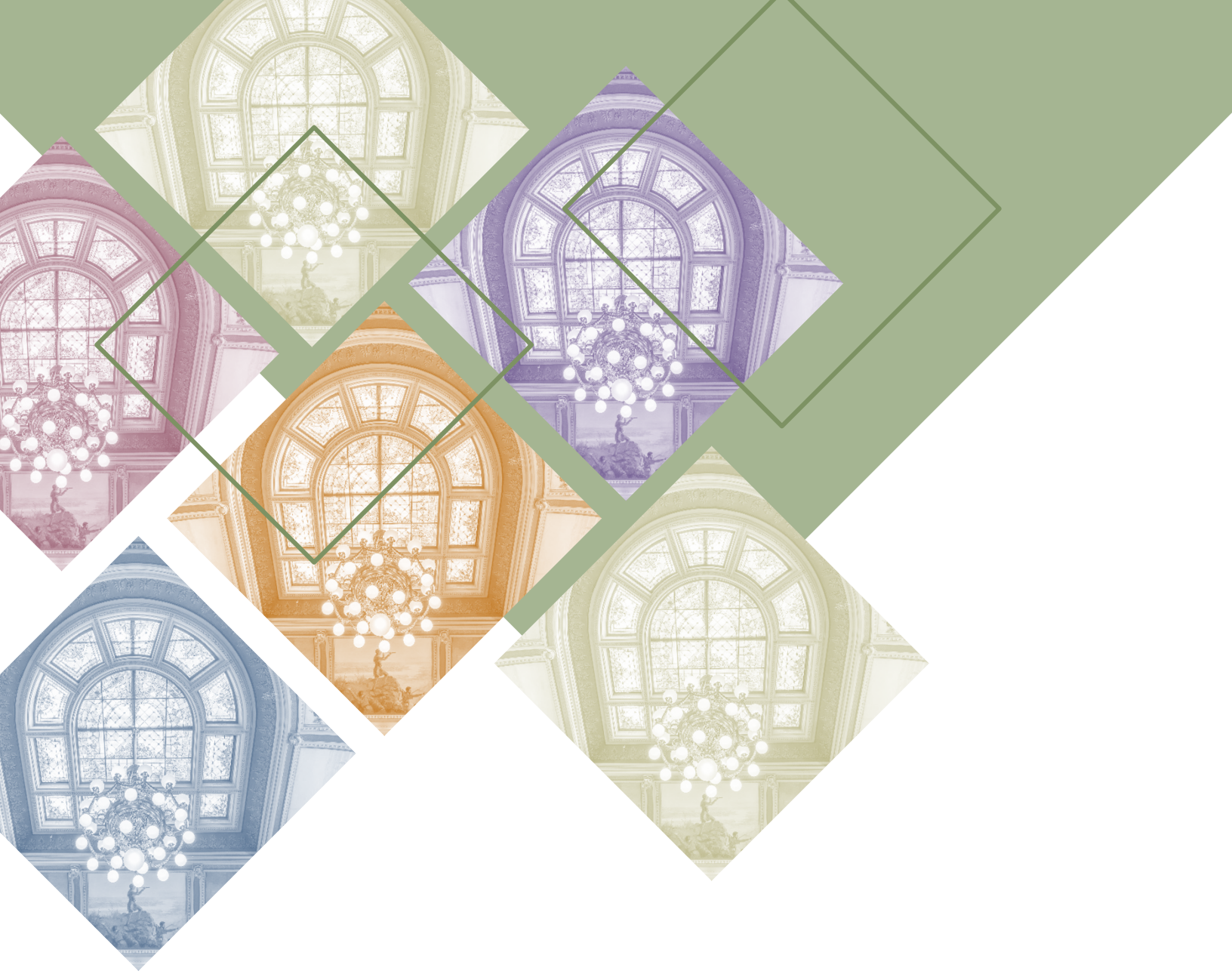

DECOUPLING CONSTRUCTION: CONSIDERATIONS FOR MONTANA

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INTRODUCTION

The construction of decoupling policies varies nationally among states and further among utilities. Designing a decoupling mechanism requires the consideration of several main policy points in an effort to align the state's, Public Service Commission's and energy stakeholders' policy objectives. The following is a collection of potential policy questions for consideration by policymakers constructing a decoupling policy that fits Montana's energy landscape.

WHY CONSIDER DECOUPLING?

Decoupling policy separates a regulated utility's profits from its total electric or gas sales so a utility isn't incentivized to sell more electricity or gas. The implementation of decoupling policy is most often discussed by the commissions that regulate utilities and often in terms of ratemaking. The policy is a mechanism to encourage regulated utilities to support energy efficiency, but it is not a tool for increasing energy efficiency. Instead, it is a ratemaking mechanism that removes what can be seen as a utility's incentive to discourage energy efficiency.

A utility collects revenues based on a revenue requirement that is typically determined by a regulatory commission and is typically on a per-customer basis. Regulatory commissions set rates every few years that allow a utility to recover costs and to earn a fair return on investment. The actual revenue earned by a utility, however, varies based on how much energy customers use each month, which results in the utility earning either more or less than the established rate. With decoupling, utility revenue is established based on an amount needed to cover established costs. Rates are then allowed to change with consumption to meet the revenue target. To further simplify, under decoupling, a utility's fixed costs (transmission lines and other infrastructure) are allocated on a per-customer basis for customers. Rates are set by the commission to cover those costs. Then each year, the commission reviews actual costs and the number of customers. Rates are adjusted upward to pay extra costs if the per-customer cost is more than originally estimated. Rates are reduced for the next year if the fixed costs are less than estimated. The utility is then able to recover those costs, regardless of how much electricity or gas a customer uses.

The construction of sound decoupling policy usually entails answering the following four policy questions:

1. What entity has the legal authority to enact a decoupling mechanism?
2. What utilities and what utility functions are covered?
3. What method is best to adjust utility revenue under a decoupling mechanism?
4. What method best handles consumer refunds and surcharges?

1. Regulatory Authority

Historically, decoupling policy is established by a combination of statute and at the regulatory level through the administrative rules at the commission. Several states have enacted decoupling policy at the regulatory level without enabling legislation. The western decoupling states examined in previous meetings implemented policy both by statute and by commission action.

California

California adopted decoupling policy for gas utilities in 1978 and for major electric utilities in 1982. In 1996, decoupling policies were suspended during the era of utility restructuring. In 2001, the California Assembly passed Assembly Bill 29 that directed the California Public Utilities Commission to ensure that errors in estimates of demand did not result in over- or under-collection on the part of the electrical corporations.[1]

Idaho

The Idaho Public Utilities Commission began to investigate disincentives to energy efficiency investment in 2004. In 2007, the commission approved a three-year pilot program of a proposed decoupling mechanism. The pilot was extended two years in 2009 and made permanent in 2012.[2]

Washington

In 2006, Washington voters approved Initiative 937, resulting in the passage of the Washington Energy Independence Act. The legislation gave the Washington Utilities and Transportation Commission the authority to implement decoupling policy.

Montana

Montana regulators most recently considered decoupling policy in 2010 when NorthWestern Energy (NWE) proposed a four-year pilot program that would provide decoupled electric and natural gas rates for residential and small-business customers. The PSC granted the decoupling mechanism as part of NWE's rate case, but the utility filed a motion for reconsideration, which left the docket open and stalled implementation decoupling in Montana.[3]

Lawmakers considering the construction of decoupling policy are faced with the following questions concerning the regulatory authority for decoupling policy construction:

1. How much authority should be granted to the Public Service Commission? Does the state need legislation in order to propagate decoupling policy?
2. If statute is required, what policies are implicitly included in legislation and what policies should be decided at the Public Service Commission?

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[1] Assem. Bill 29, ch 8, 2001 Cal. Stat. http://www.leginfo. ca.gov/pub/01-02/bill/asm/ab_0001-0050/abx1_29_bill_20010412_chaptered.pdf

[2] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project

[3] Measuring Montana's Experience with Decoupling, Nowakowski, Sonja, Montana Legislative Services Division

2. What is covered?

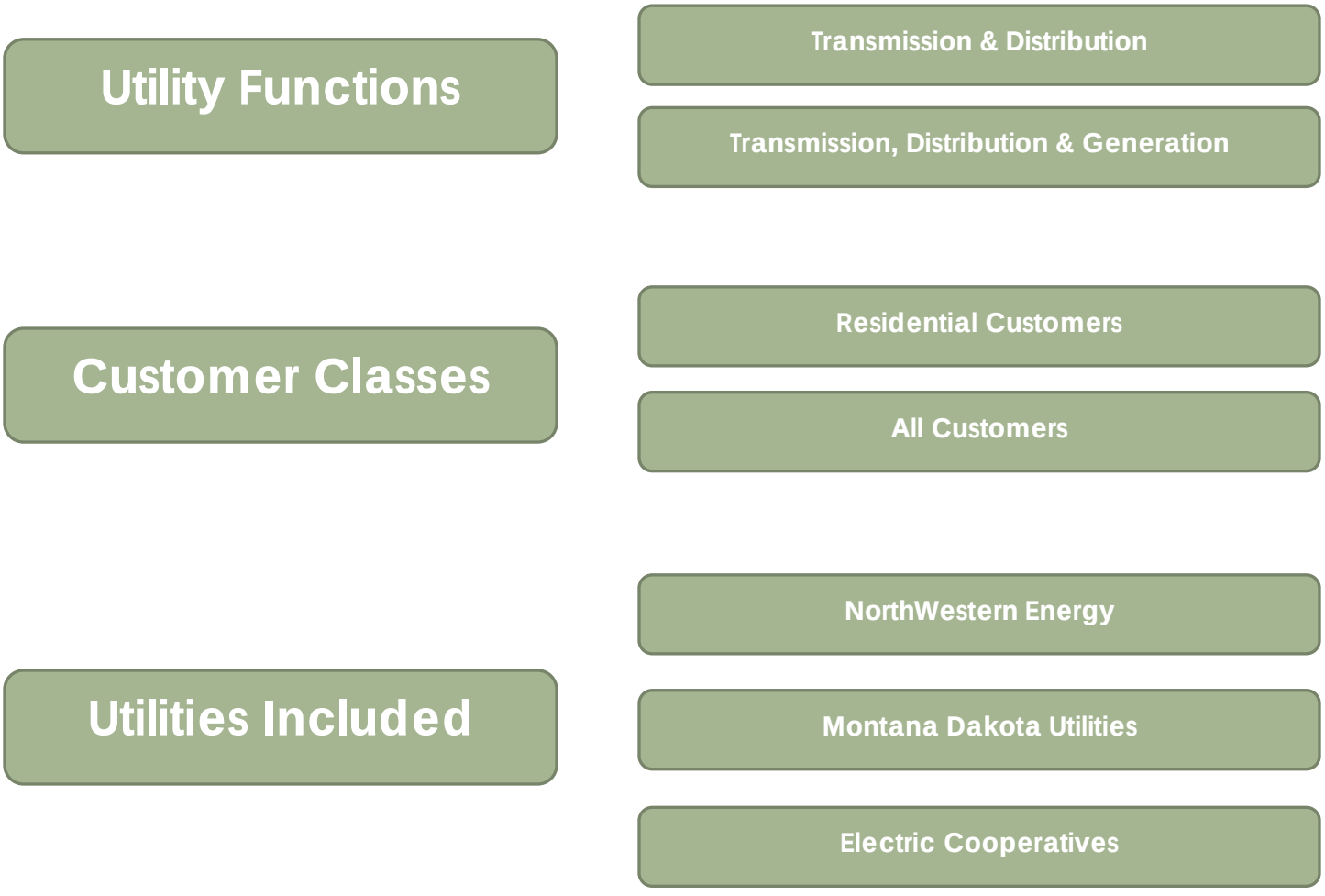
The second important step in constructing decoupling policy is to decide what utility functions, customer classes, and costs will be included in a decoupling mechanism. Decoupling policy is often crafted at the public service commission level on an individual utility basis during regular rate cases.

Four main points can be considered.

1. Is the utility's generation, distribution, and transmission revenue or a combination of the three included?
2. What customer classes, commercial or residential, are included?
3. What elements of the utility's cost should be included?
4. Which utilities should be included, NorthWestern, Montana Dakota Utilities and the electric co-ops?

WHAT'S INCLUDED?

The following utility functions, rate classes, and the utilities themselves could be included or left out of the decoupling policy.



Utility Functions

Decoupling can apply to all aspects of transmission, distribution, and generation of a utility or only specific portions of a utility's business. Decoupling policy in the West typically comes in two forms – full or partial decoupling.

Full decoupling

In prior testimony submitted during the Montana Energy and Telecommunications Interim Committee's January 2018 meeting, both Montana Dakota Utilities and NorthWestern Energy officials voiced support for full decoupling. Northwestern officials wrote:

> Full Decoupling in its essential, most complete form insulates a utility's revenue collections from any deviation of actual sales from expected sales. The cause of the deviation — e.g., increased investment in energy efficiency, weather variations, and/or changes in economic activity — does not matter. Any and all deviations will result in an adjustment ("true-up") of collected utility revenues to the allowed level of Decoupling revenues. Full Decoupling can be likened to setting a budget. Currently established ratemaking methods are used to determine a utility's revenue requirement using a historic test year — i.e., the total revenues it will need in a period (typically, a year) to provide safe, adequate, and reliable service.[4]

Partial Decoupling

Partial decoupling affects only a portion of a utility's revenue. For instance, a partially decoupled company may only receive a decoupled rate on its transmission and distribution revenue, but not its generation.

Customer Classes

Typically, decoupling is applied to small business and residential customers. The homogeneous nature of that customer class makes it easier to adjust rates and build rate design.

Costs Included

Often, most costs are included in a decoupling mechanism, unless the utility has a separate mechanism to track costs that are recovered on a regular basis.

Decision makers constructing a decoupling policy may consider the following questions:

1. Should all utility functions be included in a decoupling mechanism or should costs be carved out?
2. Is a form of full or partial decoupling the best fit for Montana utilities?

[4] Northwestern Energy, 2018 Montana Legislative Decoupling Study NorthWestern Energy Response

3. Revenue Adjustment

Decoupling mechanisms rely on several forms of multi-step formulas called revenue adjustment mechanisms to determine allowed revenue for the utilities. Legislators also must consider how often to implement revenue adjustments. The table below details several revenue adjustment options.

Revenue Adjustment Mechanism (RAM)	Key Elements
No RAM	No adjustment is made to the revenue requirement until a utility files a rate case to increase it; in the meantime, rates are adjusted via periodic true-ups. Some consumer advocates support this out of concern over increasing rates and lack of opportunity to verify the increases.
Stair-Step	Adjustments are pre-determined in a rate case and are usually based on forecasts of projected cost increases. The benefit of this is that it can provide revenue stability based on pre-determined choices that translate into financial benefits for the utility and its customers. The downside is that costs are difficult to forecast accurately.
Indexing	Adjustments are tied to multiple factors, such as general or industry inflation, industry productivity, customer growth, and changes in capital. This is sometimes viewed as a reasonable compromise because it can account for known or likely utility cost changes without necessarily having major rate impacts.
Revenue Per Customer (RPC)	Regulators determine the revenue requirement on a per-customer basis (usually by customer class), and the total system revenue requirement is determined by multiplying the number of customers in each class by the revenue requirement for each customer in that class. This is frequently used for distribution utilities and is among the most popular mechanism; a benefit is that customers do not end up compensating a utility for lost revenues due to lost customers.
Attrition	Periodic reviews are used to adjust base rates for known and measurable changes in rate base and operating expense. More controversial larger changes, such as major plant additions, are left for a full rate case (unless there is an applicable tracker in place, in which case it would not be part of the decoupling mechanism).

K factor	An adjustment is used to increase or decrease overall growth in revenues between rate cases, if a key assumption (such as increased efficiency or growth in rooftop solar) is likely to vary significantly during the decoupling period. The K factor can vary from year to year but is usually set at a prescribed level in between rate cases. A K factor coupled with an RPC can be convenient, while also addressing the challenge of tracking the effects of these changing cost drivers.
Hybrid	Regulators may use a combination, or hybrid, of regulatory mechanisms. For example, a combination of RPC and K Factor may be used so that the allowed revenue per customer grows (or declines) according to a historical trend factor as the mix of customers changes over time.

Source: Regulatory Assistance Project, 2016

Western States

In the West, revenue per customer and attrition methods are most common. The accrual policies rely on public service commissions to set base allowed revenue figures and reconcile actual revenue with allowed revenue, refunding the surplus or levying surcharges for the deficit using balancing accounts.

California

In the case of PG&E, California implements the accrual attrition method of full decoupling in revenue regulation cases. Revenue requirements are fixed in a rate case and then incrementally adjusted in periodic "attrition cases." The California Public Utilities Commission typically determines utilities' revenue requirements every three years in a general rate case. Future cost requirements and sales levels are forecasted in a future test year to determine the revenue requirement. Two methods are available for revenue adjustment. The first, the stair-step method, predetermines revenue requirement adjustments during the general rate case. The second involves changes to the post-test-year revenue requirements.[5]

During the general rate case, the CPUC also determines post-test-year attrition adjustments. Attrition is defined as the decrease in utility revenues compared with costs between rate cases. Attrition adjustments aim to allow the utility to recover increased costs.[6]

Idaho

Idaho utilizes a rate-per-customer RAM. The program is based on a fixed cost adjustment (FCA) mechanism that compares the authorized fixed-cost revenue requirement with weather-normalized sales. The difference is reconciled annually for residential and small business customers. Allowed revenue is determined on a per-customer basis during the general rate case. Total fixed costs are adjusted based on the number of customers.

[5] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project
[6] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project

During general rate cases, the Idaho Public Utilities Commission establishes a revenue requirement based on fixed costs collected through residential and small general service customer rates. The commission also establishes a fixed-cost-per-customer rate and a fixed-cost-per-kWh rate. Fixed costs are defined broadly to include return, taxes and labor expenses.

Revenue adjustment occurs between general rate cases utilizing the FCA mechanism. The adjustment is determined by multiplying the fixed-cost per-customer rate by the total number of customers for each customer class to determine the allowed cost recovery amount. The amount is then compared to the fixed costs realized by the company by multiplying the weather-normalized sales for each customer class by the fixed-cost per-kWh rate determined in the general rate case. The difference determines the fixed cost adjustment between general rate cases.

Idaho Fixed Cost Adjustment (FCA) Formula

FCA = (Total Customers x Fixed-cost Per Customer) – (Weather Normalized Sales x cost-per-kWh)

Idaho reconciles actual revenue with authorized revenue on a monthly basis. The actual fixed-cost recovered amount is determined based on the weather-normalized sales for each customer class multiplied by the fixed-cost per-kWh rate. The methodology used to weather-normalize actual monthly energy used in the FCA is the same as used in the general rate case. The actual fixed-cost recovered is subtracted from the allowed FCA and the difference is recorded as a line item in a monthly power cost adjustment report provided to the commission. [7]

Oregon

Oregon enacted a rate-per-customer method. PGE is the only electric utility using a decoupling mechanism in the state that utilizes the Accrual Revenue Per Customer method.[8]

Washington

Avista Utilities' natural gas division in Washington implemented an accrual revenue per customer mechanism and provides an example of how decoupling works in the natural gas sector, as well as an example of partial decoupling. To calculate the monthly allowed delivery revenue per customer, the Washington Utilities and Transportation Commission utilizes a seven-step formula.

1. Determine the Total Normalized Revenue – The Total Normalized Revenue is equal to the final approved base rate revenue approved in the Company's last general rate case.
2. Determine Variable Gas Supply Revenue – The Normalized therms by rate schedule from the last approved general rate case are multiplied by the approved Schedule 150 PGA rates to determine the Variable Gas Supply Revenue.
3. Determine Delivery Revenue – To determine the Delivery Revenue, the mechanism subtracts the Variable Gas Supply Revenue from the Total Normalized Revenue.

[7] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project
[8] Schedule 123 tariff, Portland General Electric Company

4. Remove Basic Charge Revenue – included in the Delivery Revenue is revenue recovered from customers in Basic fixed charges. Because the decoupling mechanism only tracks revenue that varies with customer energy usage, the revenue from Fixed Charges is removed. The number of Customer Bills, multiplied by the applicable Fixed Charges determines the total Fixed Charge revenue by rate schedule.
5. Determine Allowed Decoupled Revenue – Allowed Decoupled Revenue is equal to the Delivery Revenue (Step 3) minus the Basic Charge Revenue (Step 4).
6. Determine the Allowed Decoupled Revenue per Customer – To determine the annual per customer Allowed Decoupled Revenue, divide the Allowed Decoupled Revenue by the Rate Year number of Customers to determine the annual Allowed Decoupled Revenue per Customer (by Rate Group).
7. Determine the Monthly Allowed Decoupled Revenue per Customer – to determine the monthly Allowed Decoupled Revenue per customer, the annual Allowed Decoupled Revenue per customer is shaped based on the monthly therm usage from the rate year. [9]

Montana

In prior testimony to the Energy and Telecommunications Interim Committee during the January 2018 meeting, both NWE and MDU officials supported a rate-per-customer RAM.

Decision makers constructing a decoupling policy would likely consider the following questions?

1. Which rate adjustment method best fits Montana?
2. How much direction for crafting a RAM should be implicitly written into a bill? How much authority should be granted to the PSC in order to develop such a method?

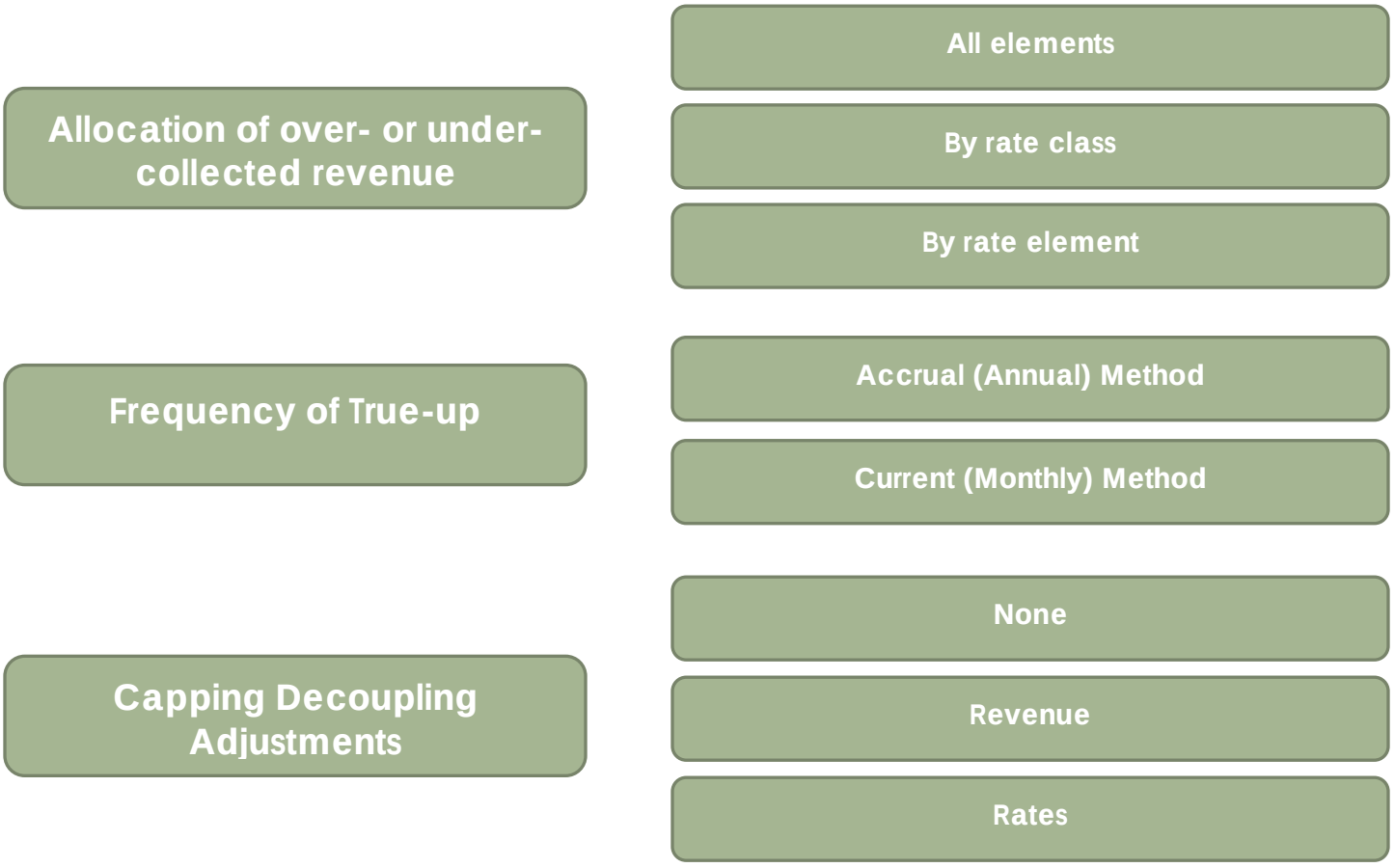
[9] Schedule 175, Avista Corporation

4. Refunds and Surcharges

The last step in a decoupling mechanism involves reconciling over- or under-collections of revenue resulting in either customer refunds or possible surcharges charged to future customer bills. To calculate refunds and surcharges the mechanism must consider allocation, the frequency of true-ups, and possible caps in decoupling adjustments.

HANDLING REFUNDS AND SURCHARGES

Decoupling mechanisms offer several choices when constructing refund and surcharge structures.



Allocation

Allocation methods most often include a uniform surcharge or credit per kilowatt-hour (kWh) to all decoupled classes; a uniform percentage surcharge or credit to all rate elements; or "class-by-class" decoupling, in which allowed revenue is

computed separately for each class and used to produce a uniform adjustment (either by kWh or percentage) for all customers in that class.[10]

Frequency of True-Ups

The typical choices are monthly, quarterly, and annually. Monthly is the low limit because billing is monthly, while annual is the upper limit to avoid excessive divergence between expected and actual revenues. Monthly adjustments tend to be more accurate in matching actual and authorized revenues, while a longer period, such as a year, has the benefit of smoothing out shorter-term volatility and tends to result in smaller adjustments—positive or negative—overall. A weather-only normalization can be used as a form of real-time decoupling adjustment.[11]

Capping Decoupling Adjustments

While adjustments resulting from a RAM tend to cluster in the -1 to +3 percent range, they can be larger or smaller, as either a surcharge or credit. Many regulators adhere to the principle of gradualism so as to minimize rate shock and make it easier for consumers to adjust to new prices. Not all utilities have caps; some regulators may not be fans of deferrals and may instead prefer to allow the true-up to reflect the full extent of any adjustment, and some have limited surcharges but allowed full flow-through of credits. For those that prefer to limit rate impacts, there are various mechanisms for capping rates, from a cap on the percentage of a permissible rate change, to a cap on total revenue increases (as opposed to rate increases), to setting the cap in dollars, not as a percentage. Unrecovered amounts must be considered, usually via the handling of deferral balances and true-ups.[12]

Western States

California

During the general rate case, every three years, the California Public Utilities Commission also determines post-test-year attrition adjustments. Attrition is defined as the decrease in utility revenues compared with costs between rate cases. Attrition adjustments aim to allow the utility to recover increased costs. Balancing accounts are used to track the difference in billed revenue and authorized revenue on a monthly basis. The total annual surplus or deficit at the end of the year is refunded or collected from ratepayers in the following year through rate adjustments.[13]

Idaho

Idaho reconciles actual revenue with authorized revenue on a monthly basis. The actual fixed-cost recovered amount is determined based on the weather-normalized sales for each customer class multiplied by the fixed-cost per-kWh rate. The methodology used to weather-normalize actual monthly energy used in the Fixed Cost Adjustment is the same as used in the general rate case. The actual fixed-cost recovered is subtracted from the allowed Fixed Cost Adjustment and the difference is recorded as a line item in a monthly Power Cost Adjustment report provided to the Idaho Public Utilities Commission. The differences are deferred to the end of the year with interest. Each year, the company totals the FCA results, including interest. If a deficit occurs, the amount is recovered the following year. If the company has over collected its fixed-cost revenue, the

[10] Regulatory Assistance Project: Customizing Revenue Regulation to Your State's Priorities
[11] Regulatory Assistance Project: Customizing Revenue Regulation to Your State's Priorities
[12] Regulatory Assistance Project: Customizing Revenue Regulation to Your State's Priorities
[13] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project

amount is returned to customers through a credit or surcharge mechanism. The FCA is recovered proportionally from residential and small general service customers. Annual adjustments are capped at 3 percent and differences beyond that are rolled over until the next period. Adjustments to the rate occur June 1 of the year following the previous 1-year period from January 1 to December 31.[14]

Oregon

Oregon's Sales Normalization Adjustment (SNA) mechanism for residential and small business customers sets a fixed charge per customer (FCC) rate. The calculation is made each month based on the difference between allowed revenues toward fixed costs and actual weather-adjusted revenues toward fixed costs.

Oregon Sales Normalization Adjustment (SNA) Formula

SNA = (FCC x Customers) – (Fixed Charge Energy Rate x Weather-normalized sales)

FCC: Fixed Charge per Customer Rate
Customers: Total number of customers
FCE: Fixed Charge Energy Rate
Sales: Weather-normalized sales

The resulting value is placed in a tracking account called the SNA balancing account. The balancing account records both over collections and under collections. The resulting surplus or deficit is refunded or recovered through a change to electric rates in the following year. Rate increases are capped at 2 percent and rate change are calculated for each tariff schedule.[15]

Washington

Once monthly allowed delivery revenue per customer is calculated, Avista recognizes actual revenue with authorized revenue on a monthly basis by multiplying the number of customers by the monthly-allowed decoupled revenue per customer, to find the allowed decoupled revenue for that month. The remaining balance of actual decoupling revenue and allowed decoupled revenue is calculated and deferred to a balancing account. Based on the realized surplus or deficit at the end of the process, Avista Utilities files a request annually with the Washington Utilities and Transportation Commission to either surcharge or rebate, over the following year, the amount accumulated in the balancing accounts. Rate increases are capped at 3 percent annually.[16]

Decision makers constructing a decoupling mechanism should consider the following:

1. What cap, if any, should be placed on the increase or decrease of allowed revenues as a result of a rate adjustment mechanism?
2. How should surcharges and refunds be allocated? Across the board or by customer class?
3. How often should rate true-ups occur in order to ensure the proper surcharges or refunds are being paid?

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[14] Decoupling Case Studies: Revenue Regulation Implementation in Six States, Regulatory Assistance Project
[15] Schedule 123 tariff, Portland General Electric Company
[16] Schedule 175, Avista Corporation

Next Steps

If the ETIC chooses to proceed with developing a decoupling policy, the following policy points should be decided before selecting a rate adjustment mechanism.

1. Identify what utilities should be covered in the decoupling discussion.
2. Decide whether electricity, natural gas, or both should be included in the discussion.
3. Decide between full or partial decoupling.
4. Identify how much authority should be given to the PSC in building a decoupling mechanism.