Measuring Montana's Experiences with Decoupling

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During the September 2015 Energy and Telecommunications Interim Committee meeting, members requested additional information about decoupling and the use of decoupling in Montana. The information included in this report is taken from Montana Public Service Commission (PSC) dockets and a 2011 report by the Regulatory Assistance Project, "Revenue Regulation and Decoupling: A Guide to Theory and Application."

Introduction

Decoupling is a policy that 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. Because decoupling is a ratemaking practice, it is most often discussed by the commissions that regulate utilities, like Montana's PSC. It is also discussed in terms of ratemaking – a function of utility commissions. Decoupling is a mechanism used to encourage regulated utilities to support energy efficiency for their customers. Decoupling itself, however, is not a tool for increasing energy efficiency. It is instead a ratemaking function that removes what may be viewed as a utility 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.

Traditional Rates: Revenue = Fixed Price x Sales

Decoupled Rates: Price = Fixed Revenue/Sales

However, there are different methods for implementing decoupling – which in Montana has been the source of much debate and discussion during Montana Power Company (MPC) and NorthWestern Energy experiments with decoupling. For example, decoupling can be implemented using a true-up mechanism that automatically adjusts rates based on consumption or through a balancing account, where excess revenue is stored or makes up for shortfalls in revenue. Utilities also can implement full,

partial, or limited decoupling. Sources of contention also can include the "index" that is used to calculate a decoupling mechanism. For example, does it account for weather events or changes in load, and ultimately how do decoupling adjustments impact customer rates?

There are also other mechanisms used to address the issue of utility incentive. A Lost Revenue Adjustment Mechanism or LRAM has most recently been implemented in Montana. Other mechanisms include net lost revenue recovery and conservation and load management adjustment. This report focuses on decoupling, as requested by the ETIC in September. LRAM is also discussed because it is a mechanism that has been a significant element in Montana's discussions of incentivizing energy efficiency and, more recently, a significant issue before the Montana PSC.

Decoupling Methodology	Key Elements	Example of Application
Accrual Revenue Per Customer (RPC)	Allowed revenue computed on an RPC basis. One rate adjustment per year.	Utah, Questar
Current RPC	Allowed revenue computed on an RPC basis. Rates adjusted each billing cycle to avoid deferrals.	Oregon, Northwest Natural Gas Company; DC: Pepco
Accrual Attrition	Allowed revenue determined in periodic general rate cases. Changes based on specified factors determined in annual attrition reviews. Rates adjusted annually.	California, PG&E and SCE Hawaii, Hawaiian Electric
Distribution-Only	Only distribution costs included in the mechanism. All power costs (fixed and variable) recovered outside the decoupling mechanism.	Massachusetts, NGrid; NGrid Maryland, BG&E; Washington (PSE, 1990-95)

RAP: 2011

In 2011 a form of decoupling had been adopted for at least 1 electric or natural gas utility in 30 states and was under consideration in another 12 states. "Economic and environmental imperatives demand that we reshape our energy portfolios to make greater use of end-use efficiency, demand response, and distributed, clean resources, and to rely less on polluting central utility supplies. Decoupling is a key component of a broader strategy to better align the utility's incentives with societal interests," according to the Regulatory Assistance Project.

History of Montana Power Company/NorthWestern Decoupling

In 1994 the PSC issued a final order on a revenue requirement requested by MPC for a rate increase. The order included a stipulated decoupling proposal based on a 4-year trial period. For the first 2 years, a decoupling index would be the forecast kilowatt-hour sales contained in MPC's March 1993 load forecast and integrated resource plan. MPC also had to prepare annual reports to evaluate the effectiveness of decoupling compared to the status quo. The stipulation also required interested parties to work together to develop a customer service charge alternative to decoupling. The PSC said, "the decoupling stipulation provides a reasonable way to test the concept of decoupling as a means of improving the efficient acquisition of cost-effective demand-side management (DSM)." (D1993.6.24)

In 1995 MPC proposed a decoupling adjustment of about $2.25 million. The request included the basic decoupling calculation, an adjustment that reflected the temporary shutdown of an industrial customer, and an adjustment for higher than forecast economic growth. The request was not greeted with enthusiasm. (D1995.6.27)

Decoupling: A mechanism setting a fixed amount of revenue to be recovered each month or year, generally set as an amount to be recovered per customer, so changes in the number of customers result in changes in utility revenues.

The Montana Consumer Counsel found that the decoupling adjustment did not comply with the decoupling stipulation. Large-customer groups objected, alleging noncompliance with the decoupling stipulation as well. They indicated that MPC's economic growth adjustment was inconsistent with the decoupling stipulation because the stipulating parties chose not to include an adjustment for unexpected differences between actual loads and the forecast. The Montana Department of Environmental Quality suggested setting aside the decoupling experiment for the first year and resuming it when the stakeholders established a more satisfactory index. The Human Resource Council, Natural Resources Defense Council, and the Montana Environmental Information Center also found that the forecast kilowatt-hour index led to inappropriate adjustments. They found that the decoupling adjustment filing went "far beyond" the adjustments envisioned by the parties to the decoupling stipulation. A weather normalization method that MPC used was also criticized.

LRAM: A mechanism through which a utility recovers any revenues lost as a result of utility-operated energy efficiency programs, requiring an extensive review and analysis of the amount and value of savings.

The PSC ultimately found MPC's adjustment “troubling”. The Commission said, “decoupling is not intended to recover lost revenues, as MPC asserts, but is supposed to remove the lost revenue disincentive by linking fixed cost revenues to something other than kilowatt hour sales.” The PSC ordered no decoupling adjustments in either of the first 2 years of the 4-year decoupling experiment. The stakeholders were told to develop an alternative decoupling index.

In 1997 the Montana Legislature passed and the Governor signed the Electric Utility Industry Restructuring and Customer Choice Act. Shortly after that, the MPC filed its transition plan, and in January 2001, MPC and NorthWestern jointly filed an application with the PSC for approval of the sale of MPC to NorthWestern. Discussions of decoupling largely took a backseat to Montana’s struggles with deregulation.

However, NorthWestern in 2004 filed resource planning with the PSC that evaluated energy efficiency in terms of its relative cost-effectiveness as a resource to serve the needs of its customers over the long term. NorthWestern determined in its 2004 default supply resource procurement plan that about 100 average megawatts of energy efficiency could be acquired cost-effectively within its system. The PSC found “that the lost revenue disincentive is real and puts at risk a full and complete ramp-up of cost-effective energy efficiency resource acquisition programs in the near-term.” The PSC approved, on an

interim basis, NorthWestern's request to recover $273,196 in estimated DSM program-related lost transmission and distribution revenue for the default supply cost tracking period. This estimated lost revenue amount was to be trued-up based on actual program activity in 2004-2005 and again following a comprehensive program evaluation and independent verification of actual savings. (D2004.6.90)

A Lost Revenue Adjustment Mechanism or LRAM continued to be used by NorthWestern and approved by the PSC as a mechanism to encourage the acquisition of demand-side management. The use of LRAM, however, was an ongoing matter before the PSC in various rate cases. The PSC often raised concerns that lost revenue adjustments accumulated for too long, made it increasingly difficult to determine the reasonableness of lost revenue levels, and potentially misaligned NorthWestern's costs, revenues, and rates. Over time, NorthWestern has recognized LRAM revenues being collected from customers of about $7.1 million annually and deferred the remaining portion.

In 2010, NorthWestern proposed a 4-year pilot program that would provide decoupled electric and natural gas rates for residential and small business customers. It would have capped adjustments at 3%. The decoupling proposal included tracking and an annual true-up to reconcile actual fixed cost revenues from energy sales with the per-customer fixed cost recovery authorized by the PSC in the last general rate case. Over collections of fixed costs would have been refunded to customers. Undercollections would have been recovered through increased rates. The PSC granted the decoupling mechanism as part of NorthWestern's electric rate case, but the utility filed a motion for reconsideration, which left the docket open and stalled implementation of the decoupling proposal. (D2010.5.50 and D2009.9.129)

In June 2014, the PSC initiated a contested case proceeding to consider whether to continue the LRAM that had been in place for NorthWestern since 2005 for both electric and natural gas energy efficiency programs. The current commission expressed its skepticism about continuing the LRAM. The PSC in October 2015 voted 5-0 to eliminate LRAM. (D2014.6.53 Order No. 7375a) The commission concluded the LRAM was no longer reasonable or in the public interest. The order was effective December 1, 2015.The commission in its order does not endorse or reject decoupling. They also found that NorthWestern has not formally presented decoupling as an alternative for consideration by the PSC.

Decoupling Pros and Cons

In the 2010 NorthWestern docket, the PSC gathered testimony on decoupling. The utility and the Human Resources Council, District XI/Natural Resources Defense Council (NRDC) supported the proposal. The Montana Consumer Counsel (MCC) opposed it. The NRDC argued that decoupling would "better align the utility's energy efficiency incentives with the PSC's energy efficiency objectives and would make regulation more supportive of that policy." They said that the disadvantages of LRAM include:

- savings outside of utility programs are not covered; and
- the link between utilities' financial health and retail sales is maintained.

In its testimony, the NRDC claimed that every additional 1% reduction in electricity use and demand by residential and small general service customers not covered by the existing lost revenue recovery mechanism would reduce NorthWestern's annual fixed cost recovery by $2.4 million, while every 1%

increase would have the opposite effect. Shareholder impacts would be at least 10 times that amount, according to their testimony. They said the advantages of decoupling include:

- it is comprehensive in scope;
- it reduces the opportunities for disagreements over energy savings for which NorthWestern is or is not responsible; and
- it is easier to administer because it requires only periodic reviews of changes in NorthWestern's sales and the number of customers.

NorthWestern also testified in support of decoupling. They recommended a stakeholder group work out the details of a pilot. (D2009.9.129 consolidated with D2007.7.82)

The MCC raised concerns about the unintended consequences of decoupling. Fixed rates, as opposed to fixed revenues associated with decoupling, create opportunities for gains or losses between rates cases and provide a utility with incentives to enhance productivity and efficiency. Decoupling can weaken that incentive, according to their testimony. They also said decoupling adjusts a utility's rates outside of the normal rate case setting in which all of a utility's costs are considered and cost increases are balanced with cost reductions. "Decoupling would abandon this matching principle for a piecemeal focus on only one factor that affects profitability," according to MCC testimony. The MCC stated that its concerns with decoupling include:

- it guarantees utility profits and reduces a utility's incentive to operate efficiently;
- it insulates a utility from the effects of an economic downturn, while at the same time exposing customers to rate increases; and
- incremental gains in energy conservation from decoupling may not justify the management incentive, efficiency, productivity, and risk-shifting costs it imposes.

The MCC also raised concerns about the LRAM in related testimony. They said that NorthWestern is legally obligated to procure least cost resources, including energy efficiency and conservation. "The reality is that LRAM is a post-hoc one-sided adjustment applied to rates that were originally determined considering all revenue and cost factors in total. The current LRAM adjustment will always go only in one direction; there will never be a reduction in rates because of LRAM."

Conclusions

The PSC expects information from NorthWestern on whether decoupling should:

- apply only to particular types of assets;
- be full or partial;
- include "revenue per customer" or a simple approved revenue requirement true-up;
- include adjustments to the target revenue requirement; and
- include a requirement to file periodic general rate cases.

NorthWestern responded that it will evaluate its regulatory and policy options and has not determined whether a docket will be filed in early 2016. Cl0099 5345slea