigation of decoupling could be reflected in capital or ROE

- Utility Workers Union of America Local 335
    - This organization's comments refer specifically to MAWC
    - Limitations on granting decoupling to MAWC
        - Valve maintenance
        - Hire new employees
        - Fill vacancies

- Laclede Gas Company
    - Laclede employs mechanism similar to decoupling through collection of distribution costs in small first block
    - Decoupling rate designs are lawful and there is state authority for customer usage mechanism with similar results as decoupling
    - Weather adjustment clauses may be unnecessary if decoupling is implemented

- Commodity charges in Laclede's rates tend to be half or more of customer's bill and savings are fully passed on to customer

- Kansas City Power & Light Company/KCP&L Greater Missouri Operations Company (KCPL&L/GMO)
  - Utilities are experiencing penetration of energy saving products in market - need to be financially healthy
  - Rate cases are expensive – need to consider forward test year, formula rate plans, performance based rate plans and other rate adjustment mechanisms (RAMs) like revenue decoupling
  - Other Questions to Ask
    - What elements should decoupling apply to?
    - How should customer additions/losses be treated under revenue decoupling?
    - The impact of decoupling on other rate adjustment mechanisms (RAM)
    - Impact on customer rates and future rate predictability
    - Impact on utility's rate of return (ROR)
  - Believes tracker mechanism is allowed under current statute/rules
  - Sees need for continued periodic rate cases to address fixed monthly rate elements and variable rate elements

- Renew Missouri/Sierra Club/NRDC/Great Rivers Environmental Law Center/Earth Island Institute/Earthjustice
  - Pursuant to case history relating to rate adjustments outside of a rate case and the PSC's authority to grant rate design modifications through a study docket and rulemaking, these stakeholders find the Commission has the right to implement decoupling for electric utilities

- NRDC/National Housing Trust/Blue Hills Community Services
  - Decoupling allows transition from commodity business to service provider

- Need to look beyond rate design mechanisms to address changes in regulatory policies and practices
- Decoupling could be beneficial to low income customers and those who use less resources by reducing the customer charge and focusing on volumetric rates

- The Empire District Electric Company
  - Decoupling revenue from the volume of the commodity is in Empire's best interest
  - Empire's portion of volumetric recovery is significant and unreasonable – costs do not change with volume
  - Customers using more services should bear more of the costs
  - Customers under a decoupling mechanism would use energy more efficiently
  - Empire is at a disadvantage to other electric utilities with more revenue certainty because of reliance on volumetric recovery of fixed costs

- Ameren Missouri
  - Commission has authority through either revenue tracker or straight fixed variable (SFV) rate design
    - May not have authority for any other method of decoupling
  - Believes decoupling will benefit customers, stakeholders and the grid as a whole
  - Should not reduce ROE in relation to decoupling
  - Utility should get revenue increase for new customers, decrease for lost customers
  - Decoupling should be voluntary
  - Should revenue decoupling be applied to all customer classes?
  - If decoupling is implemented it changes the mission of the electric companies from increasing sales to providing quality service. Therefore, it is important to incentivize the companies to make infrastructure repairs and to maintain a reliable grid.
  - No immediate rate impact if rider mechanism used

- Missouri Energy Development Association

- Straight Fixed Variable rate design (has been approved in MO) is different than the revenue tracking proposed by MAWC but is in line with the objective of MAWC's proposal
- Five states have approved decoupling mechanism for water utilities
- Current ratemaking model in Missouri is outdated
- Revenue and expense tracking mechanisms are lawful

- Liberty Utilities
  - Generally supportive of decoupling mechanisms
  - Straight Fixed Variable rate design is lawful (§393.104(4))RSMo
  - Utilities may apply for rate adjustments outside of rate cases to reflect increases or decreases in revenue (§386.266(3))RSMo
  - Revenue decoupling should occur on a per customer basis
  - Customer classes included will need to be identified

- Brightergy
  - Believes Commission should adopt new policies to allow utilities to explore new markets
  - Believes decoupling would allow for more time to be spent on programming discussions instead of TD-NSB models in cases
  - Decoupling may allow utilities to pursue public policy goals and comply with federal mandates
  - Adopting decoupling would change public perception about Missouri being a difficult environment for utilities

- Missouri Industrial Energy Consumers/Office of the Public Counsel
  - Decoupling is not necessary
  - Decoupling violates fundamental regulatory principles
  - Decoupling will create customer confusion, rate volatility, and potential unintended consequences
  - Decoupling will not solve utility issues with throughput disincentive

- Decoupling is illegal
- Retroactive adjustment for changes in revenues and expenses is illegal
- Even if legal, decoupling is poor public policy because rates should be set in rate case
- Maine discontinued decoupling because it was implemented prior to the recession, which significantly reduced output and consumption of electricity, leading to high rate increases under the decoupling mechanism
- Washington also discontinued decoupling because it was implemented concurrently with a power cost recovery mechanism, which the Commission found the utility used imprudently to increase its power supply costs. The Commission ordered discontinuance of both mechanisms as a result.

- AARP/Consumers Council of Missouri
  - Both entities are skeptical of practice of decoupling
  - Decoupling has no legal authority in Missouri
  - Unfairly shifts business risk to consumers
  - Negative customer impacts in other jurisdictions – can raise rates drastically
  - Energy efficiency is promoted by other laws, decoupling is not necessary
  - Benefits are unlikely to outweigh risks
  - Maine and Washington had problems with decoupling and many other states have limited their decoupling mechanisms
  - Many factors may affect changes in revenue and the Commission should have an opportunity to review each of them

- Division of Energy
  - Missouri law permits certain decoupling mechanisms
  - Commission has broad authority to approve mechanisms supporting efficiency
  - Interprets "including" in the Missouri Energy Efficiency Investment Act (MEEIA) statute to mean that decoupling merely needs to be considered a cost recovery mechanism to be legal – and it is reasonable from that to believe decoupling is legal

- A two-way tracker solves concerns about retroactive ratemaking – amortization recovery of expenses is not retroactive ratemaking
- Decoupling should be linked with performance metrics to encourage efforts toward efficiency
- Consumer protection and education necessary
- Need to consider all types of decoupling mechanisms before implementing and need to consider consumer impacts – rate impact studies
- Need to consider effects on cost of capital

- Sierra Club
  - Decoupling is legal under MEEIA
  - Commission has discretion to implement decoupling as a DSIM
  - Best mechanism would be something other than Straight Fixed Variable rate design or a raise in fixed customer charges
  - Refers to Case No. ER-2014-0370 for testimony regarding design of decoupling
  - The Commission should consider shifts in business risk
  - Decoupling could be used to eliminate throughput disincentive mechanisms
  - Decoupling can allow specific revenue targets
  - Adjustments can be made on fixed, pre-determined schedule to eliminate volatility
  - Decoupling adjustments can be subjected to a cap to protect ratepayers from significant rate increases
  - Can reduce ROE
  - Can hold utility to meaningful energy efficiency results in exchange for decoupling mechanism
  - Concerns that a utility would not have the same interest in restoring power after a storm is unfounded as a utility would not want public backlash and criticism for not restoring power

Supplemental Comments

- NRDC, Ameren Missouri, KCP&L/GMO, MAWC, National Housing Trust and Blue Hills Community Services
    - An RDM will mitigate the throughput disincentive for utilities; thus, they will be more inclined to pursue all cost-effective demand-side resources.
    - When combined with a robust efficiency program, an RDM will help lower consumer bills.
    - The main feature of a RDM would be to allow utilities to adjust for the variance between historical test year billing and actual sales after new rates take effect.
    - The results of an empirical analysis done by the Brattle Group do not support the contention that utilities with RDM have a lower cost of capital.
    - To preserve customer growth opportunities, average usage "per customer" by class may be an appropriate design basis for RDM.
    - An RDM would also have the added benefit of helping those residential customers who use less energy or water because the authorized revenue requirement would be recovered through existing rate structures, diminishing the pressure for utilities to seek a higher fixed customer charge.

- Missouri Industrial Energy Consumers (MIEC)
    - Decoupling violates fundamental regulatory principles that the Commission has relied on for decades and is not a legal option in determining just and reasonable rates.
    - Decoupling will create consumer confusion and cause customer rate volatility.
    - Guaranteeing a utility's revenue through a decoupling rate adjustment is illegal retroactive ratemaking because "the commission [would be] determin[ing] what a reasonable rate would have been and…require[ing] a credit or refund of any amount collected in excess of this amount [or collecting any revenue shortfall from tomorrow's ratepayers]."
    - Section 393.1075 does authorize the Commission to address the "throughput disincentive," which is the disincentive to spend money on any program that

results in lost sales, which both energy efficiency and demand-side management cause, but nothing in Section 393.1075 expressly or impliedly offers decoupling as the solution to this problem.

- Decoupling encourages consumption and discourages conservation. Adopting a ratemaking design that discourages conservation is hardly consistent with the clear policy embodied in Section 393.1075.
- Decoupling is a benefit to utilities with declining demand and a detriment to utilities with an increasing demand.
- Decoupling in itself does not incent a utility to promote energy efficiency. It merely provides for the recovery of a predetermined level of revenues.
- If decoupling is in effect, the monopoly utility is guaranteed recovery of a level of revenues. It is unfair to those businesses that barely survive to make them pay higher rates to guarantee utility revenues. Decoupling failed in Maine due to businesses having to shut their doors due to the increase in rates from decoupling.
- At the workshop it became apparent that the main benefit of decoupling to utilities was the elimination of variations in revenue due to variations in weather, and the solution to the throughput disincentive was secondary. The nature of the utility business, and the regulatory compact itself, is that utilities bear the risk of fluctuating revenues from weather. This risk should not be shifted to the consumer.
- If the level of revenues are guaranteed through decoupling, the motivation to restore damaged infrastructure following a major storm may be diminished.

- Renew Missouri
  - Unless a rate stabilization mechanism (RSM) is coupled with a means of lowering a utility's ROE, comparable to the reduced investment risk that an RSM creates, electric utilities will still prefer large-scale investments in infrastructure as opposed to energy efficiency.
  - According to MIEEA, "the purpose of an alternative rate design is to; develop cost recovery mechanisms to further encourage investments in demand-side

programs." Therefore, the principles of utility finance dictate that an RSM must include provisions which does one of two things:

- Lower the utility's ROE to allow a utility to recover only their cost of equity, making the company indifferent to investments in energy efficiency, or
- Include specific performance metrics related to energy efficiency.

- An RSM transitions the business model of an investor-owned utility away from being a unit-sales based business to being a service business, tasked with providing a safe, affordable and reliable grid. The idea that ROE should not be up for discussion does not stand to reason.
- MEEIA allows cost recovery exemptions for individual customers who have shown that they are making private investments in energy efficiency on the same level as the utility. Renew Missouri is not necessarily opposed to RSM's that exempt particular rate classes.

- The Office of the Public Counsel
  - There is great difficulty in comparing policy objectives and outcomes between states:
    - Many of the states cited in the workshop represent deregulated states with legislatively mandated Energy Efficiency Resource Standards (EERS), and many of these states have a greater average price of electricity for residential customers than Missouri.
    - In contrast, Missouri investor-owned electric utilities are not subject to EERS and effectively set their own energy efficiency targets under MEEIA.
  - OPC has concerns that the resulting rate impact of decoupling would unreasonably tip the balance in favor of the regulated utility by shifting risks from the utility to the consumer.
    - Decoupling results in an imbalance because the interest of the consumer to pay only for what they use is outweighed by the interest of the utility to collect as much revenue as it can.

- A volumetric rate that changes between rate cases does not provide sufficient protection to the customer.

- OPC is concerned that decoupling abandons the principle that customers should only pay for what they use and focuses more on ensuring revenue for the utility.
  - A high fixed customer charge also disproportionately affects low income customers, and in turn, disproportionately affects elderly and minority customers, whose usage tends to be at a bare minimum and who may not be able to afford efficiency upgrades.
  - Low-use customers will subsidize the use of other customers; therefore, decoupling is potentially discriminatory and not in the public interest.
- Each month customers' utility bills are subject to a variety of surcharges such as fuel adjustment surcharge, energy efficiency surcharge and an environmental cost recovery charge. Each surcharge adds to the complexity of the customers' bill making it very difficult to determine if the amounts are correct. Customers cannot protect themselves from billing errors if the bill is virtually impossible to read.
- Decoupling can be seen as a potential detriment to priorities codified in other Missouri statutes.
  - Because the perceived need for decoupling is based on lower actual sales of the utility product to the customer, decoupling can be counter-productive to Missouri's goal of energy efficiency.
    - According to the Missouri statute Section 393.1040, RSMo, "the policy of this state to encourage electrical corporations to develop and administer energy efficiency initiatives that reduce the annual growth in energy consumption and the need to build additional electric generation capacity." In order to enact energy efficiency requirements under MEEIA, the Commission promulgated Rules 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093 and 4 CSR 240-20.094 which provide incentives to encourage significant new utility investments in energy efficiency programs for regulated electric companies, including a recognition for "lost revenue."

- Missouri instituted the Infrastructure System Replacement Surcharge statutes, Section 393.1000 to 393.1015, RSMo, to promote the replacement of deteriorated water and gas infrastructure. This ISRS policy rationale could be undermined if a decoupling mechanism is instituted.
    - If revenue is ensured through decoupling no matter how much water or gas actually reaches the customer, utilities may have less incentive to replace deteriorated infrastructure.
- There are several provisions already in place to protect the utility from variation in its actual revenue between general rate cases.
    - The Fuel Adjustment Clause (FAC), Section 386.266.1, RSMo, and the Environmental Cost Recovery Mechanism (ECRM), Section 386.266.2, RSMo, and Section 386.266.3, RSMo, are three examples of this.
- OPC has been unable to find any evidence that a decoupling mechanism, by itself, and controlling for other relevant variables, has achieved comparable reductions in energy consumptions than what is produced through an inclining block rate design.
- Decoupling does not meet the fixed-rate requirement upheld by the Court in State ex rel. Utility Consumers' Council of Mo., Inc. v Pub. Serv. Comm'n 585 S.W.2d 41 (Mo. 1979).
- Each state referenced in the workshop as evidence of a successful decoupling mechanism was specifically tied with additional ratepayer protections and/or explicit reductions in a utility's ROE.
    - OPC requests any movement toward decoupling in Missouri include robust ratepayer protections and explicit reductions in ROE.

VI. Legal Analysis

Is decoupling legal in Missouri? Put another way, can the PSC lawfully approve a tariff containing a decoupled rate design? The answer is that some forms of decoupling are legal in Missouri; the Commission has already implemented it and has been upheld by the courts.

What legal principles govern the Commission's ratemaking authority?

The first step in determining whether, and to what extent, decoupling is lawful in Missouri is to understand the legal principles that guide the Commission in its exercise of its ratemaking authority.

The PSC is a "creature of statute" and its "powers are limited to those conferred by the [Missouri] statutes, either expressly, or by clear implication as necessary to carry out the powers specifically granted."[9] The law requires a utility's charges to be "just and reasonable."[10] Likewise, the law requires the Commission to set "just and reasonable" rates.[11] In performing its statutory duty, "[t]he Public Service Commission is not bound to any set methodology in ensuring a just and reasonable return in setting rates."[12] The PSC is "free, within the ambit of [its] statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances."[13] "The Commission has considerable discretion in rate setting due to the inherent complexities involved in the rate setting process."[14] "Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling. . . . It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end. The fact that the method employed to reach that result may contain infirmities is not then important."[15]

However, there are some limitations and requirements that apply to the methods the Commission employs in setting rates. First, Missouri courts have traditionally held that the Commission's "determination of the proper rate for [utilities] is to be based on all relevant factors

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[9] ***State ex rel. Utility Consumer's Council of Missouri v. PSC,*** 585 S.W.2d 41, 47 (Mo. banc 1979) (***"UCCM"***); ***State ex rel. City of West Plains v. PSC,*** 310 S.W.2d 925, 928 (Mo. banc 1958). "The Public Service Commission is an administrative agency or committee of the Legislature, and as such is vested with only such powers as are conferred upon it by the Public Service Commission Law, by which it was created." ***State ex rel. Laundry, Inc. v. PSC,*** 327 Mo. 93, ___, 34 S.W.2d 37, 43 (1931). "Whatever power the [Commission] has must be warranted by the letter of law or such clear implication flowing therefrom as is necessary to render the power conferred effective." ***State ex rel. City of St. Louis v. PSC,*** 335 Mo. 448, 457-58, 73 S.W.2d 393, 399 (*banc* 1934).

[10] Section 393.130, RSMo.

[11] Section 393.140, RSMo.

[12] ***State ex rel. Praxair, Inc. v. PSC,*** 328 S.W.3d 329 (Mo. App., W.D. 2010).

[13] ***Federal Power Commission v. Natural Gas Pipeline Co. of America,*** 315 U.S. 575, 586, 62 S.Ct. 736, 743, 86 L.Ed. 1037, ___ (1942).

[14] ***State ex rel. Associated Natural Gas Co. v. PSC,*** 706 S.W.2d 870 (Mo. App., W.D.1985).

[15] ***State ex rel. Missouri Water Co. v. PSC,*** 308 S.W.2d 704, 714 (Mo.1957) (*quoting* ***Federal Power Commission v. Hope Natural Gas Co.,*** 320 U.S. 591, 602–03, 64 S.Ct. 281, 287–88, 88 L.Ed. 333, ___ (1944)).

rather than on consideration of just a single factor."[16] Second, "[t]he Commission fixes rates prospectively and not retroactively."[17] "The commission has the authority to determine the rate to be charged. In so determining it may consider past excess recovery insofar as this is relevant to its determination of what rate is necessary to provide a just and reasonable return in the future, and so avoid further excess recovery. It may not, however, re-determine rates already established and paid without depriving the utility (or the consumer if the rates were originally too low) of his property without due process."[18]

To summarize: the Commission must set "just and reasonable" rates and it does not much matter how it gets there. Furthermore, the Commission must consider all relevant factors and cannot set rates to compensate for past under-collections or overpayments.

What is a "just and reasonable" rate?

With those principles in mind, what is a "just and reasonable rate"? A "just and reasonable" rate is one that is fair to both the utility and its customers;[19] it is no more than is sufficient to "keep public utility plants in proper repair for effective public service, [and] . . . to insure to the investors a reasonable return upon funds invested."[20] It has been said that:

> It is axiomatic that a just and reasonable utility rate is a bilateral proposition. Like a coin, it has two sides. On the one side it must be just and reasonable from the standpoint of the utility. On the other side it must be just and reasonable from the standpoint of the utility's customers. . . . [Therefore, the law] evidences a legislative intent to imbue the Commission with authority to properly weigh all relevant factors in the . . . utility rate making process in order to achieve the ultimate goal of bilateral fairness.[21]

Likewise, it is said that "[r]atemaking is a balancing process."[22] The fixing of just and reasonable rates involves "a balancing of the investor and the consumer interests."[23] "What the company is entitled to ask is a fair return upon the value of that which it employs for the public

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[16] ***Midwest Gas Users' Ass'n v. PSC,*** 976 S.W.2d 470, 479 (Mo. App., W.D. 1998).
[17] ***Lightfoot v. City of Springfield,*** 361 Mo. 659, 669, 236 S.W.2d 348, 353 (Mo.1951).
[18] ***UCCM,*** *supra,* 585 S.W.2d at 58 (citations omitted).
[19] ***St. ex rel. Valley Sewage Co. v. PSC,*** 515 S.W.2d 845, 850 (Mo. App., K.C.D. 1974).
[20] ***St. ex rel. Washington University et al. v. PSC,*** 308 Mo. 328, 344-45, 272 S.W. 971, 973 (banc 1925).
[21] ***Valley Sewage,*** *supra.*
[22] ***State ex rel. Union Elec. Co. v. PSC,*** 765 S.W.2d 618, 622 (Mo. App., W.D. 1988).
[23] ***State ex rel. Office of Public Counsel v. PSC,*** 367 S.W.3d 91, 108 (Mo. App., S.D. 2012) (*quoting* ***Federal Power Commission v. Hope Natural Gas Co.,*** 320 U.S. 591, 603, 64 S.Ct. 281, 288, 88 L.Ed. 333, ___ (1944)).

convenience. On the other hand, what the public is entitled to demand, is that no more be exacted from it . . . than the services rendered . . . are reasonably worth."24

Rates must not only be fair as between shareholders and customers; they must also be fair as between one customer and another. "[Utilities] are forbidden from granting undue preference or advantage to any ratepayer, just as they may not unduly or unreasonably prejudice or disadvantage any ratepayer in the provision of services."[25] The Missouri Supreme Court has explained:

> All individuals have equal rights both in respect to service and charges. Of course, such equality of right does not prevent differences in the modes and kinds of service and different charges based thereon. There is no cast iron line of uniformity which prevents a charge from being above or below a particular sum, or requires that the service shall be exactly along the same lines. But that principle of equality does forbid any difference in charge which is not based upon difference in service, and, even when based upon difference of service, must have some reasonable relation to the amount of difference, and cannot be so great as to produce an unjust discrimination.[26]

The sorting of utility customers into classes based on discernable differences in the services they require is thus lawful. The Court went on: "In brief, rates or charges to be valid must not be unjust, unreasonable, unjustly discriminatory, or unduly preferential. . . . Thus the principle of equality . . . forbids any difference in charge which is not based upon difference of service, and even when based upon difference of service must have some reasonable relation to the amount of difference, and cannot be so great as to produce unjust discrimination."[27] Thus, customers within the same class may be charged different amounts based on measureable differences in the service each received.

To summarize: rates must be fair as between the utility and its customers and must also be fair as between one class of customers and another and as between customers within a class.

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[24] ***Smyth v. Ames***, 169 U.S. 466, 546–547, 18 S.Ct. 418, ___, 42 L.Ed. 819, ___ (1898).
[25] ***State ex rel. City of Joplin v. Public Service Com'n of State of Mo.,*** 186 S.W.3d 290, 296 (Mo. App., W.D. 2005).
[26] ***Laundry,*** *supra*, 327 Mo. at 111, 34 S.W.2d at 45 (*quoting* ***Western Union Telegraph Co. v. Call Pub. Co.,*** 181 U.S. 92, 100, 21 S.Ct. 561, 564, 45 L.Ed. 765, ___ (1901)).
[27] *Id.*, at 34 S.W.2d 44-45.

What is the application of these principles to decoupling?

A rate that is fair to the utility is one that recovers all of the costs of providing the service and provides a fair return on the value of the assets committed to the public service. A rate that is fair to the customer is one that is no more than is necessary to recover only the reasonable, necessary and prudent costs of providing the service that customer received, including a fair return on the value of the assets used in providing it. When speaking of costs, note that they fall into two primary categories: those that vary depending upon the amount of service provided and those that are fixed and thus do not vary. Traditionally, the rate charged each customer includes a fixed element, the customer charge, and a variable element that reflects the amount of service received by the customer. These rate elements vary from class to class, reflecting the differing costs of serving each class of customers.

In traditional cost-of-service ratemaking, all of the utility's variable costs as well as a portion of its fixed costs are recovered through the variable rate element, while the remainder of its fixed costs are recovered through the fixed customer charge. This rate design necessarily creates an incentive for the utility to sell as much service as it can because the utility bears the risk of not recovering all of its fixed costs, not to mention its authorized return. In decoupling, the recovery of the cost of service is "decoupled" from the amount of service sold. This is achieved by reducing or eliminating the variable rate element. This rate design, by contrast, eliminates the utility's incentive to sell as much service as possible.

Decoupled rate designs are already in use in Missouri. With respect to natural gas utilities, the practice in Missouri that has already been used is the Straight Fixed Variable ("SFV") rate design, in which all fixed costs are recovered through the fixed customer charge and only variable costs are recovered through the variable rate element. The recovery of fixed costs is thus not dependent on how much service the utility sells and the incentive to sell as much service as possible is removed. This decoupled rate design is fair to both the utility and its customers. A customer that uses no service will pay only his or her fair share of the fixed costs that are not dependent on the amount of service used. High and low volume users will pay the fixed customer charge plus a variable charge that reflects the amount of service used. Thus, the rate design is also fair as between customers in that the amount charged each customer reflects the amount of service the customer used.

Additionally, the Commission has in the past found it fair to grant trackers[28] under Section 393.140.4, RSMo, which permits the Commission to prescribe methods of keeping accounts, records and books. The Court of Appeals has found purchased gas adjustment (PGA) clauses[29] are fair and that they do not amount to single issue ratemaking because all items of cost and expense are not required to be treated in the same way. Under Section 386.266.3, RSMo, weather related trackers are permitted to account for revenue effects related to usage variations resulting from weather, conservation or both. However, no such tracker is presently in effect.

Legal Analysis Conclusion:

Because the SFV rate design is fair as between the utility and its customers, and is also fair as between customers, it is just and reasonable within the intendments of Missouri law. It has survived legal challenge.[30] Thus, it is clear that limited decoupling is lawful in Missouri, at least to the extent reflected by the SFV rate design and the other mechanisms mentioned that are currently in use. However, any single-issue ratemaking mechanism requiring adjustments to be made in between rate cases will require statutory change before it may be implemented.

What about full decoupling? What if every customer in each class was charged the same amount, a flat rate, regardless of individual usage? This would be fair, if the class rates were properly constructed, as between classes.[31] It would be fair to the company if the total cost of service was recovered, plus a reasonable return; and it would be fair to the customers if no more was recovered than the reasonable, necessary and prudent costs of providing the service, including a fair return on the value of the assets used in providing it. But it might *not* be fair as between customers within a class, because the low volume user would inevitably pay more with such a rate structure than he or she would pay with a rate structure that reflected usage. Staff must therefore conclude that full decoupling would require a statutory change.

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[28] The term "tracker" generally refers to mechanisms under which the amount of a particular cost of service item actually incurred by a utility over time is compared to the amount of that item currently reflected in the utility's rate levels. Any difference is eligible to be included in the utility's rates set in its next general rate proceeding.

[29] ***State ex rel. Midwest Gas Users' Ass'n v. Public Service Commission or State***, 976 S.W.2d 470 (Mo.App. W.D. 1998),

[30] ***State ex rel. Missouri Office of the Public Counsel v. PSC,*** 293 S.W.3d 63, 71-74 (Mo. App., S.D. 2009).

[31] By "fair," Staff of course means "just and reasonable."

VII. Allowed Rate of Return and Revenue Decoupling

Staff has reviewed the literature and comments in this docket as it relates to the various parties' positions on whether the adoption of revenue decoupling should be accompanied by an explicit adjustment to the allowed ROE or some other adjustment to the rate of return (ROR), such as by adjusting the capital structure. First, in Staff's opinion, the impact on utilities' business risk of revenue decoupling through periodic rate adjustments due to usage being different than that used to set rates is much the same as a shift from collection of the revenue requirement to the customer charge from usage charges. Just as there is much debate on the starting value of a fair and reasonable rate of return, there is also much debate on whether revenue decoupling mechanisms warrant an explicit reduction to the allowed ROE and/or the allowed ROR. Even if there is an agreement that such mechanisms reduce business risk, utilities by and large maintain that this reduction in business risk is simply addressing a gradual increase in business risk due to the changing landscape of the utility industry.

In Missouri, rate designs designed to "decouple" fixed costs and variable costs were introduced in two gas utility rate cases in 2006, Missouri Gas Energy (MGE)and Atmos Energy, Case Nos. GR-2006-0422 and GR-2006-0387, respectively. In these cases, Staff recommended the Commission adopt straight fixed-variable rate designs. Although Laclede Gas Company has not pursued a direct straight-fixed variable ("SFV") rate design, due to its weather normalized rate design, it does not have much volatility in its earnings. Staff did not make a specific adjustment to its recommended ROE in Case Nos. GR-2006-0422 or GR-2006-0387 as a result of Staff's proposal to the Commission to adopt a SFV rate design in these cases. Staff suggested to the Commission that if it believed some consideration should be made to the allowed ROE if it chose to adopt a SFV rate design, it should award an ROE in the lower half of Staff's recommended ROE range. Due to a non-unanimous settlement of the revenue requirement in Case No. GR-2006-0387, the Commission did not make a specific allowed ROE determination. In Case No. GR-2006-0422, the Commission determined that the allowed ROE should be adjusted downward by 32.5 basis points for the SFV rate design based on information provided by Staff and MGE.

Considering some adjustment was made to the allowed ROE in MGE's 2006 rate case on account of a separation of the collection of fixed and variable costs, it appears that any potential adjustment to the allowed ROE for a revenue decoupling mechanism would depend on the specifics of the proposal, as revenue decoupling is a fairly general description for a variety of mechanisms that may be instituted for a number of specific reasons.

Staff is aware of various initiatives in the electric utility industry to adopt higher customer charges in response to various changes in the industry such as slowing demand growth, demand response and energy efficiency initiatives, as well as customer installed generating capacity. In many of these instances, consumer advocates and (quite often) the commission staffs advocated some consideration of these proposals in setting the allowed ROE, but it does not appear that these adjustments are based on an objective study that quantifies how much investors lower their required returns if such changes should occur. Staff is not surprised about the lack of objective, quantifiable support for such proposals because it is not possible to agree on the methodology and inputs that should be used to estimate the cost of equity for companies without decoupling mechanisms, let alone for companies with decoupling mechanisms.

Staff appreciates the literature submitted by Missouri-American Water Company (MAWC) that attempts to address whether decoupling mechanisms result in a lower cost of capital to utilities. While the studies indicate no statistically significant decline in the cost of equity has occurred due to revenue decoupling, in Staff's opinion, these studies are of questionable value. For example, the Brattle Group study submitted by MAWC[32] used the constant-growth discounted cash flow (DCF) method to estimate the cost of equity for the proxy group for quarterly periods starting in 2005. The Brattle Group's cost of equity estimates were based on the assumption that utilities' dividends per share ("DPS") will grow in perpetuity at the same rate as equity analysts' 5-year earnings per share ("EPS") growth projections. Staff has repeatedly discovered evidence in equity analysts' reports that shows that they do not assume dividends will grow in perpetuity at the same rate as their 5-year compound annual growth rate projections for EPS. Consequently, Staff would dispute the cost of equity estimates that underlie the study performed by The Brattle Group. Additionally, although the authors maintain that they

[32] MAWC submitted two articles authored by individuals from The Brattle Group. The most recent article published in the August/September 2015 edition of *The Electricity Journal*, simply updates that study published by The Brattle Group on March 20, 2014 for The Energy Foundation.

attempted to control for the fact that each utility's cost of equity is influenced by the parent company's variable exposure to non-regulated business risks, Staff's experience in performing cost of capital analysis in rate cases before the Commission is that no witness has been able to remove this information from their cost of equity analysis because it is embedded in the stock prices investors pay for the holding company, which includes these risks. Another significant concern that Staff has with The Brattle Group study is that it includes financial data from the financial crisis and recession during 2008 to 2009.

Although Staff does not believe it is possible to control for all variables other than rate design in undertaking an analysis of cost of equity impacts due to decoupling, Staff has observed analysis and commentary from the investment community that looks favorably on the decoupling of revenue collection for short-term fixed costs from usage. In fact, in the MGE rate case, No. GR-2006-0422, Staff introduced as evidence information from a Goldman Sachs report that certainly implied that a straight-fixed variable rate design with a lower amount of rate increase would still be supportive of the share price, i.e. lower cost of equity. Also, rating agencies frequently indicate a preference for revenue stabilization mechanisms.

To the extent the Commission considers a revenue decoupling mechanism for any of its utilities, it is Staff's opinion that the cost of equity impacts of each mechanism has to be considered independently. For example, a utility company may propose a decoupling mechanism for purposes of furthering a policy initiative. In that event, the Commission should consider if lowering the allowed ROE would have the impact of countering the intended purpose of the policy initiative, even if the mechanism was found to reduce the utility's business risk. Alternatively, if a utility proposes a decoupling mechanism for the primary purpose of creating extra value for its shareholders at the expense of the ratepayers, then the Commission should lower the allowed ROE. Of course, because setting of the allowed ROE is supposed to consider the company's cost of equity, whether an adjustment is needed is dependent on the proxy group's overall risk profile as compared to the subject company. This can only be determined at the time the cost of capital analysis is performed for each circumstance.

Consequently, although it seems logical that a smoothing of revenues would reduce a company's business risk and allow for a lower cost of capital, there is much debate on whether and by how much the allowed ROE should be affected by implementation of such mechanisms.

Staff recommends the Commission review the specifics of each decoupling proposal to determine whether any explicit consideration should be given to the allowed ROE.

VIII. Conclusion and Recommendation

Staff has read all of the comments and literature provided by stakeholders and has conducted its own review of the various revenue decoupling mechanisms that have been implemented throughout the country. Based upon its investigation, Staff has come to the following conclusions and recommendations.

Revenue decoupling is an alternative tool to allow the Commission to try and balance the interests of stakeholders in the ratemaking process. The Purchase Gas Adjustment, the Fuel Adjustment Charge, the Infrastructure System Replacement Surcharge, Straight Fixed Variable rate design, and a true-up to the historical test year are examples of alternatives to traditional rate of return regulation the Commission has already approved.

However, even though RDMs are a tool that the Commission could consider, it is imperative that any use of an RDM be thoroughly vetted through the traditional rate case process. Since each industry, and each utility, is separate and distinct, with its own operating characteristics and customer needs, a one-size fits all RDM approach may result in unintended consequences. What may work for one utility in one industry may not be the right method to address concerns for another utility in the same or different industry.

Therefore, Staff recommends the Commission close this working docket and investigate any proposed revenue decoupling mechanism on a case-by-case basis during a general rate case. In that way, any proposal can be given the appropriate level of review and the Commission can make its decision based upon the facts relative to the particular utility and its customers.

State	Electric	Gas	Water	Mechanisms in Place	State Comments	Administrator/Trust	Docket/Other Information Provided
Arizona	Yes	Yes	No	Lost revenue adjustment mechanism (LRAM) in place electric. Natural gas both decoupling and LRAM in place.	Controversial case. Seeing customer complaints. Lack of customer education. Advice to determine extreme examples for weather.	No administrator for programs	Case No. G-01551A-10-0458 Decision No. 72723 Example of Customer Complaint 13-0327
Arkansas	Yes	Yes	No	LRAM both electric and natural gas	Working well for gas and electric. Rider/tariffs in place decouples loss in energy sales due to efficiency.	No administrator for programs	Case No. 08-137-U Orders regarding lost contribution to fixed cost associated with the energy efficiency programs. Order Nos. 14 and 15. Documents provided Gas Billing Determinant Adjustment Rider and Weather Normalization Adjustment
California	Yes	Yes	Yes	Decoupled	Decoupling working well for the state. Energy Resource Recovery Account. In place for years Competitive contracting. Adjustment done annually. Goals were to apply regulatory best practices from energy to water and place water conservation at top of loading order as the best lowest cost supply. Water decoupled through Modified Cost balancing Account and adjusts rates for the effects of changes in average cost of water and the water revenue adjustment mechanism which adjusts rates to account for recovery of fixed costs despite changes in sales volumes. Office of ratepayer Advocates not on board	No administrator for programs	Case No. A.02-11-017, et al., A.93-120-29, A.02-12-027, A.02-02-012
Colorado	Proposal	Yes	No	LRAM natural gas	Seems to be working ok been in place several years.	No administrator for programs	07R-371G Decision C08-0248 and C08-0066; 06S-656G Decision C07-0474 07A-447E 07S-521E
Connecticut	Yes	Yes	Yes	Decoupled	Electric initially pilot and then mandated by legislature because of concern utilities would not support conservation efforts. Decoupling and RAM resulted in several companies overearning and it appears to postpone rate cases. Water RAM annually required to reconcile each utility petitions the authority to reopen latest rate increase docket for limited purpose of approving surcharege or credit. In addition Water Infrastructure and Conservation Adjustment. Separate mechanisms can be greateer than rate case allowed revenues as often as twice a year and has its own annual true-up mechanism.	Department of Energy and Environmental Policy (DEEP) sets energy policy.	CT Public Act No. 07-242. Docket No. 08-07-04 C.P.U.C.A. No. 598 reconciles non-weather adjusted revnues. Public Act No. 13-298, 12-08-11, 13-03-02
Delaware	No	No	No	Investigated decoupling recently	Workshops did not go anywhere. Electric and gas rate cases every year or every other.	Sustainable Energy Utility	10-237 - Previous gas decoupling case, 11-528, 09-276T
Georgia	No	Yes	No	LRAM natural gas		No administrator for programs	Docket No. 34734 adopting Stip
Hawaii	Yes	No	No	Decoupled electric	Current investigation ongoing if decoupling serving intended purpose. Hawaii has an "Energy Cost Adjustment Clause"/weather normalization.	Hawaii Energy formed SAIC/RW Beck Public Benefits Fund/Trust	Docket Nos. 2013-0141, 2008-0274, 2007-0323
Idaho	Yes	No	No	Decoupled electric	Held workshops. Several recent modifications as rates decreased first year and has increased since. No delay in time between rate cases - still in regularly.	No administrator for programs	Docket Nos. 44124, 44019, 44001 GDSM7 (6/30/15), 44501 with Stip
Illinois	No	Yes	No	Decoupled natural gas	QIPS - Qualifying Infrastructure Plant Surcharge. Started 2014-2015 new to implementing.	No administrator for programs	Case No 07-0241/07-0242

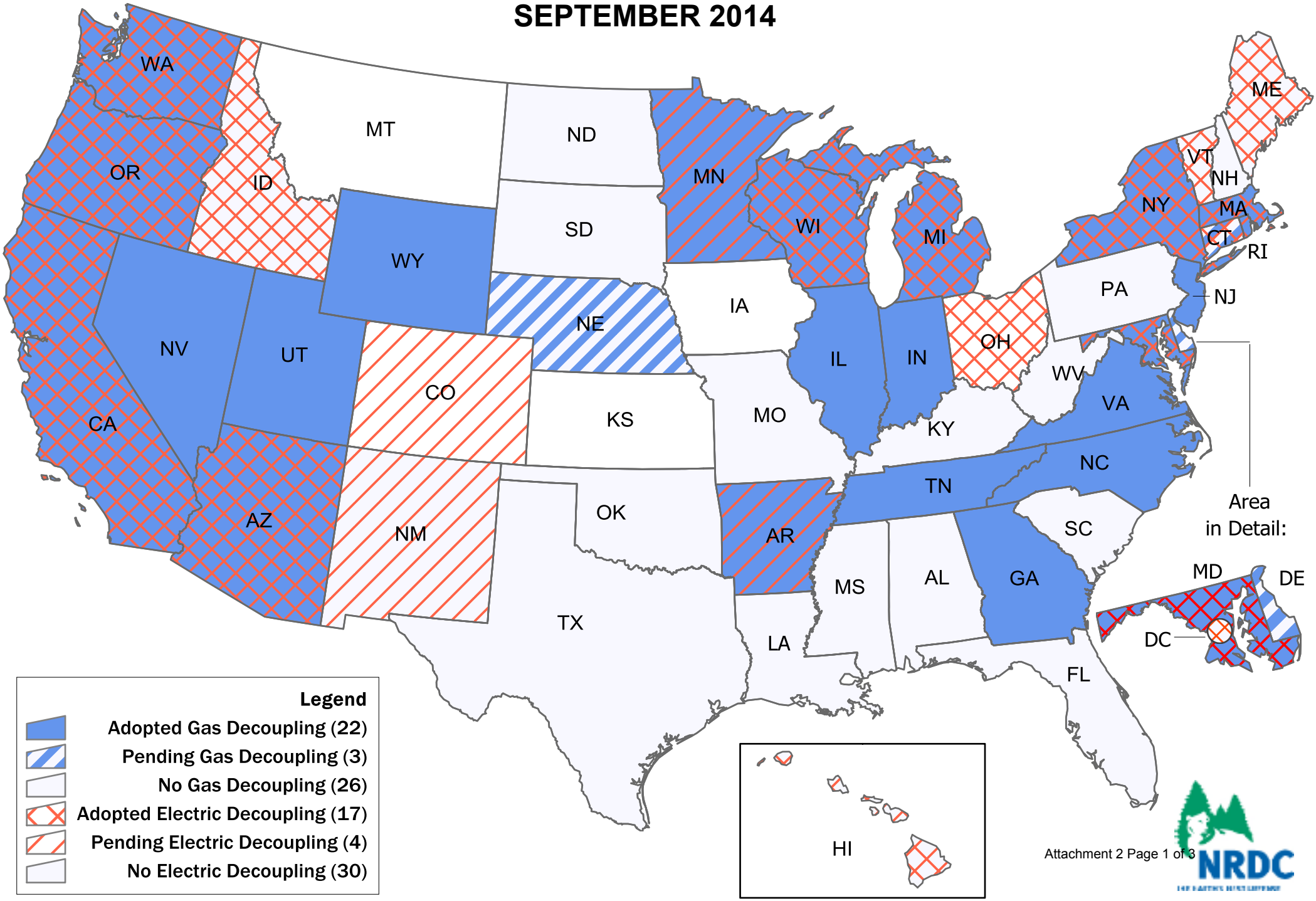
Indiana	Yes	Yes	No	LRAM electric Decoupled natural gas	Electric decoupling in the past no longer per legislation. Recover straight up costs. Gas utilities only involved. Mandated reporting required. Electric DSM programs Brad Borum bborum@urc.in.gov	No administrator for programs	Gas Case Nos. 42943, 42767, 44001, 44501, 44637, 44124, 44575, 44019, 44598 Orders/Stip
Kansas	Yes	No	No	LRAM electric	Multiple applications but companies didn't like the proposed modificationsso nothing accepted. There is a weather normalization rider in which some define as a form of decoupling	No administrator for programs	Docket Nos. 10-WSEE-775-TAR, 12-GIMX-337-GIV
Kentucky	Yes	Yes	No	LRAM electric and natural gas	LRAMS determined on case-by-case basis all electric utilities in Kentucky have DSM proposals in place.	No administrator for programs	Docket Nos. 2007-004477, 2008-00473, 2009-00444, 2010-00445, 2011-00448
Louisiana	Yes	No	No	LRAM electric	Implement riders to recover contemporaneously amount of proposed recovery from partcipating customers subject to annual true-up.	No administrator for programs	Docket R-31106
Maine	Yes	No	No	Decoupled electric	Decoupling abandoned in past. Recent 2013 docket utility requested and Commission allowed. Sent testimony and Stip. Hasn't been through full cycle or adjusted.	Efficiency Maine Trust (Government is the administrator)	Docket 2013-00168 Tinal Stip/Order on Revenue Decoupling for Transmission and Distribution Utilities
Maryland	Yes	Yes	No	Decoupled electric and natural gas	Minimizing weather risks allows utility to collect test year revenue. Revised adjustments for major weather events. Incentives to restore power. Unique and adjust monthly. Staff Comments include to recommend to accept tariffs with 2.9% sharing allocation	No administrator for programs	Docket No. RR-2151
Massachusetts	Yes	Yes	No	Decoupled electric and natural gas	Seems to be about same time between rate cases. Conducted several workshops.	No administrator for programs	09-39 Discusses how Massachusetts developed its decoupling program for utilities in the state. D.P.U. 07-50-A, 07-50-B
Michigan	No	Yes	No	Decoupled natural gas	Must do on gas prohibited on electric. Condidtions set out. Biggest lesson limit the money through it and weather normalization	Efficiency United (optional statewide system - state offers program to take over if utility declines to run its own programs)	Testimony beginning on page 182 Nicholas Revere U-17735
Minnesota	Yes	Yes	No	Decoupled electric and natural gas	3 pilot programs in various stages all approved during rate cases. Seems helpful for gas but not sure about electric.	No administrator for programs	Staff Briefing Papers/Order on Decoupling standards and crieteria/Reports to Legislature on Pilot Programs E,G 999/CI-08-132
Mississippi	Yes	Yes	No	LRAM electric and natural gas	Energy Efficiency Cost Rate rider shall be adjusted to reflect a reconciliation of any over-or under-recovery for the prior year and the approved budget for the current program year	No administrator for programs	Docket No. 2010-AD-2
Missouri	Yes	No	No	LRAM electric		No administrator for programs	
Montana	Yes	Yes	No	LRAM electric and natural gas	Lost revenues due to DSM efforts factored into rates monthly as part of default supply cost tracker. Estimated lost revenue amount trued-up annually based on actual program activity following a comprehensive program EM&V to evaluate DSM programs and the scope of work.	No administrator for programs	Dockets D2004.6.90, D2010.5.50 D2009.9.129
Nevada	Yes	Yes	Yes	LRAM electric Decoupled natural gas	Electric first decoupling did not go well. New docket number replaced the prior docket. New water filing requesting decoupling but nothing has been done to date for new water docket.	No administrator for programs	Docket Nos. 09-07016, 14-10018, 07-06046, 13-06017, 12-12030
New Hampshire	Pending	No	No	Proposal but did not go any further	Issue side stepped for now. Mentioned Pamela Morgan study is a good reference	No administrator for programs	NA
New York	Yes	Yes	Revenue reconcilliations akin to RDM	Decoupled	RDMs served purpose removing disincentive for utilities to particpate and cooperate w/ other parties in promoting EE. Gas uses delivery revenue per customer approach. Electric uses delivery revenue per class approach	NYSERDA and its New York Green Bank independent administrator. Utilities also administer their own programs	Typical bill analysis provided. Docket Nos. 03-E-0640, 06-G-0746, 07-E-0949, and 07-E-0523

North Carolina	No	Yes	No	LRAM electric Decoupled natural gas	Gas was a 4 year pilot then approved and made permanent. True up every month. Electric mentioned but usually doesn't go anywhere. Residential customer usage gas decrease while cost each therm inclease - Customer Usage Tracker. Margin Dec. Tracker recognize residential use gas decrease.	No administrator for programs	Docket Nos. G-9 Sub 499, G-21 Sub 461, G-44 Sub 15, G-9 Sub 550, G-9 Sub 631, G-5 Sub 495 E-2 Sub 931, E-7 Sub 831
Ohio	Yes	No	No	Both decoupling and LRAM electric	Dockets specific to decoupling Commission idd not include an ROE adjustment in conjunction with the decoupling approval. Pilots and calculate adjustments by comparing authorized distribution reveues and actual distributtion revenues for the residential and small commercial classes Throughput Balancing Adjustment Rider	No administrator for programs	Case No 11-5905-EL-RDR,
Oklahoma	Yes	Yes	No	LRAM electric Decoupled natural gas	Direct lost revenue adjustment built in to the approved demand program rider structure includes a shared savings mechanism. Lost revenue amounts are examined by customer class.	No administrator for programs	Cause No. PUD 200800059, Order 556179
Oregon	Yes	Yes	No	Decoupled electric and natural gas	Approved initially pilot. True-ups will occur annually	Energy Trust of Oregon	Docket Nos. UG143, UG163, UG167, UM1283, UE197
Rhode Island	Yes	Yes	No	Decoupled electric and natural gas	Customer education big obsticale. Very high ranked ACEEE. Targets then 3 year plan. Annually implementation plans.	Energy Efficiency Resource Management Council	Targets Order 4202, Docket No. 4206, Order 20745
South Carolina	Yes	No	No	LRAM electric	Natural Gas Rate Stabalization Act passed SC 58-5-400-480 specifically 58-5-455. Electric every 3-4 years in for rate cases Gas similar. File quarterly reports and include audit review with adjustment. Ruling in October with rates effective in November.	No administrator for programs	Docket 200-251 E. Statutes 58-5-400-480; 58-5-455
South Dakota	Yes	Yes	No	LRAM electric and natural gas	Utilities switched from receiving performance incentives to a fixed percentage of lost revenues. Riders with annual true-ups for recovery of lost revenue.	No administrator for programs	Dockets EL11-012, GE10-001, EL11-002, EL11-013, GE12-001
Tennessee	No	Yes	No	Decoupled natural gas	Calculates adjustments by comparing actual base revnue per customer to test year base revenue per customer for residential and small general service customers. 2% cap on accruals.	No administrator for programs	Docket No. 09-00183
Utah	No	Yes	No	Decoupled natural gas	Energy balancing account. Gas decoupling easy to set rate and count the customer. Obsticle that Utah is growing state. Consumer adovocate very skeptical for the pilot. Trackers in place and utility not wanting to come back in because of their rate. Sometimes not evenly distributed like an apartment complex situation. Adjusts monthly.	No administrator for programs	Balancing Mechanism Example. Docket No. 05-057-T01 - Settlement Stip/Modified Order. Made permanent 09-057-16
Vermont	Yes	Yes	No	Decoupled electric and natural gas	Initially adopted alternative regulatory plans revised and extended in subsequent dockets. Utilities may adjust rates every year based on forecase costs and sales. Limits any benefit of increased sales during a given year.	Efficiency Vermont	Case No 7336, 7175, 7176, 7438, 7585

Virginia	No	Yes	No	Decoupled natural gas	Gas decoupling tied to revenue per customer calculations. Looking into test year issues. Set up by statute. Seems to benefit utilities. Report - Implementation of The Natural Gas Conservation and Ratemaking Act. All mechanisms make monthly adjustments based on difference between actual and authorized distribution revenue per customers, the adjustments lag.	No administrator for programs	Docket No. PUE-2008-00064, PUE-2009-00051, PUE-2012-00013
Washington	Yes	Yes	No	Decoupled electric and natural gas	Full decoupling. % increase customer. All except power is included	No administrator for programs	Docket No. U-100522, UG-060256, UG-060518, UG-090135
Washington D.C.	Yes	No	No	Decoupled electric	The DC Public Service Commission approved PEPCO's Bill Stabilization Adjusment (BSA) in 2009. Adjusts quarterly normalized revenue per customer within each service class.	Managed by Energy Office affiliate of Efficiency Vermont	Order 1053-E-549
Wisconsin	No	No	No	Pilots for decoupling recently	Pilot program in place in past rate cases. Decoupling did not go well. Rate cases every two years. Conditions included. Did not seem to add benefit and not likely to incorporate decoupling in future.	Focus on Energy	Docket Nos. 6690-UR-119
Wyoming	No	Yes	No	Decoupled natural gas	Gas decoupling in place. Distribution use per customer. Weather normalized. Electric has been discussed. More complicated and not there yet	No administrator for programs	Docket Nos. 30005-0182 - GR-13, 30010-135-GR-14, 30022-0219-GA-13 Tariff sheet P.S.C. WYO No. 11 39A

Gas and Electric Decoupling in the US

SEPTEMBER 2014



NRDC

Electric Decoupling in the US

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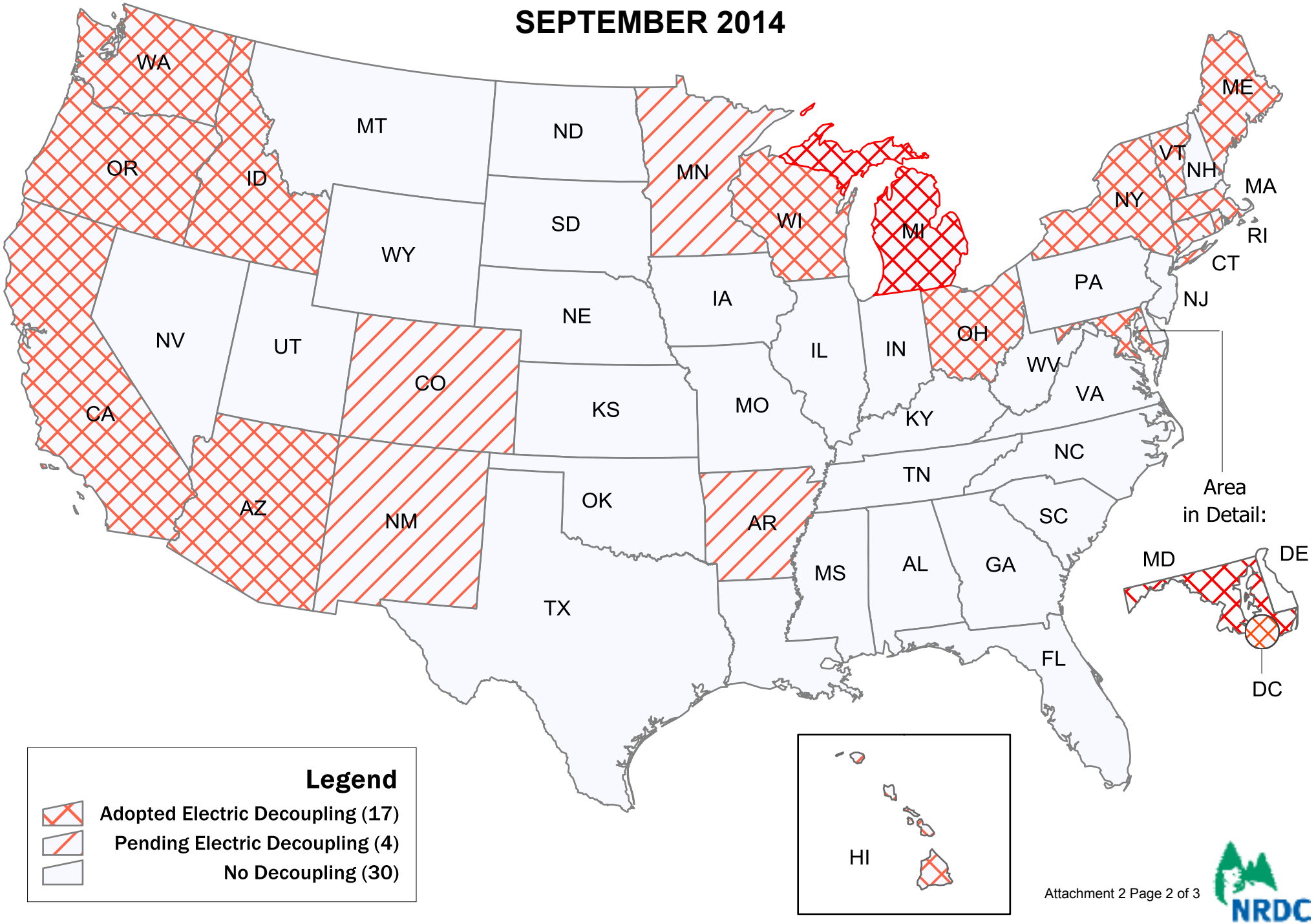

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Gas Decoupling in the US

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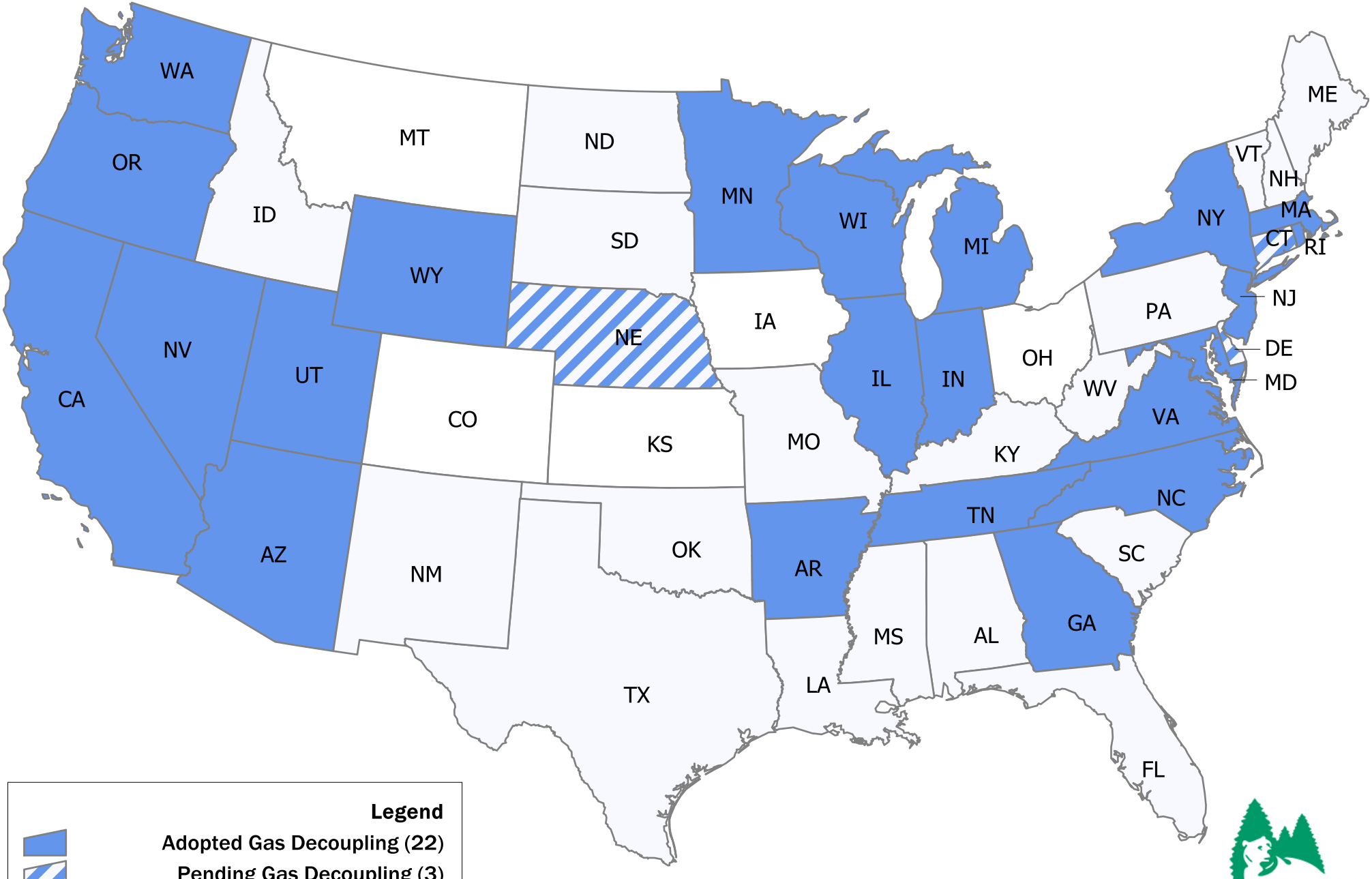

Legend

- Adopted Gas Decoupling (22)
- Pending Gas Decoupling (3)
- No Gas Decoupling (includes DC) (26)

AGA American Gas Association

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