

July 31, 2017

Margaret McCuaig-Boyd  
Minister of Energy  
324 Legislature Building  
Edmonton AB T5K 2B6

Dear Ms. McCuaig-Boyd

**Re:** Request for a Review of the Regulated Rate Option

On April 18, 2017 the MSA received your letter requesting that I provide a report with options for enhancing the design of the regulated rate option (RRO). The MSA provided your office with a draft report on June 1, 2017 and has attached the final report to this letter. I trust that this report and the accompanying stakeholder comments will assist your office in its assessment of the *Regulated Rate Option Regulation* (RRO Regulation).

To assist in its drafting of the report, the MSA requested comments from stakeholders on potential options for changing the RRO, which were incorporated in the draft report provided to your office on June 1, 2017. The MSA also requested stakeholder comments on the draft report and received comments from 12 parties. The request for comments and a list of the comments received are attached as Appendix D and E, respectively. The comments will be provided separately. Aside from factual corrections, the final report attached to this letter is the same as the June 1, 2017 draft. Instead of making significant changes to the report, below the MSA highlights a number of areas of stakeholder comment.

A number of stakeholders submitted that changes to the RRO should be made with consideration of the electricity market transition. The RRO should not be changed in a vacuum; all energy sourcing mechanisms depend on the wholesale electricity market and changes to the wholesale market may affect the advantages and disadvantages of each option. The MSA agrees with stakeholders that arriving at a long term, stable and affordable RRO requires clarity regarding the structure of the wholesale market, which includes markets for energy, capacity and ancillary services.

Stakeholders also expressed concerns with the pool price flow-through option and emphasized that pool price volatility may not remain as low as it is currently, even with the electricity market transition. The MSA agrees that generally energy prices are allowed to increase in response to scarcity in markets with capacity mechanisms, even if market power is mitigated. As such, there is still potential for price spikes, which would be passed through to consumers. The design of the RRO will impact how much and when the possibility of such price volatility will impact rates for consumers.

Stakeholders restated that there are disadvantages associated with equalized billing and deferral accounts, including the potential to add volatility to rates and bills because of deferral charges, increasing customer confusion and reduced price responsiveness with respect to bills because they are not paying only for the current month consumption, and potential additional working capital requirements for provider. It should also be noted that the RRO Regulation currently requires providers to offer equalized billing to eligible customers; however, consumer adoption of this option has been low.

The MSA would like to emphasize that the energy price is only one component of overall electricity bills. Consideration of other components of the bill, such as distribution and transmission charges, is required to ensure electricity remains affordable for consumers into the future. Electricity bills also vary significantly based on consumption, which has considerable seasonal variation. A stable RRO rate will not eliminate consumption-based variation in bills, which affects energy, distribution, transmission and other charges.

The MSA has attached copies all first and second round stakeholder comments to the report for your consideration. I believe that the report and stakeholder comments will provide you and your team with sufficient background to begin a broader consultation on potential changes to the RRO Regulation and the MSA looks forward to contributing to any further process.

Should you have any questions regarding any of the above, please do not hesitate to contact me.

Sincerely,

**/s/ Matt Ayres**

CEO and Market Surveillance Administrator

CC: Phillip Shum, Alberta Energy

Mark Nesbitt, Manager Investigations and Retail, MSA

# Options for Enhancing the Design of the Regulated Rate Option

**MSA Report to the Minister of Energy**

July 31, 2017

**Taking action** to promote effective competition and a culture of compliance and accountability in Alberta's electricity and retail natural gas markets

## Table of Contents

List of Figures and Tables .....	3
List of Definitions and Abbreviations .....	4
1 Executive Summary .....	6
2 History of the Regulated Rate Option.....	8
3 Regulated Rate Option Today.....	9
3.1 AUC Process .....	10
3.2 Regulatory Cost .....	11
3.3 RRO Volatility.....	12
3.4 Energy Price as a Percentage of Energy Bills .....	14
3.5 RRO Rates Vary by Rate Class .....	17
3.6 RRO Rates Vary by Location .....	19
3.7 Natural Gas Default Rate Tariff .....	21
4 The Competitive Retail Market Today .....	22
5 Options to Enhance the RRO.....	24
5.1 Single RRO Buyer.....	24
5.2 Energy Sourcing Options .....	26
5.3 Billing Options .....	31
5.4 Miscellaneous Options .....	35
6 Transition.....	40
7 Impact of RRO Options on Municipal Providers and Rural Electrification Associations .....	41
7.1 Lethbridge.....	41
7.2 Medicine Hat.....	41
7.3 Rural Electrification Associations .....	42
A List of RRO Providers by Location .....	43
B MSA Request to Stakeholders for Comments .....	44
C List of Stakeholder Comments .....	45

## List of Figures and Tables

Figure 1: NGX Alberta Flat Electricity 120 Day RRO Index and Pool Price, June 2013 to April 2017.....	13
Figure 2: RRO Rates and Pool Price.....	13
Figure 3: Impact of RRO Smoothing on Average Monthly Detached Home Regulated Bills, ENMAX & ATCO Zones, 2012 – 2016 .....	14
Figure 4: Impact of RRO Smoothing on Average Monthly Detached Home Regulated Bills, EPCOR & FortisAlberta Zones, 2012 – 2016 .....	15
Figure 5: Typical Detached Home Annual Total Regulated Electricity Bill in 2016 by Service Zone (Annual Consumption in kWh).....	16
Figure 6: Monthly Consumption for a Detached Home by Service Zone, 2012-2016.....	16
Figure 7: Residential Premium over Other RRO Rate Classes in the ATCO Zone (DERS RRO), 2012-2016.....	17
Figure 8: Residential & Lighting RRO Rates, 2012-2016.....	18
Figure 9: Residential RRO Rates in the Four Service Zones & Distribution-Ownning Municipalities, 2012-2016 .....	20
Figure 10: RRO Rates from January 2015 to May 2017.....	21
Figure 11: Select Fixed-Rate Competitive Electricity Contracts, January 2012 to May 2017 .....	23
Figure 12: Share of Alberta Residential Sites on Competitive Contracts, 2012-2016 .....	23
Figure 13: Traded Volumes of Near Year Annual Forward Contracts, 2006-2016.....	29
Figure 14: RRO Share of Monthly Contracts Traded in the Near (4) Months.....	31
Figure 15: Comparison of Equalized Bills in the ATCO Zone, 2014.....	34
Table 1: Regulated Rate Option Regulation (AR 262/2005) Amended Expiry Dates .....	11
Table 2: RRO Administration Charges for Residential Consumers, May 2017 .....	12
Table 3: Percentage of Months Small RRO Consumers Pay More/Less/Same Under a Single RRO Rate Class per Service Area, 2012-2016 .....	19
Table 4: Summary of RRO Options.....	24
Table 5: Electricity Policy and Regulatory Timelines .....	40

## List of Definitions and Abbreviations

Adjustable Equalized Billing	A variation on equalized billing, whereby monthly bill payments are mechanically adjusted in response to divergences between forecasted bill costs and actual costs. These divergences may occur if rates and/or load shape change.
AESO	Alberta Electric System Operator (known as the ISO)
AEUB	Alberta Energy and Utilities Board, the predecessor of the AUC
AUC	Alberta Utilities Commission
Bill-deferral Mechanism	A means of bill equalization whereby the difference between a consumer's pre-determined monthly equalized payment and their actual monthly bill cost is collected by the bill provider (as a positive or negative balance) over a series of months, and subsequently paid to/collected from the consumer at the end of the equalization period.
Cost-deferral Account	An account held by the RRO Provider (specifically, the energy buyer) that collects month-to-month differences between the RRO Provider's RRO revenue and costs for individual RRO components. The balance of the account is then collected from/paid to consumers at a later time. For example, a cost-deferral account for only energy charges would collect the costs and revenues of pool settlement (costs where non-hedged energy needs to be purchased at the pool price, revenues where excess hedged energy can be sold at pool price).
Criteria	The Minister's April 18, 2017 letter requested that the MSA report outline options to change the RRO to provide long-term, predictable, stable and affordable electricity rates, with minimized regulatory and administrative costs. These are interpreted by the MSA to be the criteria for evaluating the options.
DGS Regulation	<a href="#"><u>Default Gas Supply Regulation</u></a>
DERS	Direct Energy Regulated Services
DRT	Default Rate Tariff (for natural gas)
EPCOR	EPCOR Energy Alberta GP Inc.
EPSP	Energy Price Setting Plan as required by the RRO Regulation and approved by the AUC.
Fixed Payment Equalized Billing	Consumers pay fixed monthly payments based on their expected annual consumption and forecast rates. Each consumer would have a bill-deferral account for the period, which would then be collected upon/paid out at the end of the year. This true-up could be a lump sum payment/refund, or spread over a series of months in the

subsequent year.

Large RRO Provider	The three RRO Providers that have their EPSPs approved by the AUC: DERS, EPCOR and ENMAX.
ENMAX	ENMAX Energy Corporation
EUA	<a href="#"><u>Electric Utilities Act</u></a>
Minister	Alberta Minister of Energy
MSA	Market Surveillance Administrator
RMRC	Retail Market Review Committee
RRO	Regulated Rate Option
RRO Provider	Any party that provides the RRO to consumers in a distribution zone.
RRO Regulation	<a href="#"><u>Regulated Rate Option Regulation</u></a>
REA	Rural Electrification Association
UCA	Utilities Consumer Advocate

# 1 Executive Summary

This report was prepared in response to the Minister of Energy's April 18, 2017 request (Appendix B) for the MSA to prepare a report that assesses options for enhancing the design of the regulated rate option to provide long-term, predictable, stable and affordable electricity rates, with minimized regulatory and administrative costs. The Minister requested advantages and disadvantages of each option, as well as challenges associated with a transition.

To assist the MSA in completing its report the MSA published a notice (Appendix B) on April 21, 2017 requesting that stakeholders provide comments regarding potential changes to the RRO and identify advantages and disadvantages for each option. The MSA asked that stakeholders consider: (i) whether there should be one RRO rate for all eligible consumers (or consumer category) in Alberta; (ii) changes to procurement, including advanced procurement of longer term products, centralized procurement, or options that do not require advanced procurement; (iii) introduction of deferral accounts or changes to bill smoothing; and (iv) when and how a change to the RRO should occur.

The MSA received comments from 20 stakeholders, including private citizens, RRO Providers, retailers, Rural Electrification Associations, generators, distribution system owners, and consumer groups. A list of the stakeholders who provided comments is attached (Appendix C) and copies of the comments received are available on the MSA website. The MSA greatly appreciates the time taken by stakeholders to provide feedback and believes the consultation has been valuable in improving this report. Among the stakeholder comments there was a diversity of opinion expressed on what, if any, changes to the RRO are optimal.

In this report the MSA has not summarized the comments received, but has used them to help articulate the advantages and disadvantages of various modifications to the RRO. Most stakeholders were of the view that once options were narrowed further consultation would be helpful in articulating those advantages and disadvantages more clearly. The MSA agrees; choosing between options requires consideration of trade-offs. While the choice between competing options may not be easy, there are a number of options that appear to meet the requirement for more stable and predictable electricity rates with minimized regulatory and administrative costs. Many of these options would not require an RRO price cap and would continue to provide consumers with meaningful choice among retail products provided by competitive retailers as well as regulated providers.

The majority of the options would require amendments to the RRO Regulation and some may be more effectively implemented by also amending sections of the EUA. Some options depend in part on what happens in other parts of the Alberta electricity market. For example, if the transition to a capacity market results in stable wholesale prices, this would also lead to more stable retail rates. The MSA also notes that the energy price is only one component of overall bills. Consideration of other components of the bill, such as distribution and transmission charges, is required to ensure electricity remains affordable for consumers into the future. That broader consideration is outside the scope of this review. Electricity bills also vary significantly based on consumption, which has considerable seasonal variation. A stable RRO rate will not eliminate consumption-based variation in bills.



To provide context to the current RRO review, the MSA has provided a brief history of the RRO and previous reviews and an overview of the competitive retail market today.

## **Options to Enhance the RRO**

### *Single Buyer*

The MSA considered whether all energy required for the RRO could be procured by a single, designated agent for all of Alberta (also referred to as 'central procurement'). The MSA found that there is some scope for regulatory and administrative costs savings, but these savings are relatively small compared to the total cost of providing the RRO. There may also be advantages to procurement by a single buyer in terms of rate standardization across the province and enabling smaller RRO Providers to benefit from greater scale. There would, however, be significant cost associated with establishing a new entity, or ensuring that an existing entity has the necessary expertise and independence to undertake this role.

### *Energy Sourcing Options*

The MSA also considered a number of options for sourcing energy for the RRO, including (i) near-term purchase of monthly forward market hedges, as used today; (ii) longer term forward market hedges; and (iii) pool price flow-through. The MSA is of the view that each of these three options could satisfy the Minister's Criteria when combined with other features. The two more volatile sourcing options, monthly forward market hedges and pool price flow-through, could be combined with default equalized billing of a consumer's monthly charges to provide stable bills. Longer term forward market hedges would provide for more stable rates, but the energy cost is likely to increase with the length of contract because suppliers are taking on more price risk. As a result, pool price flow-through is likely to be the least cost option in the long run for consumers, but also the most volatile month-to-month.

Predictability can be provided by procurement of longer term forward market hedges, since a rate could be set for a longer period than monthly, as is the case currently. Pool price flow-through would not provide rates that are known ahead of consumption.

The three energy sourcing options would have different effects on the competitive retail market.<sup>1</sup> As detailed in Section 4, the competitive retail market has expanded since the introduction of the current RRO design. While many competitive retailers offer pool price flow-through products, their primary business is longer term hedged products. The effect an RRO based on pool price flow-through would have on the competitive market would depend on consumers' preferences and whether bills are equalized. A long-term hedged RRO would likely have the largest negative impact on the competitive market, because it would compete most directly with hedged products offered by retailers.

The time required to transition these products would vary. Moving to a longer term hedge would require time to increase the percentage of energy procured on longer term contracts, perhaps

<sup>1</sup> This analysis is done independent of the 6.8 cent/kWh price cap on the RRO and its effect on the competitive retail market.

on a staged basis. Pool price flow-through could be implemented relatively quickly because it does not require hedges to be purchased. All options may require changes to the RRO Regulation and RRO Providers' automated systems, which may take some time. The government should consider the expiry of the current EPSPs, RRO Regulation, and introduction of the capacity market when deciding on timelines.

### *Billing Options*

The MSA considered which entities should provide billing and customer service to RRO consumers. Established entities, such as the current RRO Providers or competitive retailers, currently have responsibility for billing and customer service. Moving away from this arrangement could be costly in terms of development of new billing infrastructure, transition of customer information between providers, and could affect billing continuity and customer service.

The MSA also explored options to smooth bills or charges between months using some type of bill-deferral mechanism (current month costs are paid in the future). By equalizing bills, consumers would receive a more consistent energy bill, regardless of the RRO procurement mechanism. Disadvantages to default equalized billing include greater working capital costs, increased consumer confusion regarding bill charges, and potential for large true-up payments in addition to the monthly bill.

### *Miscellaneous Options*

These options include standardizing the RRO rate for all Albertans, changing the eligibility threshold for the RRO, charging entry or exit fees, changing the name of the RRO, 'greening' the RRO and allowing cost-deferral accounts. Some of these options, including one RRO rate for all Albertans, allowing entry or exit fees, 'greening' the RRO and allowing cost-deferral accounts may be costly for RRO consumers while achieving few benefits according to the Minister's Criteria. Changing the eligibility threshold for the RRO and changing the name of the RRO would not be costly, but are unlikely to have significant impacts relating to the Criteria.

## **2 History of the Regulated Rate Option**

The RRO was introduced in 2001 alongside the introduction of retail competition. Since then, the RRO and enabling regulations have gone through numerous reviews and revisions. In 2005 the Department of Energy (DOE) released a review of electricity policy which concluded that the RRO should transition from a longer term hedged product<sup>2</sup> to a product based on monthly forward hedges to promote the continued development of the competitive retail market and provide appropriate price protection.<sup>3</sup> The transition to an RRO based on monthly forward hedges began in mid-2006 and ended in 2010. During this period the percentage of the RRO based on long term hedges was gradually reduced, which resulted in a blended product.

<sup>2</sup> The length of these hedges varied by provider but ranged from quarterly to 4 year hedges.

<sup>3</sup> Alberta Department of Energy, *Alberta's Electricity Policy Framework: Competitive – Reliable – Sustainable*, (June 6, 2005).

On April 15, 2010 the DOE issued another review of the RRO transition rate.<sup>4</sup> The conclusion of this review was that “there is sufficient growth and development within the market to support the continued transition to the competitive world. Therefore, the Department recommends that the Government confirm the scheduled progression towards a 100 percent one-month forward pricing hedge.” This transition was completed for the 2011 EPSPs submitted to the AUC.

On March 22, 2012 the Minister of Energy signed Ministerial Order 32/2012 forming the RMRC, directing it to “review, within the context of the competitive retail electricity market in Alberta, the necessity and appropriate design of a default rate for eligible consumers.”<sup>5</sup> The Ministerial Order also directed the RMRC to consider the purposes of the EUA and focused the committee’s work on the government’s preference for developing a competitive retail market for electricity.

In its report published September 2012, the RMRC recommended that the RRO be phased out as soon as possible because the RRO is a mechanism to facilitate the transition to a fully competitive retail market.<sup>6</sup> The RMRC also recommended that a provider of last resort be created, to provide continuity of service if a retailer is no longer able to service customers. The government rejected all recommendations related to the elimination of the RRO.

On May 1, 2013 the government established an implementation team composed of MLAs to provide advice on the implementation of the other RMRC recommendations approved in principle by the government. In its final report the implementation team recommended that the Minister allow the AUC to determine the procurement method and any standardization for EPSPs and consider reducing the RRO eligibility limit to 25 MWh per year over 3-5 years.<sup>7</sup> The RMRC recommendation that the RRO procurement window be extended was implemented in the RRO Regulation in 2013. The eligibility limit was not reduced.

### **3 Regulated Rate Option Today**

The RRO Regulation requires that RRO Providers develop EPSPs that set RRO rates based on monthly forward market electricity prices established in the 120 days preceding the delivery month. EPSPs for the three Large RRO Providers are approved by the AUC. The current regulation expires on April 30, 2020.

EPSPs provide a framework for how RRO rates are set on a monthly basis, and establish various rules governing energy procurement and forecasting methodologies, energy cost allocation mechanisms and include an element for risk compensation and reasonable return. The EPSPs are intended to be valid for a pre-established period, after which they are replaced by new plans. The AUC approves EPSPs for the Large RRO Providers. The proceedings involve both the applicant (the Large RRO Provider) and interveners (which may include consumer advocacy groups and energy suppliers).

<sup>4</sup> Alberta Department of Energy, *Retail Market Review An Update and Review of Market Metrics*, (April 15th, 2010).

<sup>5</sup> RMRC, *Power for the People*, (September 2012), page 204.

<sup>6</sup> *Ibid.*

<sup>7</sup> MLA Retail Market Review Committee Implementation Team, *Enhancing the Retail Market for Electricity*, (June 2, 2014).

### 3.1 AUC Process<sup>8</sup>

In 2006, the AEUB, the AUC's predecessor, approved negotiated settlements for the ENMAX, EPCOR, and DERS EPSPs for the period of July 1, 2006 to June 30, 2011.<sup>9</sup> With the exception of DERS' proposed reasonable return component, which was not part of its negotiated settlement, all other aspects of the three Large RRO Providers EPSPs were derived from their respective negotiated settlements. The three Large RRO Providers had negotiated settlements approved by the AUC in 2011 for their plans spanning the period of December 2011 to June 30, 2014.<sup>10</sup> EPCOR's 2011 EPSP was amended in 2013 to change the price setting period from 45 to 120 days,<sup>11</sup> in line with the 2013 amendment of the RRO Regulation.

On November 22, 2013, the AUC initiated a generic proceeding on the RRO to examine all elements of the proposed 2014-2018 EPSPs for DERS, ENMAX, and EPCOR. The combined proceeding was intended to allow for a "more thorough understanding of any similarities and differences among the proposed EPSPs of the three RRO Providers and reduce duplication of efforts."<sup>12</sup> Because of the amount of time the generic proceeding was expected to take, the AUC determined that the parties would adhere to their 2011 EPSPs (as amended for EPCOR) until otherwise directed, past the date of expiry.<sup>13</sup>

The AUC issued its decision regarding the generic proceeding on March 10, 2015, directing DERS and EPCOR to file compliance filings and ENMAX to file a new EPSP proposal, each incorporating the AUC's various findings and directions.<sup>14</sup> Among the directions, the AUC had the EPCOR and DERS replace the older fixed risk margins with a form of rolling monthly risk compensation, termed 'Commodity Risk Compensation'. EPCOR had its generic proceeding EPSP compliance filing approved by the AUC in February 2016.<sup>15</sup> DERS and ENMAX's generic proceeding EPSPs are still subject to AUC proceedings.<sup>16</sup> As such, DERS and ENMAX RRO rates are still set pursuant to their 2011 EPSPs, with the exception that the reasonable return component of both EPSPs has been updated to reflect the AUC's determinations on reasonable return arising from the generic proceeding.

EPCOR filed its proposed 2018-2021 EPSP on January 24, 2017. The proposed plan includes procurement of full-load strips (a percentage of hourly load) in addition to the usual flat and on-peak hedges. DERS filed its proposed 2018-2020 EPSP application on May 5, 2017, which proposed the continued use of flat and peak hedge procurement.<sup>17</sup> This proceeding was

<sup>8</sup> For consistency, the 2011-14 and 2014-18 EPSPs will be referred to as such, despite the lack of actual adherence to this schedule.

<sup>9</sup> ENMAX, EPCOR, and Direct Energy had their negotiated settlements approved by the AEUB in Orders U2006-110, U2006-109 and U2006-108, respectively.

<sup>10</sup> Direct Energy AUC Decision [2011-199](#); ENMAX AUC Decision [2011-486](#); and EPCOR AUC Decision [2011-123](#),<sup>15</sup> which was amended by four decisions: AUC Decision [2011-259](#), AUC Decision [2011-314](#), AUC Decision [2013-021](#) and AUC Decision [2013-292](#).

<sup>11</sup> AUC Decision [2013-292](#).

<sup>12</sup> AUC Notice, November 22, 2013, Proceeding 2941.

<sup>13</sup> AUC Decision [2014-051](#).

<sup>14</sup> AUC Decision [2941-D01-2015](#).

<sup>15</sup> AUC Decision [20342-D02-2016](#).

<sup>16</sup> See AUC Proceeding 22510 for the ENMAX 2014-18 EPSP Compliance Filing. AUC Proceeding 21295 is the Direct Energy 2016-18 Second Compliance Filing Application.

<sup>17</sup> [DERS, 2018-2020 EPSP Application](#), (May 5, 2017), PDF page 5.

suspended pending the expected conclusion of DERS' 2014-2018 EPSP proceeding in August 2017.<sup>18</sup> ENMAX has not yet filed an application for the period beyond 2018.

The RRO Regulation has recently been renewed for short periods of time (Table 1). Because these frequent renewals necessitate shorter-term EPSPs, the regulatory costs of these plans have been larger than they otherwise would have been under a regulation that does not come close to expiry so often. Providers could then have longer term EPSPs, which would avoid regulatory costs associated with more frequent hearings. There may, however, be benefits to shorter EPSPs, including greater AUC scrutiny of plans and costs and how they evolve over time.

Table 1: Regulated Rate Option Regulation (AR 262/2005) Amended Expiry Dates

<b><u>Regulated Rate Option Regulation (Amendments)</u></b>	<b><u>Expiry Date</u></b>
<b>AR 262/2005 – Regulated Rate Option Regulation<sup>19</sup></b>	December 31, 2015
<i>264/2007</i>	December 31, 2012
<i>143/2010</i>	June 30, 2014
<i>224/2012</i>	April 30, 2018
<i>11/2013</i>	April 30, 2018
<i>59/2015 (Current Version)</i>	April 30, 2020

### 3.2 Regulatory Cost

Of the three EPSPs intended to span the 2011 to 2014 period, two are still in effect as of May 2017; the third EPSP was only replaced in August 2016.<sup>20</sup> The complexity of the EPSPs and the often diverging interests of Large RRO Providers and consumer groups tend to lengthen the EPSP application process. Some of the regulatory costs incurred by the Large RRO Providers and the non-governmental interveners<sup>21</sup> during these EPSP hearings are paid by consumers on the RRO through the energy rate and the non-energy ('administration') rate.

The UCA, a government agency and one of the interveners, estimated its own RRO-associated regulatory costs at \$1.54 million since the beginning of the generic proceeding for the 2014-18 EPSPs; it has further estimated the total regulatory cost of the RRO for parties to be \$5 million from 2014 to July 31, 2016.<sup>22</sup>

A portion of the gross annual RRO regulatory costs are recovered from RRO ratepayers via the energy charge. The costs recovered via the energy rate are relatively small; between 2012 and

<sup>18</sup> [AUC Letter – Process and Schedule](#), May 26, 2017, Proceeding 22635.

<sup>19</sup> CanLii, [Regulated Rate Option Regulation, Alta Reg 262/2005](#).

<sup>20</sup> As applied for in the initial applications, EPSPs were intended to be separate plans spanning the years 2011-14, 2014-18 and 2018-20/21.

<sup>21</sup> The UCA obtains 80% of its funding from the Balancing Pool and 20% from natural gas utilities. UCA, [Annual Report to the Minister 2015/2016](#), (October 31, 2016), page 12.

<sup>22</sup> Utilities Consumer Advocate, *RRO Submission*, (May 19, 2017), PDF page 449.

2016, regulatory costs comprised an average of 0.01 ¢/kWh across all rate classes and service areas, with the gross cost amounting to \$4.2 million over the five years.<sup>23</sup>

In addition to recovering regulatory costs through the RRO energy rate, some costs are recovered through the daily or monthly non-energy charge, which is a fixed rate per site. The non-energy charges for the three Large RRO Providers are listed in Table 2. RRO Providers serving more consumers tend to have lower non-energy charges, indicating possible economies of scale.<sup>24</sup> The RRO non-energy costs are similar to the administrative costs charged by competitive retailers, which range from \$5-12 per month for an electricity site, with the majority centered on \$7 per month.

Table 2: RRO Administration Charges for Residential Consumers, May 2017

RRO Provider	Administration Charge
ENMAX <sup>25</sup>	\$0.2064/day (Average \$6.28/month)
<i>EPCOR</i>	
EPCOR Service Area <sup>26</sup>	\$5.40/month
FortisAlberta Service Area <sup>27</sup>	\$5.51/month
DERS <sup>28</sup>	\$0.352/day (Average \$10.71/month)

### 3.3 RRO Volatility

RRO rates are primarily based on the price of forward market hedges procured by the RRO Providers in the months leading up to the delivery month.<sup>29</sup> Historically, the forward market frequently carried a premium over the real-time market (Figure 1). Flat monthly near month forward contracts carried a positive premium over pool price in 87% of months between June 2013 and April 2017, with an average premium of \$9.66 MWh. This resulted in RRO rates that were often higher than monthly average pool prices (Figure 2). Consumers on pool price flow-through rates, however, do not pay pool price directly and instead pay pool price shaped to their energy consumption profile, plus a margin charged by the retailer (typically around 1 cent per kWh).

<sup>23</sup> Data collected from monthly AUC RRO rate filings for the three RRO Providers. These costs do not include costs of the government agencies such as the UCA and AUC. These costs include ongoing costs for the involvement of the consumer groups and an independent advisor.

<sup>24</sup> In December 2016, ENMAX served approximately 167,000 RRO customers in its service area, while EPCOR served approximately 487,000 RRO customers in the EPCOR and FortisAlberta service areas combined and DERS served approximately 85,000 customers. MSA, [Retail Statistics](#), (May 19, 2017).

<sup>25</sup> AUC Decision [21646-D01-2016](#), (October 6, 2016), Appendix 4, PDF page 28.

<sup>26</sup> EPCOR Energy Alberta GP Inc., [Price Schedule Applicable to Regulated Rate Tariff Customers within the City of Edmonton](#), PDF page 2.

<sup>27</sup> EPCOR Energy Alberta GP Inc., [Price Schedule Applicable to Regulated Rate Tariff Customers outside the City of Edmonton](#), PDF page 2.

<sup>28</sup> DERS, [2017 Interim Rate Schedules for Electricity RRT Service Effective May 1, 2017](#), PDF page 2.

<sup>29</sup> As of publication, forward hedges are procured 45-days in advance of the delivery month in service areas served by DERS and ENMAX as the RRO provider, while the two EPCOR RRO rates are based on a 120-day procurement period.

Figure 1: NGX Alberta Flat Electricity 120 Day RRO Index<sup>30</sup> and Pool Price, June 2013 to April 2017

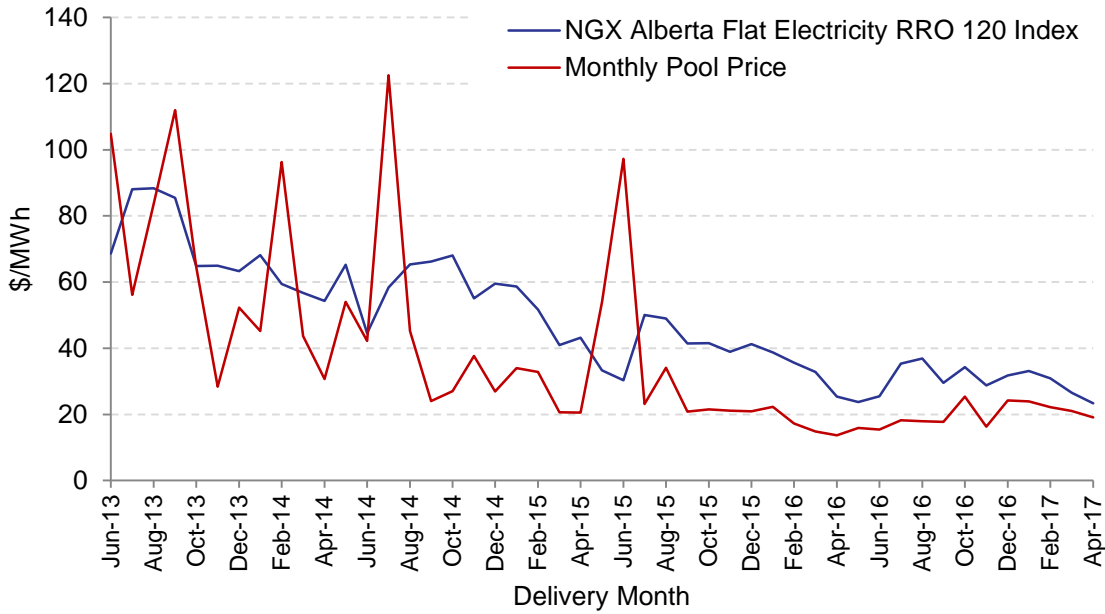
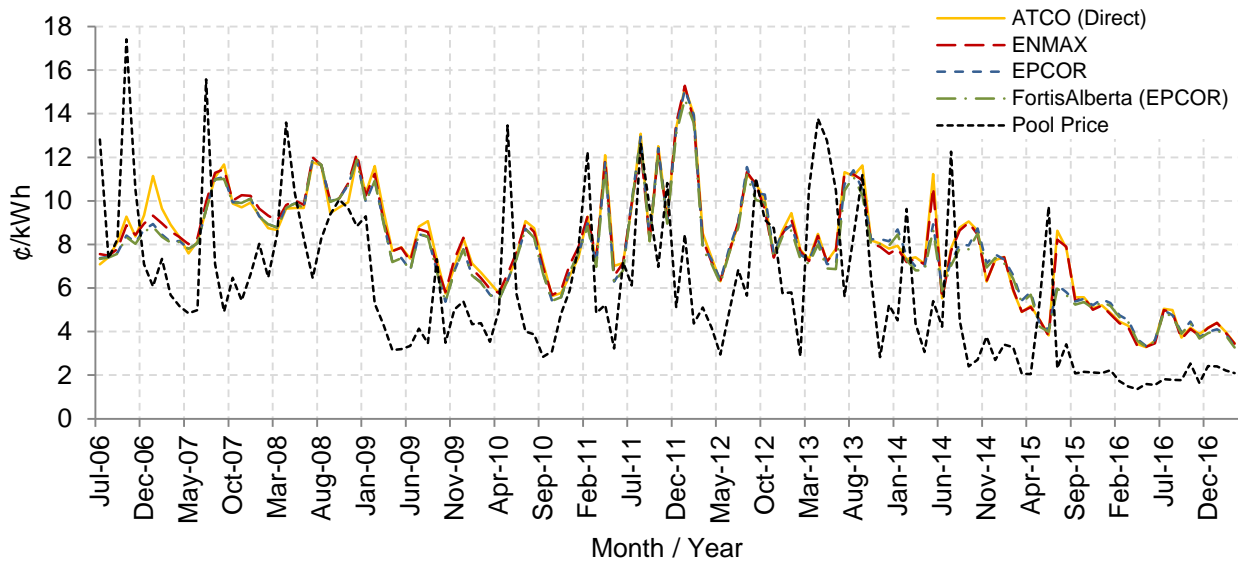


Figure 2: RRO Rates and Pool Price



Pool price volatility, caused by fluctuating fuel costs, a low supply cushion, and offer behaviour (among other factors), drives forward price volatility, and consequently, unstable RRO rates. Recently, the pool price level and volatility have been low, resulting in low forward and RRO price volatility. The pool price outcomes have been due to:

- Relatively high supply cushion compared to recent years;

<sup>30</sup> [Index data](#) and [methodology](#) available via NGX. Index data available from June 2013 to present.

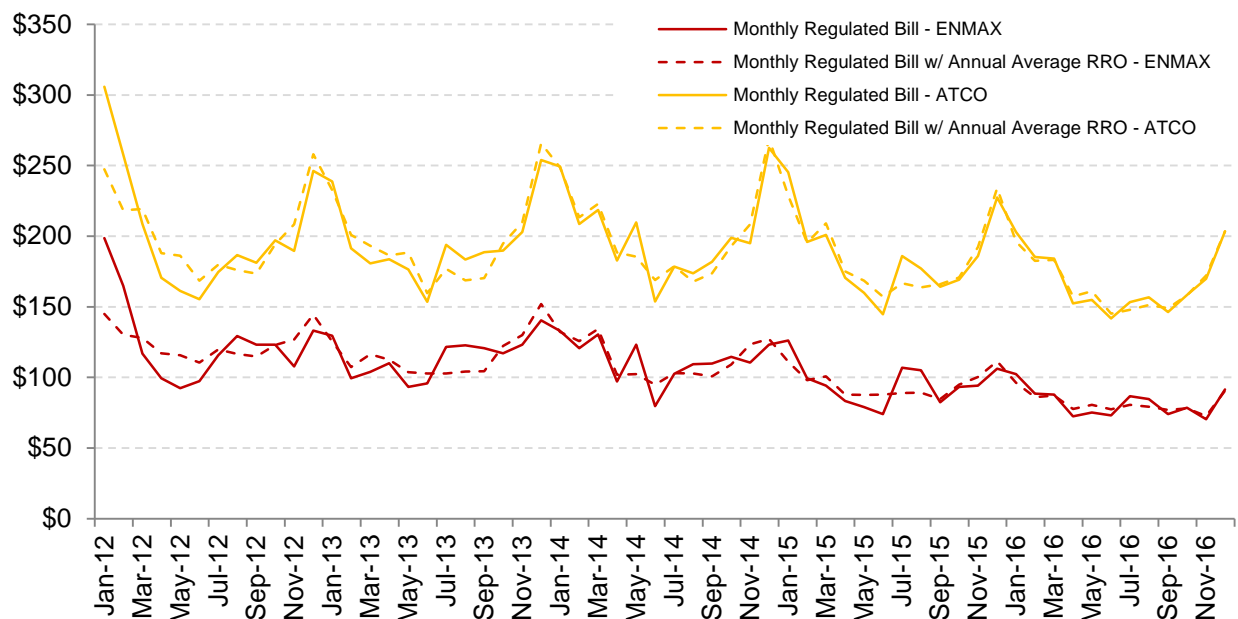
- Offer control around PPA terminations affecting the offers of many coal-fired units;
- Lower offers because of lower natural gas prices; and
- Lower year-over-year demand.<sup>31</sup>

Current pool prices are likely not sufficient to support fixed cost recovery for many generators, and are therefore unlikely to support new investment. All-in energy and capacity prices are likely to rise in the future to support new investment, although when this will occur is uncertain. In addition, the introduction of a capacity market and related policies may result in Alberta energy market prices that are less volatile than the period between 2011 and 2015.

### 3.4 Energy Price as a Percentage of Energy Bills

Significant variability of monthly energy bills can make budgeting difficult for some consumers. As shown in Figure 3 and Figure 4, electricity bills across the province vary significantly on a month-to-month basis. The figures include both the actual monthly bills for an average detached home consumer (solid line) as well as hypothetical monthly bills with the monthly energy rate for each year set at the annual average RRO rate (dashed line). These figures show that the majority of bill variation is due to factors other than the RRO rate, primarily seasonality of consumption (Figure 6). Consumption of residential consumers is typically highest in winter and lowest in summer. Simply reducing variability in the energy rate will not eliminate all month-to-month differences in bill totals. Equalized billing, as explored in Section 5.3.4, would allow all charges to be smoothed on a month-to-month basis.

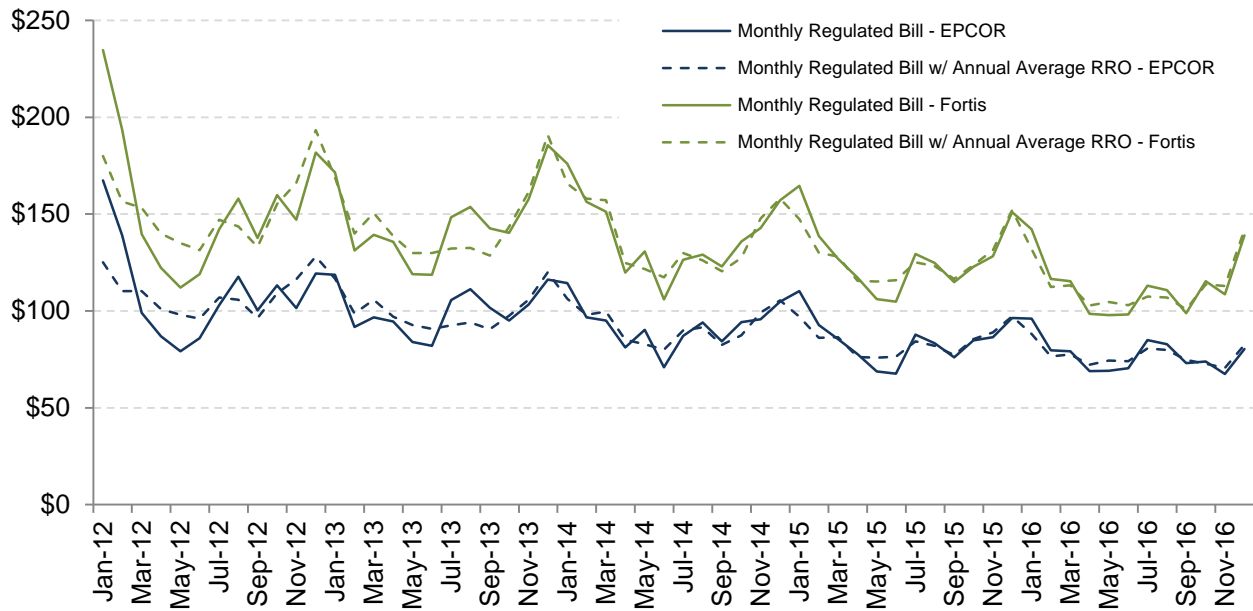
Figure 3: Impact of RRO Smoothing on Average Monthly Detached Home Regulated Bills, ENMAX & ATCO Zones, 2012 – 2016



<sup>31</sup> MSA, [Q4/2016 Quarterly Report](#), (February 16, 2017).



Figure 4: Impact of RRO Smoothing on Average Monthly Detached Home Regulated Bills, EPCOR & FortisAlberta Zones, 2012 – 2016



As shown in Figure 5, the components of consumers' bills that vary with consumption include the energy, transmission, and variable distribution charges, which account for between 55 and 67% of the bill. As of 2016, energy accounts for between 22 to 50% of variable charges. This means that if only the RRO rate is stabilized, variability in bills based on consumption (Figure 6) would still be significant.

Figure 5: Typical Detached Home Annual Total Regulated Electricity Bill in 2016 by Service Zone (Annual Consumption in kWh)

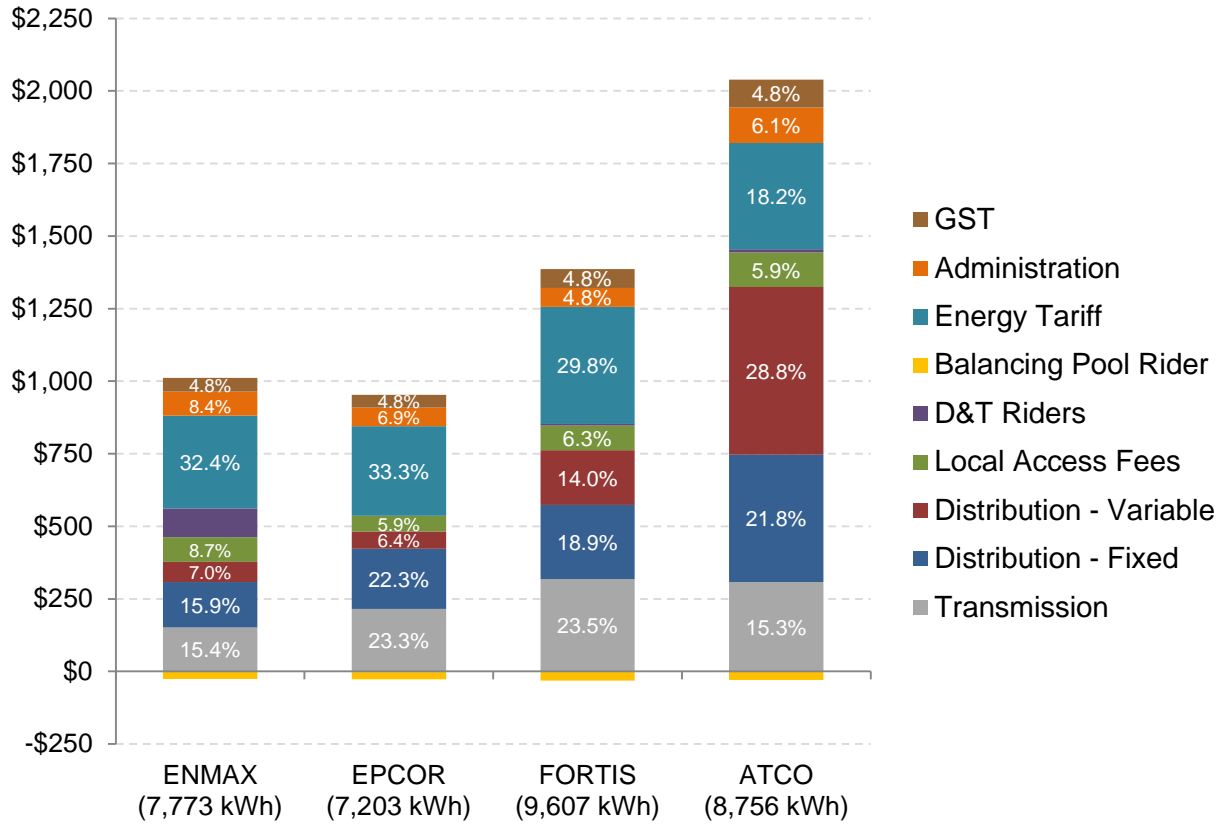
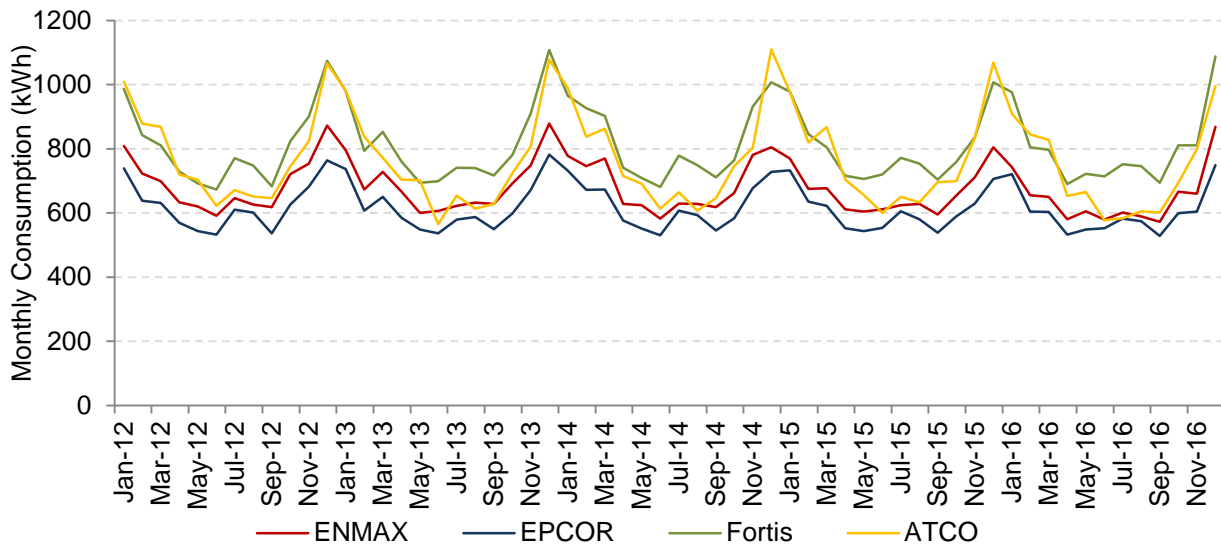


Figure 6: Monthly Consumption for a Detached Home by Service Zone, 2012-2016

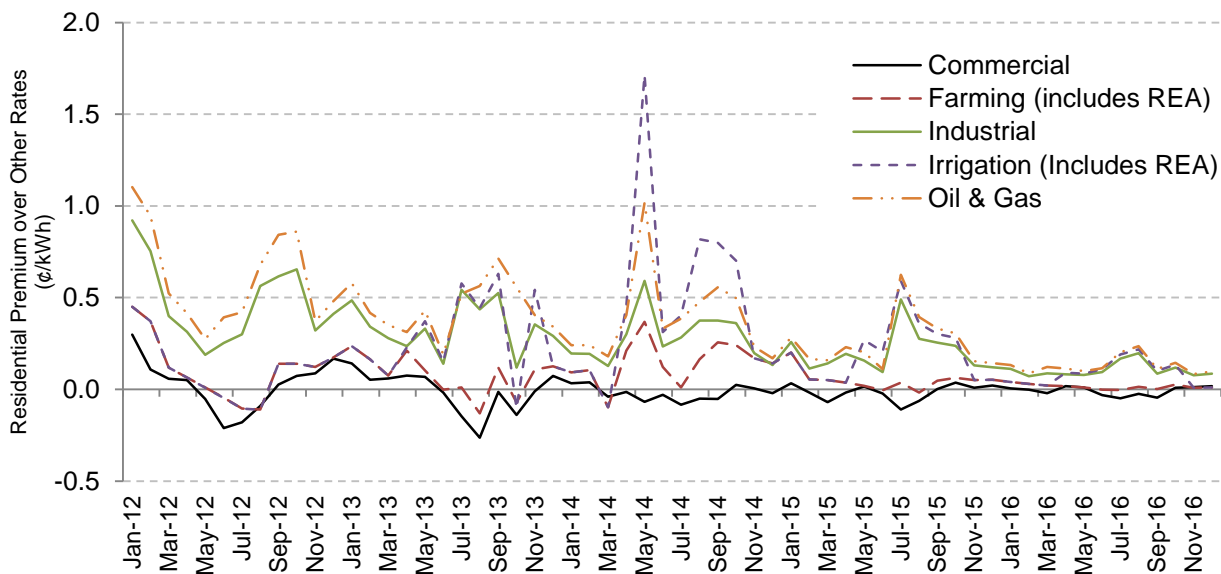


### 3.5 RRO Rates Vary by Rate Class

Regulated retail consumers in each of the four service zones are grouped into various rate classes.<sup>32</sup> The energy rate charged by the RRO Provider to eligible consumers often varies by rate class, based on cost-allocative criteria such as load shape and line losses. Because the majority of the RRO rate (approximately 70-80% of the monthly rate in 2016) recovers the cost of energy hedges, rate class differentials are often due to differences in the portfolios purchased to hedge against each rate class' load shape.

With recently low forward market prices, hedging costs have also fallen, narrowing the rate differentials between RRO rate classes. While narrowing has occurred among all RRO Providers, it is most apparent among DERS' RRO rates, which tended to have the highest rate variation between classes. Figure 7 illustrates this narrowing in DERS RRO rates.

Figure 7: Residential Premium over Other RRO Rate Classes in the ATCO Zone (DERS RRO), 2012-2016<sup>33</sup>

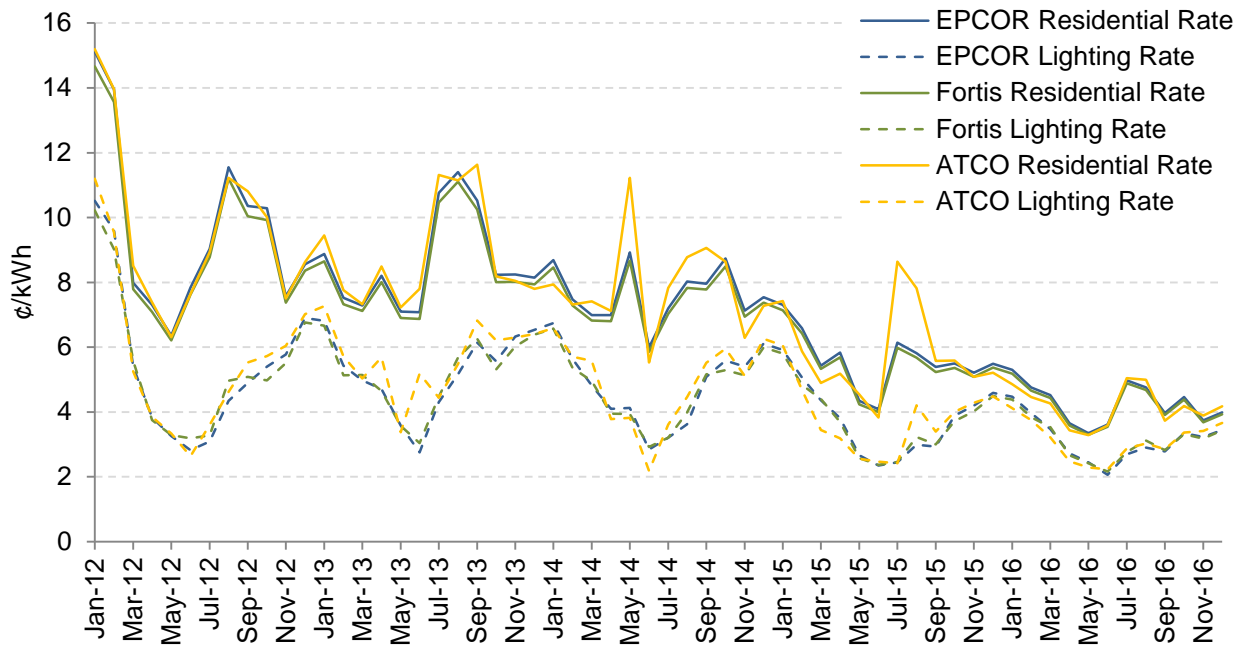


While most rate classes pay very similar rates, lighting consumers are the exception. This RRO rate class is only offered under the EPCOR, FortisAlberta, and ATCO zone RROs, and tends to be at least 0.5 ¢/kWh lower than other rate classes (Figure 8). This is because lighting load is generally off-peak, requiring fewer on-peak load hedges than other rate classes. On-peak hedges typically sell at a premium to flat hedges in the forward market.

<sup>32</sup> Rate classes generally include residential, commercial, industrial, irrigation, farm and lighting, although the number of classes and inclusion criteria vary by zone.

<sup>33</sup> Note that the 'lighting' rate class has been excluded; lighting customers generally receive a significantly lower rate compared to other rate classes.

Figure 8: Residential & Lighting RRO Rates, 2012-2016



Combining the RRO rates into a single rate for each service area would result in small changes to annual energy costs for certain rate classes; some stakeholders characterize this as a cross subsidization. It is not clear that either regulatory or administrative costs would be significantly reduced by combining rate classes. Additionally, the effects on ratepayers would vary depending on both their rate classification and location. The MSA conducted a counterfactual analysis to determine the welfare effects of such a policy had it been in place between 2012 and 2016.<sup>34</sup> The results of this analysis (Table 3) reveal that small RRO consumers (residential, commercial, and farm) would not necessarily have had lower rates under a single-RRO rate scheme, with some paying more in a significant percentage of months.

<sup>34</sup> This analysis assumes that the all prior EPSP cost components among non-lighting rate classes are aggregated into a single rate, rather than being allocated to each individual rate class. No changes to procurement mechanisms, margins, etc. have been modelled in this analysis.

Table 3: Percentage of Months Small RRO Consumers Pay More/Less/Same Under a Single RRO Rate Class per Service Area, 2012-2016<sup>35</sup>

	% of Months with Higher/Lower/Equal RRO Rate			Average Annual Difference in Energy Costs under Single RRO Rate (\$) <sup>36</sup>
	Higher	Lower	Equal	
EPCOR Residential	53%	40%	7%	\$0.00
EPCOR Small Commercial	47%	47%	7%	\$0.00
Fortis Residential	98%	0%	2%	\$1.68
Fortis Small Commercial	0%	100%	0%	(\$5.33)
Fortis Farm	0%	100%	0%	(\$2.02)
ATCO Residential	23%	77%	0%	(\$2.18)
ATCO Commercial	23%	77%	0%	(\$2.56)
ATCO Farm	87%	13%	0%	\$3.62

### 3.6 RRO Rates Vary by Location

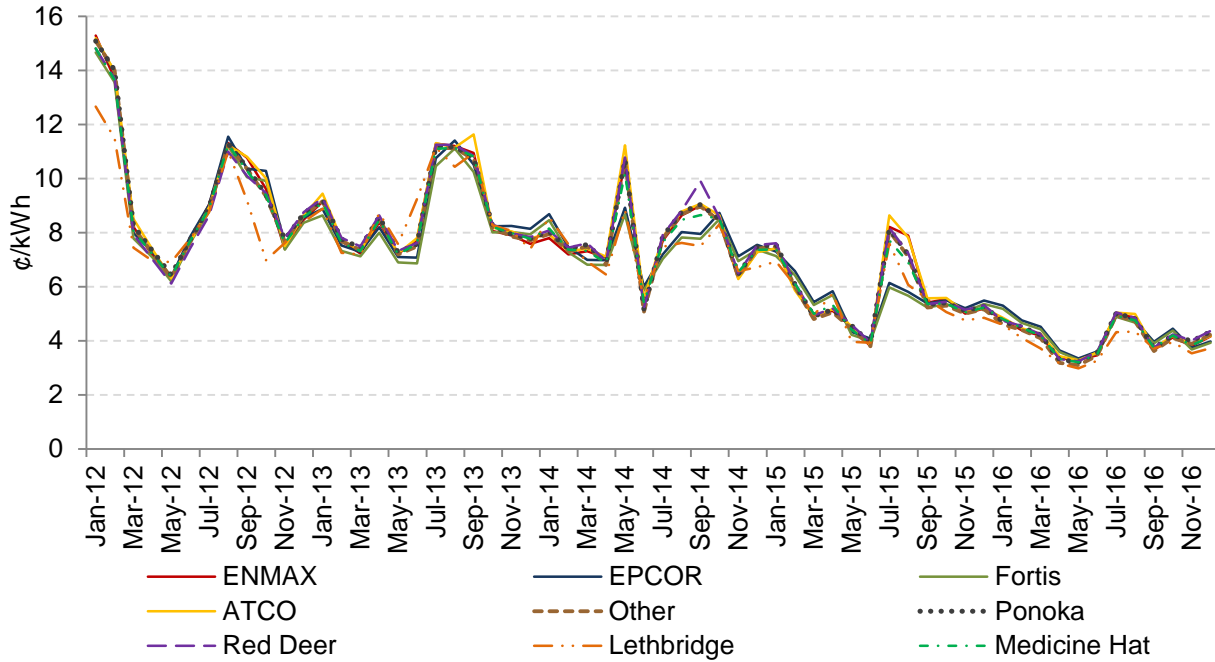
RRO rates also vary by location (see Appendix A for a list of jurisdictions and the associated RRO Provider) due to differences in procurement/rate setting methodology, load shape differences and rates approved by the AUC. Figure 9 below shows the monthly rate variation in residential rates between service zones and wire-owning municipalities.

While rates are generally quite similar across regions, some differences are apparent. Because both the EPCOR and FortisAlberta service zones have EPCOR as an RRO Provider, their rates tend to be quite similar. Furthermore, EPCOR (the RRO Provider) uses auctions to procure forward hedges, while ENMAX and DERS buy forward hedges on the NGX screens and through bilateral trades. This difference can sometimes result in significant price differences between EPCOR's RRO and those of ENMAX and DERS, although the rates are generally quite similar, and trend together.

<sup>35</sup> ENMAX RRO residential and commercial classes have been excluded from this table as both rate classes already pay the same rate. Totals may not sum to 100% due to rounding.

<sup>36</sup> Assumes a consumption of 600 kWh per month.

Figure 9: Residential RRO Rates in the Four Service Zones & Distribution-Owning Municipalities, 2012-2016<sup>37</sup>

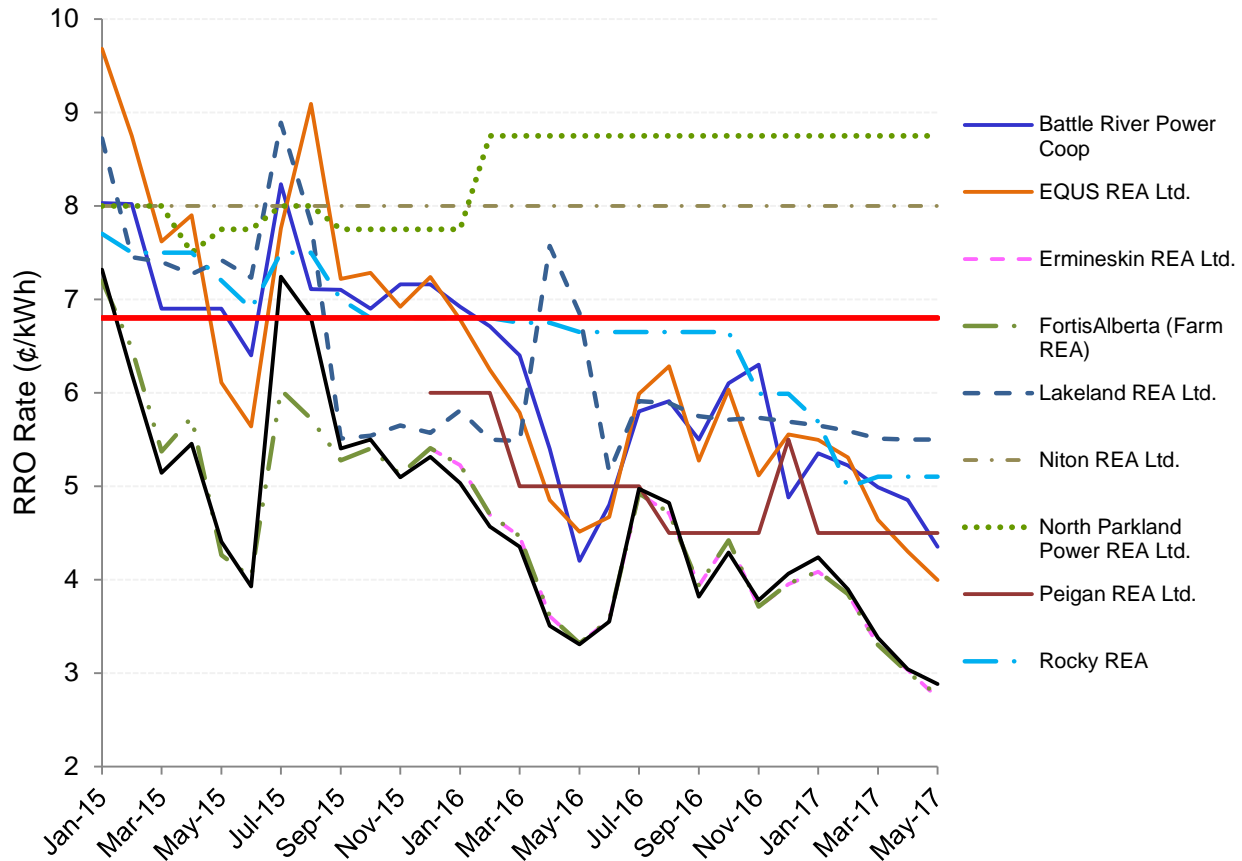


While rates in the four service zones and the wire owning-municipality are quite similar, RRO rates in the REAs tend to be less homogeneous, and higher. The absence of a standardized procurement mechanism for all REAs has generated much of this observed heterogeneity and has resulted in higher RRO rates. Figure 10 shows a sample of RRO rates for REAs in the province between 2015 and 2016.<sup>38</sup>

<sup>37</sup> Note that Cardston, Crowsnest Pass, and Fort Macleod all had the same monthly RRO rate between 2012 and 2016, with the RRO service being provided by ENMAX. These three municipalities collectively appear as 'Other' in the graph. Note that Crowsnest Pass has since switched to using EPCOR as their RRO provider.

<sup>38</sup> MSA, [Regulated Rate Option in Alberta's Rural Electrification Associations and Municipalities](#), (February 1, 2017).

Figure 10: RRO Rates from January 2015 to May 2017<sup>39</sup>



### 3.7 Natural Gas Default Rate Tariff

The DRT (for regulated natural gas) is provided by DERS in the ATCO North and South gas service areas and AltaGas in the AltaGas service area. Regulated retail natural gas tariffs are set according to the provisions of the DGS Regulation. Unlike the RRO, the DRT gas charge uses the forecast flow-through cost of gas with cost-deferral accounts, rather than using the forward market with risk margin methodology.<sup>40</sup> The relative simplicity of the DRT price mechanism, because it does not require the equivalent of an EPSP, results in less regulatory burden when compared to the RRO. This is allowable under the current legislative framework, as the DGS Regulation does not prohibit Cost-deferral Accounts for gas costs, unlike the RRO Regulation.

There are generally fewer sudden price changes in wholesale natural gas than electricity because natural gas is a storable commodity that has ample local supply and a liquid continental forward market. This lends itself well to the flow-through nature of DRT rates. The lower liquidity of electricity forward markets may make it more difficult to buy electricity in the same manner as natural gas for the DRT.

<sup>39</sup> Sources include the various REAs, ENMAX, EPCOR, and Direct Energy.

<sup>40</sup> AUC, [Regulated Retail Energy Harmonization Inquiry](#), (March 25, 2011), PDF pages 16-17, Table 1.

## 4 The Competitive Retail Market Today

When the RMRC Report was released on September 1, 2012 there were 12 competitive retailers with about 50 unique offerings for residential customers.<sup>41</sup> As of May 2017, this has increased to 30 competitive retailers with 199 different products.<sup>42</sup> The prices of various fixed rate offerings are shown in Figure 11 below. In addition to fixed rate products, many retailers offer variable rate products, often flowing through pool price plus a per-kWh service fee.

Two major players, ENCOR by EPCOR and ATCO Energy, entered the retail market in the last three years. In 2012, many small retailers all received billing and back office services from one provider. The market has since seen the entry of retailers using two other independent billing service providers.

Products similar to the RRO alternatives discussed in Section 5 are currently provided by the competitive retail market. Some of these competitive products could disappear should a similarly structured RRO be introduced. It is unclear whether competitive retailers would be able to develop new competitive offerings or whether they would choose to exit the market in response to a new RRO.

The MSA has undertaken detailed assessments of the retail market in 2014<sup>43</sup> and 2015,<sup>44</sup> both of which concluded that the Alberta retail market was competitive. The MSA remains of the view that the retail market is competitive. The competitive retail market offers consumers considerable diversity of choice not provided by the RRO and has provided specialized offerings and promotions to attract customers. The MSA is of the view that a thriving competitive retail market provides value for consumers above the basic RRO service and before any change is made to the RRO, the effects on the competitive market should be carefully considered.

<sup>41</sup> RMRC, *Power for the People*, (September 2012), page 55.

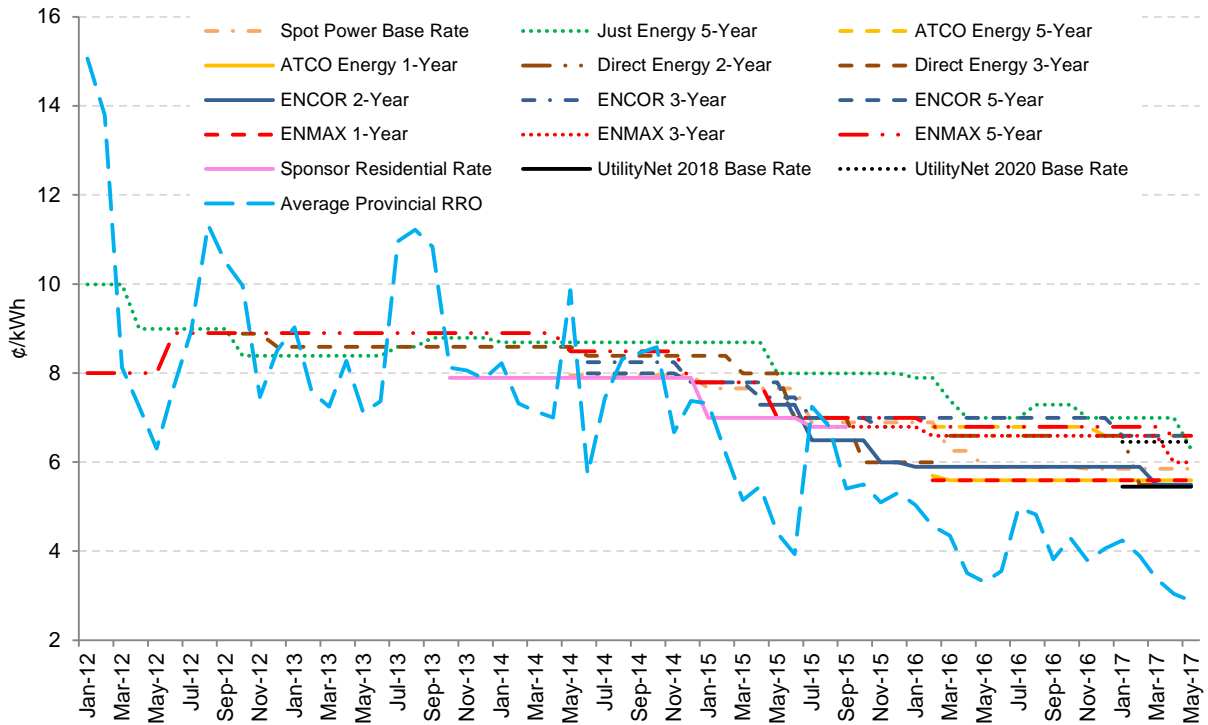
<sup>42</sup> Number of products was determined for residential customers in the City of Calgary and includes Fixed & Variable Rate contracts. UCA, [Cost Comparison Tool](#), (May 2017),

<sup>43</sup> MSA, [State of the market 2014: The residential retail markets for electricity and natural gas](#), (November 27, 2014).

<sup>44</sup> MSA, [Retail Market Update 2015](#), (November 23, 2015).

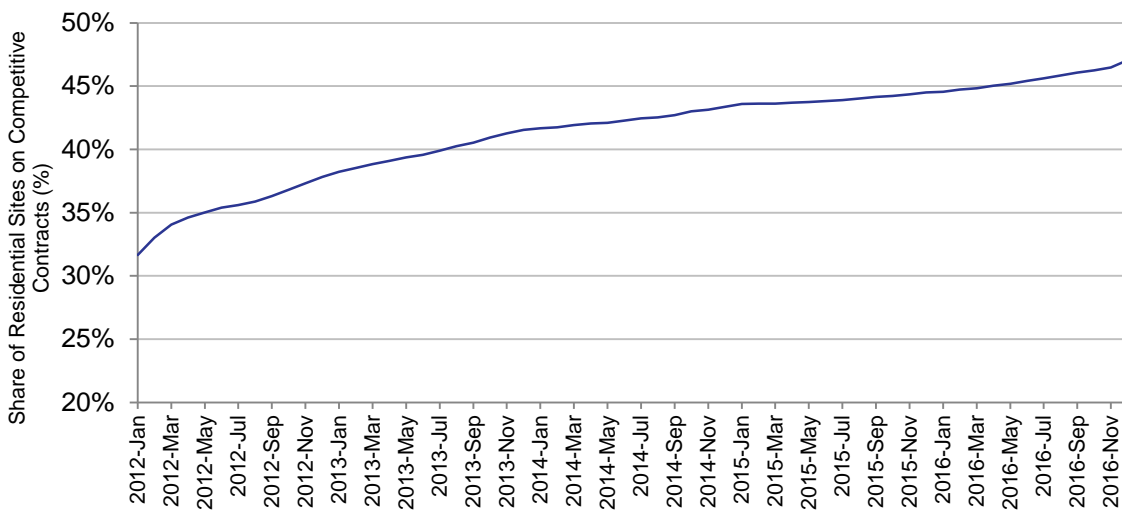


Figure 11: Select Fixed-Rate Competitive Electricity Contracts, January 2012 to May 2017



As of December 2016, 47% of residential customers across the province were on competitive electricity contracts – an increase of 15% since January 2012 (Figure 12).<sup>45</sup> Residential consumers have steadily continued to switch from the RRO to competitive retailers over this period.

Figure 12: Share of Alberta Residential Sites on Competitive Contracts, 2012-2016



<sup>45</sup> MSA, [Retail Statistics](#), (May 19, 2017).

## 5 Options to Enhance the RRO

With input from stakeholders, the MSA has considered various options to enhance the design of the RRO to provide consumers with a more predictable, stable and cost effective rate, and with minimized regulatory and administrative costs. The MSA has also considered the effect each option may have on the competitive retail and wholesale electricity markets in Alberta. This section discusses: (5.1) a move to having a single buyer of energy for the RRO, (5.2) energy sourcing options, (5.3) billing options and (5.4) miscellaneous options. Each option includes a discussion of advantages and disadvantages.

Table 4: Summary of RRO Options

Category	Option <sup>46</sup>
Energy Procurement	<ol style="list-style-type: none"> <li>1. Monthly Forward Contracts (SQ)</li> <li>2. Long-Term Forward Contracts</li> <li>3. Pool Price Flow-Through</li> </ol>
Energy Supplier	<ol style="list-style-type: none"> <li>1. Different RRO Buyer per Service Area (SQ)</li> <li>2. Single Buyer</li> </ol>
Billing Agent	<ol style="list-style-type: none"> <li>1. Regulated Retailers (SQ)</li> <li>2. Single Billing Agent</li> <li>3. Competitive Retailers</li> </ol>
Billing Equalization	<ol style="list-style-type: none"> <li>1. No Equalization; Bills Vary by Month (SQ)</li> <li>2. Equalized Billing</li> </ol>
RRO Provider Energy Cost-Deferral Accounts	<ol style="list-style-type: none"> <li>1. No Deferral Accounts (SQ)</li> <li>2. Deferral Accounts</li> </ol>
Rate Classes	<ol style="list-style-type: none"> <li>1. Different Rate Classes; Variation by Service Area (SQ)</li> <li>2. One Alberta RRO Rate</li> </ol>
RRO Eligibility Cap	<ol style="list-style-type: none"> <li>1. 250 MWh Annual Consumption (SQ)</li> <li>2. Less than 250 MWh</li> </ol>
Fees	<ol style="list-style-type: none"> <li>1. No Entry/Exit Fees (SQ)</li> <li>2. Yes Entry/Exit Fees</li> </ol>

### 5.1 Single RRO Buyer

The consideration of whether to move to a single buyer for all RRO energy in Alberta can be made separately from the decision of how to procure energy. A single buyer could procure energy for the current monthly forward hedges or longer term forward hedges.

A single buyer obligation could either be held permanently by one company/agency, or could be allocated to a company via a competitive bidding process for a pre-determined period of time. The risks inherent in providing the RRO service could either be held by the single buyer (effectively turning the current RRO Providers into billing agents), or could be passed through to the RRO Providers themselves.

<sup>46</sup> SQ = Status Quo

Such a system could function similarly to the relationship between Gas Alberta Inc. and rural gas distributors.<sup>47</sup> Gas Alberta Inc. is owned by and procures natural gas on behalf of these rural distributors. The company operates on a non-profit basis, charging a postage-stamp rate to its customers based on the cost of direct purchasing and indexed forward prices, while incorporating hedges to mitigate price volatility.<sup>48</sup> Any operating profits/losses are passed on to the rural distributors it serves.<sup>49</sup>

### Advantages

- Procurement administration costs may be reduced, but the magnitude of these cost reductions would be small on a per kWh basis. If all administrative costs and risks of managing the RRO were removed (not possible), this would result in a 0.07 ¢/kWh decrease in the RRO rate in the zone with the highest administrative component.<sup>50</sup>
- There would be one EPSP process with the AUC, instead of three. If the RRO Regulation was made prescriptive enough the EPSP process could be eliminated entirely. This would decrease flexibility with respect to implementation and modification of the RRO since all changes would have to be made through regulation and would only result in average savings of 0.01 ¢/kWh across all rate classes and service areas, as detailed in Section 3.2.
- The central procurement agency would have greater scale when procuring, which would be an advantage for small RRO Providers, such as REAs and some municipalities.
- Rates across the province could be more closely aligned, including for municipalities and REAs. Section 3.6 details the differences in rates between zones in the province.
- Moving to a single buyer would not, in itself, have a large impact on the competitive retail market.

### Disadvantages

- The single buyer would require accurate load forecasts from all RRO Providers. Today the RRO Providers bear some of the forecast risk, so have some incentive for accuracy. These incentives would need to be retained with a single buyer. Alternatively, load forecasting could also be centralized. Forecast and attrition risk could be put on energy suppliers if full load contracts are used.
- Credit costs borne by consumers may increase, as the RRO Provider may have credit costs with the single buyer, while the single buyer may have its own credit costs with both the RRO Provider and the exchange and clearing agency (Natural Gas Exchange Inc.).
- There is potential for market power disparity in the forward market where one buyer would know the total RRO load requirement and have all the buying power. Further

<sup>47</sup> These rural gas distributors are member owned cooperatives or municipality owned companies, not investor owned utilities.

<sup>48</sup> Gas Alberta Inc., [Gas Rates in Alberta: Natural Gas Purchasing](#), (accessed: May 30, 2017).

<sup>49</sup> Gas Alberta Inc., [Our Company: Competitive rates](#), (accessed: May 30, 2017).

<sup>50</sup> The per site administration cost would likely not be reduced since the provider would still have to bill customers and offer customer service. Note that regulatory costs flowed-through onto the RRO are not included in this value.

potential distortions exist if there is any chance this information could flow through to a competitive player (i.e. the single buyer was not fully independent).

- Forward market liquidity could be damaged if the single buyer was a generator that could self-supply.
- Without other RRO procurers to serve as a benchmark, it would be more difficult to assess whether hedge volumes are procured at competitive prices.

The move to a central procurement agent would, at a minimum, require changes to the RRO Regulation, but may be more effectively implemented through a change to the EUA.

*How could the single buyer be selected?*

One of the large existing RRO Providers or competitive retailers may be able to assume this function. A competition between retailers and RRO Providers or other interested parties to provide the service may result in lower costs. The competitive process would need to be conducted in a fair and transparent manner by an unbiased party to avoid allegations of preferential treatment. Concerns related to incentives and flows of confidential information may exist if the single buyer has interests in other Alberta electricity businesses. The government could also designate an existing or new agency to act as the single buyer.

## **5.2 Energy Sourcing Options**

These options explore how the energy to supply RRO consumers is obtained. Energy can be purchased through the forward market for periods ranging from one month to a year or longer or can be purchased in the real time energy market at the spot market price.

The first two options, the purchase of monthly or longer term forward hedges, could be combined with a price setting period longer than the current 120 days allowed by the RRO Regulation.<sup>51</sup> This would give RRO Providers more flexibility to purchase energy further in advance of delivery which may increase rate stability, but increase volume risk.

### **5.2.1 Status Quo**

The current EPSP procurement mechanism remains viable today and will likely remain an option into the future. Purchase of monthly contracts through the forward market will remain viable as long as there is sufficient monthly volume offered by sellers, which the MSA does not expect to change in the near term.

Advantages

- Compatible with the EUA and current market design.
- Avoids additional changes to the electricity market in a time where there is already significant change.
- Consumers know the rate they will be paying for electricity before it is consumed.

<sup>51</sup> RRO Regulation, Section 11(2).

- Provides significant liquidity to the forward market for monthly contracts, contributing to the health of the forward market.
- The competitive retail market has seen a significant expansion of options since the month ahead RRO was introduced.
- Could be combined with equalized billing to further stabilize bills.

#### Disadvantages

- Does not result in long term, stable rates, unless the forward market for monthly contracts does not fluctuate.
- Forward monthly contracts have historically sold at a premium to spot prices (Figure 1). This premium flows through to consumers through the RRO rate.
- Requires a risk margin to compensate providers if the amount and type of energy procured does not match that consumed. This requires a Commission EPSP process.

### 5.2.2 Long-term Forward Market Purchases

This option would not be a significant departure from the current RRO procurement structure, but would see energy for the RRO procured using a proportion of longer term hedges, such as quarterly or annual products. Energy could be procured using flat and on-peak products (as is done today) or by purchasing a portion of total RRO load (sometimes termed full load products). There is no established market for full load products, although they have been used to supply the RRO in the past. In the absence of purchasing full load products, EPSPs or similar would be needed to establish appropriate risk margins. Long term hedges could also be combined with monthly hedges or pool price flow-through to reduce volume risk.

One stakeholder assessed the cost of a long term hedged RRO compared to the current monthly hedged RRO by analysing contract settlement prices in previous years.<sup>52</sup> While using historical prices may provide some indication of the relative prices of term products, shifting a significant amount of buying to long term products may substantially alter price characteristics in the forward market. As such, the MSA believes it is difficult to forecast how the price of a long term hedged RRO would compare to today's RRO.

#### Advantages

- Compatible with the EUA and current market design and would only require minor changes to the RRO Regulation.
- Long term hedges could be purchased by current RRO Providers or by a single buyer.
- Would reduce month-to-month price volatility.
- Allowing RRO Providers to use a mix of monthly and longer term hedges would enable RRO Providers to manage risk related to RRO consumption volume more readily than if only long term hedges are used.

<sup>52</sup> EPCOR, RRO Submission, (May 19 2017), PDF pages 79-82.

## Disadvantages

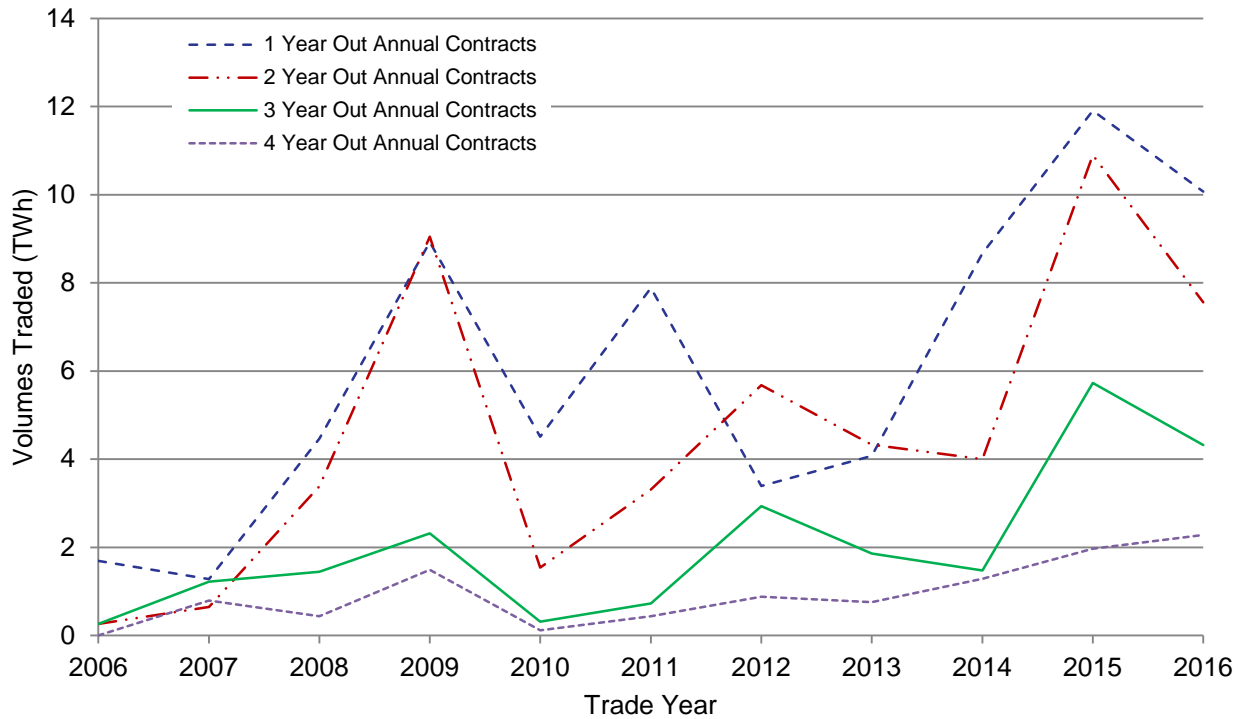
- Rate differences may be significant between periods when moving from one contract length to another unless contract purchases are staggered. For example, if annual contracts are purchased monthly, not all contracts will expire at the same time, meaning any rate change will be gradual.
- Long term forward purchases may be problematic if they are affected by the move from energy only to capacity markets.
- Forward contracts may be subject to change in law provisions or the risk of changes to market design may dissuade sellers.
- Accurate load forecasting for one year or more ahead would be more difficult than the month-ahead forecasts required today. There would be significantly more risk of consumers joining or leaving the RRO.
- To mitigate the volume risk of consumers leaving the RRO, monthly contracts would also need to be procured as a 'true-up'. This would hedge some of the volume risk but not all. If more consumers join or leave the RRO than is expected, there is a risk of not having the correct hedges, resulting in additional charges to those consumers that remain on the RRO.
- Long term hedged products are provided by all competitive retailers and have proved popular with customers so it is unclear whether the regulated provision of such a product is necessary.
- A long term RRO would compete more directly with products offered in the competitive retail market, which may have an adverse effect on the market.

## *Market Liquidity*

The MSA considered whether the adoption of long term hedges is feasible in today's forward market. Figure 13 shows that while volumes of near year annual contracts (for delivery within one to four years of the trade year) decreased in 2016 compared to 2015, a substantial decrease has not occurred. Furthermore, near year annual contract volumes traded in Q1/2017 have increased relative to the second half of 2016, and are comparable to 2014 and 2015 levels. These traded annual volume levels should be interpreted in the context of total forward market volumes of approximately 69 TWh in 2015 and 65 TWh in 2016. For further context, total RRO consumption in 2016 was approximately 9 TWh.<sup>53</sup> If the RRO were to move to long term hedging it is likely that trading in long term contracts would increase, due to the consistent and significant demand the RRO would provide.

<sup>53</sup> MSA, [Retail Statistics](#), (May 19, 2017).

Figure 13: Traded Volumes of Near Year Annual Forward Contracts, 2006-2016



### 5.2.3 Pool Price Flow-through

Pool price flow-through would be the simplest RRO mechanism, but would represent a significant departure from the current RRO procurement model. Figure 2 in Section 3.3 shows the historical rates pool price<sup>54</sup> compared to the RRO rates for the Large RRO Providers. This analysis suggests that volatility of monthly rates would have been higher in most years for pool price flow-through. However, with a transition underway to a capacity market it is possible pool prices will be significantly less volatile in the future.

This option could be combined with a bill-deferral mechanism or equalized billing to stabilize electricity bills. Equalization, however, would not stabilize the underlying price paid by consumers for the volume of electricity consumed in a month. A variation of this option would be setting an RRO rate for a number of months in advance based on forward prices and using a bill-deferral mechanism to account for deviations of settled pool price from the forecast rate.

#### Advantages

- Would likely result in lower overall electricity prices for consumers since flow through rates would not have a forward market risk premium (Figure 1) and regulatory costs would likely be reduced.

<sup>54</sup> Consumers on pool price flow-through rates do not pay pool price directly and instead pay pool price shaped to their energy consumption profile, plus a margin charged by the retailer (typically around 1 cent per kWh).

- Actions that mitigate wholesale prices or economic withholding during the transition to a capacity market will make large price spikes less likely, resulting in a less volatile pool price flow-through rate.
- Likely compatible with any future capacity market design. In a capacity market, energy rates may become less volatile because economic withholding is generally not permitted.
- Energy procurement and the resulting complexity would not be required.
- Rates would not differ by procurement mechanism or EPSP.
- Risk margins would be lower than in the current EPSPs, or not necessary with a bill-deferral mechanism / equalized billing.
- Unlikely to significantly harm the competitive retail market. While retailers do offer flow through rates, the majority of offerings are long term hedged contracts that stabilize energy prices.
- Since this option does not involve forward market purchasing, it avoids potential conflicts of interest for forward market traders that buy for the RRO as well as trading for the RRO Provider.
- Compatible with the EUA and current market design.

#### Disadvantages

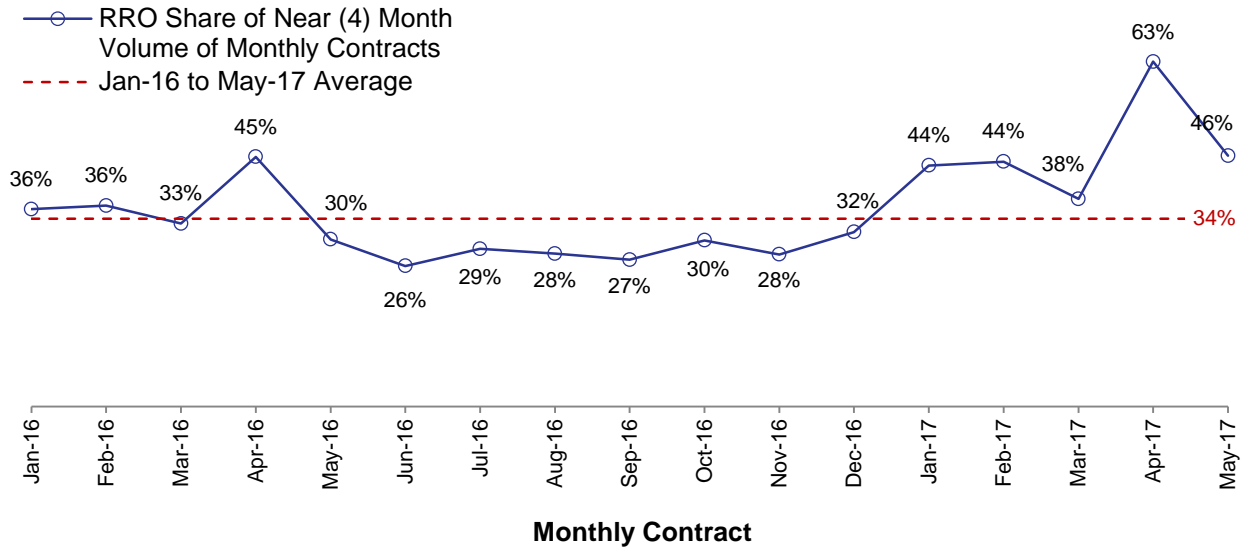
- Consumers would not know the price until the end of the month, which means energy prices would not be known before consumption occurs. This could be mitigated by providing consumers with a forecast energy price at the start of each month, which could be based on forward market prices. Similarly, price could be set for several months on the basis of forward market prices. Some form of bill-deferral mechanism would be required.
- Pool price flow-through products are provided by most competitive retailers and have proved popular with some customers so it is unclear whether the regulated provision of such a product is necessary.
- Will not eliminate, and may exacerbate, month-to-month variability in RRO rates. This could be mitigated by combination with default bill equalization, as described in Section 5.3.4.
- This option would require changes to the RRO Regulation since prices for energy are required to be set prior to the start of the delivery month.
- RRO Providers would need to modify their billing systems, which may result in added costs.
- Forward market volume in the prompt months may be reduced by about a third if RRO energy is no longer purchased forward (see Figure 14).<sup>55</sup> This may lead to a downward spiral in forward market liquidity. A less liquid forward market may create issues for

<sup>55</sup> The first five months of 2017 have seen liquidity dip to the point where RRO buying now represents about 45% of the total liquidity in monthly contracts for near term months (four months prior to delivery). This can be compared to an RRO buying share of 31% in 2016.



generators or loads trying to hedge and may make it more difficult for new generators to enter. This effect would be mitigated by the introduction of capacity payments.

Figure 14: RRO Share of Monthly Contracts Traded in the Near (4) Months



### 5.3 Billing Options

These options explore how consumers on the RRO will be provided with a bill, including any equalization across bills, and any necessary customer service.

#### 5.3.1 RRO Billing by RRO Providers

This is the status quo option. Energy procurement, billing and customer service are currently done by the RRO Provider for the distribution zone, which is distributor or their designate.

##### Advantages

- The service would continue to be provided by the incumbent RRO Providers, avoiding any transition costs, which could be significant.

##### Disadvantages

- If a consumer wants the RRO rate, they must obtain their bill and related services from the RRO Provider designated for their service zone. There is no option to switch to another RRO Provider if customer service is poor.
- Potential for co-branding between RRO Providers' regulated services and competitive services.

#### 5.3.2 RRO Billing by Competitive Retailers

This option would allow all competitive retailers to provide the RRO. The RRO consumer would be forced to choose a retailer, but all would have similar RRO prices and terms. The retailer

would not be able to reject servicing a customer because of credit or deposit issues, but could be compensated through an RRO Provider reimbursement mechanism. This would likely work best in concert with a single RRO buyer, since each individual retailer is unlikely to have enough scale to procure energy effectively. The single buyer would still require accurate load forecasts, whether done internally or provided by the retailer or distribution service provider. The transition of consumers could be done in a staged auction process, or the current RRO Providers could remain and consumers could switch to another provider if they choose.

#### Advantages

- May encourage more switching between the RRO and competitive rates, since they are provided by the same retailer.

#### Disadvantages

- Would require a single RRO buyer if the RRO remains a hedged product. If pool price flow-through is used, agency single buyer would not be necessary.
- Implementation would be complicated because competitive retailers would be providing a regulated service.
- Since competitive retailers would be providing a regulated product, there would need to be regulatory oversight of significantly more entities than is currently required.

### **5.3.3 Centralized Billing and Customer Service**

In addition to moving to a single RRO buyer, billing and customer service could also be done by a single entity.

#### Advantages

- Would remove current RRO Providers that also have competitive retail businesses from RRO billing, eliminating RRO-related co-branding issues.

#### Disadvantages

- Unlikely to see significant cost advantages or economies of scale in the short term. The current billing systems have been developed and paid for and much of the customer service has already been outsourced.
- The single service provider may not have the necessary billing infrastructure or experience.
- Transitioning consumers to a new billing provider at the same time is likely to result in significant transition issues. Billing is the part of the process closest to the consumer, which means any issues are likely to generate a significant volume of complaints.
- RRO Providers have made investments in billing systems for the RRO, to be recovered through the RRO rate. These costs may have to be paid by consumers if the billing responsibility is moved to another entity.

### 5.3.4 Equalized Billing

Under the current RRO Regulation, RRO Providers are required to offer equalized billing plans to consumers who can provide evidence that they are receiving financial support from an income support program specified in the regulation. Some RRO Providers offer equalized billing to all consumers, although this is not required by regulation. The adoption of equalized billing has been very low, under 10% for most Large RRO Providers, even though it has been available at no extra cost. The low uptake may be a result of lack of interest in bill smoothing (i.e. all consumers that care about bill volatility have signed up) or lack of consumer awareness.

To offer Fixed Payment Equalized Billing, the RRO Providers currently forecast the consumer's total energy bill for the next year based on long range weather forecasts, current and forecasted price of energy and the consumption record of the home in the past. For new houses the forecast is based on number of square meters and appliances.<sup>56</sup> After the estimate is calculated, the total is broken into equal monthly payments. At the end of the year, some providers will adjust the monthly payments for the next year correspondingly, or other providers will add a credit or debit to the consumer's next bill.

Alternatively, bills could be smoothed from month-to-month over a pre-established period of time (a year, for example) with Adjustable Equalized Billing. This would function similarly to Fixed Payment Equalized Billing, but would be responsive to changes in rates and the consumer's consumption shape, and would mechanically adjust monthly bills to minimize any end-of-year balance owed/owing. Adjustable equalized billing would provide RRO consumers with more stable electricity bills than they currently receive (although not as stable as the Fixed Payment Equalized Billing method), while minimizing any end-of-year balance and retaining a muted price and consumption signal.

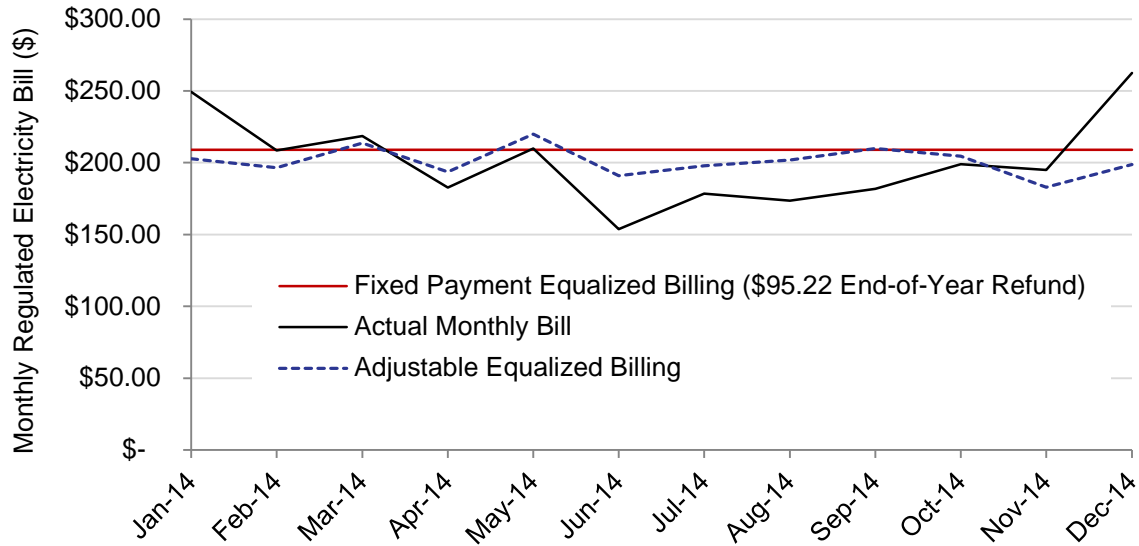
The MSA conducted a simple counterfactual analysis<sup>57</sup> to illustrate how both equalized billing methods would have affected residential electricity bills for a typical detached home in the ATCO zone in 2014.<sup>58</sup> Figure 15 shows the result of this analysis; both equalized billing methods significantly increased bill stability relative to conventional billing methods. It should be noted that this is a simple analysis, with simplified forecasting assumptions; more accurate forecasts would increase the stability of the Adjustable Equalized Billing method and decrease the size of any end-of-year balance for the Fixed Payment Equalized Billing method.

<sup>56</sup> DERS, [Budget Payment Plan](#), (accessed May 30, 2017).

<sup>57</sup> Forecasted rates and consumption levels were generated to create 'forecast bills' for the year 2014, from which the two equalized bill schedules were created. Consumption was forecasted at 2013 monthly levels for a detached home in the ATCO zone, while the RRO rate was assumed to be the average of those in 2013. All other line items were assumed to be equivalent to those in January 2014, which were 'forecasted' to remain stable throughout the year. Access fees were taken from the City of Grande Prairie.

<sup>58</sup> The example uses the ATCO zone in 2014 because the ATCO zone is the service area with the most variable bills and 2014 is the most variable year for electricity bills which can be 'forecasted' with readily available data.

Figure 15: Comparison of Equalized Bills in the ATCO Zone, 2014<sup>59</sup>



Equalized billing can be used to smooth the entire energy bill, including the energy, distribution and transmission charges or any portion thereof. Smoothing only the energy rate would limit the size of potential true-up payments, since consumption-based payments would not be equalized.

#### Advantages

- Equalized billing can be used to smooth the entire energy bill, including the energy, distribution and transmission charges. As explored in Section 3.4, variability in the energy consumed contributes far more to overall electricity bill variability than variability in the energy rate.
- Equalized billing can be used with any of the energy sourcing options in Section 5.2.
- Equalized billing would not add significant risk or regulatory cost to bills, since consumers are paying for all the energy they consumed at market rate.

#### Disadvantages

- There may be issues with equalized billing related to customer service. If there are charges on a consumer's bill that are not directly related to electricity consumed in the billing month, there may be confusion about where those charges are coming from (depending on how it works, charges could be from previous months etc.).
- While the consumer would be exposed to pool price in all months, they would not see the result their previous month's consumption has on their bill immediately, such that a change in consumption behaviour could be made. The bill payment becomes slightly detached from the energy cost and consumption.

<sup>59</sup> For readability, end-of-year balances appear in the legend and are not graphically illustrated. Note that only the fixed payment equalized billing method had an end-of-year balance. This balance could be a charge or refund depending how the estimated values compare to the actual values.

- Equalized billing accounts would likely all be jointly positive or negative at the same time. With significant volume on the RRO this could represent a large credit risk to the provider and may present working capital issues.
- Energy bills are hard to predict and model; there is risk of large true-ups. Bills could be true-up more frequently than annually to avoid risk of a large true-up, carrying cost and bad debt risk.
- May have significant administrative implementation costs if the mandated equalization methodology is not the same as what is currently offered by the RRO Providers.
- Some RRO consumers may be dissatisfied about being forced onto equalized billing and it may be confusing to some consumers.
- It may be difficult to develop accurate consumption forecasts for new RRO consumers.

### **5.3.5 Bill Content**

The RRO Regulation stipulates that regulated bills must indicate the following as separate items:<sup>60</sup>

1. Energy Charge
2. Administrative Charge
3. Distribution Charges and Transmission Charges (or, fixed and variable delivery charges)
4. Access Fees (where applicable)
5. Consumption for the Billing Period

If desired, the RRO Regulation could be amended to require further information on billing line items. For example, the RRO rate (the energy charge) is comprised of various components, including the energy portfolio price, risk compensation, and return margin (among others), all of which could be included on consumer bills. If the RRO were to use a pool price flow-through mechanism, it may be worthwhile including historical pool price data, or future pool price forecasts.

Bills could also include a pie chart with the percentage of energy consumed that was produced by various generation types, or the percentage that is “green”. As the grid becomes greener this pie chart would change. However, without time-of-use metering (see Section 5.4.7) this would be an estimate.

## **5.4 Miscellaneous Options**

### **5.4.1 One RRO Rate for all Albertans**

An identical RRO rate could be provided to Albertans in all rate classes and service areas if RRO energy is procured by a single buyer or in a similar manner by all RRO Providers. Equally, a single RRO rate could apply to each rate class across the province. This could be done in concert with the exclusion of certain rate classes (such as lighting, commercial and industrial) from the RRO, or by lowering the annual consumption limit for RRO eligibility (see Section

<sup>60</sup> RRO Regulation, Section 15.

5.4.2). There is currently no regulatory requirement for different rates to be provided to different consumer categories.

#### Advantages

- May reduce the regulatory time and administrative burden of rate setting for different rate categories.
- A single RRO rate would eliminate any confusion consumers may have regarding differing rates between service areas and consumer types.

#### Disadvantages

- Aggregating the costs of serving all consumers into a single RRO rate would result in a transfer to consumers or zones with high loss factors and higher on-peak consumption from other consumers because rate classes and regions have different load shapes and loss factors. This problem could be mitigated (but not entirely negated) by excluding certain rate classes from the RRO, or by introducing time-of-use metering as described in Section 5.4.7. Time of use metering would allow energy charges to move away from assumed load shapes to actual load shapes.
- A single RRO rate may increase administrative costs if the multiple RRO Provider framework is maintained, as providers may have to true-up differences in procurement/settlement costs and RRO revenues between one another to ensure the provision of a single rate across the province. These reconciliation payments would be minimized – but not altogether eliminated – if procurement were standardized across all RRO Providers.<sup>61</sup>

### 5.4.2 Eligibility

Currently, electricity consumers (sites) with an annual consumption of less than 250 MWh are eligible for RRO service. This eligibility cap is sufficiently high to give some larger consumers access to the RRO (such as commercial, lighting, industrial and oil & gas). Lowering the eligibility cap could be done in a number of ways, including limiting RRO eligibility to specific distribution tariff rate classes – such as residential and farming consumers – or by lowering the eligibility cap to a lower value, or by both methods. The 2012 RMRC recommended RRO eligibility be limited to residential consumers with an annual consumption of less than 50 MWh.<sup>62</sup>

#### Advantages

- Limiting eligibility to specific distribution tariff rate classes would limit access to the RRO to the specific rate classes the government wants to protect with the RRO.

<sup>61</sup> Even if the procurement method were exactly the same for all RRO Providers, there would still at least be differences in line loss/UFE/load shape to be reconciled. In the case of a forward hedge method (status quo or long term), there would also be differences in procured hedge prices between RRO Providers (although these would likely be small differences).

<sup>62</sup> RMRC. *Power for the People*, (September 2012), PDF page 124.

- The RRO rate would better reflect the load shape of smaller consumers, rather than pricing an aggregated load shape for all rate classes.<sup>63</sup>

#### Disadvantages

- Any fixed costs flowed through as part of the RRO rate (such as regulatory costs) would be spread over a smaller consumption volume, resulting in a higher fixed cost allocation per MWh.
- Eliminates an energy rate option for consumers that would no longer be eligible.

#### 5.4.3 Entry or Exit Fees

RRO Providers are not currently allowed to charge entry and exit fees, pursuant to the RRO Regulation.<sup>64</sup> Entry and exit fees may be suitable for use with procurement mechanisms that result in variable monthly RRO rates with the potential for stranded costs should consumers exit. Charging these fees would help mitigate attrition and volume risk, as consumers would be disincentivised from frequently switching to or from the RRO should rates suddenly change.

Entry and exit fees can be used with equalized billing, where consumers would be required to pay their cumulative account balance as a condition for terminating service, rather than paying a pre-established exit fee.

#### Advantages

- Exit fees may be useful in disincentivising switching off of the RRO, thereby reducing the cost sharing burden on consumers who remain on the RRO. Exit fee revenue could also be used to offset any marginal impact on other consumers. Entry fees could be used to offset any additional costs incurred from signing up an additional RRO consumer (such as administrative costs).

#### Disadvantages

- Charging entry and exit fees could disproportionately impact lower-income consumers, who may not be capable of paying significant fees upfront. This could be mitigated by providing a low-income exemption from these fees, but doing so would create greater administrative burden.
- Were a competitive retailer to cease operations, its customers would presumably be slammed onto the RRO, forcing a large number of consumers to pay an entry fee because of circumstances beyond their control.
- May harm the competitive retail market by creating restrictions to switching (have to pay a fee before switching to a competitive retailer).
- May be offensive to consumers.

<sup>63</sup> Note that some RRO Providers, such as EPCOR and Direct Energy, already have separate portfolio prices for different rate classes to more accurately price their load shapes.

<sup>64</sup> RRO Regulation, Section 19(1)(a).

#### 5.4.4 Renaming the RRO

In the past, many stakeholders viewed renaming the RRO as a priority. This issue was discussed at some length in the 2012 RMRC report, with the committee recommending the name be changed.<sup>65</sup> It has been argued that the word ‘regulated’ is misleading to consumers, as the RRO is not regulated in the sense commonly understood, and does not ‘protect’ consumers from high prices and rate instability.

Since the release of the RMRC report, the desire to rename the RRO appears to have tempered. Of the 20 stakeholder submissions received by the MSA (see Appendix C), only two stakeholders recommended renaming the RRO.<sup>66</sup> The two suggested replacement names were ‘Default Supply Charge’ and ‘Default Rate’.

#### 5.4.5 ‘Greening’ the RRO

To help achieve the established 30% renewable energy goal by 2030 (colloquially, the ‘30 by 30’ target),<sup>67</sup> among other environmental policy objectives, the RRO could be ‘greened’ in a variety of ways. This could be through the inclusion of a Renewable Portfolio Standard (RPS), direct contracting of renewable energy in the RRO procurement portfolio, the purchase of Renewable Energy Certificates by RRO Providers, or by offsetting government spending on the Renewable Electricity Program.

##### Advantages

- The RRO could be used to help the Government achieve its environmental policy objectives.
- Could be used to offset AESO costs of long-term contracting of renewables.<sup>68</sup>
- The addition of ‘green’ attributes would not necessarily impact rate stability.

##### Disadvantages

- Consumers could face significantly higher RRO rates. The RRO is the electricity provider of last resort for vulnerable consumers, who would face higher costs than more mobile consumers that are able to switch to a competitive retailer.
- Could be seen as a discriminatory green ‘tax’ on consumers that prefer a regulated rate.
- If many consumers leave the RRO in response to higher rates, any environmental policy objectives included in the RRO may not be achieved.
- Would require changes to the RRO Regulation and potentially the Renewable Electricity Act.

<sup>65</sup> RMRC, *Power for the People*, (September 2012), PDF pages 158, 161 and 171-77.

<sup>66</sup> Fulton, Sheldon, *RRO Submission*, (May 19 2017), PDF page 430, and Spragins, Rob, *RRO Submission*, (May 19 2017), PDF page 290.

<sup>67</sup> Government of Alberta, [Renewable Electricity Program](#), (accessed May 30, 2017).

<sup>68</sup> The AESO has been directed to assist in developing 5,000 MW of renewable generation by 2030 using contract for differences payments. [AESO, Renewable Electricity Program](#), (accessed May 30, 2017).



#### **5.4.6 Cost-Deferral Accounts**

The current RRO Regulation forbids the use of cost-deferral accounts, true-ups or rate riders to recover energy related costs.<sup>69</sup> Instead, EPSPs include risk margins as a component of the RRO rate to help providers offset any volume, price and credit risks they incur by providing RRO service, and prevent any systemic losses on a forward-looking basis.<sup>70</sup> These risk margins create significant regulatory burden in EPSP proceedings, and have been responsible for much of the delay in approving the 2014-18 EPSPs (see Section 3.1).

As an alternative to using risk margins, RRO Providers could be granted the use of cost-deferral accounts to recover any energy related costs not recovered from consumers in prior months.

##### **Advantages**

- Would reduce the regulatory burden and time required for establishing new EPSPs.
- The risk of RRO Providers running long-term losses would be minimized.

##### **Disadvantages**

- Would require the AUC to approve monthly cost-deferral accounts and other cost recovery mechanisms over the life of the EPSP.
- Commodity risk would be shifted from the RRO Provider to the consumer, which may dilute incentives for risk minimization.
- Providers would have less incentive to make accurate forecasts or appropriately hedge against settlement risks, as any losses would be recovered from consumers via the cost-deferral account. This could be resolved by creating an incentive/penalty structure to encourage risk-mitigating procedures.
- Would increase energy rate variability as cost-deferral account balances are collected from ratepayers. This could be mitigated by spreading any true-ups or riders over a series of months.
- Attrition risk (the risk of consumers leaving/moving to the RRO) could increase with the adoption of cost-deferral accounts, as consumers react to higher/lower RRO rates during any true-up periods. Costs are paid by a different group of consumers than those who created the costs.
- The RRO Regulation would have to be amended to allow for cost-deferral accounts, true-ups and rate riders.

#### **5.4.7 RRO Integration with Time-of-Use Metering**

Any of the energy sourcing options described could be integrated with time-of-use metering in order to price hourly consumption, rather than using the price of aggregated monthly consumption. If the RRO was changed to pool price flow-through, consumers could pay the actual pool price for their consumption in the hour, plus any margin or adders.

<sup>69</sup> RRO Regulation, Sections 3(2) and 6(2).

<sup>70</sup> Historically, these have either been a \$/MWh charge fixed over the duration of the EPSP, or a rolling average charge based on historical losses. Neither is designed to make the RRO provider whole immediately after incurring a loss, but rather are designed to have the RRO provider have zero net losses in the long-run, on average.

Under either of the hedged RRO options, energy could be priced with time-of-use rates based on hedge prices in peak and off-peak hours. Assuming the RRO continues to be sourced using flat (7x24) and extended peak (7x16) hedges, an ‘off-peak’ RRO price could correspond to the cost of the flat hedge, while an ‘on-peak’ price could correspond to the aggregated cost of the extended peak hedge and underlying flat hedge.

Time-of-use pricing could shift consumption away from peak hours because of higher peak prices, resulting in possible system and environmental benefits. While large-scale, regulated adoption of time of use meters for sites with smaller consumption would be costly, an increasing number of new and replaced meters have time-of-use capabilities. To take advantage of these capabilities the RRO could offer time-of-use pricing. On the competitive side, the adoption of time-of-use metering and billing could encourage the development of innovative competitive retail offerings. Some benefits of time-of-use pricing may be lost if equalized billing were widely adopted, as the real-time price signal would be somewhat muted. In absence of equalized billing, time-of-use pricing could increase bill instability.

## 6 Transition

The time required to transition each of the options outlined above would vary. Moving to a longer term hedge would require time to increase the percentage of energy procured on longer term contracts, perhaps on a staged basis. Pool price flow-through could be implemented relatively quickly because it does not require hedges to be purchased. All energy sourcing options may require changes to the RRO Regulation and RRO Providers’ automated systems, which may take time. Existing hedges purchased for the RRO prior to a change to the energy sourcing method may delay the implementation of this change for a number of months.

There are many policy and regulatory timelines that should influence the transition timing, as outlined in Table 5 below.

Table 5: Electricity Policy and Regulatory Timelines

<b>Regulation / EPSP / Act</b>	<b>Date</b>
2011-14 EPSPs expired	June 30, 2014
2014-18 EPSPs expire	Apr. 30, 2018
2018-20/21 EPSPs expire	Apr. 30, 2020 to Apr. 30, 2021 (as proposed) <sup>71</sup>
RRO Regulation expires	Apr. 30, 2020
Power Purchase Arrangements end	Dec. 2020
RRO price cap expires	May 2021
Capacity contracts awarded	2020/21 (projected)

<sup>71</sup> As of June 1, 2017, only DERS and EPCOR have filed 2018-2020/2021 EPSP applications with the Commission. EPCOR has applied for a term ending on April 30, 2021 ([EPCOR 2018-2021 Energy Price Setting Plan Application – Exhibit 22357-X0012.01](#), PDF page 17), while DERS has applied for a term ending on April 30, 2020 ([DERS 2018-2020 EPSP Application – Exhibit 22635-X0005](#), PDF page 5).

### 6.1.1 Capacity Market Considerations

On November 23, 2016 the Government of Alberta announced the creation of a capacity market for the Alberta electricity system.<sup>72</sup> While the design and implementation work is underway, it is not currently known how capacity costs will be passed through to consumers. It is possible that consumers will see a new line item (such as ‘capacity charge’) on their bill, but this decision has not yet been made, nor has it been decided how capacity costs will be allocated to different types of consumers. This decision and any RRO reform decision should not be made independently of one another, as some of the aforementioned RRO options would not align well with some capacity charge pass-through methods.

## 7 Impact of RRO Options on Municipal Providers and Rural Electrification Associations

While the majority of RRO consumers are served by ENMAX, EPCOR or DERS, a small number of consumers are provided RRO service by their municipality or REA. Lethbridge and Medicine Hat are the two municipalities that provide their own RRO rates, while eight REAs also provide the RRO.<sup>73</sup> Changes to the RRO may impact these providers differently than the three Large RRO Providers, due to their size and regulatory requirements.

### 7.1 Lethbridge

Like many municipalities, Lethbridge owns its electric distribution system. However, the city has not arranged to have one of the Large RRO Providers serve as its regulated rate provider, and instead establishes its own EPSPs in accordance with the RRO Regulation and the EUA.<sup>74</sup> The Lethbridge RRO rate is calculated and energy is procured in a manner similar to the Large RRO Providers.<sup>75</sup> Lethbridge is a significantly smaller RRO Provider (by load served) than the Large RRO Providers.<sup>76</sup> Lethbridge does not believe it would face any material impediment to procuring longer term contracts for energy, should the RRO move to a longer term product.<sup>77</sup>

### 7.2 Medicine Hat

Medicine Hat also owns its own distribution system, but is unique among municipalities as it is exempt from the requirement to prepare a regulated rate tariff.<sup>78</sup> They have, however, voluntarily chosen to offer a rate similar to the RRO. Instead of using an EPSP as a framework to set its RRO rate-equivalent, it sets the monthly energy charge for small consumers<sup>79</sup> based on the Market Reference Price.<sup>80</sup> This method of rate setting could conceivably remain viable under a new RRO, as any mandated changes in RRO procurement for other providers would in

<sup>72</sup> Government of Alberta, [Consumers to benefit from stable, reliable electricity market](#), (November 23, 2016).

<sup>73</sup> MSA, [Regulated Rate Option in Alberta's Rural Electrification Associations and Municipalities](#), Table 4.1, PDF page 10.

<sup>74</sup> Electric Utilities Act, Section 103(1), RRO Regulation, Sections 2, 3(1).

<sup>75</sup> [Lethbridge Bylaw 5792](#), Schedule A1, PDF page 16.

<sup>76</sup> MSA, [Regulated Rate Option in Alberta's Rural Electrification Associations and Municipalities](#), Section 7.2, Tables 7.3 and 7.4, PDF page 19.

<sup>77</sup> City of Red Deer and City of Lethbridge June 28, 2017 Letter to MSA, Stakeholder Comments on Draft Report, pages 16-17.

<sup>78</sup> Electric Utilities Act, Part 7 Section 100 as it relates to Section 103, PDF pages 65-67.

<sup>79</sup> A small consumer here means all typical rate classes except industrial, large commercial and lighting customers.

<sup>80</sup> This is the average of the residential and small/medium commercial RRO rates charged by the three main RRO Providers in all regions and the City of Lethbridge. See [Medicine Hat Bylaw No. 2244](#), Schedule “A”, PDF page 13.

some sense “flow-through” onto the Medicine Hat energy rate. Similarly, if a single RRO rate for all Albertans were desired, Medicine Hat’s price setting methodology for small consumers would accommodate such an option.

Unlike other Alberta jurisdictions, Medicine Hat’s retail electricity services remain fully regulated by the city and closed to competitive retailers.<sup>81</sup> As such, no change to the RRO would impact competitive retail services within the city.

### 7.3 Rural Electrification Associations

Of the 32 REAs, eight set their own RRO rates, seven have their rates set by another REA and one receives RRO service from another market participant.<sup>82</sup> The remaining 16 REAs have either DERS or EPCOR as their RRO Provider. The eight REAs that set their own rates have their regulated rate tariff approved by their own board of directors, rather than the AUC.<sup>83</sup>

Given their relatively small number of consumers, certain RRO options may be less feasible for adoption by these REAs. REAs do not have the buying power of larger RRO Providers, which may result in higher procurement costs of forward market hedges (especially long term products) and possibly increased collateral costs. REAs also do not benefit from the administrative economies of scale of many larger providers; an RRO requiring greater administrative effort by providers may disproportionately increase the administrative costs passed onto REA consumers as a result. Furthermore, REAs may not be able to secure credit to hold negative equalized billing account balances at an acceptably low cost.

Some REAs currently provide the RRO hedged with long-term forward contracts. If procurement for all providers were centralized or moved to a pool price flow-through mechanism, some of these contracts would become stranded assets. In their submissions to the MSA,<sup>84</sup> the REAs argue that they would need to be compensated for these stranded costs, or risk being absorbed by one of the large distributors (with its associated RRO Provider).

<sup>81</sup> City of Medicine Hat, [Electric Rate Bylaw No. 2244](#), Section 32(1), PDF page 8.

<sup>82</sup> MSA, [Regulated Rate Option in Alberta’s Rural Electrification Associations and Municipalities](#), PDF page 10.

<sup>83</sup> Electric Utilities Act, Part 7 Section 103(4), PDF page 67.

<sup>84</sup> The Alberta Federation of REAs, RRO Submission, (May 19, 2017) and REA Working Group, RRO Submission, (May 19, 2017).

## A List of RRO Providers by Location

	Distribution Owner	RRO Provider
<b>Service Zones</b>	ENMAX (in the City of Calgary)	ENMAX
	EPCOR (in the City of Edmonton)	EPCOR
	FortisAlberta	EPCOR
	ATCO	DERS
<b>Wire-Ownning Municipalities</b>	Cardston	ENMAX
	Ponoka	ENMAX
	Fort Macleod	ENMAX
	Red Deer	ENMAX
	Crowsnest Pass	EPCOR
	Lethbridge	Lethbridge
	Medicine Hat	Medicine Hat (RRO rate is based on other zones)
Rural Electrification Associations (REAs)	See <a href="#">MSA Regulated Rate Option in Alberta's Rural Electrification Associations and Municipalities Report</a>	See <a href="#">MSA Regulated Rate Option in Alberta's Rural Electrification Associations and Municipalities Report</a>

**B MSA Request to Stakeholders for Comments**

## **NOTICE TO PARTICIPANTS AND STAKEHOLDERS**

April 21, 2017

**Re:** Options for Enhancing the Design of the Regulated Rate Option (RRO)

---

### **Request from Minister of Energy to MSA**

On April 18, 2017 the MSA received a letter (attached) from the Minister of Energy requesting that the MSA “conduct an analysis and provide a report with options for enhancing the design of the Regulated Rate Option to provide long-term, stable and affordable prices for Alberta’s electricity consumers into the future.”

The Minister further requested that the MSA identify options that provide for: “affordability of electricity; predictable and stable rates; and minimized regulatory and administrative costs.” She also requested that the report “identify any issues or possible challenges associated with transitioning from current Regulated Rate Option arrangements to alternative approaches. Rather than providing a recommendation, the report should provide advantages and disadvantages of the different options identified.” The Minister requests that this report be completed by June 1, 2017.

### **MSA Request to Stakeholders**

The MSA is of the view that in preparing an options paper for the Minister it would benefit from stakeholder involvement to assist in identifying options, advantages and disadvantages. The MSA plans to provide the Minister with a draft report by June 1, 2017. The report is expected to present advantages and disadvantages of a variety of options and will present the view of the MSA having been informed by stakeholder comment.

When formulating comments, in addition to the Minister’s direction, the MSA asks that stakeholders consider:

- i) whether there should be one RRO rate for all eligible consumers (or customer category) in Alberta;
- ii) changes to procurement, including advanced procurement of longer term products, centralized procurement or options that do not require advanced procurement;
- iii) introduction of deferral accounts or changes to bill smoothing; and
- iv) when and how a change to the RRO should occur.

For each option put forward, please identify the advantages and disadvantages of the option and, if relevant, regulatory or legislative changes that may be necessary.

## Stakeholder Process

Given the requested timeline in which the MSA has been asked to carry out the work and nature of the work the MSA is not following its usual Stakeholder Consultation Process, but instead asks stakeholders to provide written comments by **May 19, 2017**, noting that earlier responses would be preferred. All comments should be sent to [stakeholderconsultation@albertamsa.ca](mailto:stakeholderconsultation@albertamsa.ca). Any written comments received will be attached to the report in an appendix. Should timelines allow, the MSA may invite another round of comments prior to completing a final report at a later date.

In addition to providing written comments, should stakeholders wish to meet regarding the report, please contact me directly.

Mark Nesbitt

Manager, Retail and Investigations

[mark.nesbitt@albertamsa.ca](mailto:mark.nesbitt@albertamsa.ca)





Office of the Minister  
MLA, Dunvegan-Central Peace-Notley

RECEIVED  
APR 18 2017

AR28002

April 6, 2017

Dr. Matt Ayers  
Market Surveillance Administrator  
#500, 400 5 Avenue SW  
Calgary AB T2P 0L6

Dear Dr. Ayers:

It is the Government of Alberta's intention to protect consumers from price volatility by ensuring Alberta's electricity arrangements are in the long-term interests of consumers. Consequently, I am requesting that the Market Surveillance Administrator conduct an analysis and provide a report with options for enhancing the design of the Regulated Rate Option to provide long-term, stable and affordable prices for Alberta's electricity consumers into the future.

The Market Surveillance Administrator is in an expert position to analyze the Regulated Rate Option Regulation and identify options for reform that would meet the needs of Albertans by providing for:

- affordability of electricity;
- predictable and stable rates; and
- minimized regulatory and administrative costs.

In addition to the issues highlighted above, the report should identify any issues or possible challenges associated with transitioning from current Regulated Rate Option arrangements to alternative approaches. Rather than providing a recommendation, the report should provide advantages and disadvantages of the different options identified.

To enable the implementation of possible reform options within reasonable timeframes, I am requesting the report be finalized by June 1, 2017.

.../2

For detailed inquires or concerns, please contact the Acting Executive Director of Alberta Energy's Markets and Distribution Branch, Mr. Philip Shum at 780-415-4573 or [philip.shum@gov.ab.ca](mailto:philip.shum@gov.ab.ca).

Sincerely,



Margaret McCuaig-Boyd  
Minister

cc: Philip Shum  
Alberta Energy

## **C List of Stakeholder Comments**

<b><u>Stakeholder</u></b>	<b><u>Pages</u></b>
Alberta Federation of Rural Electrification Associations	1-14
ATCO	15-17
Capital Power	18-20
City of Red Deer and City of Lethbridge	21-25
Consumers' Coalition of Alberta	26-31
David P. Brown and Andrew Eckert	32-41
Direct Energy Regulated Services	42-54
ENMAX	55-63
EPCOR	64-109
FortisAlberta	110-111
Just Energy	112-115
Maxim Power	116-117
Nicolaas Jansen	118-286
Robert F. Spragins	287-393
Rural Electrification Association Working Group	394-420
Sheldon Fulton	421-433
TransAlta	434-435
TransCanada Energy	436-438
Utilities Consumer Advocate	439-489
Utility Network and Partners	490-495

**D MSA Request to Stakeholders for Comments on Draft Report**

## NOTICE TO PARTICIPANTS AND STAKEHOLDERS

June 20, 2017

**Re:** Options for Enhancing the Design of the Regulated Rate Option – Request for Comments on Draft Report

---

On April 18, 2017 the MSA received a letter from the Minister of Energy requesting that the MSA prepare a report on options to enhance the design of the Regulated Rate Option (RRO). The MSA [published](#) this letter, along with a request to stakeholders to provide comments on RRO options by April 21, 2017.

The MSA received comments from 20 stakeholders. Stakeholder comments are available [here](#). Comments are best navigated using the PDF table of contents or by clicking on the hyperlinked submission in the list of submissions.

A draft report and stakeholder comments were provided to the Minister on June 1, 2017. Today, the MSA is releasing a [draft](#) of its report for stakeholder comment. The MSA requests that stakeholders provide specific comments and suggestions for improving the report in the context of the Minister's request by **July 18, 2017**. All comments should be sent to [stakeholderconsultation@albertamsa.ca](mailto:stakeholderconsultation@albertamsa.ca). All comments will be published on the MSA's website and attached to the final report. After receiving comments the MSA will revise the report at its discretion and publish a final version.

In addition to providing written comments, should stakeholders wish to meet regarding the report, please contact me directly.

Mark Nesbitt

Manager, Retail and Investigations

403-705-3195

[mark.nesbitt@albertamsa.ca](mailto:mark.nesbitt@albertamsa.ca)

## **E List of Stakeholder Comments on Draft Report**

<b><u>Stakeholder</u></b>	<b><u>Pages</u></b>
Alberta Federation of Rural Electrification Associations	2-10
ATCO	11-13
Capital Power	14-15
City of Red Deer and City of Lethbridge	16-17
Direct Energy Regulated Services	18-19
ENMAX	20-24
EPCOR	25-27
Just Energy	28
Rural Electrification Association Working Group	29-43
TransAlta	44
TransCanada Energy	45-47
Utilities Consumer Advocate	48-51