

Consumer Impacts of Montana's Renewable Portfolio Standard

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Montana's renewable portfolio standard (RPS) has had a minimal impact on retail customer rates, according to information provided by Montana's largest utilities. Utilities, however, raise concerns about their ability to maintain a balance between customer needs and available resources, if the standard is increased. NorthWestern Energy also notes that its highest cost RPS resources are currently more costly, on a \$/MWh basis, than the market purchases that they displace. Senate Joint Resolution No. 6 sets out the parameters that the Energy and Telecommunications Interim Committee (ETIC) is to analyze in its review of the consumer impacts of the RPS. Those parameters include the standard's contribution to:

- mitigation or contribution to higher energy costs for consumers;
- hedging against volatility in fossil fuel prices; and
- other efforts to help consumers.

A detailed determination of the overall customer cost of Montana's renewable portfolio standard (RPS) varies depending on the parameters used to arrive at a specific cost. Those parameters are highly flexible and can include federal production tax credits, fossil fuel and wholesale market price uncertainty, the value of reducing carbon dioxide emissions, resource eligibility, treatment of renewable power and credits imported from other states, load growth, integration needs, and portfolio risks. With such a wide range of parameters, it is difficult to reach a conclusion about the overall impact of each of those parameters. The impact to customers of specific utilities and competitive electricity suppliers required to meet Montana's RPS, however, is more apparent. And anecdotal evidence provided by those entities in Montana suggests limited rate impacts for most Montana customers so far -- largely based on the responses to the surveys sent to utilities and suppliers by the ETIC in September 2013.

Anecdotal evidence suggests limited rate impacts for most Montana customers.

The results of those surveys are discussed in more detail throughout this report. The ETIC asked utilities and competitive electricity suppliers subject to Montana's RPS a series of questions based on SJ 6 related to customer impacts. The questions were:

- Has the standard contributed to you reducing your dependence on fossil fuels?
- Has the standard assisted you in hedging against the volatility of fossil fuel markets?
- Has the standard contributed to higher, lower, or neutral costs for your customers?
- How much has the standard changed, if at all, your average residential customer's monthly utility bill?
- How is the standard beneficial to your customers?
- How is the standard a drawback to your customers?

Only one competitive electricity supplier, in responding to the survey, stated that Montana's RPS has increased customer costs. As with most cost questions in the electricity industry, however,

the survey responses came with a number of caveats. Because of those caveats and because there are only a limited number of utilities and suppliers required to meet Montana's RPS, it is most useful to look at the unique circumstances of each entity and its response to the ETIC survey then it is to determine an overall number for the relative impact.

Utilities and competitive suppliers are also required to file Renewable Energy Credit (REC) reports each year with the Department of Revenue. The reports are required to comply with 69-3-2009, MCA. The reports were collected for the first time in 2013. The Montana Legislature also revised the reporting requirements in 2011 in an effort to clarify what entities need to report in 2013. The reports to-date have not resulted in a great deal of useful information, but they do offer a few details concerning the costs of an RPS. A discussion of the REC reports for each utility and supplier is offered in this overview. The ETIC, however, will take a closer look at the issue of RECs under an additional agenda item during its March meeting. That item will include details on the use of RECs by individual utilities and generators in Montana.

In order to meet RPS requirements in Montana, both Montana-Dakota Utilities and NorthWestern Energy have undertaken some utility-owned projects. A number of factors influence a utility's decision to construct or invest in a generation resource. One factor, presumably, is Montana's RPS. A review of utility-owned projects and rate cases before the Montana Public Service Commission (PSC) provides some additional insight into the costs of renewable energy projects. Because the RPS mandate has cost caps unique to different utilities and suppliers and because resource acquisition and rate increase require PSC approval, a look at the resources acquired by individual utilities to meet the standard offers direct information about the costs of the RPS for at least two utilities operating in Montana.

Background and Big Picture

Most RPS requirements include "cost-caps" to protect consumers from rate spikes and unfair utility bills. Montana is no exception. The cost-caps for Montana's RPS are included in 69-3-2007, MCA. As discussed previously, the caps also are unique to different operations in Montana and include three different options. Montana's cost-caps are as follows:

- A utility, like NorthWestern Energy, that restructured does not have to take renewable energy to meet the standard unless, using a competitive bidding process, the total cost of electricity from the renewable resource, including the cost of ancillary services needed to "firm" that power, is less than or equal to bids for the equivalent quantity of power over the same contract term from other electricity suppliers.
- A public utility, like MDU, that has not restructured, does not have to take renewable energy to meet the standard unless the cost per kilowatt hour of the generation from the renewable resource does not exceed the cost of power from any other alternate generating resource available to the utility by 15 percent.
- A competitive electricity supplier, like PPL Treasure State, does not have to take electricity from a renewable energy to meet the standard unless the total cost of electricity from the renewable resource, including the cost of ancillary services needed to firm that power, is less than or equal to the cost of alternate power supplies available to the supplier and the cost caps applicable to other utilities.

While cost caps are in place, regulatory requirements can translate into additional costs. An RPS often has multiple goals of promoting renewable technologies and reducing air emissions and, in the case of Montana, promoting economic development. There are numerous studies that examine the overall costs and benefits of state renewable portfolio standards in the United States and most recognize that each RPS is unique as are the multiple goals of an RPS.

One of the largest reviews of renewable portfolio standards was completed by the Lawrence Berkeley National Laboratory and published in 2007. The study looked at data from 28 state or utility-level renewable policies enacted since 1998. The estimated impact on electricity rates varied by state, but 70 percent of the state RPS cost studies in the sample projected a base-case retail electricity rate increase that was no greater than 1 percent in the year that each RPS policy reached its peak percentage requirement.¹ The median bill impact across all of the studies in the sample was an increase of \$0.38 per month. The study also indicated that the cost factors are particularly sensitive to the availability of the federal production tax credit, renewable technology costs, fossil fuel prices, and wholesale market price uncertainty. "The large diversity of modeling methodologies and assumptions used to estimate state RPS costs demonstrates that state RPS cost analysis is still an evolving process, and that a standard template has not yet emerged."²

In 2012, the Lawrence Berkeley National Laboratory study was revisited. A status update indicated that RPS' requirements applied to about 54 percent of total retail electricity sales in 2012 in the United States. In Montana about 62 percent of total customers are part of a utility that is or has been subject to the RPS. Most states have capped rate impacts well below 10 percent, and in 13 states, including Montana, the impacts are capped below 5 percent. The graph in **Figure 1** indicates impacts in Montana to be on the lowest end of the spectrum.³

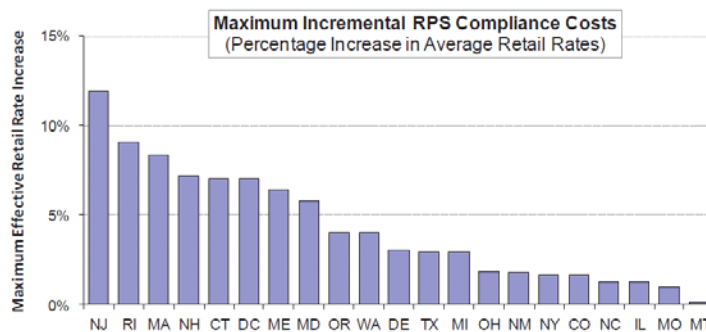


Figure 1

¹ "Weighing the Costs and Benefits of State Renewables Portfolio Standards: A Comparative Analysis of State-Level Policy Impact Projections," Chen, Wiser, and Bolinger. Environmental Energy Technologies Division, Ernest Orlando Lawrence Berkeley National Laboratory, March 2007.

² Ibid, page v.

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The U.S. Energy Information Administration completed a study in 2009 that examined the potential impact of a 25 percent nationwide renewable electricity standard. "Electricity price impacts vary from region to region, with renewable-resource-rich regions like the northern Great Plains States and the northwest states potentially seeing prices decline from reference case levels, while other regions see price increases ranging from 1 percent to 6 percent above reference case levels between 2025 and 2030."⁴

Other studies reach very different conclusions about Montana's RPS. The Beacon Hill Institute at Suffolk University was commissioned by the American Tradition Institute and the Montana Policy Institute to estimate the costs of the RPS and its impact on the economy. Beacon Hill used its State Tax Analysis Modeling Program to reach its conclusions. It found that "In the aggregate, the state's electricity consumers will pay \$225 million in 2015, within a range of \$141 million and \$348 million, because of the RPS. Montana's electricity prices will increase by an average of 1.33 cents per kilowatt-hour (kWh), or by 18 percent in 2015, within a range of \$0.83 cents per kWh, or by 11 percent, and 2.06 cents per kWh, or by 28 percent." Similar studies were completed by Beacon Hill in a number of other states. Some concerns were raised in other states about the use of a model that was based on analyzing city taxes and the failure of the model to adequately recognize cost caps.

Such disparities in determining the impacts of an RPS on customers are not unique to Montana. "Little consensus has emerged among analyses of policies for renewable energy, particularly with respect to consumer impacts."⁵ Other states have conducted in-depth analysis and hired consultants in an effort to pin down the exact costs of a statewide RPS. Minnesota requires each electric utility to submit a report containing an estimation of the rate impact of activities of the electric utility necessary to comply with an RPS to the Public Service Commission and to the legislative committees with primary jurisdiction over energy policy. The report must be updated with a utility's biennial resource plans and must discuss the costs incurred from complying with Minnesota's RPS, which requires 25 percent of electricity to come from renewable sources by 2025.⁶ The Wisconsin Legislature requires its Public Service Commission to biannually submit a report that evaluates the impact of the RPS on the rates and revenue requirements of electric providers and compare that impact with the impact that would have occurred if renewable energy practices were subject to market forces in the absence of an RPS.⁷

The information provided below is designed to offer some insight into the RPS effects for each utility or supplier required to meet Montana's RPS. The individual impacts to customers of those

⁴ [http://www.eia.gov/oiaf/servicerpt/acesa/pdf/sroiaf\(2009\)04.pdf](http://www.eia.gov/oiaf/servicerpt/acesa/pdf/sroiaf(2009)04.pdf).

⁵ "Renewable Portfolio Standards: When do the lower energy prices?", Fischer, International Association for Energy Economics, The Energy Journal, Vol. 31, No. 1, 2010.

⁶ Minnesota Statute 216B.1691 subd.2e.

⁷ Wisconsin Statute 196.378 (4r).

different utilities and suppliers has varied. With exemptions from the RPS approved by the 2013 Legislature, the only utilities and suppliers still responsible for meeting the RPS requirements are NorthWestern Energy, Montana-Dakota Utilities, and PPL Treasure State.

NorthWestern Energy

272,000 Montana electric customers

Survey Results

14. Has the standard led to you reducing your dependence on fossil fuels?

No. Given NWE's dependence on market purchases, this cannot be precisely determined. However, NWE believes any change in fossil fuel use to be minimal.

15. Has the standard assisted you in hedging against the volatility of fossil fuel markets?

No. On one hand, resources acquired to meet the RPS standards provide a partial hedge against volatility of fossil fuel markets by reducing market purchases, which include a thermal (gas/coal) component. On the other hand, the inclusion of RPS resources caused NWE to invest in additional gas-fired resources to integrate/regulate those resources. These offsetting effects cannot be precisely determined.

16. Has the standard contributed to higher, lower, or neutral costs for your customers?

Neutral. Customer cost impact cannot be precisely calculated (refer to responses 14 and 15). However, NWE's highest cost RPS resources are currently much more costly, on a \$/MWh basis, than the market purchases that they displace.

17. How much has the standard changed, if at all, your average residential customer's monthly utility bill? Did not respond.

18. How is the standard beneficial to your customers? *NorthWestern was focused on renewable resources prior to RPS (refer to NWE's response to 13, 15, and 16.) Therefore, any benefit from RPS is minimal.*

19. How is the standard a drawback to your customers? *NorthWestern was focused on renewable resources prior to RPS (refer to NWE's response to 13, 15, and 16.) Therefore, any drawback from RPS is minimal.*

REC Report

The 2012 REC report filed by NorthWestern Energy indicates that credits were purchased as both bundled and unbundled products. The unbundled price listed for RECs purchased was \$12.50. The bundled price for energy and RECS (with no value assigned specifically to the REC) varied from \$24.63 per MWh to \$68.21 per MWh.

Case Study: Spion Kop

In February 2012, the PSC approved NorthWestern Energy's request to purchase and operate the Spion Kop Wind farm in Judith Basin County. The 40 MW wind farm is certified as an eligible renewable resource that can be used to meet Montana's RPS. The application provides details on the cost of the facility and Montana's RPS. Spion Kop had a total capital cost of about \$86 million, including about \$7 million for an associated substation and transmission facilities. Spion Kop was selected as the result of a competitive bidding process conducted by NorthWestern in 2009. In testimony before the PSC, NorthWestern Energy indicated that Spion Kop's \$53.78/MWh, 25-year levelized cost was \$11/MWh less than the next best offer NorthWestern received in response to its market solicitation.⁸

NorthWestern Energy indicated that without additional renewable resources, the utility would not comply with the 10 percent renewable standard sometime in 2013 and 2014. NorthWestern provided further testimony that Spion Kop's effect on electricity supply tracker costs would be a decrease of \$0.70/MWh in market purchase costs, no change in Colstrip 4 fixed and variable costs, no change in fixed costs at Dave Gates, and an increase of \$0.03/MWh in variable costs at Dave Gates to integrate Spion Kop.⁹

Ultimately, the PSC found that "the rates resulting from the procurement of Spion Kop will be just and reasonable."

Question of Integration

Wind's variability can increase the day-to-day operating costs of a utility system. Concerns abound that large, utility-grade wind turbines can't be installed on the distribution grid without upgrades, resulting in higher costs being passed on to ratepayers. The cost of wind integration also can grow as the percentage of wind increases on the interconnected system. Overall, however, the economics of wind energy are largely a function of a project's size, the wind resource, policy incentives, and financing. Cost recovery can be a threshold issue that varies among areas and utilities.

Integration is a term used in describing the economic impact wind has on a utility because of variability and uncertainty. Wind integration can lead to additional utility costs because additional generation capacity that is controllable is added to manage the incremental variability of wind. The uncertainty is attributed to operations planning required to accommodate wind. Utilities purchase regulatory reserves to balance out the variability of wind. The Federal Energy Regulatory Commission (FERC) sets generation integration rules that require a utility to balance supply and demand.

⁸ Montana Public Service Commission, Final Order in the matter of Application for Approval to Purchase and Operate the Spion Kop Wind Project, Docket No. D2011.5.41, Order No. 71591, page 4.

⁹ Ibid, page 12.

Wind integration costs are often driven by the need to "secure additional operating flexibility on several time scales to balance fluctuations and uncertainties in wind output."¹⁰ A 2007 study by the Department of Energy, Energy Efficiency and Renewable Energy division found that wind integration costs were about \$5/MWh, or less, for wind capacity penetrations up to 15 percent of the peak load where the power is delivered.¹¹

NorthWestern Energy in a July 2006 presentation to the Northwest Power and Conservation Council identified wind integration issues including: within-hour regulation issues, forecast issues, forced outage notification issues, increased regulation cost, and increased penetration levels for wind generation. Limited resource availability for regulation services and concern that present regulation resources may not be available in the future due to increased penetration of wind in other control areas also were raised.¹² In addition, transmission issues relative to load following services when purchased outside the control area were pointed out by NorthWestern. NorthWestern encountered some challenges in integrating the 135-MW Judith Gap Wind farm which came online in late 2005. For example, in April 2006, the Western Electricity Coordinating Council notified NorthWestern that its transmission system may have fallen 3 percent short of minimum control performance standards of 90 percent. The lapse did not bring sanctions, but illustrate some of the difficulty associated with managing the ups and downs of wind -- particularly when it is new to a system.

In January 2011, the Dave Gates Generation Station started operating and is used by NorthWestern to provide regulation services for balancing authority, including regulation for wind projects in the supply portfolio. In approving NorthWestern's request to construct Dave Gates, the PSC noted, "The NorthWestern balancing authority requires 60 MW of traditional regulation service, used by both retail and wholesale customers, to comply with reliability standards...An additional 45 MW of Dave Gates' capacity is allocated to the integration of wind and borne by retail ratepayers exclusively."¹³ There was much discussion at the PSC level concerning how much of the costs of Dave Gates to attribute to wind. NorthWestern, in filling out the ETIC survey, indicated that both renewable and integration resources would have been added to their portfolio even if there was not a standard in Montana. However, they did note that the company would have acquired and constructed those resources at a different size. The company also attributed about 50 percent of the cost of Dave Gates to the Montana RPS.

¹⁰*The Northwest Wind Integration Action Plan*, March 2007, page 27.

¹¹ *Annual Report on U.S. Wind Power Installation, Cost, and Performance Trends: 2006*, U.S. Department of Energy, Energy Efficiency and Renewable Energy, May 2007, page 20.

¹² NorthWestern Energy Wind Integration, Northwest Power and Conservation Council Meeting, PowerPoint presentation, July 11, 2006.

¹³Public Service Commission, Application of NorthWestern Energy for Approval to Construct and Operate the Dave Gates Generating Station, Docket No. D2008.8.95 Order No. 6943e, page 32.

While Dave Gates has assisted with integration issues, it has not resolved all issues. In August 2012 NorthWestern issued a Request for Proposals for up to 45 MW of Community Renewable Energy Projects (CREP is a subset of Montana's RPS). NorthWestern received 30 responses, including 24 wind projects. The scoring of projects included transmission criteria based on project location, because NorthWestern was concerned that individual CREP proposals might require transmission upgrades which could increase customer costs. Ultimately, NorthWestern wasn't able to move forward with any of the proposals -- largely because of concerns about transmission and integration issues. The concerns were based on Western Area Power Administration's decision not to integrate those into their system, but still fall into the category of integration issues.

In NorthWestern Energy's 2013 Resource Procurement Plan, existing wind resources are shown in the resource stack at their average annual energy production, which is equal to about 38 percent of generation at full capacity. However, NorthWestern notes that in any one hour cumulative wind may vary between 0 percent and 91 percent of total installed capacity. "This band of variability represents uncertainty that NorthWestern must manage when procuring resources to serve loads."

Montana-Dakota Utilities

18,800 Montana electric customers

Survey Results

14. Has the standard led to you reducing your dependence on fossil fuels? *Yes. To a minor degree, it did not reduce the need for Montana-Dakota's thermal generation. However, the energy produced by the renewable resources reduced the need to purchase energy from MISO, in which thermal resources still dominate.*

15. Has the standard assisted you in hedging against the volatility of fossil fuel markets? *No. Montana-Dakota's renewable resources do not avoid the need for thermal resources.*

16. Has the standard contributed to higher, lower, or neutral costs for your customers? *Neutral. The renewable resources acquired by the company were cost competitive with other forms of electric generation available at the time of their investment.*

17. How much has the standard changed, if at all, your average residential customer's monthly utility bill? Did not respond.

18. How is the standard beneficial to your customers? *The standard did not directly benefit customers. However, the introduction of renewables into Montana-Dakota's generation portfolio has reduced the cost of fuel and purchased power for its customers. This has also reduced the amount of market purchases from others and/or reduced the amount of generation from other higher cost resources that the company has available to it. The introduction of renewables into Montana-Dakota's generation portfolio has also diversified the types of resources that the company utilizes to meet its customers' requirements.*

19. How is the standard a drawback to your customers? *The existing renewable standard did not have a negative impact upon Montana-Dakota customers. The renewable resources acquired by the company were cost competitive with other forms of electric generation available at the time of their investment and are operated as integrated system resources.*

REC Report

MDU indicated that in 2012 it sold \$80,000 worth electric energy credits in unbundled transactions. Additional information about those sales is not provided.

Case Study: Request for Rate Increase

In August 2010 MDU filed an application for authority to increase its electric service rates in Montana. Reasons for the increase were listed as:

- increased investment in facilities, including expansion of wind generation in the Cedar Hills and Diamond Willow projects;
- a decline in MDU's total company wholesale sales margin; and
- recovery of the deferred generation costs associated with the proposed Big Stone II, Gascoyne and Milton Young III generation projects. (Plants that were never built.)¹⁴

Since 2007, MDU made several new generating resource additions including: a 19.5 MW Wind Project named Diamond Willow which began generating electricity in December 2007, a 5.3 MW heat recovery generating station named Glen Ullin Station #6 which commenced commercial operation on June 2010, and a 10.5 MW expansion to the Diamond Willow Wind Project which commenced commercial operation on June 2010.

The Diamond Willow and Cedar Hills wind projects are used to meet customer energy requirements that MDU would otherwise potentially have purchased from the Midwest ISO Energy Market or generated from available company generation. The offsetting benefits of the renewable investments are passed through to the customer under the fuel and purchased power tracking adjustment or directly, according to testimony provided to the PSC. Transmission investments and tariff costs can provide direct benefits to customers in the form of congestion relief which reduces the amount of fuel and purchased power that MDU would otherwise have to purchase. The corresponding savings flow back through the fuel and purchased power tracking adjustment.¹⁵

In July 2011, the PSC approved a 6 percent increase in electric rates for MDU's Montana customers. With the increase, a homeowner using 800 KWh a month saw a bill increase by about \$3. North Dakota's Public Service Commission in 2011 approved a rate increase for MDU's 75,000 customers. The North Dakota Commission approved the increase in a split decision with

¹⁴ Montana Public Service Commission, Application for Authority to Establish Increased Rates for Electric Service, Docket No. D2010.8.82, Order No. 7115d, page 4.

¹⁵ Ibid, page 47.

commissioners disagreeing on the impact of Montana's RPS on North Dakota rates.

Black Hills

13 Montana electric customers

Senate Bill No. 164, passed and approved by the 2013 Montana Legislature, exempted public utilities that served 50 or fewer customers on December 31, 2012 from the requirements of Montana's renewable portfolio standard. This exempted **Avista and Black Hills** from the RPS.

Survey Results

14. Has the standard led to you reducing your dependence on fossil fuels? *No. The majority of our Montana load is constant, industrial load. We must maintain generation to meet the demand regardless of the availability of our wind energy.*

15. Has the standard assisted you in hedging against the volatility of fossil fuel markets? *No. Since we own and operate our own generation we have limited exposure to any volatility in the fossil fuel markets.*

16. Has the standard contributed to higher, lower, or neutral costs for your customers? *Neutral. Had we complied with the CREP requirements, it would have resulted in higher costs to our customers. Given the small number of customers we have in Montana, we have not adjusted rates for many years, or for any moderate increases associated with renewable energy we have provided.*

17. How much has the standard changed, if at all, your average residential customer's monthly utility bill? Did not respond.

18. How is the standard beneficial to your customers? *We do not believe the standard is beneficial to our Montana customers, given the economics associated with our small number of customers.*

19. How is the standard a drawback to your customers? *Due to the small number of customers in the rural area of the state, the CREP requirement is not economically feasible compared to our current generation resources.*

REC Report

Black Hills provided information that it purchased bundled RECs and sold unbundled RECS. The purchase price for the bundled RECs varied from \$43.90 presumably per MWh to \$51.76 per MWh. Unbundled RECs were sold for \$1.45.

Avista

9 Montana electric customers

Survey Results

Avista completed portions of the survey, but not questions specific to customer impacts. As noted under information about Black Hills, Avista is now exempt from the RPS. In discussions with the utility, the company indicated neutral customer costs. Since 2008, Avista has not met the RPS requirements in Montana. The utility instead has paid a fine for not procuring the necessary renewable energy credits. Montana's RPS requires a public utility or competitive electricity supplier to pay an administrative penalty, assessed by the commission, of \$10 for each megawatt hour of renewable energy credits that the public utility or competitive electricity supplier failed to procure. A public utility may not recover the penalty in electricity rates, and money generated from the penalties is deposited in the universal low-income energy assistance fund.

Since 2008, Avista has paid a total of \$1,403 in fines.

REC Report

Because Avista paid a fine as opposed to meeting the RPS, the utility did not acquire RECs and filed a report indicating that no credits were purchased. The 2013 Legislature passed and approved Senate Bill No. 52, which clarified that only certain public utilities, cooperatives, competitive electricity suppliers, and electrical generators are required to report the purchase of renewable energy credits. The clarification will exempt Avista from filing reports in the future.

Competitive Electricity Suppliers

In 2007, the Montana Legislature passed and approved House Bill No. 681 (Chapter 246, Laws 2007) which, in addition to public utilities, required competitive electricity suppliers to meet the Montana RPS. Competitive electricity suppliers include any person, corporation, or governmental entity that is selling electricity to small customers at retail rates in the state of Montana and that is not a public utility or cooperative. The number of competitive electricity suppliers subject to the standard has varied since 2008.

PPL Treasure State

Survey Results

14. Has the standard led to you reducing your dependence on fossil fuels? *No. The addition of intermittent resources to meet the Renewable Energy Standard has resulted in operating complexities and additional costs of regulation such as the construction of the Dave Gates Generating Station. In addition, the market impact of the intermittent resources has resulted in increased cycling of thermal units. This is expected to have long-term effect of higher maintenance costs and lower commercial availability.*

15. Has the standard assisted you in hedging against the volatility of fossil fuel markets? *No. Market price volatility has increased, not decreased, with the addition of intermittent resources. There is also lower market liquidity due to the uncertainty of generation, particularly*

in the spring months. Prices can be negative during the off-peak periods and in excess of \$100/MWh in the highest peak hours of the same day due to significant swings in intermittent generation.

16. Has the standard contributed to higher, lower, or neutral costs for your customers?
Higher. The renewable standard has resulted in higher costs to customers due to both the cost of the RECs and the increased regulation cost from the transmission provider.

17. How much has the standard changed, if at all, your average residential customer's monthly utility bill? Did not respond.

18. How is the standard beneficial to your customers? *No perceived benefits.*

19. How is the standard a drawback to your customers? *The standard is a drawback to the customers due to additional costs and an added compliance obligation. These added costs result in putting our customers at a competitive disadvantage in either global or national markets.*

REC Report

PPL Treasure State filed a report indicating that it purchased 40,000 unbundled RECs. The price of the RECs was not publicly disclosed and in accordance with 69-3-2010, MCA. PPL Treasure State indicated that they would not disclose the price of the RECs.

In filings with the PSC, PPL Treasure State indicated that they were required to purchase 20,406 RECs to meet the 2012 standard in Montana. Those credits were purchased from MDU's Diamond Willow wind farm.

Electric City Power

Survey Results

Electric City Power, the electric utility arm of the City of Great Falls, completed portions of the survey, but not questions specific to customer impacts. Electric City Power no longer is operational. In December 2013 the Great Falls City Commission repealed ordinances that had been in place to establish and operate an electric utility -- bringing an end to the City of Great Falls experiment as an electricity supplier.

In 2008 Electric City Power was fined roughly \$23,000 for failure to meet Montana's RPS and in 2010, Electric City Power faced fines of \$99,120 for failure to purchase RECs. In 2009 and 2012, Electric City Power met the standard by acquiring credits from Klondike III wind farm in Sherman County, Oregon. The standard was met in 2011 with credits from Happy Jack wind farm in Laramie County, Wyoming.

REC Report

Electric City Power filed a report indicating that they purchased 9,587 RECs for 95 cents each. Those RECs all came from the Klondike III wind farm.

Conoco-Phillips

Survey Results

Conoco-Phillips did not respond at all to the survey. Senate Bill No. 327, passed and approved by the 2013 Montana Legislature exempted competitive electricity suppliers that serve four or fewer customers from the requirements of Montana's renewable portfolio standard. The exemption only applies to Conoco-Phillips.

REC Report

Conoco-Phillips indicated that 41,550 unbundled RECs were purchased. The price of the RECs was privately negotiated and in accordance with 69-3-2010, MCA, Conoco-Phillips indicated that they would not disclose the price of the RECs.

In filings with the PSC, Conoco-Phillips indicated that they were required to purchase 12, 347 RECS to meet the 2012 RPS requirement and those credits were purchased from Klondike III wind farm.

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