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THE BALANCING POOL

CUSTOMER REPRESENTATIVE GROUP CONSULTATION FOR THE PROPOSED BATTLE RIVER 5 PPA TERMINATION

PREPARED FOR: THE BALANCING POOL

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CUSTOMER REPRESENTATIVE CONSULTATION OVERVIEW

BACKGROUND

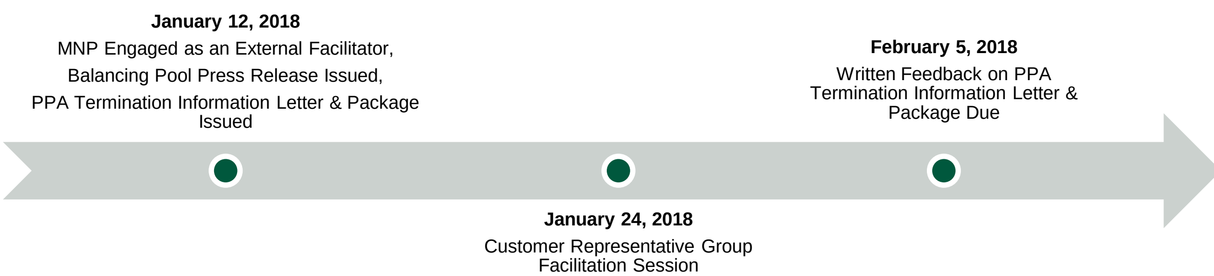
The Balancing Pool was created by the Government of Alberta to manage certain assets, liabilities, revenues and expenses arising from the transition to competition in Alberta's electric industry.[1] In late 2015/early 2016, various Power Purchase Agreements ("PPA") Buyers elected to return their respective PPA to the Balancing Pool under the terms of the arrangements. As a result, Balancing Pool is now evaluating whether to terminate some of these PPAs with the respective PPA owners. As part of the Balancing Pool's duties when terminating one or more PPA(s), Section 97 of the Electric Utilities Act ("EUA" or "Act") requires the Balancing Pool to consult with representatives of customers and the Alberta Minister of Energy ("Minister") about the reasonableness of the termination. This document reflects the feedback received from customer representative groups regarding potential termination of the Battle River 5 PPA.

The Balancing Pool is currently evaluating terminating the Battle River 5 PPA with the view that the proposal to terminate this PPA aligns with the organization's mandate requiring it to manage its generation assets in a commercial manner, and to conduct itself in a fashion that is not contrary to a fair, efficient, and openly competitive ("FEOC") market.

CUSTOMER REPRESENTATIVE CONSULTATION PROCESS

As required by the EUA, the Balancing Pool conducted a consultation process with customer representative groups regarding the reasonableness of the Battle River 5 termination. Once this process is complete, the Balancing Pool will also consult the Minister on this subject. The Balancing Pool followed a similar consultation process in July 2017 for the Sundance B and C PPAs.

Below is a high-level timeline of events and milestones surrounding the customer representative facilitation:



The consultation was completed in a 5-phased approach:

1. Preparing for Project
On January 12th, 2018, MNP was engaged as an external facilitator to support the Balancing Pool with the customer representative consultation. MNP worked with the Balancing Pool to plan the objectives and scope of the consultation process. MNP had no opinion on the subject matter of the consultation. As an independent facilitator, MNP had no participation in nor influence over Balancing Pool's analysis and decision-making arising from the consultation.

2. Initiating Customer Representative Consultation
On January 12th, 2018, the Balancing Pool issued a press release stating the intent to consult with customer representative groups about the reasonableness of the proposed PPA termination. In the press

[1] http://www.balancingpool.ca/

release, the Balancing Pool identified a list of groups, based on their participation in the Sundance termination process, who would be consulted regarding the proposed PPA termination.

Based on their involvement in the Sundance PPA termination process, the following list of 11 customer representative groups were initially invited to participate in the proposed PPA termination consultation process:

- Alberta Association of Municipal Districts and Counties (AAMDC)
- Alberta Direct Connect (ADC)
- Alberta Federation of Labour
- Alberta Federation of Rural Electrification Associations (AFREA)
- Alberta Irrigation Projects Association (AIPA)
- Alberta Urban Municipalities Association (AUMA)
- City of Calgary
- Consumers' Coalition of Alberta (CCA)
- EQUS REA (Represented by URICA Energy Management)
- Industrial Power Consumers Association of Alberta (IPCAA)
- Utilities Consumer Advocate (UCA)

Two other parties were also initially invited to participate, but they declined as they do not represent workers that could be affected by the Battle River 5 PPA termination:

- Local Union 254 - International Brotherhood of Electrical Workers
- United Steelworkers Union and Business Agent

The Canadian Energy Workers Association was then added as they represent workers who would potentially be affected by the Battle River 5 PPA termination. Therefore, a net total of 12 customer representative groups were invited to participate in the proposed PPA termination consultation process.

3. Managing Customer Representative Consultation

All identified customer representative groups were sent a PPA Termination Information Letter and Package, and were asked to submit all written feedback by January 29th, 2018 (later extended to February 5th, 2018). The customer representative groups were also asked to confirm interest in attending a Q & A session to answer questions related to the proposed PPA termination and the termination process.

The Balancing Pool provided customer representative groups with the following information:

- Overview of the Balancing Pool and the Power Purchase Arrangements
- Financial Consequences of Termination to the Balancing Pool
- Fair, Efficient, and Openly Competitive Market Considerations
- Impacts on Wholesale Electricity Prices

The PPA Termination Information Letter and Package is included in Appendix A: PPA Termination Customer Information Letter and Package.

4. Q & A Session

The customer consultation session was held on January 24th, 2018 in Calgary. All customer representative groups in attendance were given the opportunity to ask questions related to the proposed PPA termination and the termination process.

Of the 12 identified customer representative groups, the following three attended the Q & A session:

- Alberta Urban Municipalities Association
- Industrial Power Consumers Association of Alberta
- Utilities Consumer Advocate

Meeting minutes were distributed to all customer groups following the customer Q & A session.

5. Collecting and Consolidating Written Feedback Submissions

Following the Q & A session, customer representative groups were asked to submit all written feedback by the extended deadline of February 5th, 2018. The feedback received from the 12 customer representative groups is as follows:

The following seven customer representative groups submitted written feedback:

- Alberta Federation of Labour
- City of Calgary
- Consumer Coalitions of Alberta (CCA)
- EQUS REA (Represented by URICA Energy Management)
- Industrial Power Consumers Association of Alberta (IPCAA)
- Utilities Consumer Advocate (USW)
- Canadian Energy Workers Association (CEWA)

The following three customer representative groups stated that they had no feedback at this time, and did not submit comments to the Balancing Pool:

- Alberta Direct Connect (ADC)
- Alberta Irrigation Projects Association (AIPA)
- Alberta Urban Municipalities Association (AUMA)

The following two customer representative groups did not submit a response:

- Alberta Association of Municipal Districts and Counties (AAMDC)
- Alberta Federation of Rural Electrification Associations (AFREA)

6. Reporting & Presentation

This report is a compilation of all written feedback that was received from customer representative groups. The Balancing Pool will present this report and all received feedback to the Balancing Pool Board of Directors. Following the presentation to its Board, the Balancing Pool will consult with the Alberta Minister of Energy regarding the reasonableness of the termination.

CATEGORIES OF FEEDBACK:

All feedback received has been consolidated in the following sections of this report. Excerpts from the submitted feedback were selected and then organized into key themes of this report. The full written submissions are also provided in the appendices. The report was categorized into the following key themes, or sections:

Section One: Effect on Generation Facility Owners and Alberta's Electricity Market
1.1 Generation Facility Owners and Alberta's Electricity Market
Section Two: Balancing Pool Analysis and Role
2.1 Balancing Pool Analysis 2.2 Balancing Pool Role
Section Three: Effect on Consumers, Municipalities and Communities
3.1 Consumers 3.2 Municipalities and Communities

SECTION ONE: EFFECT ON GENERATION FACILITY OWNERS AND ALBERTA'S ELECTRICITY MARKET

Section One is composed of all feedback received from customer representative groups regarding the effect that the proposed PPA termination would have on the generation facility owners and Alberta's electricity market.

1.1 Generation Facility Owners and Alberta's Electricity Market

Alberta Federation of Labour
The Alberta Federation of Labour submitted the following points, for the full submission refer to Appendix B: Alberta Federation of Labour.

> "The PPA terminations should be seen in the context of the coming phase-out of coal-fired electricity and the ongoing consultations surrounding plant closures or conversions. The PPAs that are in question relate exclusively to coal-fired units and the announcement of the phase-out is undoubtedly connected to the decision to return the PPAs to the Balancing Pool. The owners of many of these facilities have already received significant payments from the agreements negotiated with Terry Boston, to make up for "stranded assets" caused by the decision to phase out coal-fired electricity."
>
> "Without a PPA to ensure Battle River #5 remains operational, it is inevitable that ATCO will choose to drastically alter operations of the Battle River Generating Station. According to a number of industry professionals, it is common for units whose fixed cost has been recovered to continue operating at reduced capacity where commercially viable."

City of Calgary
The City of Calgary submitted the following points, for the full submission refer to Appendix D: City of Calgary.

> "The change in forecasted offer control by market participants resulting from the termination of the Battle River 5 PPA demonstrates that current Fair, Efficient and Openly Competitive regulations will not be violated. The City of Calgary is supportive of having a larger proportion of offer control held by private market participants."
>
> "Higher wholesale prices at this time will also provide an incentive for generators to invest in Alberta at a time when expensive coal to gas conversions and new renewable energy generation is needed."

Consumers' Coalition of Alberta
The Consumers' Coalition of Alberta (CCA) submitted the following point, for the full submission refer to Appendix E: Consumers' Coalition of Alberta.

> "The actions of TransAlta after the termination of the Sundance PPAs through its mothballing actions has pushed the forward prices in 2018, 2019, and 2020 up from the $32.00 forecast in July 4, 2017 to nearly $60.00 in 2018, over $56.00 in 2019 and $48.00 in 2020. The estimated impact by BP was a $4.00/MWh increase to $36.00."

EQUS REA – Represented by URICA Energy Management
URICA Energy Management on behalf of EQUS REA submitted the following points, for the full submission refer to Appendix F: EQUS REA – URICA Energy Management.

> "EQUS does not dispute the economics of the BP's decision to terminate and does agree that the resulting increase to consumer costs of energy via increased RRO rates may be initially offset by increased spot prices that are realized by the remaining BP portfolio. However, this effect is negated by the historical tendency of the Forward markets to settle well above spot prices, therefore consumers will be absorbing the Forward Market premium through their RRO rates, but the BP will not see this same revenue from the spot settles."
>
> "The BP's Consumer information package predicted a forward pool price of $47/MWh for the balance of the BR5 PPA, at the same time current forward market prices for this period are in excess of $53/MWh. This premium is in line with historical results and while transacting at these prices would not change the economics of this particular decision, they certainly would be in line with a mandate to act in a commercial manner especially on the remaining units post BR5 termination. EQUS is concerned with the support BP shows in respect to EEA's proposed EPSP format in Proceeding 22357, and their stated mandate."
>
> "EQUS does have some concerns as to the effect on the existing supply surplus that the proposed termination will have and around the clarity of ATCO's next steps with regard to the Battle River fleet. As pointed out by the BP ATCO can trigger an additional payment by the BP of $17 million through the decommissioning of BR3-4-5, EQUS is interested to know how long these units would need to be decommissioned to trigger this clause. Further, could this clause be triggered through shutting down the units for a coal to natural gas conversion if this process takes long enough? The return of the units as a natural gas fired asset essentially eliminates any need for the mine and the BP has not provided a complete answer regarding the mechanics of this to date. Further elaboration on the ability of ATCO to exercise this option would be beneficial to understanding the potential net effects to market pricing for power given ATCO's portfolio of assets."

Industrial Power Consumers Association of Alberta

Industrial Power Consumers Association of Alberta (IPCAA) submitted the following point, for the full submission refer to Appendix G: Industrial Power Consumers Association of Alberta.

> "Naturally, IPCAA's concern is that while the termination of this PPA will reduce the BP's consumer charge, it will also raise the Alberta pool price."

Utilities Consumer Advocate

Utilities Consumer Advocate (UCA) submitted the following points, for the full submission refer to Appendix H: Utilities Consumer Advocate.

> "The UCA would like to better understand the unique provision that could obligate the PPA buyer to make a termination payment estimated at $17 million related to the mine. Specific areas of interest are around the timing that the decommissioning would have to be communicated and completed by."

> "The UCA has evaluated the issue and does not support the termination of the Battle River 5 Power Purchase Agreement owing to the financial impact that the termination could have on the wholesale pool price and increased cost to electricity consumers in the province."

SECTION TWO: BALANCING POOL ANALYSIS AND ROLE

Section Two is composed of all feedback and summary of requests received from customer representative groups regarding the Balancing Pool's analysis and role.

2.1 Balancing Pool Analysis

Consumers' Coalition of Alberta

The Consumers' Coalition of Alberta (CCA) submitted the following points, for the full submission refer to Appendix E: Consumers' Coalition of Alberta.

> "The CCA disagrees with the Balancing Pool (BP) decision to recommend termination of the Battle River 5 PPA (BR5). CCA does not believe that sufficient analysis has been undertaken on the effect of such a termination on the overall cost to consumers."

> "The information presented to consumers in July of 2017 implied that the Sundance units would continue to be operated and the consequences would be acceptable. However, the July 2017 analysis for Sundance has proven to be totally misleading, prices are now much higher than forecast, and the potential for significant price excursions exists as much of the Sundance capacity is being terminated or mothballed. The BR5 analysis simply repeats the conclusions from the July analysis which has been demonstrated as incorrect. Further it does not look to alternative actions with respect to operation of BR5, including sale of energy into the forward market."

> "The Balancing Pool analysis has to view the impact to consumers of increased market prices, of sunk costs for termination, and for the consequences to carbon revenues if another coal unit is mothballed. To not undertake this analysis would deprive consumers the ability to ascertain if the termination is indeed "reasonable" as required by the EUA (Electric Utilities Act)."

City of Calgary
The City of Calgary submitted the following point, for the full submission refer to Appendix D: City of Calgary.

> "The City finds that the financial analysis performed to evaluate the consequences of terminating the Battle River 5 PPA terminations clearly identifies large anticipated savings to the Balancing Pool. The expected savings of $105 million (high price scenario) to $122 million (on a low price scenario) provides a high level of confidence that financial benefits will accrue to the Balancing Pool as a result of terminating of the Battle River 5 PPA."

EQUS REA – Represented by URICA Energy Management
URICA Energy Management on behalf of EQUS REA submitted the following points, for the full submission refer to Appendix F: EQUS REA – URICA Energy Management.

> "The BP has freely admitted that although BR5 was the primary candidate for termination it was not considered first due to external political circumstances. These types of non-financially prudent decisions have cost the consumer millions of dollars through increased Rider F charges... it's hard to understand why outside of a non-commercial agenda the BP would not have executed these terminations much earlier."
>
> "...Going forward EQUS hopes that the BP will act in a commercial manner with regard to their remaining assets."

Utilities Consumer Advocate
Utilities Consumer Advocate (UCA) submitted the following points, for the full submission refer to Appendix H: Utilities Consumer Advocate.

> "The UCA submits that analysis with respect to the proposal to pay out the Net Book Value for the PPA facilities should include the total financial impact on Alberta electricity consumers, not only the narrower impact the action has on the Balancing Pool. Comprehensive consideration should be given to the consequences and impacts on consumers as well as the overall electricity market."
>
> "The UCA would like to know if the Balancing Pool has considered other or different approaches when evaluating the option of the proposed PPA terminations."

2.2 Balancing Pool Role

Alberta Federation of Labour
The Alberta Federation of Labour submitted the following point, for the full submission refer to Appendix B: Alberta Federation of Labour.

> "While the Balancing Pool is not mandated to consider such impacts and outcomes, they remain a matter of public interest and should be considered in accordance with the Balancing Pool's mandate to act prudently and responsibly. Should the Balancing Pool not act to consider this public interest, the Government of Alberta should act to ensure the impact of PPA terminations on workers and communities is mitigated."

Canadian Energy Workers Association
The Canadian Energy Workers Association (CEWA) submitted the following point, for the full submission refer to Appendix C: Canadian Energy Workers Association.

> "Firstly they (the Balancing Pool) mention the need to be fiscally responsible, 2 years ago when they secured a 2-billion-dollar line of credit and are now losing some $60 million a month, as well as an intent to pay out $63 million to release BR5. Is this fiscally responsible when the rate payers will eventually have to foot the bill?"

Consumers' Coalition of Alberta
The Consumers' Coalition of Alberta (CCA) submitted the following point, for the full submission refer to Appendix E: Consumers' Coalition of Alberta.

> "The Balancing Pool has always had an engagement with the forward market in its mandate and activities. It was responsible for the collection of the proceeds from the original PPA Auction in 2000. It offered forward energy strips from the unsold PPAs. It actively participated in the forward market and in periodic auctions of energy for the Regulated Rate Option procurement programs. All such participation was deemed to be consistent with the BP mandate and accepted by the Market Surveillance Administrator (MSA) as being FEOC compatible. The BR5 analysis is deficient from a consumer perspective unless it includes an assessment of the opportunities and impacts on forward selling PPA energy in the forward market to 2021."

City of Calgary
The City of Calgary submitted the following point, for the full submission refer to Appendix D: City of Calgary.

> "...terminating the Battle River 5 PPA would comply with the requirements of the Electric Utilities Act that the Balancing Pool act prudently in the management of its accounts associated with PPAs."

EQUS REA – Represented by URICA Energy Management
URICA Energy Management on behalf of EQUS REA submitted the following point, for the full submission refer to Appendix F: EQUS REA – URICA Energy Management.

> "While EQUS doesn't dispute that the termination of BR5 makes sense from a financial perspective based on the information provided, the BP's statement that the BP is not mandated to manage market outcomes on behalf of consumers, and that the cost of electricity for consumers is more of a policy level consideration is concerning."

Industrial Power Consumers Association of Alberta
Industrial Power Consumers Association of Alberta (IPCAA) submitted the following point, for the full submission refer to Appendix G: Industrial Power Consumers Association of Alberta.

> "To help alleviate that impact on consumers and create a more competitive marketplace, IPCAA submits that the BP should reconsider its decision not to sell power into the Regulated Rate Option (RRO) with its remaining PPAs. IPCAA understands that the decision not to sell into the RRO was made by the BP Board, and as such, we request a meeting with the BP Board to discuss this decision."

Utilities Consumer Advocate
Utilities Consumer Advocate (UCA) submitted the following points, for the full submission refer to Appendix H: Utilities Consumer Advocate.

> "The UCA believes that there is a significant benefit to electricity consumers of having the Balancing Pool as a properly motivated and active seller in the RRO forward market. The Balancing Pool is in a good position to do this as they have the required backstopping units."
>
> "In the UCA's view, it would be appropriate for the Balancing Pool to remove its self-imposed constraint and sell into the RRO forward market."

Section Three: Effect on Consumers, Municipalities, and Communities

Section Three is composed of all feedback received from customer representative groups regarding the effect that the proposed PPA termination would have on the consumers, municipalities, and communities.

3.1 Consumers

Consumers' Coalition of Alberta
The Consumers' Coalition of Alberta (CCA) submitted the following points, for the full submission refer to Appendix E: Consumers' Coalition of Alberta.

> "Even based on the BP's numbers the cost of termination to consumers far exceeds the cost of continuing to operate the PPA."
>
> "As with the termination of the Sundance PPAs, consumers are concerned with the absence of analysis from the perspective of overall costs to consumers including higher energy rates and payments to terminate the PPA, with no reciprocal commitments from the PPA Owners."
>
> "As almost all small market consumers (those of RRO and retailer contracts) pay rates based on forward prices, the absence of the BP as a forward seller has resulted in additional costs to consumers over the past three years."

City of Calgary
The City of Calgary submitted the following point, for the full submission refer to Appendix D: City of Calgary.

> "The Balancing Pool's Battle River 5 Termination Customer Information Package is forecasting a significant increase in the wholesale price of electricity as a result of the termination. While generally this is not good news for customers there is an offset in that a higher price for electricity will also serve to lower the forecast losses that the Balancing Pool will have on its PPA holdings. This will lower the Balancing Pool charge to customers providing an offset to the higher wholesale prices."

EQUS REA – Represented by URICA Energy Management
URICA Energy Management on behalf of EQUS REA submitted the following point, for the full submission refer to Appendix F: EQUS REA – URICA Energy Management.

> "…it is likely that consumers will not benefit from this termination in either the short term or the long term."

Industrial Power Consumers Association of Alberta
Industrial Power Consumers Association of Alberta (IPCAA) submitted the following point, for the full submission refer to Appendix G: Industrial Power Consumers Association of Alberta.

> "IPCAA submits that when making its decision on whether to return Battle River 5 to ATCO, the BP should consider the impact of this return on consumers."

Utilities Consumer Advocate
Utilities Consumer Advocate (UCA) submitted the following points, for the full submission refer to Appendix H: Utilities Consumer Advocate.

> "The UCA is concerned with the added immediate and long term financial impact that the termination of BR5 could have on electricity consumers in Alberta; especially when combined with the upcoming early mothballing of the Sundance Units, the collective effect on RRO prices and the unknown impacts of the changes to the wholesale electricity market currently being developed."

> "The Balancing Pool has the best information to decide the proper action to be taken with the BR5 PPA, however, the UCA urges the Balancing Pool to consider total cost impacts to consumers, which we estimate to be $387M for RRO customers alone. The Balancing Pool units could be used to moderate consumer prices at a time when prices are on the rise and many changes are being introduced that are creating uncertainty and likely volatility in the market place."

> "It is important to note, that increasing electricity and carbon related costs may result in consumer rate shock and drive increased customer call volumes and media attention."

3.2 Municipalities and Communities

Alberta Federation of Labour
The Alberta Federation of Labour submitted the following points, for the full submission refer to Appendix B: Alberta Federation of Labour.

> "It is our position that the Balancing Pool should consider the impact on workers and employment as part of their decision, to better act in the public's interest. While considerations of workers are not under the mandate of the Balancing Pool, the Pool is mandated to act responsibly and prudently. A prudent decision is one that at least considers all the consequences, especially when those consequences impact upon people's livelihoods and the local economy which relies upon these facilities to provide good jobs."

> "A key concern during a shift from continuous baseload operation to a more cyclical operation is the pressure this puts on employees... This potential for a change in plant operations is a consequence that should be considered by the Balancing Pool and communicated with workers and communities. According to the Balancing Pool this decision is likely mothball the whole facility, which will have dire ramifications for hundreds of workers and the entire area—even if ATCO proceeds with its stated plan to convert the plant to gas-fired generators."

> "The key impact of a mothballed Battle River Generating Stations will be most felt on the Paintearth and Vesta coal mine, which will face immediate closure and significant layoffs—127 workers are employed at the mine. This will drastically impact the small community of Forestburg, where the mine is a major employer and source of spinoff employment. Workers at the plant will also be impacted, as mothballed units will require very few workers to maintain. Even once gas-fired units are installed, only a fraction of the employees will be required to run the facility. This is a very real consequence of the decision to terminate the Battle River #5 PPA."

Canadian Energy Workers Association

The Canadian Energy Workers Association (CEWA) submitted the following point, for the full submission refer to Appendix C: Canadian Energy Workers Association.

> "At this point ATCO intends to continue to run as usual, but lets look at the consequences should there be a change in ATCO's plan. with BR5 not running would it be feasible to continue to continue to operate the facility at all. If not the plant and the mine combined would have to eliminate 130 to 150 positions, there are not that many meaningful jobs in this area or even the Province at one time. Housing values in Forestburg would bottom out as well as in some of the smaller surrounding communities.
>
> The loss of income in the Counties of Paint Earth and Flagstaff would most likely strain their abilities to maintain their individual combined services. and more centralizing of services would be an extreme over cost. It seems this decision will have a negative impact to the community and employees as well as community members and consumers."

SUMMARY/CLOSING STATEMENT

To date, the Balancing Pool has followed the expectations of the requirements of Section 97 of the Electric Utilities Act, to complete a consultation on the termination of a PPA. MNP recommends the Balancing Pool focus on the feedback that relates to the mandate of the Balancing Pool. All other feedback should also be considered for communication to the Alberta Minister of Energy.

APPENDICES

Appendix A: PPA Termination Customer Information Letter and Package

The Balancing Pool PPA Termination Customer Information Letter and Package is provided on the following pages.

Termination of the Battle River 5 Power Purchase Arrangement with the Generation Owner

January 12, 2018

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Disclaimer

This document contains forward looking statements including statements regarding the Balancing Pool's forecasts or expectations with respect to market conditions, market prices, results of operations, and financial results. Readers are cautioned not to place undue reliance on these forward looking statements. While due care has been taken in the preparation of forecast information, actual outcomes may vary in material ways. Forecasts are subject to uncertainty.

Executive Summary

The Balancing Pool is of the view that terminating the Battle River 5 Power Purchase Arrangement ("PPA") is in alignment with the organization's mandate to manage its generation assets in a commercial manner and to conduct itself in a fashion that is not contrary to a fair, efficient, and openly competitive ("FEOC") market. As part of the Balancing Pool's duties when terminating one or more PPAs, the Electric Utilities Act ("EUA" or "Act") requires the Balancing Pool to consult with representatives of customers and the Minister of Energy ("Minister") about the reasonableness of the termination(s). This document aims to provide customer representatives with the background and reasoning behind the Balancing Pool's proposed PPA termination.

Overview of the Balancing Pool and the Power Purchase Arrangements

Commencing in the mid-1990s, Alberta began a process through which the province's electricity sector was to be restructured. The Act provided for a transition period to full deregulation of electrical generation through the implementation of PPAs which covered the vast majority of the formerly regulated power plants in the province. The PPAs allowed the existing generation owners to continue to own and operate their facilities, but auctioned the dispatch rights and beneficial ownership of the associated energy to new buyers. This framework was intended to enhance the competitiveness of the wholesale generation market by immediately introducing new players into the market.

The various PPAs are regulations that set out the terms for the wholesale purchase and sale of electricity between the Owner of a generating plant and the Buyer of the electricity from that plant. The PPAs grant the various Buyers the right to the capacity and the electricity associated with the underlying generating facilities. The Buyer pays the Owner a regulated payment and, in exchange, is granted pricing control over the facilities' capacities, allowing the Buyers to determine the offer prices at which their blocks of capacity are offered into the market. The Buyer sells the electricity to consumers through the Alberta power pool and retains for itself the spread between the regulated payment it pays the Owner and the hourly wholesale price it receives for its energy. The PPAs were auctioned to potential Buyers through a competitive process in the year 2000.

The Balancing Pool was created as an independent entity under the Act and has a role in the electric power sector in Alberta with corresponding duties and powers. Though originally envisaged as a repository for the proceeds of the PPA auction and a backstop to certain specified event risks, the Balancing Pool also legislatively assumed a role as a market participant in the sector when some PPAs remained unsold following the initial PPA auction. Any Balancing Pool net earnings over and above the amounts needed to cover PPA related obligations and to fund operations are passed onto electricity consumers through an allocation on consumers' power bills; similarly, but conversely, any shortfall in earnings relative to the amounts needed must be collected from consumers via a charge.

The Balancing Pool plays a prominent role in supporting the PPAs. By design, the organization effectively perpetuates the so called "regulatory compact" that existed between the investor owned utilities and consumers during regulation. This is achieved by protecting Owners against certain risks they were not required to bear in the regulated regime, but which could not be efficiently transferred to Buyers via the PPA mechanism. One of the most important risks retained by consumers via the Balancing Pool is an event of PPA termination.

Under the Act, a PPA that is terminated (for reasons other than destruction of the facility) by a PPA Buyer is deemed to have been sold to the Balancing Pool. The Balancing Pool becomes the default Buyer of a PPA in the event of a termination and assumes responsibility for making the related payments to the Owner and for offering the associated capacity into the wholesale electricity market.

In late 2015 / early 2016, the various Buyers elected to return their respective PPAs to the Balancing Pool under the terms of the arrangements. In mid-2016, the Government of Alberta contested these terminations through litigation against the parties involved, but by late-2016, the litigations were substantially settled and the terminations accepted with all but one Buyer. As a result, only two PPAs remain subject to the lawsuit: specifically the Battle River 5 and Keephills PPAs.

Although the Balancing Pool had accepted the return of Battle River 5 PPA from the PPA Buyer, the Balancing Pool took the position that it could not make a determination on the return of the Keephills PPA until after a decision had been rendered in the Government of Alberta’s lawsuit. In the summer of 2017, the PPA Buyer filed an injunction in the Court of Queen’s Bench in which it asked the court to direct the Balancing Pool to complete and issue its determination on return of the Keephills PPA, which the Balancing Pool was subsequently ordered to do. Based on the court’s ruling, the Balancing Pool has since accepted the return of the Keephills PPA and is now of the view that the Government of Alberta’s lawsuit is no longer an impediment to any actions related to the termination of the PPAs.

The Balancing Pool may, under the Section 97 of the Act, *fully* terminate[1] a PPA with an Owner if the Balancing Pool:

- Consults with representatives of customers and the Minister about the reasonableness of the termination,

- Gives to the Owner of the generating unit to which the PPA applies six months' notice, or any shorter period agreed to by the owner, of its intention to terminate, and

- Pays the Owner or ensures that the owner receives an amount equal to the remaining closing net book value[2] of the generating unit, determined in

[1] Termination by a PPA Buyer results in the PPA being returned to the Balancing Pool. Termination by the Balancing Pool results in the cessation of the arrangement and the control of the underlying PPA units returning to the Owner.
[2] The net book value is more fully described later in this document.

accordance with the power purchase arrangement, as if the generating unit had been destroyed, less any insurance proceeds.

In addition to these required steps, the termination of any PPAs must be considered in the context of the applicable legal principles of the Act and the responsibilities set out for the Balancing Pool. The Act requires Balancing Pool to act prudently in managing its accounts associated with all PPAs, to conduct itself in a fashion that is not contrary to the fair, efficient, and openly competitive ("FEOC") operation of the market, and to manage generation assets held by it in a commercial manner.

Given these requirements, the range of considerations by the Balancing Pool in relation to a PPA termination may include such things as:

1. The financial consequences for the Balancing Pool of terminating any one or more PPAs,

2. Any significant consequences of the termination(s) for the FEOC market,

3. The consequences of termination(s) on an overall basis for customers related to electricity prices and the Balancing Pool allocation or charge.

In 2017, the Balancing Pool elected to terminate the Sundance B and Sundance C PPAs effective April 1st, 2018. As at the time of this writing, the Balancing Pool is the default Buyer for all the outstanding PPAs, including the Battle River 5, Keephills, Genesee, and Sheerness PPAs. The Balancing Pool has assessed the economics of each of these PPAs and has identified the Battle River 5 PPA as another termination candidate in the context of the considerations articulated above.

The sections that follow explore the considerations discussed in this section as they relate the termination of the Battle River 5 PPA.

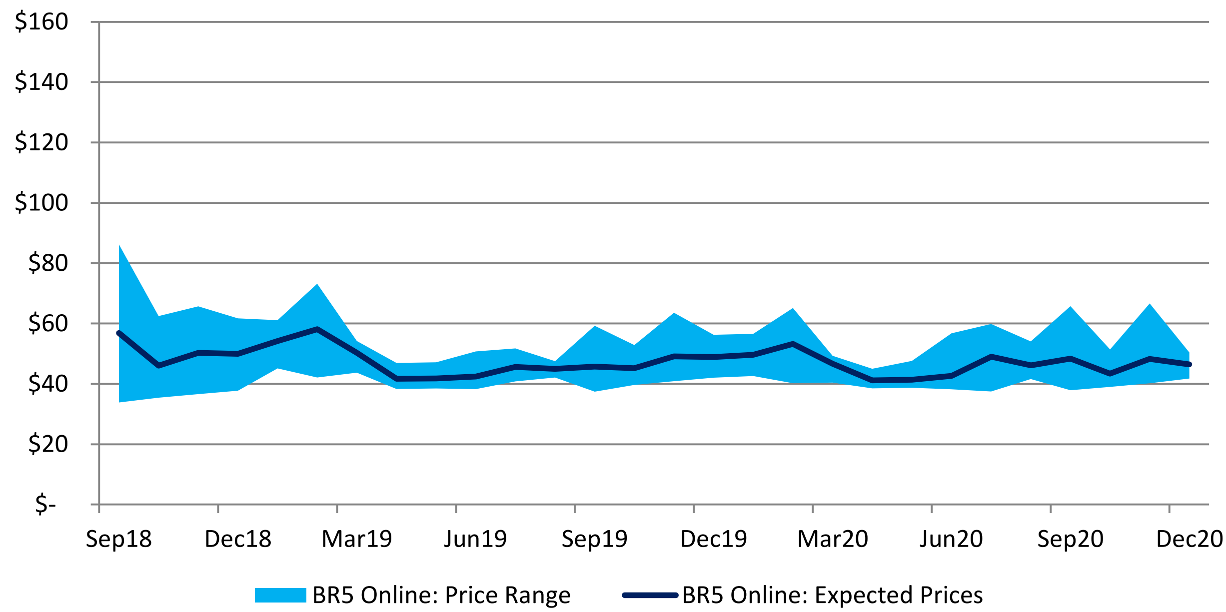
Financial Consequences of Termination to the Balancing Pool

The analysis contained herein compares the financial implications to the Balancing Pool from continuing to hold the Battle River 5 PPA over the balance of its remaining term versus terminating it under Section 97 of the Act. For the purpose of the comparison, the expected future net cash flows for the PPA were forecasted and then discounted to yield a net present value ("NPV") on September 1, 2018. The NPV represents the cost to the Balancing Pool of retaining the PPA through to 2020 when the PPA expires. As a basis for decision making, the NPV can be compared to the termination payment payable to Owner which is equal to the PPA unit's Net Book Value ("NBV"). The date of the termination payment was assumed to be on September 1, 2018 since the Owner is entitled to six months' notice from the Balancing Pool in the event of termination[3].

As the basis for forecasting the future expected cash flows of the PPA, market prices and generation volumes were simulated using an independent consulting firm's proprietary hourly dispatch model. The forecasting model is based on a physical representation of electricity supply resources, allowing the model to evaluate the impacts of generation retirements, additions, outages, constraints, and other physical factors that have an effect on market prices. It uses historical data on past market operations to incorporate factors such as offer strategies, forced outages, and weather-dependent supply and demand. A Monte Carlo approach is used to simulate the impact of random factors in the model.

A summary of the price forecast from the modelling is shown in the next chart. This price forecast was developed assuming that the Balancing Pool continues to hold the Battle River 5 PPA and continues to offer the unit into the market at variable cost.

Figure 1: Monthly Prices



The dark blue line in the graph is the mean, or expected, average monthly pool price over the relevant time horizon. The light blue area represents the range between the

[3] The six months can be shortened if the Owners agree to a shorter notice period. To mitigate the ongoing losses associated with holding the PPAs, the Balancing Pool will attempt to agree on a shorter notice period with the Owners if possible.

10th and 90th percentile pool price as simulated for a given month. The blue area can be interpreted as the potential high and low price range for each month.

The forecast suggests pool prices may be expected to average approximately $47 per MWh over the time horizon, with the potential to hit highs of $86 per MWh and lows of $34 per MWh. For comparison, pool prices have averaged $53 per MWh over the last ten years with a high of $138 per MWh and a low of $14 per MWh.

The Balancing Pool has input the price forecast above, together with anticipated generation volumes and PPA related expenses, into a financial model to estimate the future expected cash flows associated with the PPA. The estimates were determined under a low, expected, and high pool price scenario. NPVs of the net cash flows under each scenario were also calculated. The cash flows are summarized in the following table.

Table 1: Battle River 5 PPA Net Cash Flows ($ millions)[4]				
	Sep-Dec 2018	**2019**	**2020**	**NPV at Sep. 1, 2018**
Low Prices	(27)	(74)	(86)	**(185)**
Expected Prices	(23)	(70)	(82)	**(172)**
High Prices	(18)	(68)	(84)	**(168)**

The results above lead the Balancing Pool to anticipate it will experience losses in the range of $168 to $185 million if it continues to hold the PPA through to the end of 2020.

As previously discussed, the Balancing Pool is required to pay the Owner a termination payment equivalent to the NBV of the underlying PPA unit should the Balancing Pool elect to terminate that PPA. Therefore, to determine whether it is better to hold the PPA or to terminate it, one must compare the cost of continuing to hold a given PPA (the NPV) to the cost of terminating it (the NBV). The NBV is calculated in a prescribed, formulaic fashion under the terms of the PPAs. The NBV of the Battle River 5 PPA is expected to be $63 million on September 1, 2018.

In addition to the NBV payment, the Battle River 5 PPA has unique provision in its schedules that could obligate the PPA Buyer to make a termination payment related to the mine (this payment is not associated with the NBV of the mine assets). As Buyer, the Balancing Pool may be liable for the payment, but the payment is trigged only if the Owner shuts down all Battle River units. As such, the Owner would need to decommission Battle River 3, 4, and 5 upon the termination of the Battle River 5 PPA,

[4] See Appendix A for details.

which the Balancing Pool does not expect. The total payment, if required, is estimated to be approximately $17 million.

The following table summarizes the forecasted cost savings that could be achieved through the early termination of the Battle River 5 PPA. The savings are calculated as the NBV minus the NPV under the low, expected, and high pool price scenarios.

Table 3: Expected Savings ($ millions) from Terminating (NBV - NPV)		
Low Prices	**Expected Prices**	**High Prices**
$122	$109	$105

The Balancing Pool estimates it would save $105 to $122 million by terminating the Battle River 5 PPA. In order to justify continuing to hold the PPA (that is, for the expected savings from terminating to be $0 or less), pool prices would need to be consistently above $63 per MWh – above most of the top end of the blue shaded area in Figure 1[5]. This leads the Balancing Pool to be of the opinion such price levels are not likely to occur.

Accordingly, the Balancing Pool is of the view that terminating this unprofitable arrangement is consistent with the organization’s mandate to manage its generation assets in a commercial manner.

Fair, Efficient, and Openly Competitive Market Considerations

As discussed in earlier sections, the Balancing Pool should consider any substantial consequences of the PPA termination for the FEOC market.

On May 11th, 2017, the Market Surveillance Administrator (“MSA”) released its annual tabulation of offer control in the wholesale electricity market for major market participants. The table below summarizes the results of that report adjusted for the termination of the Sundance PPAs as well changes to installed generation capacity expected by September 2018[6].

[5] See Appendix A for details.
[6] Source: AESO Long-term Adequacy Metrics - November 2017

Table 4: Forecasted Offer Control by Market Participant		
Company	**Offer Control (MW)**	**Offer Control (%)**
Balancing Pool	1,917	12%
ENMAX	2,320	14%
TransAlta	3,527	22%
ATCO	1,609	10%
Capital Power	1,010	6%
Suncor	1129	7%
Other	4,210	26%
Non-dispatchable	350	2%
Grand Total	**16,072**	**100%**

As demonstrated by the table, the Balancing Pool controls a significant percentage of the installed generating capacity in the wholesale market. Current FEOC regulations state that "a market participant shall not hold offer control in excess of 30% of the total maximum capability of generating units in Alberta." While the Balancing Pool's offer control does not exceed the regulated limit, it is the Balancing Pool's view that having offer control in the hands private market participants is more conducive to supporting a sustainable FEOC market than having that generation sit with the Balancing Pool.

The Balancing Pool has prepared a forecast of the change in offer control by market participant effective September 1, 2018 assuming the candidate PPA termination is in effect. The results are shown in the following table.

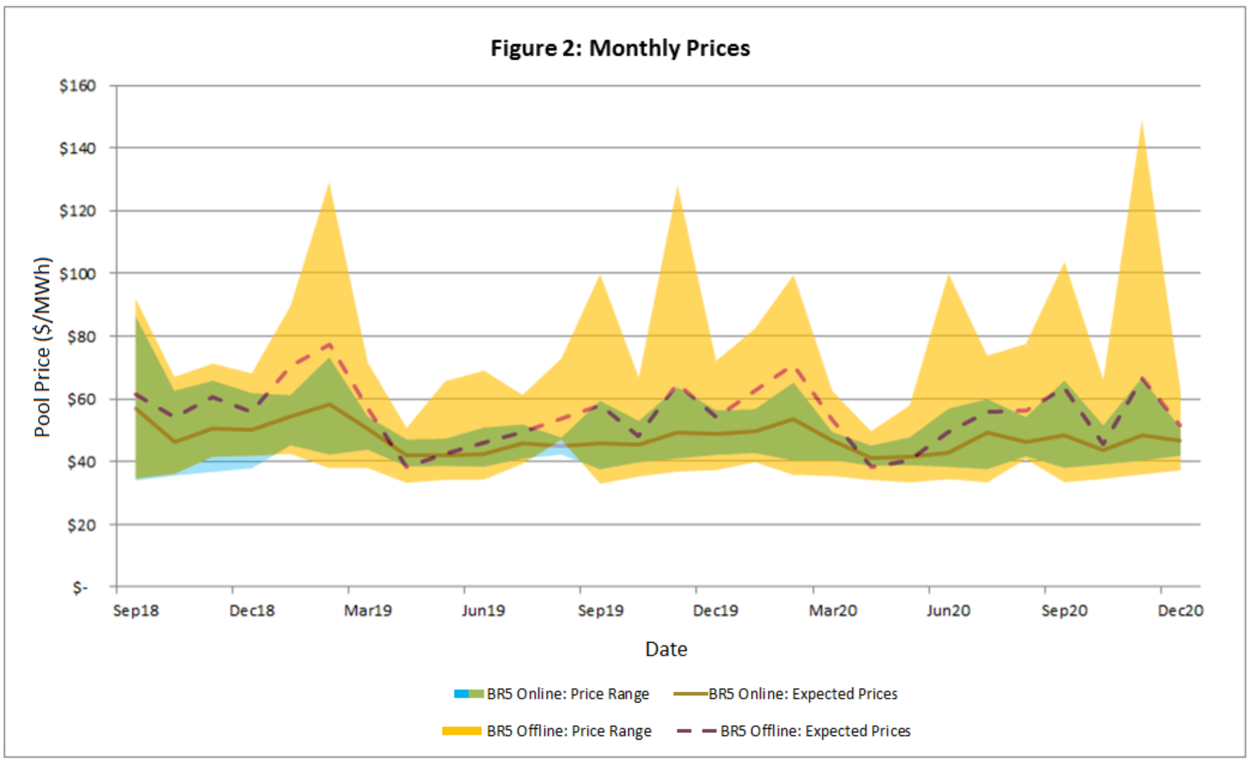
Table 5: Forecasted Offer Control by Market Participant Post PPA Termination		
Company	**Offer Control (MW)**	**Offer Control (%)**
Balancing Pool	1,549	10%
ENMAX	2,320	14%
TransAlta	3,527	22%
ATCO	1,977	12%
Capital Power	1,010	6%
Suncor	1129	7%
Other	4,210	26%
Non-dispatchable	350	2%
Grand Total	**16,072**	**100%**

As demonstrated by the table, ATCO's offer control is expected to increase by two percent while the Balancing Pool's is expected to decrease by the same amount, reducing the Balancing Pool's influence on the wholesale electricity market. The 30 percent offer control limit is not expected to be breached following the termination of the Battle River 5 PPA.

Impacts on Wholesale Electricity Prices

This final section of analysis examines the potential impacts on wholesale electricity prices from terminating the Battle River 5 PPA. As in the financial analysis presented earlier, market prices were simulated using an independent consulting firm's proprietary hourly dispatch model. Two price forecasts were developed: one in which the Balancing Pool holds the Battle River 5 PPA and one in which the PPA is terminated. The forecast in which the Battle River 5 PPA is terminated was developed under the assumption that the Battle River 5 unit is mothballed upon termination through to the end of the PPA term due to its uneconomic nature – though this outcome is not a certainty.

The chart that follows illustrates the change in forecasted market prices should the Battle River 5 PPA be terminated and the underlying unit mothballed.



The graph is interpreted as follows:

- The green/blue shaded area represents the range between the 10th and 90th percentile pool price for a given month assuming the Battle River 5 PPA *is not* terminated. This is the same price forecast shown in the *Financial Consequences of Termination to the Balancing Pool* section.

- The solid line in the graph is the mean, or expected, average monthly pool price over the relevant time horizon assuming the Battle River 5 PPA *is not* terminated.

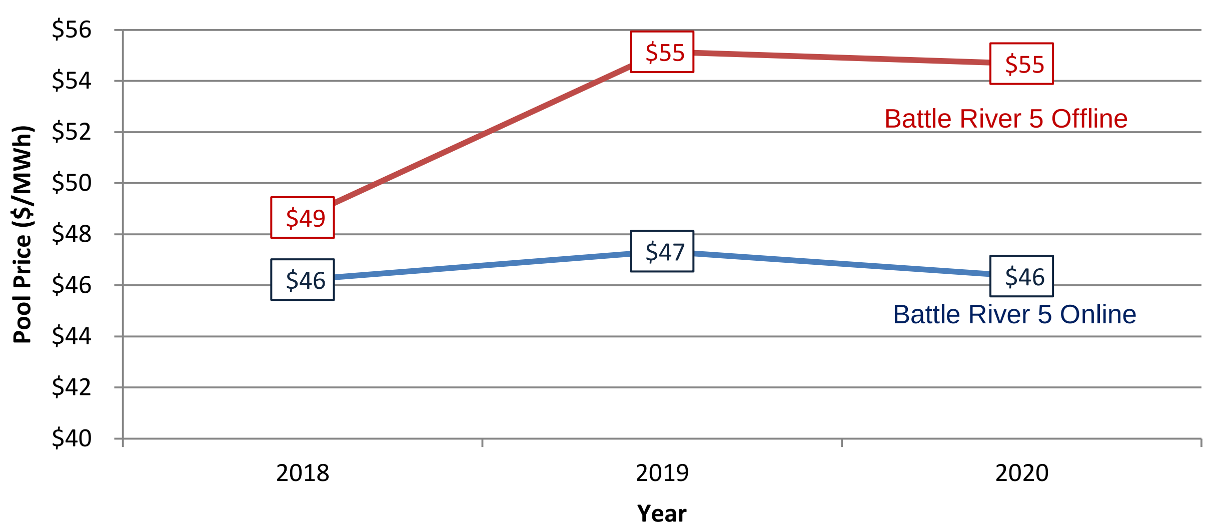
- The yellow shaded area represents the new range between the 10th and 90th percentile pool price for a given month assuming the Battle River 5 PPA *is* terminated and the underlying unit is subsequently mothballed.

- The dashed line in the graph is the mean, or expected, average monthly pool price over the relevant time horizon assuming the Battle River 5 PPA *is* terminated and the underlying unit is subsequently mothballed.

With the PPA terminations in effect, overall price levels and price volatility have the potential to increase from current levels. Due to the stochastic nature of the modelling, the reader should understand that the monthly prices are representative of potential market outcomes over the time horizon and that a particular month's price should not be interpreted as definitive forecast for that month – rather, the monthly prices illustrate the potential price range and the potential frequency of price excursions over the entire time horizon.

To get a better idea of the expected change in prices, yearly averages are more instructive. The next chart looks at the annual average price impact from terminating the Battle River 5 PPA and having the underlying unit shutdown.

Figure 3: Annual Average Pool Prices



The blue line in the chart presents the forecasted annual average electricity prices under the status quo environment in which the Balancing Pool holds and offers the capacity of the Battle River 5 PPA into the market whereas the red line shows the annual price averages assuming the PPA is terminated. The 2018 average on the red line is lower than the other years because only four months would be affected by the termination (September through December) whereas the other years are affected in their entirety.

On average, the forecast suggests the impact on wholesale electricity prices from terminating the Battle River 5 PPA may be approximately $8 per MWh. For the average Regulated Rate consumer, this change in wholesale prices could increase the retail rate by approximately 1.17¢ per KWh or about $7 per month for an average household[7].

The higher prices following the PPA terminations would increase the value of the PPAs retained by the Balancing Pool. While consumers' electricity bills would increase with the higher wholesale prices, the increase in the value of the PPAs held by the Balancing Pool could provide an offset via the consumer charge.

Conclusion

This document has provided background on the Balancing Pool, the PPAs, and the Balancing Pool's view that it is reasonable for the Battle River 5 PPA to be terminated.

The financial analysis suggests the Balancing Pool could significantly mitigate its losses if it were to terminate the Battle River 5 PPA. The net benefit of terminating the PPA is expected to be $105 to $122 million after making the required $63 million termination payment to the Owner.

The Balancing Pool examined the implications of terminating the Battle River 5 PPA in the context of the FEOC regulations. Terminating these PPAs will not result in a breach of the 30 percent offer control limit set by regulation. The Balancing Pool considers the terminations to be in alignment with fostering a sustainable FEOC market.

Finally, the Balancing Pool considered the impact of the termination on wholesale electricity prices and the Balancing Pool charge. Forecasts suggest that terminating the Battle River 5 PPA may result in an increase in wholesale electricity prices once the PPA is no longer held by the Balancing Pool. The higher prices following the PPA termination should increase the value of the PPAs retained by the Balancing Pool, providing a partial offset for consumers via the consumer charge.

[7] These calculations assumed a 1.46x retail rate premium over the flat wholesale price and 600 KWh of monthly consumption for an average household.

Appendix A: Battle River 5 PPA Financial Tables

This appendix provides additional details regarding the Battle River 5 valuations. The following tables present the annual pool price forecasts, capacity factors, cash flows, and the NPV associated with the Battle River 5 PPA.

The first three tables present the low, expected, and high pool price scenarios' results. The low and high cases were the selected forecast runs that yielded the lowest and highest NPVs, respectively.

Low Pool Price Scenario ($ millions)			
Year	**Sep-Dec 2018**	**2019**	**2020**
Realized Price ($/MWh)	$41	$48	$47
Capacity Factor	38%	40%	38%
Revenue	17	62	58
Variable Costs	(19)	(60)	(58)
Gross Margin	(2)	2	(0)
Fixed Costs	(26)	(76)	(86)
Net Cash Flows	(27)	(74)	(86)
NPV	**(185)**		

Expected Pool Price Scenario ($ millions)			
Year	**Sep-Dec 2018**	**2019**	**2020**
Realized Price ($/MWh)	$53	$52	$51
Capacity Factor	38%	39%	37%
Revenue	22	66	61
Variable Costs	(19)	(59)	(57)
Gross Margin	3	7	4
Fixed Costs	(26)	(77)	(86)
Net Cash Flows	(23)	(70)	(82)
NPV	**(172)**		

High Price Scenario ($ millions)			
Year	**Sep-Dec 2018**	**2019**	**2020**
Realized Price ($/MWh)	$61	$51	$47
Capacity Factor	43%	43%	41%
Revenue	28	71	62
Variable Costs	(21)	(65)	(62)
Gross Margin	7	7	1
Fixed Costs	(25)	(75)	(84)
Net Cash Flows	(18)	(68)	(84)
NPV	**(168)**		

The next table shows the pool price required to yield an NPV exactly equal to the termination payment.

Breakeven Requirement ($ millions)			
Year	**Sep-Dec 2018**	**2019**	**2020**
Realized Price ($/MWh)	$63	$63	$63
Capacity Factor	85%	85%	83%
Revenue	57	172	168
Variable Costs	(41)	(124)	(123)
Gross Margin	16	48	45
Fixed Costs	(24)	(72)	(77)
Net Cash Flows	(8)	(24)	(32)
NPV	**(63)**		

As shown above, a consistent $63 per MWh pool price would be required to alter the conclusion that terminating is less costly compared to holding the PPA.

Appendix B: Alberta Federation of Labour

The feedback submitted by the Alberta Federation of Labour is provided on the following pages.

Alberta Federation of Labour

Submission to Battle River #5 PPA Termination Consultations

The Albertan electricity generation sector is going through a number of new developments and changes, both as a result of changing market conditions and new government policy. Alberta will soon phase out coal-fired electricity generation, establish a capacity market for electricity generation, and strive for 30 per cent renewable electricity generation. All of this is within the context of historic low electricity prices and the implementation of a carbon levy. Companies have responded to all these changes by returning a number of power purchasing agreements (PPAs) to the Balancing Pool, on the basis that they no longer secure the profits that they were originally promised. The Balancing Pool is now considering the termination of these PPAs in accordance with its mandate. The Battle River #5 is the latest of these agreements to face termination.

Our submission draws attention to the interests of workers and communities, who will undoubtedly be impacted by the Pool's decision to terminate the Battle River #5 PPA. It is our position that the Balancing Pool should consider the impact on workers and employment as part of their decision, to better act in the public's interest. While considerations of workers are not under the mandate of the Balancing Pool, the Pool is mandated to act responsibly and prudently. A prudent decision is one that at least considers all the consequences, especially when those consequences impact upon people's livelihoods and the local economy which relies upon these facilities to provide good jobs. In this case the Balancing Pools' own analysis claims that the facility will be mothballed following the termination of the PPA, with an understanding that the facility will be converted to natural gas. In fairness to the workers and communities who rely on this facility and the mine that provides the plant fuel, the Balancing Pool should clearly communicate the employment consequences of this decision.

The Phase out of Emissions from Coal-fired Electricity—What about Workers and Communities?

To this point, the public conversation on these terminations has focused exclusively on utility companies and ratepayers, with no consideration of the workers employed by these plants or the communities that rely on them. While these are no doubt important considerations and central to the Balancing Pool's mandate, we believe the impact on workers and communities should also be considered to ensure that the decision is sufficiently prudent and responsible—qualities that are part of the Balancing Pool's mandate

The PPA terminations should be seen in the context of the coming phase-out of coal-fired electricity and the ongoing consultations surrounding plant closures or conversions. The PPAs that are in question relate exclusively to coal-fired units and the announcement of the phase-out is undoubtedly connected to the decision to return the PPAs to the Balancing Pool. The owners of many of these facilities have already received significant payments from the agreements negotiated with Terry Boston, to make up for "stranded assets" caused by the decision to phase out coal-fired electricity.

Workers at these plants and their associated mines are concerned about their jobs, their communities, and their families' futures. The termination of the PPAs associated with these facilities will deepen the

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anxiety of the workers who rely on these good jobs in Alberta's coal-fired electricity sector. Some of these workers are already being laid off, they now fear that they will be out of work far sooner than they expect.

Pressure on Workers

This fear is of course not unfounded. The return of the Clover Bar PPA to the Balancing Pool and its subsequent termination in 2005 was followed by the immediate shut-down of the Clover Bar Generation Station two months later. This plant (consisting of three natural-gas generators, providing 600+ MWs) had a life expectancy that extended until 2010. While new natural gas generators were eventually installed by Capital Power at that location, they were not operational until 2008 and 2009.

For workers and communities, PPAs offer a guarantee that a generator will continue to run to a set date. This date is publicly available and known to all parties. Without a PPA or contract of any sort, the decision to run a facility becomes a commercial decision made by the company and subject to market forces. Three other coal PPAs have expired since the early 2000s: Wabamun, Battle River 3, & H.R. Milner. In Wabamun's case, three units were decommissioned within a year of the PPA expiry while a fourth operated until 2010. H.R. Milner is technically still an active generating unit, but its use is infrequent and is unlikely to ever operate in a substantial way ever again. However, because it remains semi-active it still requires personnel to maintain and some workers remain in a state of semi-layoff. Battle River #3 remains an active generator, but often goes months before a sufficiently high pool price makes it commercially viable to operate.

Without a PPA to ensure Battle River #5 remains operational, it is inevitable that ATCO will choose to drastically alter operations of the Battle River Generating Station. According to a number of industry professionals, it is common for units whose fixed cost has been recovered to continue operating at reduced capacity where commercially viable. Flexible generation techniques often revolve around the process of two-shifting—where certain units are turned to provide electricity at peak times and then stopped. A key concern during a shift from continuous baseload operation to a more cyclical operation is the pressure this puts on employees. A 2014 article from *Power Magazine* regarding this transition discusses the need for a "culture change" for those at the plant and the need for leaders to make "tough choices"—which is a not so thinly veiled way of discussing impeding job loss as a result of the shift. This potential for a change in plant operations is a consequence that should be considered by the Balancing Pool and communicated with workers and communities. According to the Balancing Pool this decision is likely mothball the whole facility, which will have dire ramifications for hundreds of workers and the entire area—even if ATCO proceeds with its stated plan to convert the plant to gas-fired generators.

The key impact of a mothballed Battle River Generating Stations will be most felt on the Paintearth and Vesta coal mine, which will face immediate closure and significant layoffs—127 workers are employed at the mine. This will drastically impact the small community of Forestburg, where the mine is a major employer and source of spinoff employment. Workers at the plant will also be impacted, as mothballed units will require very few workers to maintain. Even once gas-fired units are installed, only a fraction of the employees will be required to run the facility. This is a very real consequence of the decision to terminate the Battle River #5 PPA.

Conclusion

Ultimately, whatever the Balancing Pool decides, the impacts of their decision will impact the future of workers employed across the coal-fired electricity sector. Potential layoffs and terminations associated with this decision should not be ignored. While the Balancing Pool is not mandated to consider such impacts and outcomes, they remain a matter of public interest and should be considered in accordance with the Balancing Pool's mandate to act prudently and responsibly. Should the Balancing Pool not act to consider this public interest, the Government of Alberta should act to ensure the impact of PPA terminations on workers and communities is mitigated.

Appendix C: Canadian Energy Workers Association

The feedback submitted by Canadian Energy Workers Association is provided on the following page.

The feedback from the Canadian Energy Workers Association was presented in email format.

From: Christine Robinson <business.manager@cewa.ca>
Sent: February 2, 2018 10:38 PM
To: PPA Inquiry 2018
Subject: Canadian Energy Workers Association comments

Good evening,

Please see the attached comments from Claude Fell; CEWAs president of Chapter 102. Representing workers from Battle River as well as a member of the impacted community.

Firstly they mention the need to be fiscally responsible, 2 years ago when they secured a 2 billion dollar line of credit and are now losing some $60 million a month, as well as an intent to pay out $63 million to release BR5. Is this fiscally responsible when the rate payers will eventually have to foot the bill?

At this point Atco intends to continue to run as usual, but lets look at the consequences should there be a change in ATCOs plan. with BR5 not running would it be feasible to continue to continue to operate the facility at all. If not the plant and the mine combined would have to eliminate 130 to 150 positions, there are not that many meaningful jobs in this area or even the Province at one time. Housing values in Forestburg would bottom out as well as in some of the smaller surrounding communities.

The loss of income in the Counties of Paint Earth and Flagstaff would most likely strain their abilities to maintain their individual combined services. and more centralizing of services would be an extreme over cost.

It seems this decision will have a negative impact to the community and employees as well as community members and consumers. We will soon be like say Ontario, Turn the lights on or feed the kids YOUR CHOICE.

Christine Robinson
Business Manager
Canadian Energy Workers' Association
Office: 780.420.7887
Cell: 780.977.3418

Appendix D: City of Calgary

The feedback submitted by the City of Calgary is provided on the following page.

Calgary

January 30, 2018

Re: Balancing Pool Consultation with Customer Representatives on the Termination of the Battle River 5 PPA - Response of the City of Calgary

The City of Calgary appreciates the opportunity to review and provide feedback on the Balancing Pool proposal to terminate the Battle River 5 PPA. As a large consumer of approximately 460,000 MWh of electricity per year, The City has a vested interest in ensuring that overall costs are reasonable and that Alberta's power market is functioning efficiently.

Financial Consequences

The City finds that the financial analysis performed to evaluate the consequences of terminating the Battle River 5 PPA terminations clearly identifies large anticipated savings to the Balancing Pool. The expected savings of $105 million (high price scenario) to $122 million (on a low price scenario) provides a high level of confidence that financial benefits will accrue to the Balancing Pool as a result of terminating of the Battle River 5 PPA. Therefore, terminating the Battle River 5 PPA would comply with the requirements of the *Electric Utilities Act* that the Balancing Pool act prudently in the management of its accounts associated with PPAs.

Fair, Efficient and Openly Competitive Market Considerations

The change in forecasted offer control by market participants resulting from the termination of the Battle River 5 PPA demonstrates that current Fair, Efficient and Openly Competitive regulations will not be violated. The City of Calgary is supportive of having a larger proportion of offer control held by private market participants.

Effect on Wholesale Prices

The Balancing Pool's Battle River 5 Termination Customer Information Package is forecasting a significant increase in the wholesale price of electricity as a result of the termination. While generally this is not good news for customers there is an offset in that a higher price for electricity will also serve to lower the forecast losses that the Balancing Pool will have on its PPA holdings. This will lower the Balancing Pool charge to customers providing an offset to the higher wholesale prices.

Higher wholesale prices at this time will also provide an incentive for generators to invest in Alberta at a time when expensive coal to gas conversions and new renewable energy generation is needed.

Recommendation

The City of Calgary therefore recommends that the Balancing Pool proceed with the Battle River 5 PPA termination.

If there are any questions regarding Calgary's submission, please contact:

Ron Holberton
Acting Manager, Corporate Tax and Regulatory Affairs
403-268-1368
ron.holberton@calgary.ca

Appendix E: Consumers' Coalition of Alberta

The feedback submitted by the Consumers' Coalition of Alberta is provided on the following pages.

Battle River 5 PPA termination

Consumer Concerns

January 29th, 2018

Summary:

The CCA disagrees with the Balancing Pool (BP) decision to recommend termination of the Battle River 5 PPA (BR5). CCA does not believe that sufficient analysis has been undertaken on the effect of such a termination on the overall cost to consumers. Even based on the BP's numbers the cost of termination to consumers far exceeds the cost of continuing to operate the PPA.

As set out in the BP Executive Summary of its report of January 12, 2018, the BP has an obligation under the Electric Utility Act (EUA) to consult with consumers, presumably on the impacts to consumers. The EUA in Section 86 also mandates that the BP must 'carry out its duties in a manner that is responsible and efficient'

The CCA does not believe that the termination on the Battle River 5 PPA is either responsible or efficient. The Jan 12 document circulated by the BP indicates that there would be a net payment of $63M required to ATCO to terminate and this will result in increasing the price to consumers by approximately $8.50/MWh. With 60 million MWhs of annual consumption (net DTS load) this would result in additional costs of nearly $1billion in 2019 and 2020. [See attached spreadsheet]

The actions of TransAlta after the termination of the Sundance PPAs through its mothballing actions has pushed the forward prices in 2018, 2019, and 2020 up from the $32.00 forecast in July 4, 2017 to nearly $60.00 in 2018, over $56.00 in 2019 and $48.00 in 2020. The estimated impact by BP was a $4.00/MWh increase to $36.00. The result is a $55.35/MWh average price for the three years based on the settlement prices from the Natural Gas Exchange – a difference of nearly $20/MWh with an impact of over $3.5 billion on costs of energy to consumers.

The information presented to consumers in July of 2017 implied that the Sundance units would continue to be operated and the consequences would be acceptable. However, the July 2017 analysis for Sundance has proven to be totally misleading, prices are now much higher than forecast, and the potential for significant price excursions exists as much of the Sundance capacity is being terminated or mothballed.

The BR5 analysis simply repeats the conclusions from the July analysis which has been demonstrated as incorrect. Further it does not look to alternative actions with respect to operation of BR5, including sale of energy into the forward market.

Issues:

Price Forecast Errors

As with the termination of the Sundance PPAs, consumers are concerned with the absence of analysis from the perspective of overall costs to consumers including higher energy rates and payments to terminate the PPA, with no reciprocal commitments from the PPA Owners. As was pointed out in response the Balancing Pool in July 2017, the analysis that needs to be undertaken by the Balancing Pool as part of its obligations under the EUA is to assess impact on consumers of termination of any PPAs.

The Sundance PPA terminations coupled with TransAlta's decision to close and/or mothball several of the units has driven the forward price for April to December of 2018 (April 1 is effective date of Sundance termination) to nearly $62.00/MWh. The Balancing Pool in its July 4th, 2017 information document for consumer's estimated the impact would be to increase the 2018 price from $32.00 to $36.00; an error of $24.00/MWh.

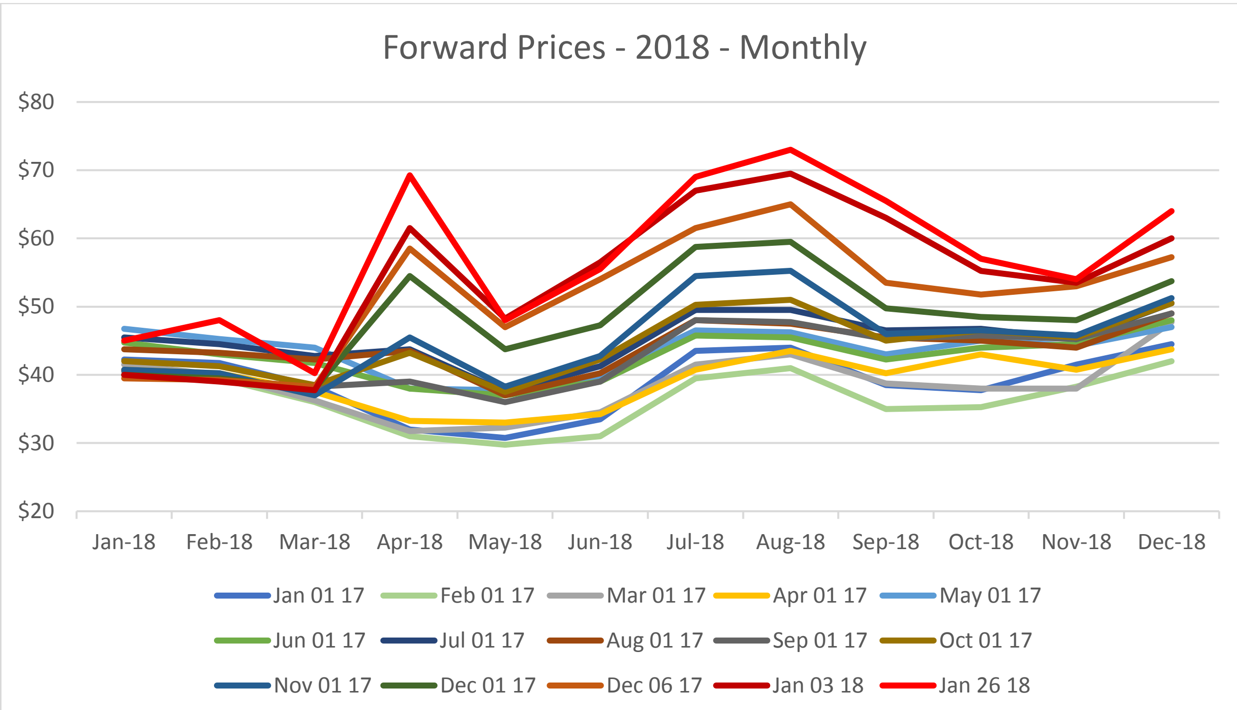

Figure 1 - 2018 Forward Prices - Selected Dates

The impact of the BP Decisions on Sundance PPAs in August of 2017 and the subsequent decisions made by TransAlta in December 2017 are reflected in the forward curve of monthly prices for 2018 depicted in Figure 1 above. Up to July 2017 the monthly curve was exhibiting a normal seasonal curve. In August and September the curve from April 2018 forward increased as speculation on the Sundance terminations came to fruition. This was further spiked in December and January (red-lines) as TransAlta declared its termination and mothballing decisions. None of these consequences were modelled nor provided to consumers in July of 2017.

(NOTE: The NGX Settlement prices are based on actual trades of energy, they are not the result of a model.)

The same errors made in the July 2017 analysis are being repeated in the January 2018 analysis. The model used by the BP underestimates the consequence to price by the terminations. The model is indicating that the prices for 2019 and 2020 will increase from $47 and $46/MWh to $55.00/MWh if BR5 is terminated and mothballed by ATCO. But as of January 25th 2018 the forward market based on NGX settlement prices for Oct 2018 to Dec 2020 is $54.40/MW.

One could conclude that either the modelling done for the BP is underestimating market prices, or more likely the NGX Settlement Prices reflect the forward market and the BP model is the hourly market. If this is the case then consumers should expect a $7.00 to $8.00/MWh higher forward market if BR5 if terminated then mothballed – a market in the $62.00 to $63.00/MWh range.

Paradoxically a $62.00 price for Flat (7X24) will result in an RRO Rate in the $72 to $75/MWh range, just over the new 6.8 cent Rate cap in effect to 2021. This impact has not been undertaken in the BP analysis, yet it is very relevant to both the consumer and the Government's Climate Initiatives. The Rate Cap protection was to be maintained through payments from the carbon fund, however a shutdown of BR5 will reduce carbon revenues and detract from carbon investments in other areas, both through reduced funds and from the need to offset higher energy prices above the Cap.

The $62.00/MWh forward price for 2018 interestingly is just $1.00/MWh shy of the estimated breakeven price for Battle River 5 – according to the information provided by the Balancing Pool. Under what circumstances does it make any sense to pay ATCO $61 million for the opportunity for the owner to mothball another unit and drive up consumer prices.

Sell Output Forward

The Balancing Pool has not considered selling forward the output of the BR5 and other PPAs held in its portfolio, instead choosing to offer these units at some marginal cost to the hourly market. As has been observed the absence of the forward selling from these units has resulted in a widening of the price gap between forward prices and the hourly market. As almost all small market consumers (those of RRO and retailer contracts) pay rates based on forward prices, the absence of the BP as a forward seller has resulted in additional costs to consumers over the past three years.

The Balancing Pool has always had an engagement with the forward market in its mandate and activities. It was responsible for the collection of the proceeds from the original PPA Auction in 2000. It offered forward energy strips from the unsold PPAs. It actively participated in the forward market and in periodic auctions of energy for the Regulated Rate Option procurement programs. All such participation was deemed to be consistent with the BP mandate and accepted by the Market Surveillance Administrator (MSA) as being FEOC compatible.

The BR5 analysis is deficient from a consumer perspective unless it includes an assessment of the opportunities and impacts on forward selling PPA energy in the forward market to 2021.

Conclusion:

The Balancing Pool analysis has to view the impact to consumers of increased market prices, of sunk costs for termination, and for the consequences to carbon revenues if another coal unit is mothballed. To not undertake this analysis would deprive consumers the ability to ascertain if the termination is indeed "reasonable" as required by the EUA.

The preliminary assessment based on the BP's numbers suggests the cost to consumers would be at least about $1 billion if the BR#5 were terminated and the unit mothballed. Also, based on the BP's numbers the cost of continuing to operate the BR#5 PPA would be about $161million. Even, based on the BP's numbers the decision should be clear-the BR#5 PPA should not be terminated. Accordingly, CCA opposes the proposal to terminate the BR#5 PPA.

Battle River 5 PPA Termination
Consumers Coalition of Alberta

Estimated Net Cost Impacts to Consumers From Termination of BR#5 (Expected)							
Year	Pool Price BR #5 continues to operate	Pool Price BR#5 Mothballed	Impact on Consumers due to price change	Cost of Continuing to operate BR#5 to Balancing Pool	Cost of Terminating BR#5 PPA to Balancing Pool	Net cost to Consumers BR#5 continues to operate	Net cost to Consumers BR#5 terminated & mothballed
	A	B	C=(B-A)*60	D	E	F=D	G=C+E
	$/MWh	$/MWh	$m	$m			
2018 (4 Mths)	46	49	-60	-23	-63	-23	-117
2019	47	55	-480	-70		-70	-432
2020	46	55	-540	-82		-82	-486
NPV @3.5%						-$161.53	-$954.66

Notes:

1. Annual AIS volume in Column C estimated at 60 TWh
2. Sept to Dec 2018 volume estimated at one third annual
3. Column G reflects net cost to consumers and recognizes: i) overall impact of price increase, ii) termination payment and iii) gain from price increase to BP from its 10% share of generation

Appendix F: EQUS REA – URICA Energy Management

The feedback submitted by EQUS REA and URICA Energy Management is provided on the following pages.

Battle River 5 Consultation Session

Stakeholder Comments

February 2, 2018

Response submitted jointly by:
Patricia Bourne, CEO
EQUS REA

and

Jason Beblow, President
URICA Energy Management Corporation

In response to the Balancing Pool notice for further feedback regarding the Battle River 5 PPA termination, Pat Bourne, Chief Executive Officer of EQUS REA and Jason Beblow, President of URICA Energy Management Corporation jointly submit the following response.

In considering of both the outputs of the customer consultation session and the proposed actions of the Balancing Pool (BP) regarding the termination of Battle River, EQUS has some concern with the BP's mandate in relation to their active behaviour while managing these units historically. If moving the BP out of the role of an active market participant is considered such a key objective, it leaves us wondering the reason for this significant change in strategy from that guided by perceived political pressure to that aligned with commercial and economic justification. The BP has freely admitted that although BR5 was the primary candidate for termination it was not considered first due to external political circumstances. These types of non-financially prudent decisions have cost the consumer millions of dollars through increased Rider F charges. EQUS does not dispute the economics of the BP's decision to terminate and does agree that the resulting increase to consumer costs of energy via increased RRO rates may be initially offset by increased spot prices that are realized by the remaining BP portfolio. However, this effect is negated by the historical tendency of the Forward markets to settle well above spot prices, therefore consumers will be absorbing the Forward Market premium through their RRO rates, but the BP will not see this same revenue from the spot settles. Therefore, it is likely that consumers will not benefit from this termination in either the short term or the long term. Further if this logic holds now, it's hard to understand why outside of a non-commercial agenda the BP would not have executed these terminations much earlier.

EQUS is somewhat confused on the BP stance on participation in the RRO and forward markets. The BP's Consumer information package predicted a forward pool price of $47/MWh for the balance of the BR5

PPA, at the same time current forward market prices for this period are in excess of $53/MWh. This premium is in line with historical results and while transacting at these prices would not change the economics of this particular decision, they certainly would be in line with a mandate to act in a commercial manner especially on the remaining units post BR5 termination. However, how does this align with the support that the BP showed in respect to EEA's proposed EPSP format in Proceeding 22357 which included a signed letter of interest to participate in EEA's Load Following product auctions that were planned as part of the EPSP application. EQUS wonders how these two actions reconcile and suggests that if the recent meeting minutes reflect the current perspective of the BP regarding participation in forward markets for electricity pricing and RRO supply, this information should be relayed to the Alberta Utility Commission for use in determination of outcomes for current proceedings, specifically Proceeding 22357.

Finally, EQUS does have some concerns as to the effect on the existing supply surplus that the proposed termination will have and around the clarity of ATCO's next steps with regard to the Battle River fleet. As pointed out by the BP ATCO can trigger an additional payment by the BP of $17 million through the decommissioning of BR3-4-5, EQUS is interested to know how long these units would need to be decommissioned to trigger this clause. Further, could this clause be triggered through shutting down the units for a coal to natural gas conversion if this process takes long enough? The return of the units as a natural gas fired asset essentially eliminates any need for the mine and the BP has not provided a complete answer regarding the mechanics of this to date. Further elaboration on the ability of ATCO to exercise this option would be beneficial to understanding the potential net effects to market pricing for power given ATCO's portfolio of assets.

While EQUS doesn't dispute that the termination of BR5 makes sense from a financial perspective based on the information provided, the BP's statement that the BP is not mandated to manage market outcomes on behalf of consumers, and that the cost of electricity for consumers is more of a policy level consideration is concerning. Going forward EQUS hopes that the BP will act in a commercial manner with regard to their remaining assets.

Appendix G: Industrial Power Consumers Association of Alberta

The feedback submitted by the Industrial Power Consumers Association of Alberta is provided on the following page.

Industrial Power Consumers Association of Alberta

1117 22 Avenue NW
Calgary AB, T2M 1P6

January 29th, 2018

MNP
330-5th Ave. SW
Calgary, Alberta
T2P 0L5

Attention: PPA Inquiry 2018 - MNP

Re: IPCAA Concerns Regarding the Termination of the Power Purchase Arrangements (PPAs)

Members of the Industrial Power Consumers Association of Alberta (IPCAA) were very appreciative of the recent meeting that the Balancing Pool (BP) had with consumers. Part of that discussion included providing comments on the BP's termination of the Battle River 5 PPA.

The BP is proposing the return of the Battle River 5 generator to ATCO Power. This will effectively give ATCO a 12% market share. Naturally, IPCAA's concern is that while the termination of this PPA will reduce the BP's consumer charge, it will also raise the Alberta pool price. For consumers, a trade-off exists between the two options.

IPCAA submits that when making its decision on whether to return Battle River 5 to ATCO, the BP should consider the impact of this return on consumers. To help alleviate that impact on consumers and create a more competitive marketplace, IPCAA submits that the BP should re-consider its decision not to sell power into the Regulated Rate Option (RRO) with its remaining PPAs. IPCAA understands that the decision not to sell into the RRO was made by the BP Board, and as such, we request a meeting with the BP Board to discuss this decision.

Thank you for your attention to this matter, and please feel free to contact us for additional information. IPCAA is more than willing to discuss the issue further with both MNP and the BP and its Board.

Sincerely,

Richard Penn
Senior Policy and Regulatory Consultant
Industrial Power Consumers Association of Alberta
T: (403) 903-7693
E: Richard.Penn@IPCAA.ca

Appendix H: Utilities Consumer Advocate

The feedback submitted by the Utilities Consumer Advocate is provided on the following pages.

utilitiesconsumer
advocate

Utilities Consumer Advocate
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Calgary, Alberta T2P 3P1
Telephone 403-476-4994
Fax 403-592-2604
www.ucahelps.alberta.ca

January 29, 2018

Delivered by e-mail: ppainquiry2018@mnp.ca

Balancing Pool
2350- 330-5th Avenue S.W.
Calgary, AB T2P 3L8

Attention: Bruce Roberts
President and CEO

Dear Mr. Roberts,

RE: Reasonableness of Battle River 5 Power Purchase Arrangement ("PPA") Termination

The UCA appreciates the Balancing Pools consultation efforts and the opportunity to provide comment. I am writing on behalf of the Utilities Consumer Advocate ("UCA") to provide feedback on the reasonableness of the proposed termination of the Battle River 5 ("BR5") PPA. The UCA has reviewed the information package and attended the Balancing Pool consultation on this matter and offers the following feedback for consideration.

The UCA recognizes that the Balancing Pool's mandate requires it to manage its generation assets in a commercial manner and to conduct itself in a fashion that is not contrary to fair, efficient, and openly competitive ("FEOC") market principles. The UCA is supportive of Balancing Pool actions that minimize costs for consumers of electricity and that are consistent with a fair, efficient, and openly competitive market. The UCA submits that analysis with respect to the proposal to pay out the Net Book Value for the PPA facilities should include the total financial impact on Alberta electricity consumers, not only the narrower impact the action has on the Balancing Pool. Comprehensive consideration should be given to the consequences and impacts on consumers as well as the overall electricity market.

The Balancing Pool states, in the PPA Termination Customer Information Package, that the wholesale price of electricity has the potential to increase by approximately $8 per MWh as a result of overall price levels and price volatility. Further this change in wholesale prices could increase the RRO cost for an average household by $7/month. The UCA is concerned with the added immediate and long term financial impact that the termination of BR5 could have on

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electricity consumers in Alberta; especially when combined with the upcoming early mothballing of the Sundance Units, the collective effect on RRO prices and the unknown impacts of the changes to the wholesale electricity market currently being developed.

The UCA believes that there is a significant benefit to electricity consumers of having the Balancing Pool as a properly motivated and active seller in the RRO forward market. The Balancing Pool is in a good position to do this as they have the required backstopping units.

The UCA would like to better understand the unique provision that could obligate the PPA buyer to make a termination payment estimated at $17M related to the mine. Specific areas of interest are around the timing that the decommissioning would have to be communicated and completed by.

The UCA would like to know if the Balancing Pool has considered other or different approaches when evaluating the option of the proposed PPA terminations.

Conclusion

With the information available to it, the UCA has evaluated the issue and does not support the termination of the Battle River 5 Power Purchase Agreement owing to the financial impact that the termination could have on the wholesale pool price and increased cost to electricity consumers in the province. It is apparent that the variables are many:

- the amount that the pool price will increase;
- ATCO's response to terminating the PPA;
- Additional PPA terminations;
- timing of a coal to gas conversion;
- turnaround length/downtime needed for a coal to gas conversion;
- Forward price impacts; and
- Wholesale market changes.

The Balancing Pool has the best information to decide the proper action to be taken with the BR5 PPA, however, the UCA urges the Balancing Pool to consider total cost impacts to consumers, which we estimate to be $387M for RRO customers alone. The Balancing Pool units could be used to moderate consumer prices at a time when prices are on the rise and many changes are being introduced that are creating uncertainty and likely volatility in the market place.

In the UCA's view, it would be appropriate for the Balancing Pool to remove its self-imposed constraint and sell into the RRO forward market along with ensuring that termination analytics

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include the total financial impact the termination has on consumers and the wholesale price; not simply the impact on the Balancing Pool.

It is important to note, that increasing electricity and carbon related costs may result in consumer rate shock and drive increased customer call volumes and media attention.

Thank you again for your consideration.

Should you require further information or have questions, please don't hesitate to contact me at (403) 476-4998 or nola.ruzycki@gov.ab.ca.

Yours truly,

"Signed Electronically"

Nola Ruzycki
Manager, Market Policy and Analysis
Office of the Utilities Consumer Advocate

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MNP LLP