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THE BALANCING POOL

CUSTOMER REPRESENTATIVE GROUP CONSULTATION FOR THE PROPOSED PPA TERMINATIONS

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Table of Contents

CUSTOMER REPRESENTATIVE CONSULTATION OVERVIEW

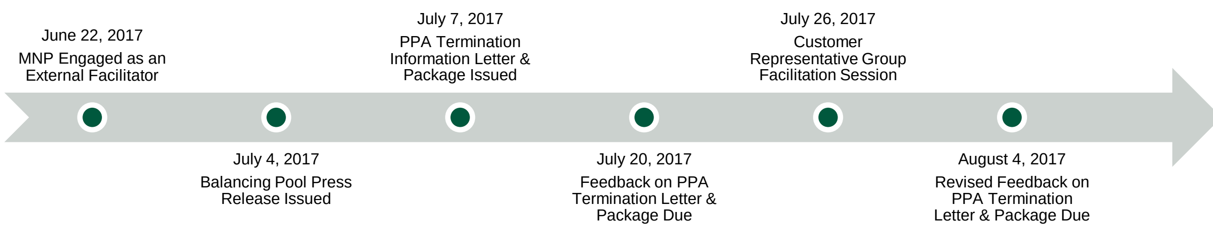
BACKGROUND

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 PPAs to the Balancing Pool under the terms of the arrangements. As a result, Balancing Pool is now evaluating whether to terminate some of these PPA's with the respective PPA owners. As part of the Balancing Pool's duties when terminating one or more PPAs, Section 97 of 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 reflects the feedback received from customer representative groups regarding potential terminations.

The Balancing Pool is currently evaluating terminating the PPAs with the view that the proposal to terminate these PPAs 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 termination(s). Once this process is complete, Balancing Pool will also consult the Minister on this subject. 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 June 22, 2017 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 July 4, 2017, the Balancing Pool issued a press release stating the intent to consult with customer representative groups about the reasonableness of the proposed PPA terminations. In the press release, the Balancing Pool identified a list of customer representative groups who would be consulted regarding these proposed PPA terminations.

The following list of customer representative groups were initially invited to participate in the proposed PPA termination consultation process:

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

- Alberta Association of Municipal Districts and Counties
- Alberta Direct Connect
- Alberta Federation of Rural Electrification Associations
- Alberta Irrigation Projects Association
- Alberta Urban Municipalities Association
- City of Calgary
- Consumers' Coalition of Alberta
- EQUS REA
- Industrial Power Consumers Association of Alberta
- Utilities Consumer Advocate

Any additional parties who sent inquiries on this topic to the Balancing Pool between July 4, 2017 and July 11, 2017 were also invited to participate in the proposed PPA termination consultation process. They were the following:

- Alberta Federation of Labour
- Local Union 254 - International Brotherhood of Electrical Workers
- Parkland County
- Spruce Grove
- United Steelworkers Union and Business Agent

3. Managing Customer Representative Consultation, Collecting and Consolidating Feedback

All identified customer representative groups were sent a PPA Termination Information Letter and Package, and were asked to submit initial written feedback by July 20, 2017. The customer representative groups were also asked to confirm interest in a Q & A session to answer any questions related to the proposed PPA terminations and termination process.

The Balancing Pool provided customer representative groups with a document that outlined 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

This information document is included in Appendix A: PPA Termination Customer Information Letter and Package.

4. Q & A Session

The customer consultation session was held on July 26, 2017. All customer representative groups in attendance were given the opportunity to ask questions related to the proposed PPA terminations and the termination process.

Of the 15 customer representative group contacts, the following nine groups were in attendance:

- Alberta Federation of Labour
- Alberta Federation of Rural Electrification Associations
- Alberta Irrigation Projects Association
- City of Calgary
- Consumers' Coalition of Alberta
- EQUS REA
- Industrial Power Consumers Association of Alberta
- Parkland County
- Utilities Consumer Advocate

5. Submission of Additional and/or Revised Feedback

Following the session, the customer representative groups were asked to provide any additional or revised feedback by August 4, 2017.

In total, of the 15 customer representative group contacts, feedback was received from all but the following three groups:

- Alberta Irrigation Projects Association
- Alberta Urban Municipalities Association
- Spruce Grove

6. Reporting & Presentation

This report is a compilation of the 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 Minister regarding the reasonableness of the termination. All information received by the Balancing Pool will be made available on the Balancing Pool's website at its own discretion.

CATEGORIES OF FEEDBACK:

All feedback received has been consolidated in the following sections of this report. Feedback has been organized into key themes, and full 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, Alberta's Electricity Market, and Pool Price
1.1 Generation Facility Owners 1.2 Alberta's Electricity Market 1.3 Pool Price
Section Two: Balancing Pool Process
2.1 Feedback and Summary of Requests
Section Three: Effect on Consumers, Municipalities and Communities
3.1 Consumers 3.2 Municipalities and Communities

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

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

1.1 Generation Facility Owners

Alberta Direct Connect Consumer Association
The Alberta Direct Connect Consumer Association (ADC) submitted the following points, for the entire email refer to Appendix C: Alberta Direct Connect.

> "The media has reported that TransAlta disagrees with the Balancing Pool's assessment of the NBV of the Sundance assets. Can the Balancing Pool reconcile the difference?

Below is the response from the Balancing Pool to the questions regarding the NBV assessment that was conducted by the Balancing Pool.

> "There are three components to the NBV of the PPA terminations:
> 1. NBV of the generation unit itself
> 2. NBV of the mine
> 3. NBV of the corporate admin assets
>
> Section 97 of the Electric Utilities Act (EUA) states that the BP must pay the owner the value for the NBV for the generation unit itself. Presumably, TransAlta's calculations are a combination of all three components. The Balancing Pool's legal analysis indicates that NBV for the generating asset is the only item required to be paid."

AFREA
The following comments were stated by the Alberta Federation of Rural Electrification Associations (AFREA), for the full submission please refer to Appendix F: Alberta Federation of Rural Electrification Associations.

> "Can you explain why you would pay the Generator Net Book Value for the generator and allow the asset to continue to produce electricity into the market and the owner continues to own the asset and make a substantial profit?

Below is the response from the Balancing Pool to the questions stated by the AFREA.

> "The plant owner built its plant under the regulated regime in which it was guaranteed to recover its costs and earn a rate of return on its investment. Every year, the plant owner would receive part of its investment costs back through the depreciation of the book value of the plant. The PPAs perpetuated this system by including the depreciation payment in the PPA's capacity payments. The capacity payments are paid by the buyer of PPA to the owner. Now that the Balancing Pool is serving in the role of the buyer, the Balancing Pool makes these payments to owner and is paying down the book value of the underlying units in the process.
>
> When a PPA is terminated, the owner receives the remaining book value that it was owed under the PPA. As such, the owner is receiving the same book value and cost recovery it would have had had the PPA not been terminated. Furthermore, if the PPA is not terminated, the owner would be free to continue running the plant once the PPA expired under its normal timelines (Sundance A's PPA expires at the end of this year and Sundance B and C expire at the end of 2020). Therefore, the termination of the PPA does not provide the plant owner any extra benefits.

Finally, when a PPA expires or is terminated, the plant owner may continue to operate the plant as previously mentioned, but the plant is subject to market forces and is not guaranteed to earn any profit. Consumers are not responsible for any further financial support once the PPA is gone."

Alberta Association of Municipal Districts and Counties
The Alberta Association of Municipal Districts and Counties (AAMDC) submitted consideration to the Balancing Pool on the following point. For the entire email, refer to Appendix B: Alberta Association of Municipal Districts and Counties.

> "…that power companies are not both receiving a payout of the termination of the PPA and also able to be compensated through the sale of the asset to with the PPA is attached."

The Balancing Pool notes that this issue is not unlike that raised by the AFREA in Section 1.1 and that the termination payment is not providing any "extra benefit" that the owner would not have received under the PPA. The payment should not be viewed as a windfall.

1.2 Alberta's Electricity Market

Alberta Direct Connect Consumer Association
The ADC submitted the following, for the entire email refer to Appendix C: Alberta Direct Connect.

> "The ADC holistically supports the competitive functioning of the Alberta electricity market and agrees that the Balancing Pool has a mandate to conduct itself in a commercial manner that is supportive of a fair, efficient, open, and competitive market."

City of Calgary
The City of Calgary expressed the following comments, for the entire feedback submission refer to Appendix G: City of Calgary.

> "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."

EQUS REA
EQUS REA submitted the following comments, for the entire feedback submission refer to Appendix I: EQUS REA.

> "EQUS supports a fully functioning deregulated power market, and as such, supports the Balancing Pool's intention to conduct operations, including the termination of any PPAs, in alignment with FEOC guidelines."

Consumers' Coalition of Alberta
The Consumers' Coalition of Alberta (CCA) submitted the following, for the entire analysis, refer to Appendix H: Consumers Coalition of Alberta.

> "The Balancing Pool cites FEOC concerns yet fails to demonstrate how the return of Sundance units to the owner [TransAlta] is more consistent with FEOC as it increases the market power of one company from 12% offer control to 22% offer control."

Below is the response from the Balancing Pool to the CCA.

> "The FEOC regulations stipulate that no market participant shall hold more than 30% offer control of the installed capacity. These terminations will not result in a breach of that limit.
>
> To the extent there are concerns with market power or economic withholding after the PPA capacity is returned TransAlta, it is the MSA's role to monitor and police such matters."

The CCA also submitted the following:

> "It is therefore equally important for the Balancing Pool to be seller of power in the forward market. If the $10 premium to hourly prices remains then the PPA losses are significantly reduced without any increase in price to consumers, the Balancing Pool is simply capturing for customers a share of this premium, in addition to what is captured by other market participants. Conversely if the Balancing Pool entering the forward market results in reducing this forward to hourly spread [lowering the cost of power] then this will result in lower energy prices to consumers as most consumers have prices largely based on the forward market.
>
> The analysis that must be done by the Balancing Pool is to assess the impact on consumers of continued losses on operations as future Balancing Pool charges and to determine the potential of the Balancing Pool as a seller in the forward market and the impact of this on the spread between forward prices and AESO hourly prices."

In response the Balancing Pool stated:

> "The trading of forward products is not linked to the terminations as the Balancing Pool would have more than sufficient length with the remaining PPAs to cover any potential forward positions, regardless of whether or not the Sundance PPAs are terminated. As such, the Balancing Pool may reconsider selling into the forward market in the future one way or another. When we have our next internal discussion on forward trading, we will be sure that IPCAA's (and other consumer groups') views on the matter are shared and duly considered."

Industrial Power Consumers Association of Alberta

The Industrial Power Consumers Association of Alberta (IPCAA) expressed the following comments in their submission, for the full submission refer to Appendix J: Industrial Power Consumers Association of Alberta.

> "…This will effectively give TransAlta a 22% market share. Naturally, IPCAA's concern is that while the termination of the PPAs 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.
>
> While returning some of the PPA units to their owners will result in a termination cost, the cost to the BP is mitigated by no longer having payment obligations to the PPAs owners over their remaining life. IPCAA recognizes that returning the PPAs to the owners could cause pool price to rise as the PPA owners begin to offer them at prices higher than marginal cost."

IPCAA also expressed the following comments in their submission:

> "Based upon the BECL report, IPCAA submits that there is an opportunity to return some of the units, minimizing the BP losses without risking material increases to pool price. As recommended in the report, a phased termination approach, in which the PPAs are returned to their owners gradually, may allow the BP to reduce its costs while not giving market power back to any one owner. In turn, as pool price rises, the actual losses incurred by the BP for the remaining PPAs it holds will be reduced.
>
> IPCAA believes it would be worthwhile for the Balancing Pool to explore the option of a phased release of Sundance C in more detail…Based on available information, IPCAA does not support the idea of returning all the PPAs at once and providing one company with significant market power to unilaterally raise the pool price."

Following the consultation session, the IPCAA also submitted the following revised comments, for the full submission refer to Appendix K: Industrial Power Consumers Association of Alberta - Revised.

> "While IPCAA is not opposed to termination of the PPAs, we believe the concept of a phased termination may be the most appropriate strategy.

IPCAA would appreciate the opportunity to meet and discuss this concept with the BP's Board of Directors and Executive Team."

1.3 Pool Price

Alberta Direct Connect
The ADC submitted the following point, for the entire email refer to Appendix C: Alberta Direct Connect.

> "Under the proposed termination TransAlta becomes the largest market participant with offer control increasing from 12% to 22%. Has the Balancing Pool considered staging the return of the Sundance PPAs to mitigate TransAlta's offer control? A staged process would allow the market and consumers to adapt to different offer behaviour."

Below is the response from the Balancing Pool to the questions asked by the ADC.

> "A staged process is already being taken as we are only terminating two of the six PPAs that will be in force in 2018."

In regards to offer control and market power, the Balancing Pool stated:

> "The FEOC regulations stipulate that no market participant shall hold more than 30% offer control of the installed capacity. These terminations will not result in a breach of that limit.
>
> To the extent there are concerns with market power or economic withholding after the PPA capacity is returned TransAlta, it is the MSA's role to monitor and police such matters."

City of Calgary
The City of Calgary expressed the following comments, for the entire feedback submission refer to Appendix G: City of Calgary.

> "It is not desirable in Alberta's competitive market for wholesale electricity that the Balancing Pool is the market's largest participant. Increasing the proportion of generation capacity where the offers are controlled by private investors should improve the market's ability to move to a price that reflects industry costs… It is inevitable that Power Pool prices will rise from the currently unsustainable level. The current framework of Alberta's power market is in a state of transition as a result of the development of the capacity market, advancement of the Renewable Energy Program, and early retirement of coal generation.
>
> An increase in the wholesale price of electricity in this environment would be positive for the stability of this industry and its ability to invest in new generation facilities. Higher prices would also reduce the amount of government subsidies required for the Renewable Energy Program. The City is of the opinion that preventing market price increases is an insufficient reason to support the Balancing Pool's continued holding of unprofitable PPAs."

Utilities Consumer Advocate
The following are comments from the UCA, for the entire submission please refer to Appendix P: Utilities Consumer Advocate.

> "The Balancing Pool stated in its information package that "Forecasts suggest that pool prices may increase as offer control shifts from the Balancing Pool, which has maintained a commercial but conservative offer strategy, to generation owners, who may employ more aggressive offer strategies or as some of the underlying PPA units are retired or mothballed." The UCA concurs with this statement and would to confirm that both a more aggressive offer strategy scenario and a retirement scenario are incorporated in your analysis and illustrated in the graphic on page 13."

The Balancing Pool stated in response:

"Yes, the price forecast assumes that the more aggressive offer strategies employed in the past by the owner will apply to the PPA capacity after the PPAs are terminated.

…The price forecast assumes that the Sundance A units are decommissioned or mothballed based on TransAlta's announcement to do so in 2018. The Sundance A PPA expires at the end of 2017 so the termination has no effect on this announcement. The other Sundance units have been assumed to continue operating after the PPAs are terminated."

SECTION TWO: BALANCING POOL PROCESS

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

2.1 Feedback and Summary of Requests

Alberta Association of Municipal Districts and Counties
The AAMDC submitted consideration to the Balancing Pool on the following point. For the entire email, refer to Appendix B: Alberta Association of Municipal Districts and Counties.

"That the process be made clear and transparent."

City of Calgary
The City of Calgary expressed the following comments, for the entire feedback submission refer to Appendix G: City of Calgary.

"The City finds that the financial analysis performed to evaluate the consequences of PPA terminations is reasonable and clearly identifies the expected savings to Alberta electricity consumers of terminating various PPAs currently held by the Balancing Pool. The methodology employed to forecasting the future cash flows of each PPA provides an acceptable level of confidence in the calculation of the net present values. Considering the financial losses associated with the PPAs held by the Balancing Pool, it is clearly within the Balancing Pool's mandate of managing the generation assets in a commercial manner to terminate those PPAs with a positive expected savings."

EQUS REA
EQUS REA submitted the following comments, for the entire feedback submission refer to Appendix I: EQUS REA.

"EQUS is primarily concerned with fairness and transparency in the termination process and does not feel that any party should be unduly harmed or receive financial benefit from the situation. It is important to EQUS that the terms and conditions of the PPA contracts be followed, and if the economics suggest that terminating the PPAs is the best financial decision for the Province, then it should be done at the earliest convenience.

EQUS would like to further understand the rational for only terminating the PPAs associated with the Sundance units at this time, and not the other remaining PPAs…"

Consumers' Coalition of Alberta
The CCA submitted the following, for the entire analysis, refer to Appendix H: Consumers Coalition of Alberta.

> "The CCA concern with the analysis provided by the Balancing Pool as to the efficacy of terminating the Sundance PPAs is whether the analysis reflects the full potential impacts to Alberta electricity consumers. The analysis needs to consider the potential consequence of any PPA terminations on the price that consumers will pay for electricity over the next three years and the potential repayment of any loans to the Balancing Pool to offset losses on the PPAs between 2017 and 2030 in the form of Balancing Pool surcharges.
>
> The analysis provided by the Balancing Pool does not include either of these factors, yet recommends that a payment of $171 million be made by consumers to terminate two PPAS and indicates that this will result in an expected pool price increase from $32/MWh to $36/MWh. It is difficult to understand why this decision would be in the "best interests of consumers".
>
> The NPV-NBV analysis requires significant more detail in terms of the assumptions made or omitted with respect to energy prices, PPA costs, other new carbon related costs, and levels of generation or output by the units."

Parkland County
The following comments are excerpts from the feedback submission from Parkland County, for the entire submission refer to Appendix M: Parkland County.

> "The short time frame for consultation should be sufficient of the Minister to conclude the proposal is not reasonable or fair. Customers have not had time to properly evaluate and respond to the questionable forecasts and forward-looking statements."

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 terminations would have on the consumers, municipalities, and communities.

3.1 Consumers

Alberta Association of Municipal Districts and Counties
The AAMDC submitted consideration to the Balancing Pool on the following point. For the entire email, refer to Appendix B: Alberta Association of Municipal Districts and Counties.

> "That consumers and municipalities not be left with the responsibility or burden of the cost of the PPA terminations through the user rate model".

Alberta Direct Connect
The ADC submitted the following point, for the entire email refer to Appendix C: Alberta Direct Connect.

> "Has the Balancing Pool completed any analysis on the overall cost impact to consumers arising from increase pool prices compared to the Consumer Allocation cost impact if the PPAs remained with the Balancing Pool?"

Below is the response from the Balancing Pool to the question stated above by the ADC.

> "It is the Balancing Pool's mandate to manage its assets in a commercial manner and to act in a fashion that is not contrary to a FEOC market. It is not the Balancing Pool's mandate to strive for specific market outcomes nor to minimize electricity costs. That said, we have forecasted the impact these terminations may have on power prices and on the Balancing Pool's finances."

Consumers' Coalition of Alberta

The CCA submitted the following concern, for the entire analysis refer to Appendix H: Consumers Coalition of Alberta.

> "The Balancing Pool does not appear to have considered the consequences in its analysis of the price paid by consumers for energy. Very few consumers are on direct flow-thru pricing, with still 60% on regulated rate option [RRO] rates and others on contracts with unregulated retailers with various terms or other characteristics."

Alberta Federation of Rural Electrification Associations
The following comments were stated by the AFREA, for the full submission refer to Appendix F: Alberta Federation of Rural Electrification Associations.

> "As it appears the cost of this initiative will be borne by the electricity consumer what is the impact on a typical residential or farm consumer? The answer at the meeting was 1 cent…how long will the 1 cent be added to the bill? Does this include all PPAs or only the ones on the list?... The AFREA concern is the immediate and long term financial impact on the REA community and all consumers in Alberta."

Below is the response from the Balancing Pool to the questions stated by the AFREA.

> "This figure should only be considered a "rough estimate" of the total bill effect. It takes into account both the Balancing Pool charge and the forecasted impact on power prices from terminating the Sundance PPAs. This net effect will not be an adder to power bills; in fact, the Balancing Pool charge (which is an adder) should decrease as the result of these terminations given that the Balancing Pool should realize significant savings from terminating."

Utilities Consumer Advocate
The following are comments from Utilities Consumer Advocate (UCA), for the entire submission please refer to Appendix P: Utilities Consumer Advocate.

> "The UCA is supportive of an approach that minimizes electricity prices for consumers and that is not contrary to a fair, efficient, and openly competitive market… the UCA would like to further understand the Balancing Pool's consideration of the impact on competition in the generation market and the impact on pool prices with the proposed PPA terminations."

3.2 Municipalities and Communities

Alberta Federation of Labour
The following are excerpts from the submission provided by the Alberta Federation of Labour, for the full submission refer to Appendix D: Alberta Federation of Labour. *This submission was prepared by the Alberta Federation of Labour in consultation with the United Steel Workers and the United Steel Workers Local 1595, with support from affiliated unions with members in the coal-fired electricity sector affected by these PPA agreements.*

> "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 coal facilitator, Terry Boston, to make up for "stranded assets" caused by the decision to phase out coal-fired electricity. No such agreement, or resources, have been announced for the workers at these facilities and the mines associated with them, despite the fact that they too will be 'stranded' by the decision.
>
> It has been nearly 20 months since the announcement of the phase-out of coal-fired electricity, which raised many questions for the workers at coal-fired power plants and the mines that fuel them. These workers are concerned about their jobs, their communities, and their families'

futures. The termination of the PPAs associated with these facilities will further that ambiguity and deepen the 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.

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. Workers at Sundance, Sheerness, and Battle River have a right to know if this decision will ultimately lead to accelerated shut-downs or immediate jobs losses at their facilities.

Already we are seeing the impending shut-down of coal-fired units being used to pressure workers in to accepting concessions and to make layoffs. Workers now fear that changes to the PPAs will allow employers to further pressure workers into unfair deals or sudden layoffs, instead of a negotiated and scheduled shut-down of the generators in question. Given the absence of a transition plan for coal workers across the sector, we are concerned about how the terminations of these agreements will impact workers and their future employment. This is especially important for workers who are already in the process of being laid off, who now fear that they might face an accelerated termination."

The following are excerpts are also from the initial submission provided by the Alberta Federation of Labour:

"… TransAlta has outlined a rough plan for the future of the Sundance generators, although this plan makes no provisions for workers and is made under the assumption that the PPAs will terminated. Sundance #1 will be decommissioned at the same time the PPA governing it will conclude, while Sundance #2 will be formally mothballed at the same time. Sundance units 3-6 will be converted to gas-fired units by 2022.

TransAlta's plan does not indicate how they will operate the four newest units between the time of the termination and the time they will be converted to gas-fired units. The commercial viability of the units is somewhat suspect, as even without the PPA the forces pressuring coal fired generation—carbon pricing and low electricity prices—will endure. The timeline for gas conversion is also still very unclear, and again subject only to TransAlta's corporate planning.

It was clear from the consultations that the Balancing Pool had a very optimistic view of this issue and was more than willing to accept TransAlta's implied assurances it would continue to operate the Sundance facility at least until the time the PPA would have expired in 2020…TransAlta's interests are not the same as the interests of workers, consumers, or communities. Unless bound to an agreement or deal, they will act solely in a commercial manner.

While not explicitly discussed in the consultation materials, the future of Highvale Mine is also of concern. The Balancing Pool's consideration of the net book value that would need to paid to TransAlta for Sundance B & C is just for the generating assets—not on the mine that supplies the facilities' coal fuel… The ramifications of TransAlta not receiving payments for Highvale Mine could have significant ramifications of the mines' operation and the continued operation of the Sundance facility… Should the Balancing Pool be successful in their claim that no compensation is owed for Highvale Mine, TransAlta could use this to their advantage to gain concessions from workers—especially if Sundance becomes a two-shifted or a cyclically operated facility."

The following are further excerpts from the Alberta Federation of Labour's revised submission. For the full submission refer to Appendix E: Alberta Federation of Labour - Revised. *This submission was prepared by the Alberta Federation of Labour in consultation with the United Steel Workers and the United Steel*

Workers Local 1595, with support from affiliated unions with members in the coal-fired electricity sector affected by these PPA agreements.

> "Our submission draws attention to the interests of workers, who will undoubtedly be impacted by the Pool's decision to terminate Sundance B & C PPAs…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.
>
> The experience of other coal-fired units governed by PPAs in other jurisdictions was also discussed at the consultations. 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."

The following is also an excerpt from the revised submission provided by the 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."

Local Union 254 - International Brotherhood of Electrical Workers

The following comment was submitted by the Local Union 254 - International Brotherhood of Electrical Workers (IBW), for the entire submission refer to Appendix L: Local Union 254 - International Brotherhood of Electrical Workers. *IBW also included their concerns to be reflected in Appendix C: Alberta Federation of Labour and* Appendix E: Alberta Federation of Labour - Revised.

> "All of the information (I have) seen to date from the Pool focuses on the impact on the Generators of electricity and the Customers of the power produced and pre-sold through the PPA process. At this point of time where our governments both Federal and Provincial have committed to clean energy nobody is giving much attention to the catastrophic impacts these decisions will have on the people who have devoted their careers to working as coal fired power producers…There are four hundred (400) or more TransAlta workers and families who are currently uncertain about their future employment and any further accelerated shutdown of their livelihood by cancelling PPA's attached to Sundance Units will be crippling for some of these people."

Parkland County

The following are comments from Parkland County, for the full press release please refer to Appendix O: Parkland County Press Release.

> "Parkland County is facing a potential budget impact upwards of $40 million after the Balancing Pool has recommended the termination of the Sundance A, B, and C Power Purchase Agreements (PPAs)… The end result could be TransAlta and other coal-fired power generators

shutting down or mothballing power generating units earlier than planned, creating a potential loss of tax revenue of over $2 million per year and $40 million cumulative… TransAlta has been identified to be compensated approximately $170 million for the termination of these agreements but no thought or consideration has been given to the potential $40 million loss to the municipality. We cannot continue to have a crisis every week in the power generation markets. It is now significantly impacting communities and local governments."

The following comments are excerpts from the initial feedback from Parkland County, for the entire submission refer to Appendix M: Parkland County.

> "The compensation to the owner is stated to be $171 million. It reasonably foreseeable the owner will subsequently request tax relief from Parkland County on the basis that the generating units have essentially been destroyed by the cancellation of the PPA. That request might affect the 2017 taxation year, but could certainly affect 2018 and beyond. …The information package does not address the consequences of the terminations on Parkland County and its residents on an overall basis.
>
> The retirement or mothballing of the underlying generating units resulting from the PPA termination will reduce Parkland County's assessment base and cause job losses for residents. These consequences of early retirement or mothballing of generating units have not been adequately identified in the information. These consequences must be factors in determining whether or not the proposal is reasonable and fair. The impact to our residents is in the tens of millions of dollars and is unacceptable."

The following comments are excerpts from a letter addressed to the Balancing Pool Board from Parkland County, for the entire letter refer to Appendix N: Parkland County Letter to the Board.

> "...Parkland County is the most financially affected coal community impacted by the Government of Alberta's decision to phase out coal-fired power generation…Parkland County is vehemently opposed to the cancellation of the PPAs and do not believe full consideration has been given to the impacts of this decision… this decision has the potential of another disruption to municipal viability. "

The following comments are also excerpts from a letter addressed to the Balancing Pool Board from Parkland County:

> "...the position the province must take is to ensure that the market pays the value of the power that is consumed, that market manipulation does not take place to maintain lower prices and that the significant impacts to the affected communities are dealt in a fair and just manner."

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 Minister.

APPENDICES

Appendix A: PPA Termination Customer Information Letter and Package

Appendix A - PPA Termination Custome

Appendix B: Alberta Association of Municipal Districts and Counties

Appendix B - Alberta Association of Munici

Appendix C: Alberta Direct Connect

Appendix C - Alberta Direct Connect.pdf

Appendix D: Alberta Federation of Labour

Appendix D - Alberta Federation of Labour.

Appendix E: Alberta Federation of Labour - Revised

Appendix E - Alberta Federation of Labour

Appendix F: Alberta Federation of Rural Electrification Associations

Appendix F - Alberta Federation of Rural El

Appendix G: City of Calgary

Appendix G - City of Calgary.pdf

Appendix H: Consumers Coalition of Alberta

Appendix H - Consumers' Coalition

Appendix I: EQUS REA

Appendix I - EQUS REA.pdf

Appendix J: Industrial Power Consumers Association of Alberta

Appendix J - Industrial Power Cons

Appendix K: Industrial Power Consumers Association of Alberta - Revised

Appendix K - Industrial Power Cons

Appendix L: Local Union 254 - International Brotherhood of Electrical Workers

Appendix L - Local Union 254 - Internatic

Appendix M: Parkland County

Appendix M - Parkland County.pdf

Appendix N: Parkland County Letter to the Board

Appendix N - Parkland Country Lett

Appendix O: Parkland County Press Release

Appendix O - Parkland County Pres:

Appendix P: Utilities Consumer Advocate

Appendix P - Utilities Consumer Advocate.p

balancingpool

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July 6th, 2017

Dear sir or madam,

Re: Reasonableness of Power Purchase Arrangement ("PPA") Terminations

In late 2015 / early 2016, various PPA Buyers elected to return their respective PPAs to the Balancing Pool under the terms of the arrangements. The Balancing Pool is of the view that terminating a subset of these PPAs is in alignment 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, openly competitive ("FEOC") market.

Specifically, the Balancing Pool considers it reasonable to terminate the Sundance A, Sundance B, and Sundance C PPAs with the PPA Owner, TransAlta.

Under Section 97 of the Electric Utilities Act (the "Act"), "the Balancing Pool may… terminate [a] power purchase arrangement 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 power purchase arrangement applies 6 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 of the generating unit, determined in accordance with the power purchase arrangement, as if the generating unit had been destroyed, less any insurance proceeds."

To facilitate the consultation process with customer representatives, the Balancing Pool has prepared an information package that provides the relevant background on the Balancing Pool, the PPAs, and the Balancing Pool's view that it is reasonable for the Sundance PPAs to be terminated. The Balancing Pool has identified a number of customer representatives that have been provided the information package and will be given the opportunity to provide written feedback regarding the reasonableness of the potential PPA terminations on behalf of their respective organizations – your organization being one of those identified.

MNP LLP ("MNP") has been engaged to support Balancing Pool's consultation process with customer representatives. MNP has no opinion on the subject matter of the consultation. As an independent facilitator, MNP will have no participation in nor influence over Balancing Pool's analysis and decision making arising from the consultation. MNP will aggregate the feedback received from customer representatives regarding the proposed PPA terminations into a comment matrix and will present the comment matrix in a neutral manner to the Balancing Pool. The Balancing Pool will take any feedback received into consideration when finalizing its determination regarding the termination of the Sundance PPAs.

If your organization is interested in providing feedback regarding the reasonableness of the proposed PPA terminations, the Balancing Pool requests that you review the attached information and provide your written commentary via email to the email address PPAinquiry2017@mnp.ca before July 20th, 2017. The Balancing Pool intends for the consultation process to be as transparent as possible and your comments may be publicly disclosed at the Balancing Pool's sole discretion.

Please direct any questions to MNP at PPAinquiry2017@mnp.ca or (403) 263-3385. Depending on the nature of the feedback received, the Balancing Pool may hold a question and answer session on July 26th, 2017 at 10:00 AM if it is deemed necessary.

The Balancing Pool thanks you in advance for your time, your consideration, and your feedback on this important matter.

Sincerely,

Bruce Roberts
President and CEO

Termination of the Sundance A, Sundance B, and Sundance C Power Purchase Arrangements with Generation Owners

July 4, 2017

Table of Contents

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 used 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 Sundance A, Sundance B, and Sundance C Power Purchase Arrangements ("PPAs") is in alignment 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. 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 terminations.

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 corporation 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) 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, various Buyers elected to terminate their respective PPAs 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. Only two PPAs remain subject to the lawsuit: namely the Battle River and Keephills PPAs.

As at the time of this writing, the Balancing Pool is the default Buyer for all the PPAs (including the Battle River and Keephills PPAs). The Balancing Pool may, under the Section 97 of the Act, terminate a power purchase arrangement 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 power purchase arrangement applies 6 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[1] of the generating unit, determined in 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.

[1] The net book value is more fully described later in this document.

Given these requirements, the range of considerations by the Balancing Pool in relation to Section 97 PPA terminations 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.

The sections that follow explore the considerations listed above.

Financial Consequences of Termination to the Balancing Pool

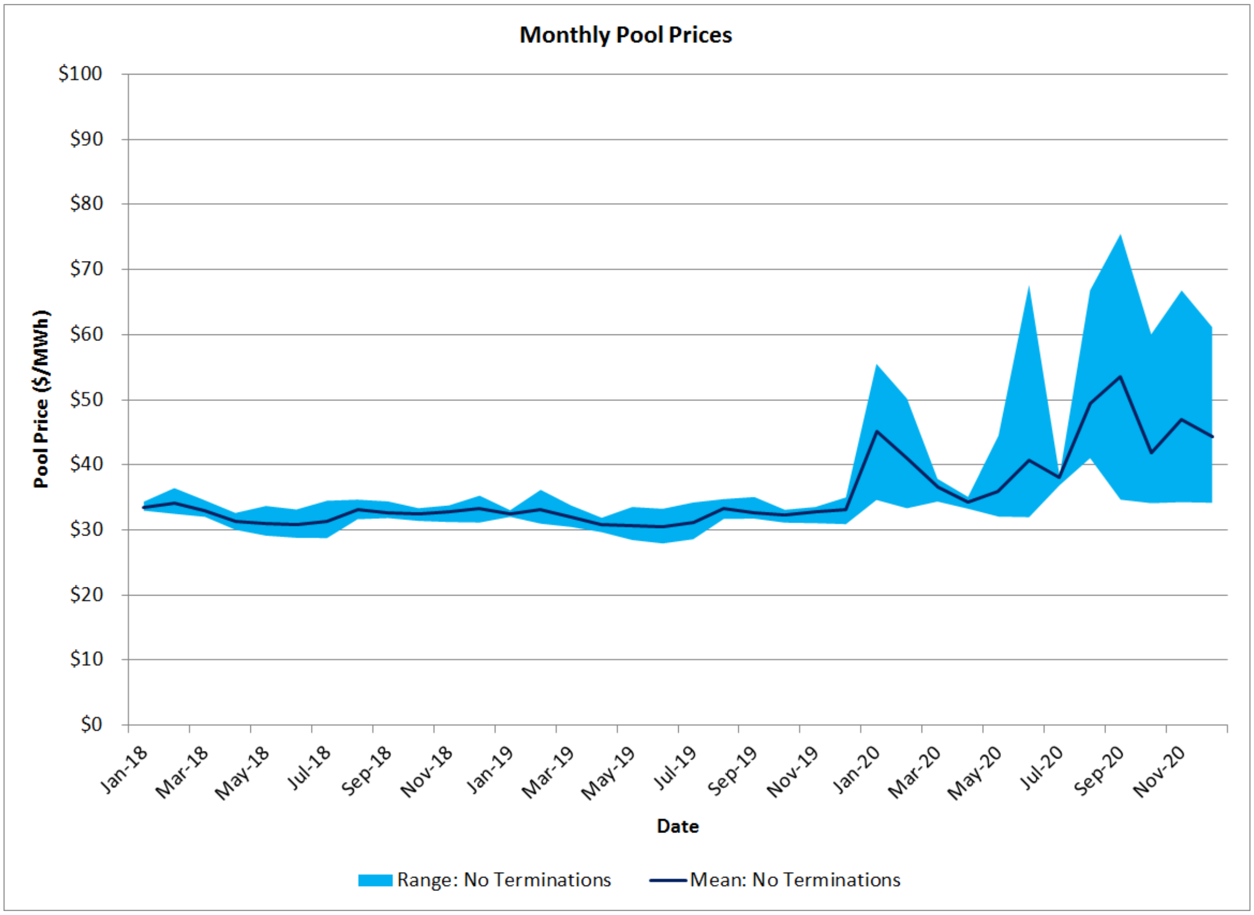
The analysis contained herein compares the financial implications to the Balancing Pool of continuing to hold the PPAs versus terminating them. For the purpose of these comparisons, the expected future net cash flows for each PPA were forecasted and then discounted to yield a net present value ("NPV") at the beginning of 2018. The NPV represents the cost to the Balancing Pool of retaining a specific PPA. As a basis for decision making, the NPV can be compared to the termination payment payable to Owner which is equal to the PPA units' Net Book Value ("NBV") at the beginning of 2018. The date of the termination payments were assumed to be at the beginning of 2018 given that the Owners are entitled to six months' notice by the Balancing Pool in the event of termination[2].

As the basis for forecasting the future expected cash flows of each 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 chart on the next page. This price forecast was developed assuming that the Balancing Pool continues to

[2] 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.

hold the full complement of PPAs and continues to offer the various units into the market at variable cost.



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 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.

Under the scenario in which none of the PPAs are terminated with the Owners, pool prices remain stable and low (just over $30 per MWh) from 2018 to the end of 2019 with little potential upside or volatility. In 2020, following the planned retirement of several coal units, prices have the potential to elevate and become more volatile.

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 each of the PPAs. An NPV of the net cash flows was also calculated for each of these PPAs. The cash flows are presented in the following table.

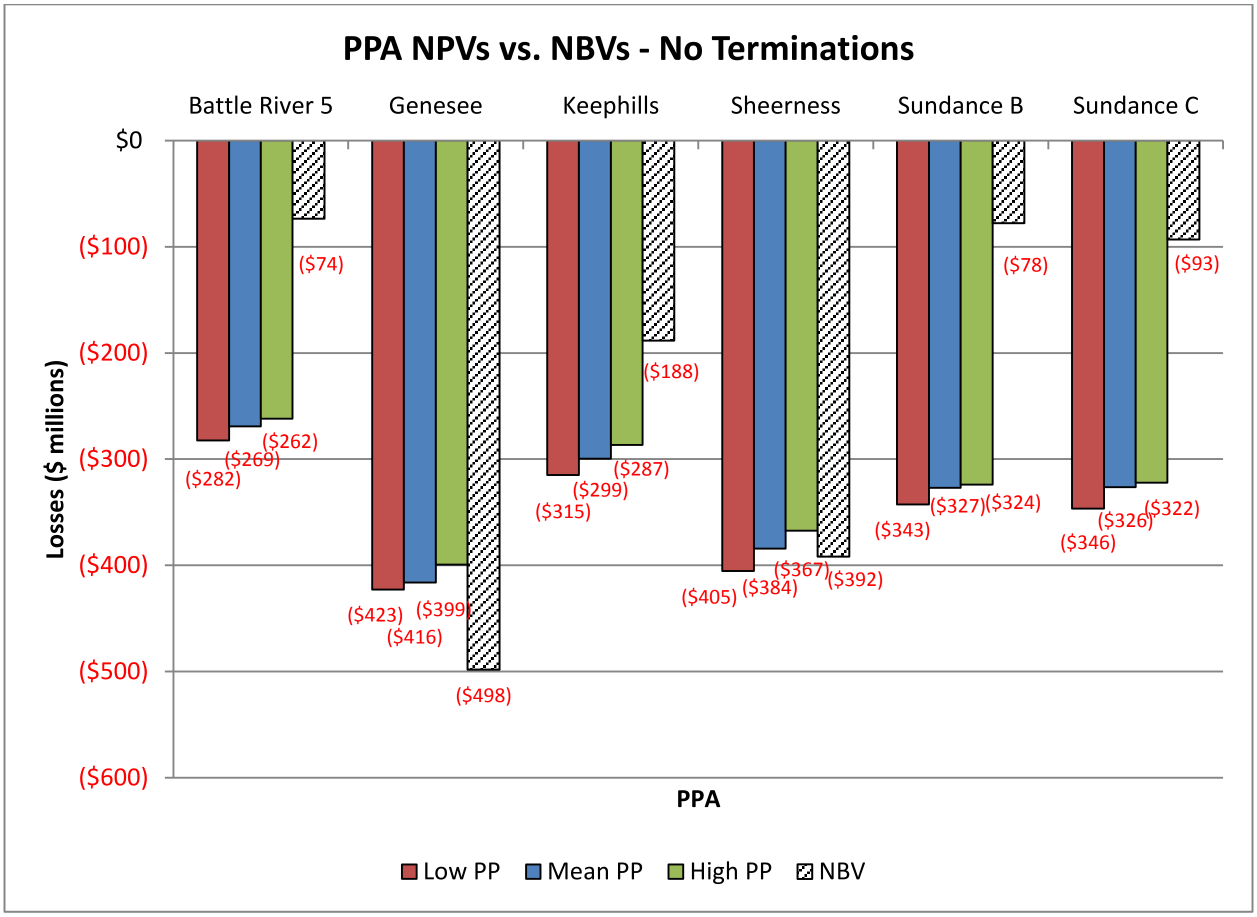
Table 1: Expected Net Cash Flows and Pool Prices ($ millions)				
	2018	**2019**	**2020**	**NPV at Jan. 1, 2018**
Battle River 5	($95)	($97)	($82)	**($269)**
Genesee	($158)	($157)	($109)	**($416)**
Keephills	($110)	($122)	($73)	**($299)**
Sheerness	($151)	($150)	($91)	**($384)**
Sundance B	($122)	($127)	($84)	**($327)**
Sundance C	($120)	($127)	($86)	**($326)**
Pool Price ($/MWh)	$32	$32	$42	

The Balancing Pool anticipates it will continue to experience considerable loses if it continues to hold these PPAs.

As previously discussed, the Balancing Pool is required to pay the Owner a termination payment equivalent to the NBV of the PPA should the Balancing Pool elect to terminate that PPA. Therefore, to determine whether it is better to hold the PPA or terminate it, it is necessary to 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 following table summarizes the NBV of each PPA.

Table 2: PPA Termination Payments / Net Book Values ($ millions) As at January 1st, 2018	
Battle River 5	$74
Genesee	$498
Keephills	$188
Sheerness	$392
Sundance B	$78
Sundance C	$93

With the NPVs and NBVs associated with each PPA in hand, a comparison between the costs of holding the PPAs relative to the costs of terminating them can now be made. The NPVs are presented in the following chart alongside the PPAs' associated termination payments (based on the NBVs). For further analytical robustness, the expected cash flows and their associated NPVs were recalculated under a potential low pool price scenario and a potential high pool price scenario.



The graph is presented as follows:

- Each cluster of four bars is associated with the specific PPA labelled along the top of the horizontal axis.
- The first three coloured bars in each cluster are the NPVs of the expected future cash flows associated with a PPA under three price runs:
    - A potential *low pool price* scenario is represented by the red bar;
    - The *mean (or expected) pool price* is represented by the blue bar; and,
    - A potential *high pool price* scenario is represented by the green bar.
- The fourth cross-hatched bar represents the cost to terminate the PPA with its Owner (i.e. the NBV at the beginning of 2018).

- Where the cross-hatched bar is less negative than the neighbouring coloured bars associated with a specific PPA, the interpretation is that the Balancing Pool should expect to realize cost savings by terminating that PPA.

The analysis demonstrates that the Balancing Pool may be able to reduce its losses associated with certain PPAs via early termination. The chart above illustrates that:

- Potential termination candidates include the Battle River 5, Keephills, Sundance B, and Sundance C PPAs since their NPVs are more negative than their NBVs.

- The expected cost of holding the Genesee PPA is less than the cost of terminating it.

- The termination decision for the Sheerness PPA is unclear. Its NBV is almost equal to its mean pool price NPV and is in between the high and low pool price NPVs.

The following table summarizes the forecasted cost savings achieved through the early termination of the various PPAs. The savings are calculated as the NBV minus the NPV under the low, mean, and high pool price scenarios.

Table 3: Expected Savings ($ millions) from Terminating (NBV - NPV)			
PPA	**Low Pool Price**	**Mean Pool Price**	**High Pool Price**
Battle River 5	$209	$196	$188
Genesee	($76)	($82)	($99)
Keephills	$127	$111	$98
Sheerness	$14	($7)	($24)
Sundance B	$265	$249	$246
Sundance C	$253	$233	$229

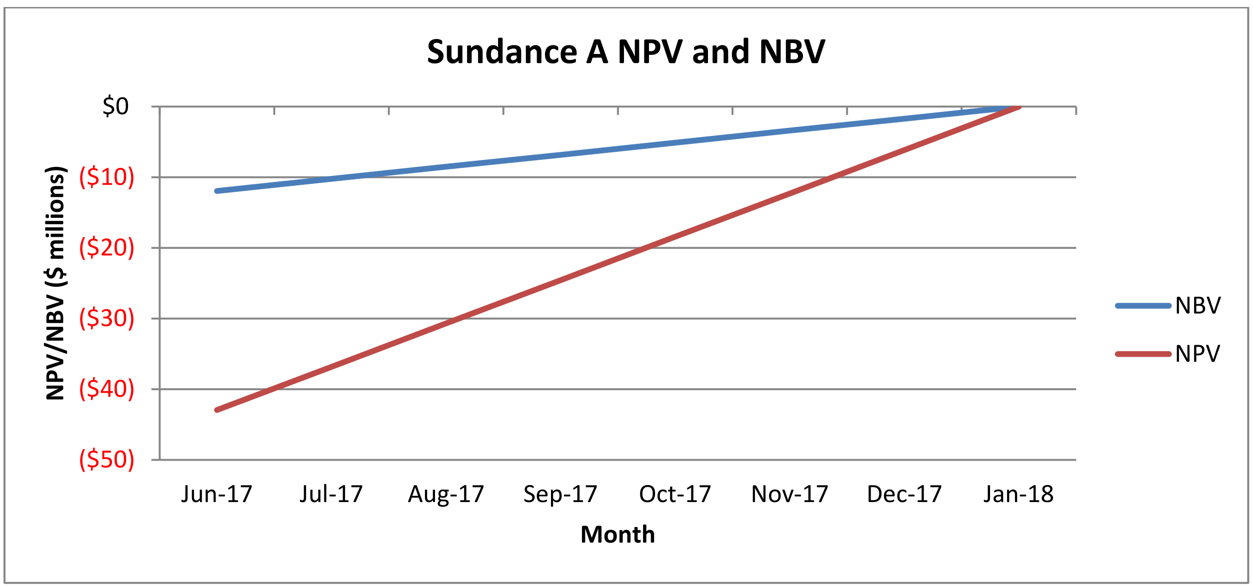
The table shows that the greatest savings are associated with the termination of the Sundance PPAs followed by the Battle River and Keephills PPAs. It is important to note, however, that the Battle River and Keephills PPAs cannot be terminated until the government's lawsuit contesting the return of those PPAs to the Balancing Pool is resolved.

The Balancing Pool estimates it would save **$475 to $518 million** by terminating a first tranche of PPAs consisting of the Sundance B and Sundance C PPAs, net of the $171 million in termination payments to the Owners (see Table 2 for a breakdown of the termination payments). The Balancing Pool is of the view that terminating these unprofitable arrangements is consistent with the organization's mandate to manage its generation assets in a commercial manner.

Forecasts suggest that pool prices may increase as offer control shifts from the Balancing Pool, which has maintained a commercial but conservative offer strategy, to generation owners, who may employ more aggressive offer strategies or as some of the underlying PPA units are retired or mothballed. These higher pool prices, in turn, improve the economics of the residual PPAs retained by the Balancing Pool, potentially altering the case for their termination. The Balancing Pool will continue to evaluate the relative merits of terminating, holding, or selling further PPAs as circumstances and market conditions evolve. Should the Balancing Pool determine further PPA terminations are warranted, another consultation processes would be initiated in the future.

A Note on Sundance A

The Sundance A PPA is set to expire at the end of 2017 and, as such, it was not included in the analysis above that focused on the 2018 to 2020 time horizon. However, should the Owner agree to a shorter notice period than the six months required, the Balancing Pool forecasts it could reduce its losses in 2017 given that the NBV of the Sundance A PPA is lower than the NPV of the remaining cash flows in 2017. The Sundance A NPV and NBV are plotted in the graph that follows.



The red line in the graph above is the NPV of Sundance A's 2017 cash flows and the blue line is the NBV in a given month. Both the NPV and NBV decline as the PPA reaches its expiration at the end of the year, but note that the red NPV line remains below the blue NBV line over the entire time period, indicating it should always beneficial to terminate the PPA early.

Given that only a few months remain in 2017, the potential for an “upside surprise” in electricity prices that dramatically alters the Sundance A PPA’s economics is highly improbable. Furthermore, given that Sundance A PPA expires in a matter of months, the impact of its early termination on the market, on prices, on consumers, or on generators would be rather insignificant. As such, should the Balancing Pool decide to move forward with an initial tranche of PPA terminations prior to yearend, the Sundance A PPA should be included in that tranche.

Fair, Efficient, and Openly Competitive Market Considerations

As discussed in earlier sections, the Balancing Pool should consider any substantial consequences of the PPA terminations 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.

Offer Control by Market Participant		
Company	**Offer Control (MW)**	**Offer Control (%)**
Balancing Pool	3,893	25%
ENMAX	2,320	15%
TransAlta	1,839	12%
ATCO	1,609	10%
Capital Power	1,010	6%
Suncor	959	6%
Other	3,936	25%
Non-dispatchable	350	2%
Total	**15,915**	**100%**

As demonstrated by the table, the Balancing Pool controls a quarter of the installed capacity in the wholesale market and is the largest market participant by a significant margin. 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 January 1st, 2018 assuming the candidate PPA terminations are in effect. The forecast incorporates new generation projects currently under active construction that are expected to be completed by the end of 2017 as well as the announced retirement of the Sundance 1 unit[3]. The results are as follows.

Table 6: Offer Control by Market Participant after PPA Terminations		
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	4,195	26%
Non-dispatchable	350	2%
Total	**16,057**	**100%**

As demonstrated by the table, the 30 percent offer control limit would not be expected to be breached following the termination of the Sundance PPAs.

Impacts on Wholesale Electricity Prices

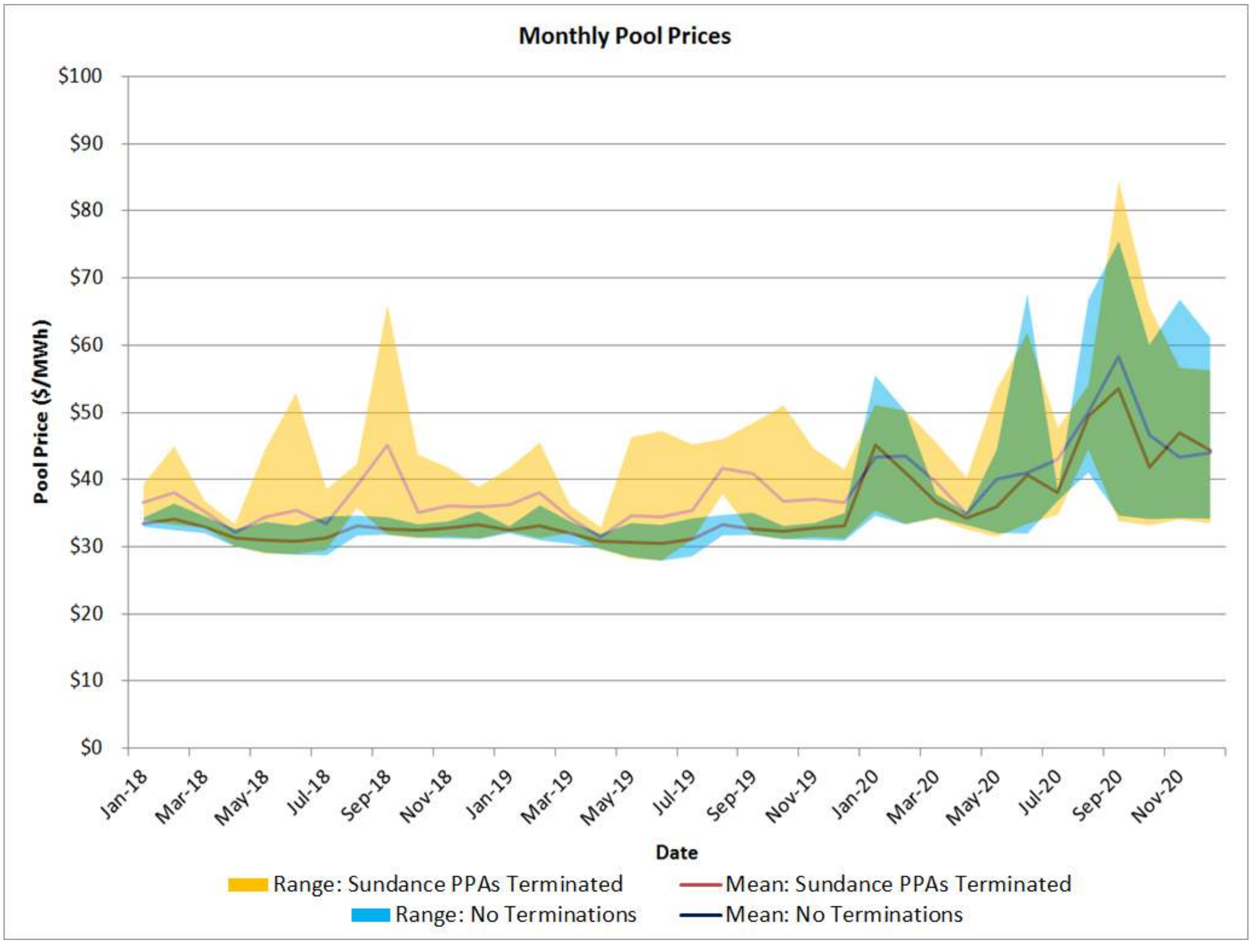
This final section of analysis examines the potential impacts on wholesale electricity prices from terminating the Sundance PPAs. As in the financial analysis presented earlier, market prices were simulated using an independent consulting firm's proprietary hourly dispatch model. Two price forecasts were developed: one in which the Balancing Pool holds all the PPAs and one in which the Sundance PPAs are terminated.

Note that the modelling assumptions used in the forecasts contained in this document included the assumption that the historical offer behaviours of the various market participants are representative of the future offer behaviours of these same market participants. However, in late May, the MSA revoked its Offer Behaviour Guidelines ("OBEG") which had permitted generators to engage in the economic withholding of their capacity for the purpose of increasing wholesale electricity prices. In its decision, the MSA identified that economic withholding may no longer be appropriate in Alberta's wholesale electricity FEOC market. As such, market participants may avoid aggressive economic withholding that results in significant market price movements in the future. If this is the case, the forecasted estimates of future prices following the termination of

[3] Source: AESO Long-term Adequacy Metrics - May 2017

various PPAs may be overstated, though the Balancing Pool does still expect the terminations to have some upward effect on prices.

The following chart illustrates the change in forecasted market prices under the scenario in which the Sundance PPAs are terminated.



The graph is interpreted as follows:

- The blue (and overlapping green) shaded area represents the range between the 10^{th} and 90^{th} percentile pool price for a given month assuming the Sundance PPAs *are not* terminated. This is the same price forecast shown in the *Financial Consequences of Termination to the Balancing Pool* section.

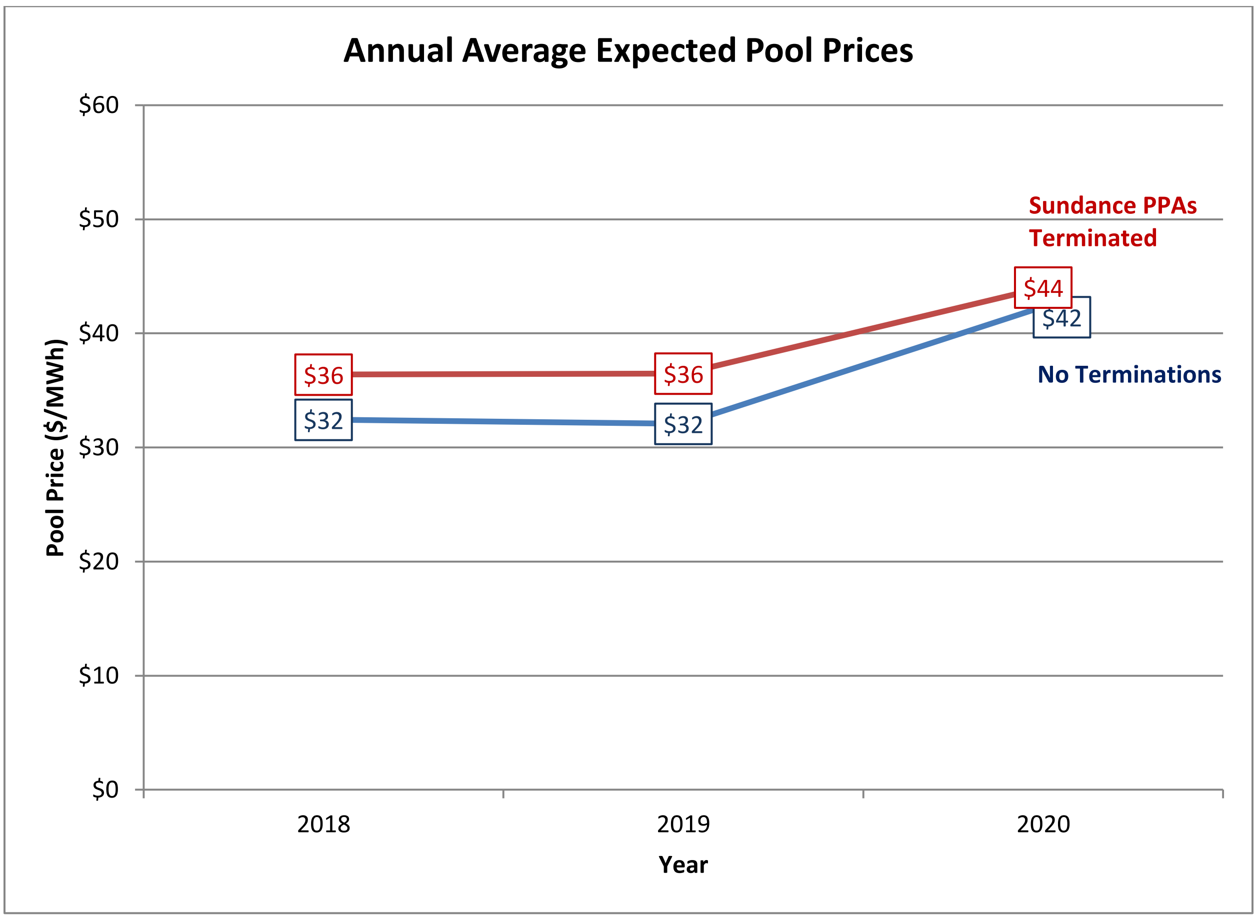
- The lowermost line in the graph is the mean, or expected, average monthly pool price over the relevant time horizon assuming the Sundance PPAs *are not* terminated.

- The yellow (and overlapping green) shaded area represents the new range between the 10th and 90th percentile pool price for a given month assuming the Sundance PPAs *are* terminated.

- The uppermost line in the graph is the mean, or expected, average monthly pool price over the relevant time horizon assuming the Sundance PPAs *are* terminated.

With the PPA terminations in effect, overall price levels and price volatility have the potential to increase should the Owners employ more aggressive offer strategies with the units underlying the terminated PPAs and as some of the less economical PPA units are decommissioned or mothballed.

The next chart looks at the price impact of terminating the Sundance PPAs in terms of annual averages.



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 Sundance PPAs into the market whereas the red line shows the annual price averages assuming the Sundance PPAs are terminated.

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 Balancing Pool's PPAs could provide a small offset as the Balancing Pool may have less need to collect from consumers via a 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 Sundance PPAs to be terminated.

The financial analysis suggests the Balancing Pool could significantly mitigate its PPA losses if it were to terminate the Sundance PPAs. The net benefit of terminating the Sundance PPAs is expected to be $475 to $518 million after making the required $171 in termination payments to the Owner.

The Balancing Pool examined the implications of terminating the Sundance PPAs 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 terminations on wholesale electricity prices and the Balancing Pool charge. Forecasts suggest that terminating the Sundance PPAs may result in an increase in prices once the PPAs are no longer with the Balancing Pool. The higher prices following the PPA terminations should increase the value of the PPAs retained by the Balancing Pool, providing a partial offset for consumers.

Submission to the Balancing Pool Consultation on Proposed PPA Terminations

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 historically 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 Phase out of Emissions from Coal-fired Electricity—What about Workers?

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. While these are no doubt important considerations and central to the Balancing Pool's mandate, we believe the impact on workers should also be considered.

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 coal facilitator, Terry Boston, to make up for "stranded assets" caused by the decision to phase out coal-fired electricity. No such agreement, or resources, have been announced for the workers at these facilities and the mines associated with them, despite the fact that they too will be 'stranded' by the decision.

It has been nearly 20 months since the announcement of the phase-out of coal-fired electricity, which raised many questions for the workers at coal-fired power plants and the mines that fuel them. These workers are concerned about their jobs, their communities, and their families' futures. The termination of the PPAs associated with these facilities will further that ambiguity and deepen the 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. Workers at Sundance, Sheerness, and Battle River have a right to know if this decision will ultimately lead to accelerated shut-downs or immediate jobs losses at their facilities.

Gil McGowan, *President*
Siobhan Vipond, *Secretary Treasurer*

#300, 10408 - 124 Street
Edmonton, Alberta T5N 1R5
www.afl.org

: 1-800-661-3995
: 780-483-3021
: 780-484-5928
: info@afl.org

Received via email from the AAMDC

From:
Sent:
To: PPA Inquiry 2017
Subject: AAMDC Input on the PPA Terminations

Hello,

On behalf of the AAMDC Board of Directors, the following input is being submitted for consideration as part of the PPA termination process and solicited in the email below. The points the AAMDC Board would like to address are broad and are as follows:

- That consumers and municipalities not be left with the responsibility or burden of the cost of the PPA terminations through the user rate model; and.

- That the process be made clear and transparent, and that power companies are not both receiving a payout of the termination of the PPA and also able to be compensated through the sale of the asset to with the PPA is attached.

Thank you for your consideration of this input. If you have further questions, or there are additional opportunities to engage with this issue, please don't hesitate to let myself know.

Regards,

AAMDC - Alberta Association of Municipal Districts and Counties
2510 Sparrow Drive, Nisku, AB T9E 8N5
http://aamdc.com

RURAL ALBERTA
WHERE IT ALL STARTS

July 20, 2017

Mr. Bruce Roberts, President and CEO
Balancing Pool
Calgary Place, 2350, 330th Ave. S.W.
Calgary, AB T2P 0L4
Via e-mail – PPAinquiry@mnp.ca

RE: Reasonableness of Power Purchase Arrangement ("PPA") Terminations

Dear Mr. Roberts;

The ADC has reviewed the materials regarding the reasonableness of terminating the Sundance PPAs and offers the following comments.

The ADC holistically supports the competitive functioning of the Alberta electricity market and agrees that the Balancing Pool has a mandate to conduct itself in a commercial manner that is supportive a fair, efficient, open, and competitive market.

There are three issues that we seek further clarity on:

1. The media has reported that TransAlta disagrees with the Balancing Pool's assessment of the NBV of the Sundance assets. Can the Balancing Pool reconcile the difference?
2. Under the proposed termination TransAlta becomes the largest market participant with offer control increasing from 12% to 22%. Has the Balancing Pool considered staging the return of the Sundance PPAs to mitigate TransAlta's offer control? A staged process would allow the market and consumers to adapt to different offer behavior.
3. Has the Balancing Pool completed any analysis on the overall cost impact to consumers arising from increased pool prices compared to the Consumer Allocation cost impact if the PPAs remained with the Balancing Pool?

We would appreciate an opportunity to participate in the July 26th information session via teleconference.

Sincerely,

Colette Chekerda

Colette Chekerda, P.Eng.
P: 780-920-9399
E: Colette@carmal.ca
ADC Executive Director

Already we are seeing the impending shut-down of coal-fired units being used to pressure workers in to accepting concessions and to make layoffs. Workers now fear that changes to the PPAs will allow employers to further pressure workers into unfair deals or sudden layoffs, instead of a negotiated and scheduled shut-down of the generators in question. Given the absence of a transition plan for coal workers across the sector, we are concerned about how the terminations of these agreements will impact workers and their future employment. This is especially important for workers who are already in the process of being laid off, who now fear that they might face an accelerated termination.

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. This impact should be factored into the Balancing Pool's decision to more fully understand the outcomes associated with terminating PPAs for coal-fired generators.

This submission was prepared by the Alberta Federation of Labour in consultation with the United Steel Workers and the United Steel Workers Local 1595, with support from affiliated unions with members in the coal-fired electricity sector affected by these PPA agreements.

Submission to 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.

Our submission draws attention to the interests of workers, who will undoubtedly be impacted by the Pool's decision to terminate Sundance B & C PPAs. In addition to drawing upon the materials provided to us by the Pool, we will also use the content of the Pool's consultation meeting on July 26th to inform this submission. 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.

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

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. While these are no doubt important considerations and central to the Balancing Pool's mandate, we believe the impact on workers 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. No such agreement, or resources, have been announced for the workers at these facilities and the mines associated with them, despite the fact that they too will be 'stranded' by the decision.

It has been nearly 20 months since the announcement of the phase-out of coal-fired electricity, which raised many questions for the workers at coal-fired power plants and the mines that fuel them. These workers are concerned about their jobs, their communities, and their families' futures. The termination of the PPAs associated with these facilities will further that ambiguity and deepen the 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

Gil McGowan, *President*
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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. Battle River #3 remains an active generator, but often goes months before a sufficiently high pool price makes it commercially viable to operate. 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.

The experience of other coal-fired units governed by PPAs in other jurisdictions was also discussed at the consultations. 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.

Returning to the circumstance of Sundance specifically, TransAlta has outlined a rough plan for the future of the Sundance generators, although this plan makes no provisions for workers and is made under the assumption that the PPAs will terminated. Sundance #1 will be decommissioned at the same time the PPA governing it will conclude, while Sundance #2 will be formally mothballed at the same time. Sundance units 3-6 will be converted to gas-fired units by 2022. TransAlta's plan does not indicate how they will operate the four newest units between the time of the termination and the time they will be converted to gas-fired units. The Balancing Pool's assessment was that Sundance units 3-6 will continue operating until 2020, which was based on two arguments: the gas conversions would ensure the site would remain active and that the units could be run profitably without the PPA. The commercial viability of the units is somewhat suspect, as even without the PPA the forces pressuring coal fired generation—carbon pricing and low electricity prices—will endure. The timeline for gas conversion is also still very unclear, and again subject only to TransAlta's corporate planning.

It was clear from the consultations that the Balancing Pool had a very optimistic view of this issue and was more than willing to accept TransAlta's implied assurances it would continue to operate the Sundance facility at least until the time the PPA would have expired in 2020. However, the truth of the matter is that the future of these units will soon be entirely up to TransAlta. TransAlta's interests are not the same as the interests of workers, consumers, or communities. Unless bound to an agreement or deal, they will act solely in a commercial manner. As such, TransAlta may find that their interests are best served by operated the plants on a cyclical nature or in the early shut-down of a generator or generators.

Already we are seeing the impending shut-down of coal-fired units being used to pressure workers in to accepting concessions and to make layoffs. Workers now fear that changes to the PPAs will allow employers to further pressure workers into unfair deals or sudden layoffs, instead of a negotiated and scheduled shut-down of the generators in question. Given the absence of a transition plan for coal workers across the sector, we are concerned about how the terminations of these agreements will impact workers and their future employment. This is especially important for workers who are already in the process of being laid off, who now fear that they might face an accelerated termination. We believe that this should be considered by the Balancing Pool, as the Pool is mandated to act with prudence and responsibility.

Highvale Mine not covered by Balancing Pool assessment of Net Book Value for Sundance PPAs

While not explicitly discussed in the consultation materials, the future of Highvale Mine is also of concern. The Balancing Pool's consideration of the net book value that would need to paid to TransAlta for Sundance B & C is just for the generating assets—not on the mine that supplies the facilities' coal fuel. The mine has a separate PPA, which the Balancing Pool claims it is not required to pay out as part of a termination under the statute.

The ramifications of TransAlta not receiving payments for Highvale Mine could have significant ramifications of the mines' operation and the continued operation of the Sundance facility. TransAlta has stated that "Termination of the PPAs is expected to provide TransAlta with increased operational flexibility, including with respect to offer pricing for generation from the affected units, maintenance and turnaround schedules, and the timing of the coal-to-gas conversions." Should the Balancing Pool be successful in their claim that no compensation is owed for Highvale Mine, TransAlta could use this to their advantage to gain concessions from workers—especially if Sundance becomes a two-shifted or a cyclically operated facility. Again, we believe a prudent and responsible decision must take into account such a consequence.

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.

This submission was prepared by the Alberta Federation of Labour in consultation with the United Steel Workers and the United Steel Workers Local 1595, with support from affiliated unions with members in the coal-fired electricity sector affected by these PPA agreements.

Received via email from the AFREA

From:
Sent: August 7, 2017 7:56 AM
To: PPA Inquiry 2017
Subject: RE: Consultation Feedback

Good morning and I apologize for not responding sooner

At the meeting I asked two questions

1) As it appears the cost of this initiative will be borne by the electricity consumer what is the impact on a typical residential or farm consumer?

The answer at the meeting was 1 cent. Please confirm your mean 1 cent per bill/consumer or 1cent per KWH or is there another formula

Further, how long will the 1cent be added to the bill?

Does this include all PPAs or only the ones on the list?

2) Can you explain why you would pay the Generator Net Book Value for the generator and allow the asset to continue to produce electricity into the market and

the owner continues to own the asset and make a substantial profit?

The AFREA concern is the immediate and long term financial impact on the REA community and all consumers in Alberta

Your thoughts please

Al Nagel
CEO
Alberta Federation of REA

www.afrea.ab.ca

Innovative and Dynamic Rural Electrification Associations as part of a Vibrant Rural Alberta Community

AFREA
ALBERTA FEDERATION OF RURAL ELECTRIFICATION ASSOCIATIONS
Vibrant and Innovative Rural Electrification Associations

From: PPA Inquiry 2017 [mailto:ppainquiry2017@mnp.ca]
Sent: Wednesday, July 26, 2017 5:35 PM

July 20, 2017

Re: Balancing Pool Consultation with Customer Representatives about the Reasonableness of Power Purchase Arrangement Terminations - Response of The City of Calgary

The City of Calgary ("The City") appreciates the opportunity to review and provide feedback on the Balancing Pool proposal regarding the reasonableness of terminating the Sundance A, Sundance B, and Sundance C Power Purchase Arrangements (PPAs). 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.

The City finds that the financial analysis performed to evaluate the consequences of PPA terminations is reasonable and clearly identifies the expected savings to Alberta electricity consumers of terminating various PPAs currently held by the Balancing Pool. The methodology employed to forecasting the future cash flows of each PPA provides an acceptable level of confidence in the calculation of the net present values.

Considering the financial losses associated with the PPAs held by the Balancing Pool, it is clearly within the Balancing Pool's mandate of managing the generation assets in a commercial manner to terminate those PPAs with a positive expected savings. The City is supportive of the Sundance A, Sundance B, and Sundance C PPA terminations, as positive savings to customers are expected.

Fair, Efficient and Openly Competitive Market Considerations

It is not desirable in Alberta's competitive market for wholesale electricity that the Balancing Pool is the market's largest participant. Increasing the proportion of generation capacity where the offers are controlled by private investors should improve the market's ability to move to a price that reflects industry costs.

Effect on Wholesale Prices

As pointed out in the PPA Termination Customer Information Package, the wholesale price of electricity may increase due to more aggressive offer behaviour by private investors and a reduction in supply due to economic factors. It is inevitable that Power Pool prices will rise from the currently unsustainable level.

The current framework of Alberta's power market is in a state of transition as a result of the development of the capacity market, advancement of the Renewable Energy Program, and early retirement of coal generation. An increase in the wholesale price of electricity in this environment would be positive for the stability of this industry and its ability to invest in new generation facilities. Higher prices would also reduce the amount of government subsidies required for the Renewable Energy Program. The City is of the opinion that preventing market price increases is an insufficient reason to support the Balancing Pool's continued holding of unprofitable PPAs.

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

Jillian Kohut
Finance & Regulatory Strategist
403-268-5059
Jillian.kohut@calgary.ca

PPA Terminations – Consumer Perspective

July 20th, 2017

The Consumers' Coalition of Alberta [CCA] has reviewed the material provided by the Balancing Pool as part of its consumer consultation process and appreciates the opportunity to respond on this issue. The CCA has been actively involved in the PPA process since initial consultations were initiated in 1997 and has supported Balancing Pool actions that are consistent with a fair and balanced market, and that give consideration to the consequences to consumers as well as impacts to the overall market including to generators.

With respect to the potential decision to pay out the Net Book Value for any of the PPA facilities the analysis as to impacts on consumers must be taken from the total impact on consumers, not just the narrower impact on the Balancing Pool. The CCA has concerns that this more comprehensive assessment has not been done. The CCA view the Balancing pool can take a more active yet nuanced approach to optimize the position of consumers. The following sections raise several of these concerns and the CCA is prepared to provide further input into the analysis needed if it is required.

Analysis Shortfall:

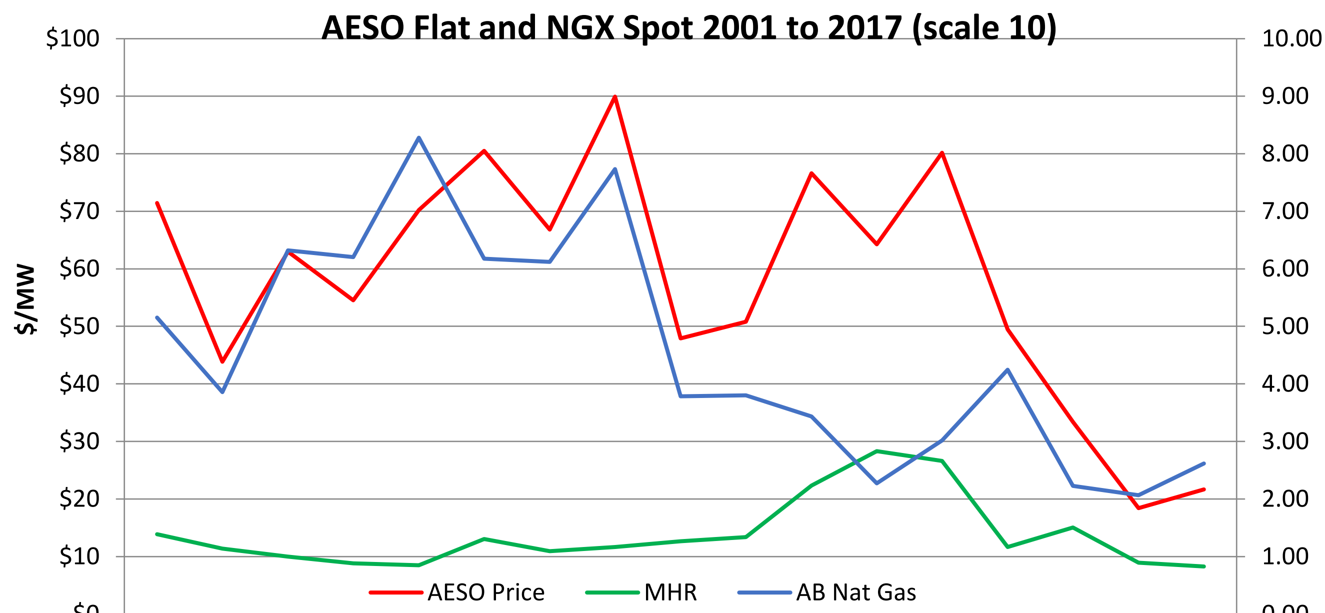
The CCA concern with the analysis provided by the Balancing Pool as to the efficacy of terminating the Sundance PPAs is whether the analysis reflects the full potential impacts to Alberta electricity consumers. The analysis needs to consider the potential consequence of any PPA terminations on the price that consumers will pay for electricity over the next three years and the potential repayment of any loans to the Balancing Pool to offset losses on the PPAs between 2017 and 2030 in the form of Balancing Pool surcharges.

The analysis provided by the Balancing Pool does not include either of these factors, yet recommends that a payment of $171 million be made by consumers to terminate two PPAS and indicates that this will result in an expected pool price increase from $32/MWh to $36/MWh. It is difficult to understand why this decision would be in the "best interests of consumers".

There appear to be three factors in the Balancing Pool analysis that require significant review before consumers should approve any decisions to terminate PPAs, namely:

1. The NPV-NBV analysis requires significant more detail in terms of the assumptions made or omitted with respect to energy prices, PPA costs, other new carbon related costs, and levels of generation or output by the units;
    a. From a consumer perspective, the consequence is the overall impact on the monthly bill, not whether the units are operated at a gain or loss;
    b. The NBV appears to include new costs for carbon that were not part of the original PPA's and these carbon payments potentially should be considered more broadly and possibly as net returns to consumers;
    c. The analysis appears to be based on the Balancing Pool as a price-taker in the hourly market without considering sales into the forward market.

2. The Balancing Pool cites FEOC concerns yet fails to demonstrate how the return of Sundance units to the owner [TransAlta] is more consistent with FEOC as it increases the market power of one company from 12% offer control to 22% offer control;
    a. It also does not observe on the past practices of the PPA Buyers to extract value from consumers through a program of economic withholding from 2011 to 2013(see Figure 1), then to allow the price to drop below market values as the new carbon programs where being introduced to prompt terminations and transfer of the losses to consumers – these can hardly be considered as (F)air practices from a consumer's perspective; The proposed termination of the Sundance PPAs does not appear to impose any conditions on TransAlta with respect to their operation over the next three years, leaving the potential for renewed economic withholding activity and/or immediate shut-down of the units with a significant adverse consequence to market prices when viewed from a customer perspective.



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AESO Price	71.41	43.84	62.98	54.53	70.19	80.48	66.84	89.93	47.89	50.78	76.60	64.29	80.19	49.45	33.41	18.40	21.63
MHR	13.9	11.4	10.0	8.8	8.5	13.0	10.9	11.6	12.7	13.4	22.3	28.3	26.6	11.6	15.0	8.9	8.3
AB Nat Gas	5.15	3.86	6.32	6.20	8.28	6.18	6.12	7.73	3.78	3.80	3.43	2.27	3.02	4.25	2.23	2.07	2.62

Figure 1 - AESO Pricing versus Natural Gas Pricing

Notes to Graph:

AESO Price – monthly average of hourly pool prices - $/MWh
AB Nat Gas – monthly average of daily AECO natural gas price -$/GJ
MHR – Market Heat Rate = AESO Price/Nat Gas Price – GJ/MWh

3. The Balancing Pool does not appear to have considered the consequences in its analysis of the price paid by consumers for energy. Very few consumers are on direct flow-thru pricing, with still 60% on regulated rate option [RRO] rates and others on contracts with unregulated retailers with various terms or other characteristics.

a. RRO rates are predominately based on contracting for power in the forward market as required by each regulated retailer and governed by Regulation, with Direct Energy and Enmax still on 45-day buy periods and Epcor on 120-day auction cycles. The regulated attribute is that all procurement methods are approved by the AUC.
b. Since the termination of the PPAs starting in 2015 the spread between the forward price and the flow through price has widened from approximately $2.40/MWh to over $12.30/MWh – this premium is largely attributable to the lack of selling from the previous PPA Buyers, leaving the rest of the generators as market participants to gain value on sales in the forward market given the constraint [self imposed or otherwise] on the Balancing Pool to not sell in the forward market;
c. Returning the Sundance units to TransAlta will not guarantee nor provide a new seller in the market and is unlikely to narrow this spread as TransAlta already participates in this market and would not be incented to narrow this spread, all other things remaining equal. Further it is unlikely that Transalta would be any more willing to operate the Sundance units at a loss as would the Balancing Pool under the status quo, and probably less so as the Balancing Pool has the means to recover the losses as a surcharge to consumers;
d. It is noteworthy that the forward curve for the one-year flat contracts (Calendar) went up the day that the Balancing Pool announced the possible termination of the Sundance units on July 4th (see Figure 2) – this indicates, to an extent, the market's perception of the consequence of returning the plant to the owner TransAlta and what it may possibly do or not do with the Sundance units;
e. As part of the analysis the benefit to consumers of having the Balancing Pool as a properly motivated and active seller in the forward market has to be included – a reduction of the forward spread by $10/MWh has a potential value of over $500 million per year to all DTS consumers as discussed in the next section. Even a $1/MWh reduction would save $50 million per year.

Additional Considerations:

Understanding Forward Prices:

Forward market prices provide a reflection of the markets perception of future hourly prices. Factors that reduce supply (such as possible terminations or retirements of some generation units) or add costs to production (such as carbon costs for coal usage) will result in forward prices moving higher. Factors that enhance supply (such as new generation or government mandated contracting) or slow down demand or slow growth (stagnant economy) tend to reduce forward prices.

In Figure 2 there are several significant market factors that are reflected in the shifts in the forward curve between January 2013 and July 2017. From Jan 2013 to Jul 2014 the five year forward curve (Cal 18 to Cal 22) ranged from $55/MWh to $60/MWh) – the reasonable expectation of forward prices at that time. Economic Withholding was still allowed by the MSA, several PPAs would expire prior to 2020 with the balance expiring at the end of 2020. The Market anticipated some increase in operating costs as carbon charges were expected to increase (SGER).

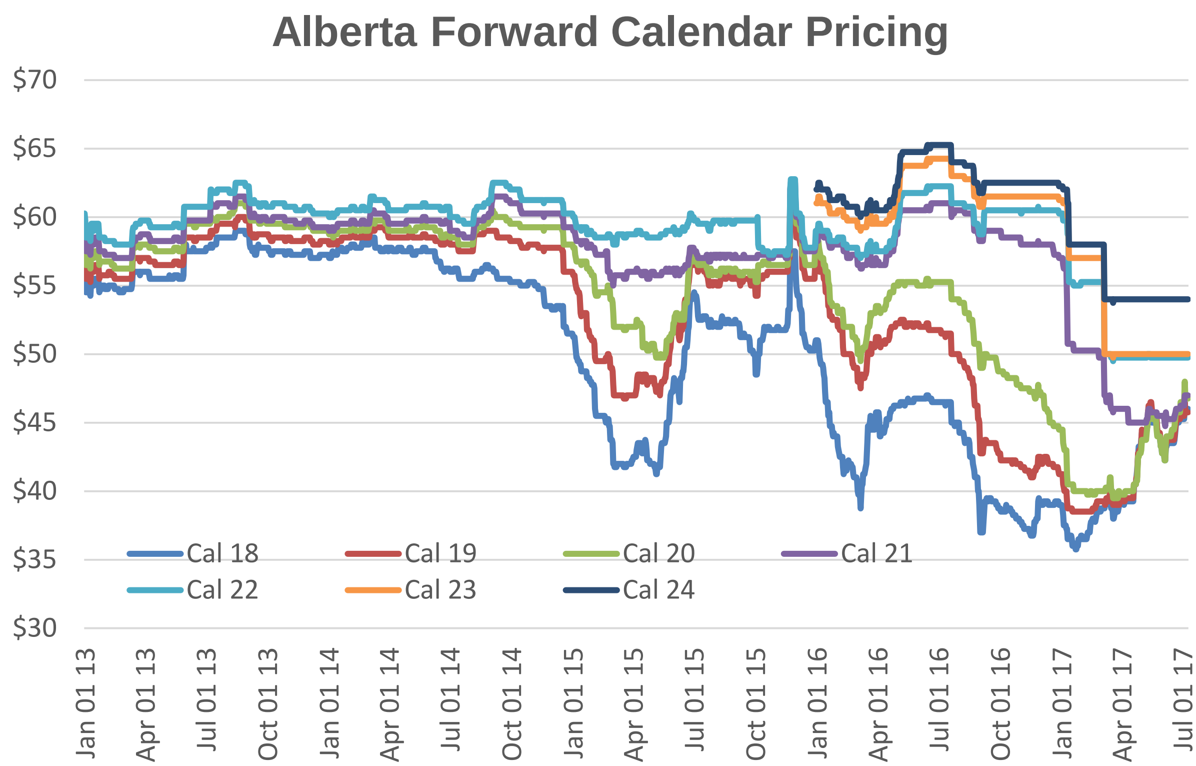


Figure 2 - Forward Calendar Prices - Cal 2018 to Cal 2024

Notes to Graph:

- Calendar contracts are for a full year of 24-hour energy
- Each line is daily NGX Settlement Price for respective Calendar Contracts
- Cal 18 is Calendar Year (start January 1st, 2018 to December 31st, 2018) 2018
- Note the graph shows Cal 18 to Cal 22 from January 2013 to July 2017
- Cal 23 and Cal 24 are added as of January 2016

From Jul 2014 to Jul 2015 the forward curve stretched out, with Cal 18 dropping to the $40/MWh range as AESO prices declined. This was largely due to demand stagnancy and the addition of 865MW of capacity at the Shephard Energy Centre. In July 2015 the curve moved back up coinciding with the election of the new government and the expectation of changes such as higher cost generation from renewables, the phase-out of coal and the addition of carbon pricing to coal based generation.

By January 2016 the forward curve settled back to the $55 to $60/MWh range as a result of the new Climate Change policies, the added costs for carbon pricing and the potential for renewable contracting. For the three remaining years (Cal18 to Cal 20) of the expected life of PPA units in the Balancing Pool the market values dropped significantly once the PPA Buyers terminated their Arrangements, liquidated potential ‘at-risk’ forward positions, and operation of the units reverted to the Balancing Pool. By September 2016 Cal 18 was trading in the $37/MWh range and each of Cal 19 and Cal 20 were indicating a $5 to $6 premium to this price reflecting the potential increased costs for carbon in those years.

The forward prices for Cal 21 and Cal 22 remained in the $60 range, reflecting the market values for post PPA pricing. These values began to decline in January 2017 as the potential for a Capacity Market was announced with the potential for capacity payments in lieu of market price as compensation to some generators.

By March of this year the three remaining PPA Cals (18 to 20) had converged on a forward price around $40/MWh. In the past month, this rose to $45/MWh as speculation about early terminations resulted in the July 4th Balancing Pool announcement. It is interesting to observe that these three Cals average price at $45.25/MWh is as much as a $10/MWh premium to the predicted AESO prices of $32 for Cal 18 and Cal 19 and $42 for Cal 20. The same premium we have seen since the original termination of the PPAs.

Lower Cost Assessment:

The Balancing Pool PPA's not including Sundance A are some 4335MW of generating capacity capable of generating some 28 to 29 GWh (gigawatt hours) of electricity each year. (77% utilization factor). In 2015 the DTS (Demand Transmission Service) load in Alberta was 58.9 GWh. DTS load excludes load serviced by on-site or behind-the-fence (BTF) generation that does not pay for transmission service on this load and hence was not eligible for Balancing Pool payments, nor pays the new Balancing Pool charge for losses.

A $10/MWh increase in price would cost DTS load an estimated $589 million over a year. A $10/MWh loss in PPA operated generation would cost $285 million over a year and be charged to DTS customers over the next 13 years – out to 2030. Paying the $285 million losses over 12 or 13 years including any interest payments is certainly less expensive than paying $589 million in higher electricity costs in 2018 without the offsetting revenue if the Balancing pool is a seller in the forward market.

It is therefore equally important for the Balancing Pool to be seller of power in the forward market. If the $10 premium to hourly prices remains then the PPA losses are significantly reduced without any increase in price to consumers, the Balancing Pool is simply capturing for customers a share of this premium, in addition to what is captured by other market participants. Conversely if the Balancing Pool entering the forward market results in reducing this forward to hourly spread [lowering the cost of power] then this will result in lower energy prices to consumers as most consumers have prices largely based on the forward market.

The analysis that must be done by the Balancing Pool is to assess the impact on consumers of continued losses on operations as future Balancing Pool charges and to determine the potential of the Balancing Pool as a seller in the forward market and the impact of this on the spread between forward prices and AESO hourly prices.

End of document

July 17, 2017

Balancing Pool
Calgary Place
2350, 330-5th Avenue SW
Calgary, AB T2P 0L4

VIA EMAIL

RE: Reasonableness of Power Purchase Arrangement ("PPA") Terminations

On July 6, 2017, EQUS received the information package provided by the Balancing Pool and appreciates the information presented and the opportunity to consult on the matter. The information package provided by the Balancing Pool has provided EQUS adequate background and reasoning for the proposed PPA terminations.

EQUS is primarily concerned with fairness and transparency in the termination process and does not feel that any party should be unduly harmed or receive financial benefit from the situation. It is important to EQUS that the terms and conditions of the PPA contracts be followed, and if the economics suggest that terminating the PPAs is the best financial decision for the Province, then it should be done at the earliest convenience.

EQUS supports a fully functioning deregulated power market, and as such, supports the Balancing Pool's intention to conduct operations, including the termination of any PPAs, in alignment with FEOC guidelines.

Respectfully, EQUS would like to further understand the rational for only terminating the PPAs associated with the Sundance units at this time, and not the other remaining PPAs associated with other generation facilities, and the plan or the proposed schedule for terminating those remaining PPAs.

EQUS is willing to participate in further discussions or engagements regarding the termination of the Sundance PPAs and would also like to be included on any subsequent engagement on the termination of remaining PPAs.

Sincerely,

Patricia Bourne
CEO

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Industrial Power Consumers Association of Alberta

1117 22 Avenue NW
Calgary AB, T2M 1P6

July 22nd, 2017

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

Attention: PPA Inquiry 2017 - MNP

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

Members of the Industrial Power Consumers Association of Alberta (IPCAA) have been paying close attention to the Balancing Pool (BP)'s discussion of the termination of the PPAs. The BP is proposing the return of all the Sundance generators to TransAlta, Sundance A by its 2017 expiry and Sundance B and C by termination. This will effectively give TransAlta a 22% market share. Naturally, IPCAA's concern is that while the termination of the PPAs 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.

While returning some of the PPA units to their owners will result in a termination cost, the cost to the BP is mitigated by no longer having payment obligations to the PPAs owners over their remaining life. IPCAA recognizes that returning the PPAs to the owners could cause pool price to rise as the PPA owners begin to offer them at prices higher than marginal cost.

To better understand the long-term financial implications of the return of the Sundance PPA units to their owners, IPCAA commissioned a study by BECL and Associates Ltd. (BECL). IPCAA commissioned this study because industrial consumers need to understand the financial impact of the BP charge on their businesses going forward versus the anticipated increase in pool price. We have provided the BECL report as an attachment with this letter.

Based upon the BECL report, IPCAA submits that there is an opportunity to return some of the units, minimizing the BP losses without risking material increases to pool price. As recommended in the report, a phased termination approach, in which the PPAs are returned to their owners gradually, may allow the BP to reduce its costs while not giving market power back to any one owner. In turn, as pool price rises, the actual losses incurred by the BP for the remaining PPAs it holds will be reduced. IPCAA believes it would be worthwhile for the Balancing pool to explore the option of a phased release of Sundance C in more detail.

Based on available information, IPCAA does not support the idea of returning all the PPAs at once and providing one company with significant market power to unilaterally raise the pool price. The result would be simply locking in losses, followed by a material increase in pool price. Consumers are interested in mitigating the BP losses, as much as possible, without introducing any rate shock or undo upward pressure on the pool price. We recognize that this is a critical file for the Balancing Pool and we wanted to provide this study to ensure the long-term perspective is being considered.

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.

Sincerely,

Richard Penn
Acting Executive Director,
Industrial Power Consumers Association of Alberta
T: (403) 903-7693
E: Richard.Penn@IPCAA.ca

BECL and Associates Ltd

706 – 7th Avenue S.W.
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Calgary, Alberta
T2P 0Z1
Phone: (403) 771-5887
Email: gerg.baden@beclandassociates.com

July 21, 2017

Richard Penn
Acting Director
Industrial Power Consumers Association of Alberta
406 – 5115 Richard Road S.W.
Calgary, Alberta
T3E 7M7

Richard,

Subject: Analysis of the Effects of the Proposed Power Purchase Arrangement Terminations

Enclosed is our report on the subject analysis. The report provides a brief description of the methodology and assumptions used along with the results and discussion of the results of the analysis.

Your truly,

Greg Baden
President
BECL and Associates Ltd.

Introduction

The Balancing Pool (BP) has initiated a consultation process with consumers regarding the reasonableness of terminating the Sundance A, Sundance B and, Sundance C Power Purchase Arrangements (PPAs) possibly as soon as January 1, 2018. The Sundance B and Sundance C PPAs are the primary focus of the consultation process, as the Sundance A PPA, will expire at the end 2017. Unless terminated earlier by the Balancing Pool, the Sundance B and C PPAs will terminate at the end of year 2020.

The PPAs were originally designed, prior to the opening of the Alberta electricity market in 2001, to transfers the dispatch rights of a generating unit from the owner to a third party in order to reduce the owner's ability to influence market prices. The Sundance B PPA transfers the dispatch rights for the Sundance generating units 3 and 4 and similarly the Sundance C PPA transfers the dispatch rights of the Sundance generating unit 5 and 6 to the Balancing Pool, the current holder of the Sundance PPAs. Termination of the PPAs by the Balancing Pool will return the dispatch rights of all of the Sundance generating units to the owner, TransAlta. BECL and Associates Ltd. (BECL) was retained by the Industrial Power Consumers Association of Alberta to analyze the long-term financial effects of the proposed early terminations on industrial consumers.

Figure 1: Annual Average Expected Pool Price – Source: Balancing Pool; Termination of the Sundance A, Sundance B and Sundance C Power Purchase Arrangements with Generation Owners

The early terminations are expected to result in an increase the hourly market prices for electricity, as the owner of the generating units regains the dispatch rights and implements a more aggressive offer strategy than is currently being used by the Balancing Pool. The Balancing Pool's own analysis of the early termination the Sundance PPAs shows expected increases in annual average hourly market prices of about $4.00/MWh, see Figure 1. Increases in the average hourly market prices for electricity will affect Alberta industrial consumers primarily in two ways, first, in the cost of purchased electricity and secondly, in the charge the Balancing Pool recovers from consumers to cover the cost associated with managing the PPAs and it other market responsibilities.

BECL's methodology and assumptions for analyzing the effects of the proposed early terminations therefore focus on assessing the potential changes to the cost of electricity for industrial consumers and the offsetting effects on the Balancing Pool charge that these consumers pay.

Description of Methodology and Assumptions

The analysis was structured around four cases that describe different termination plans. Since the termination of the Sundance A PPA will occur in any event at the end of 2017 no specific provisions were made in the analysis to understand of predict the specific effects of this PPA terminating any earlier than the end of the current year; the Sundance A termination was in effect treated as part of the background in all of the cases. The following is a brief description of the four cases:

- **No Change**: no early terminations the PPAs expire in accordance with the set termination dates

- **Sundance B Termination**: only the Sundance B PPA is terminated effective January 1, 2018
- **Balancing Pool Proposal**: Sundance B and C PPAs are terminated effective January 1, 2018
- **Phased Terminations**: Sundance B is terminated effective January 1, 2018 and Sundance C is terminated effective January 1, 2019

Each of the four cases were analyzed using a base set of the assumptions and three sensitivities. In the first of the three sensitivity analysis, the annual average market price used in the base assumptions was decreased by $10/MWh and in the second sensitivity analysis, the annual average market price was increased by $10/MWh over the level in the base assumptions. In the third sensitivity analysis, the interest rate used to calculate the cost of funds borrowed by the Balancing Pool from the Government of Alberta is increased from the level in the base assumptions by one (1) per cent. Table 1 shows the parameter values used in the base assumptions and sensitivities.

Figure 2: Annual Average Market Prices

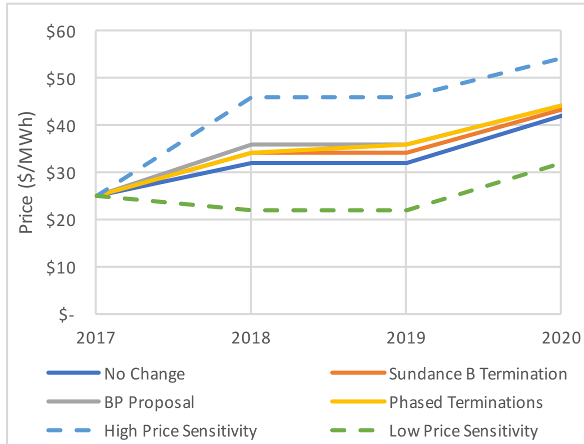
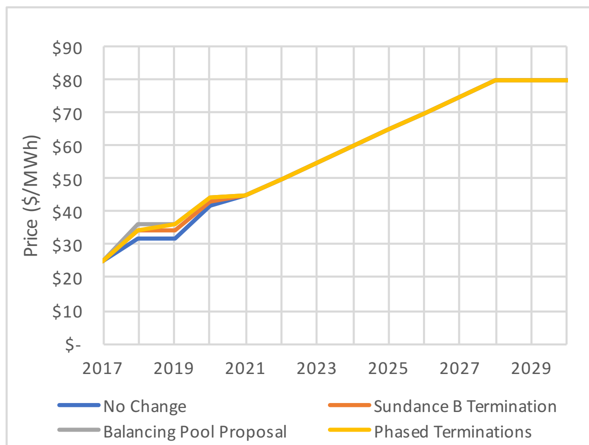


Table 1: Parameter Values

Parameter	Base	Sensitivities		
		Price		Interest
		Low	High	
Interest Rate	4%	4%	4%	5%
Discount Rate	6%	6%	6%	6%

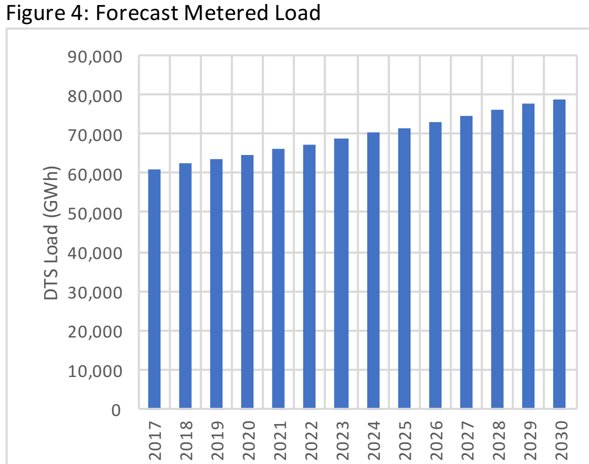
Figure 3: Long-Term Annual Average Market Prices



A set of annual average prices were developed, for each of the cases based on the expected pool prices developed by the Balancing Pool and shown in Figure 1. Figure 2 shows the prices used in each of the cases and the high-price and low-price sensitivity sets. Beyond 2020, when all of the PPAs will have expired, average market prices are expected to increase as Alberta load continues to grow and the transition from coal-fired generating capacity to lower carbon emitting generating technologies commences, see Figure 3.

The implementation of a capacity market, which may be implemented as soon as 2020, will influence electricity prices, but no provisions or adjustment have been made to longer term electricity prices to account for the implementation of a capacity market in 2020 or later.

Figure 4: Forecast Metered Load



A forecast of expected metered loads, load to which the Balancing Pool charge is applied, was developed using an estimated metered load for 2016 of 59,900 GWh and increasing the 2016 value by two (2) per cent per year for each following year, see Figure 4. Metered load represents the load of consumers using the AESO DTS and FTS tariffs. Industrial consumer loads make up about half of metered loads in Alberta and therefore metered load growth is considered to be reasonably representative of the industrial consumer load growth.

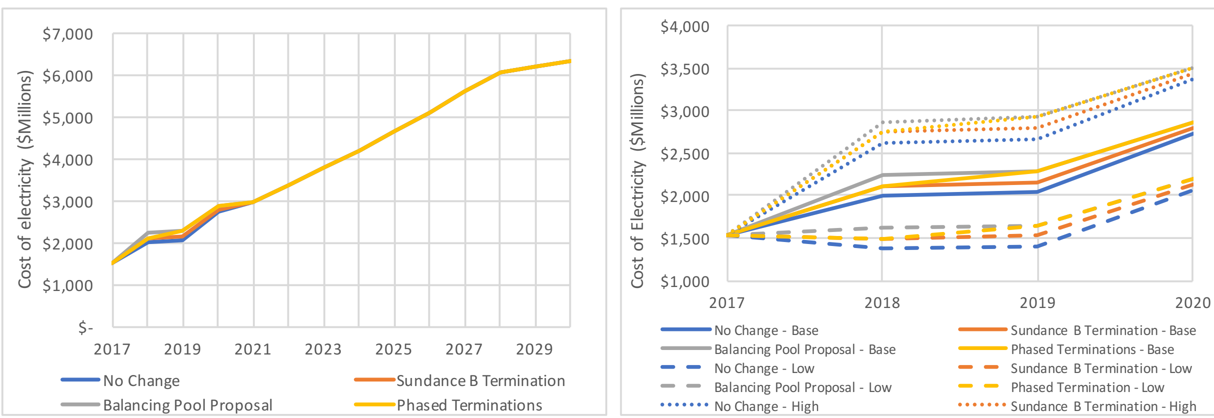
The annual cost of purchased electricity was estimated as product of the annual market price times the corresponding forecast metered load.

The effects of the PPA terminations on the Balancing Pool charge were analyzed using a financial cashflow model developed by BECL that incorporates actual data from the Balancing Pool financial reports. The model estimates future revenues, costs including the PPA obligations and, the annual cash balance. Any annual shortfalls in cash are made up, in a sense, by borrowing from the Government of Alberta at the assumed interest rate. The annual interest and principle payment on all outstanding debt is included in the amount to be recovered each year by the Balancing Pool charge. The Balancing Pool charge in any year is calculated as total amount to be recovered divided by the estimated metered load.

Results

It should not be surprising with both the expected future prices for electricity and metered load forecast to increase that the estimated cost of electricity also increases over time, see Figure 5. Between 2017 and 2020 the estimated cost of electricity varies between the cases by as much as $250 million. Given that

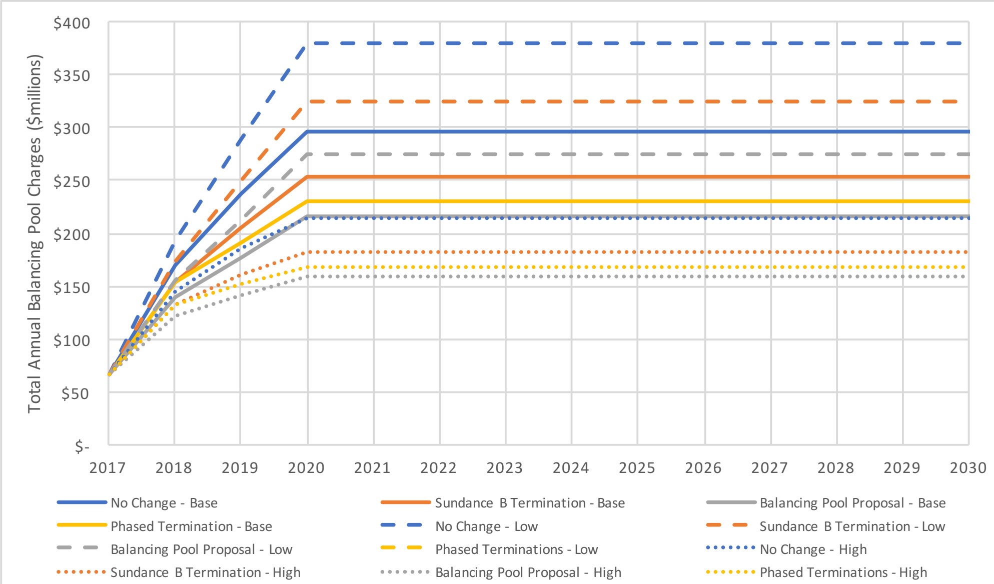
Figure 5: Estimated Cost of Electricity – Long-Term and Short-Term with the Sensitivities



industrial consumers represent about half of the metered load in Alberta this could mean industrial consumers could face an increase of as much as $125 million in the cost of electricity in one year following the terminations of the Sundance B and C PPAs.

Estimates of the total annual Balancing Pool Charges show that as electricity market prices increase the Balancing Pool charges decline. This result is to be expected considering the nature of the Balancing Pool charges, which are to recover from the market any shortfall in cash or, as in previous years, rebate to consumers any cash surpluses. When market prices are relatively low, as they are now, the Balancing Pool's PPA payment obligations to generating unit owners significantly exceeds the revenues it receives from the sale of electricity under the PPAs it holds, the resulting shortfall is currently being funded, as previously mentioned by borrowing from the Government of Alberta. Figure 6 show the results from modelling the base assumptions and sensitivities for the four cases. The chart in Figure 6 uses the same colour and line types as in Figure 5 and, as discussed, the low sensitivity results are higher than the high sensitivity results with the base result in the middle.

Figure 6: Total Annual Balancing Pool Charges



The total net cost to consumers is the sum of the cost of electricity and the Balancing Pool charges. Since the cost of electricity and the Balancing Pool charges vary year-to-year a sum of the two values was derived by calculating the net present value (NPV) of each of the amounts over the period 2017 to 2030 using a discount rate of six (6) per cent and then adding the resulting NPVs together. Table 2 shows NPV results for all of the cases using the base assumptions and for the low and high price sensitivities. Table 3 shows the same result with a five (5) per cent interest rate.

Table 2: NPV Results – 4% Interest Rate

Base Assumptions				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$34,100	$2,379	$36,479	
Sundance B	$34,369	$2,049	$36,418	($61)
Balancing Pool Proposal	$34,638	$1,773	$36,411	($68)
Phased Terminations	$34,527	$1,884	$36,411	($68)
Low Price Sensitivity				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$28,319	$2,992	$31,311	
Sundance B	$28,588	$2,578	$31,166	($145)
Balancing Pool Proposal	$28,857	$2,203	$31,060	($252)
Phased Terminations	$28,746	$2,349	$31,095	($217)
High Price Sensitivity				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$39,882	$1,764	$41,646	
Sundance B	$40,151	$1,520	$41,671	$25
Balancing Pool Proposal	$40,420	$1,342	$41,762	$116
Phased Terminations	$40,309	$1,419	$41,728	$82

Table 3: NPV Results – 5% Interest Rate

Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
Base Assumptions				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$34,100	$2,526	$36,626	
Sundance B	$34,369	$2,176	$36,545	($81)
Balancing Pool Proposal	$34,638	$1,884	$36,522	($104)
Phased Terminations	$34,527	$2,002	$36,529	($97)
Low Price Sensitivity				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$28,319	$3,176	$31,495	
Sundance B	$28,588	$2,737	$31,325	($170)
Balancing Pool Proposal	$28,857	$2,339	$31,196	($299)
Phased Terminations	$28,746	$2,494	$31,240	($255)
High Price Sensitivity				
Cases	Cost of Electricity	BP Charge Revenue	Total	Difference to No Change Case
	NPV $Millions	NPV $Millions	NPV $Millions	Increase (Decrease)
No Change	$39,882	$1,875	$41,757	
Sundance B	$40,151	$1,616	$41,767	$10
Balancing Pool Proposal	$40,420	$1,428	$41,848	$91
Phased Terminations	$40,309	$1,509	$41,818	$61

Discussion and Conclusions

The differences between the No Change Case Total value and the same values for other cases are less than one (1) per cent, definitely less than the inherent uncertainty of the analysis, which is at least plus or minus ten (10) percent. What we can conclude from the results is:

- Given that electricity market prices are more likely to increase than decrease in the future phasing the terminations as the Balancing Pool proposes or as shown in the Phased Termination case is a reasonable strategy; and,
- Comparing the results under the two interest rates show that the expectation of higher interest rates in the future should provide motivation to terminate PPA earlier rather than waiting for 2020. Recent actions by the Bank of Canada to increase interest rates and the downgrading of the Provincial credit rating support this strategy.

IPCAA
INDUSTRIAL POWER CONSUMERS ASSOCIATION OF ALBERTA

Industrial Power Consumers Association of Alberta

1117 22 Avenue NW
Calgary AB, T2M 1P6

August 3rd, 2017

Robert Bhatia, Chair
Bruce Roberts, President & CEO
Balancing Pool
2350, 330-5th Ave. SW
Calgary, Alberta T2P 0L4

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

Attention: PPA Inquiry 2017 - MNP

Re: IPCAA Concerns Regarding the Termination of the PPAs

The Industrial Power Consumers Association of Alberta (IPCAA) was very appreciative of the recent meeting that the Balancing Pool (BP) had with consumers. Part of that discussion included providing final comments on the BP's termination of the Power Purchase Arrangements (PPAs) by August 4th, 2017.

The BP is proposing the return of all the Sundance generators to TransAlta: Sundance A by its 2017 expiry and Sundance B and C by termination. This will effectively give TransAlta a 22% market share. Naturally, IPCAA's concern is that while the termination of the PPAs 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. While IPCAA is not opposed to termination of the PPAs, we believe the concept of a phased termination may be the most appropriate strategy.

IPCAA would appreciate the opportunity to meet and discuss this concept with the BP's Board of Directors and Executive Team.

Thank you for your consideration, and please feel free to contact us for additional information.

Sincerely,

Richard Penn
Acting Executive Director,
Industrial Power Consumers Association of Alberta
T: (403) 903-7693
E: Richard.Penn@IPCAA.ca

From:
Sent:
To: PPA Inquiry 2017
Subject: Power Purchase Arrangements Termination

I have recently been added to the list of concerned stakeholders in the above noted issue. All of the information I have seen to date from the Pool focuses on the impact on the Generators of electricity and the Customers of the power produced and pre sold through the PPA process.
At this point of time where our governments both Federal and Provincial have committed to clean energy nobody is giving much attention to thr catastrophic impacts these decisions will have on the people who have devoted their careers to working as coal fired power producers.
The Alberta Federation of Labour will provide you with a brief outlining the concerns of many of us as to the " price people and families " that are our coal plant workers will suffer and I support said brief.
There are four hundred (400) or more TransAlta workers and families who are currently uncertain about their future employment and any further accelerated shutdown of their livelihood by cancelling PPA's attached to Sundanece Units will be crippling for some of these people.
Please take into consideration the concerns of the people as well as the corporations and customers as you make decisions for the good of all Albertans.
Thank you for your attention to this extremely important aspect of change in our power production world.

Local Union 254
International Brotherhood of Electrical Workers

parkland county

Office of the Chief Administrative Officer
Direct Line: 780.968.8411
mheck@parklandcounty.com

July 18, 2017

Balancing Pool
Calgary Place
2350, 330 – 5th Ave. S.W.
Calgary, Alberta T2P 0L4

c/o: PPAinquiry2017@mnp.ca

Dear Sir/Madam:

Subject: Reasonableness of Sundance A, B & C Power Purchase Arrangement ("PPA") Terminations

This correspondence is in response to the Balancing Pool's letter and information package dated July 6, 2017 citing its obligation to consult with representatives of customers about the reasonableness of terminating the Sundance A, B & C PPA's. The Balancing Pool has statutory duties, including a duty "to manage risks prudently",[1] and to "carry out its duties in a manner that is responsible...."[2]

Parkland County is a customer but also, as the municipality in which the Sundance units are located, its tax base and residents may see significant negative impacts as a result of the proposed terminations. Parkland County's position is that the termination of the Sundance A, B & C PPAs is not reasonable or fair and requests that the Minister reject the proposed terminations.

Parkland County's positon that the terminations are not reasonable or fair is as follows:

1. The Balancing Pool's consultation was announced July 4, 2017 by press release, with Parkland County only becoming aware later that week. The deadline of July 20, 2017 has not provided adequate time for customers to properly evaluate and respond to the Balancing Pool's information. As stated on page 1 of the information package:

> "This document contains forward looking statements including statements regarding the Balancing Pool's forecast 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 used in the preparation of forecast information, actual outcomes may vary in material ways. Forecasts are subject to uncertainty."

[1] *Electric Utilities Act*, s. 85 (1) (g)
[2] Ibid., s. 86

The short time frame for consultation should be sufficient of the Minister to conclude the proposal is not reasonable or fair. Customers have not had time to properly evaluate and respond to the questionable forecasts and forward looking statements.

2. As stated on pages 4 and 15 of the information package, the Balancing Pool will compensate the owner for the "remaining net book value of the generating unit as if the unit had been destroyed". The compensation to the owner is stated to be $171 million.

   It reasonably foreseeable the owner will subsequently request tax relief from Parkland County on the basis that the generating units have essentially been destroyed by the cancellation of the PPA. That request might affect the 2017 taxation year, but could certainly affect 2018 and beyond.

   The proposed terminations are not reasonable or fair as the foreseeable risk to Parkland County's assessment base has not been accounted for or compensated.

3. As stated on page 4 of the information package, the Balancing Pool is to act prudently in managing its accounts associated with the PPAs and the *Electric Utilities Act* imposes a responsibility to support the fair, efficient, and openly competitive ("FEOC") operation of the market. Page 5 of the information package states the range of considerations for the Balancing Pool when looking at FEOC includes "3. The consequences of the termination(s) on an overall basis for customers related to electricity prices and the Balancing Pool allocation or charge".

   The information package does not address the consequences of the terminations on Parkland County and its residents on an overall basis. Parkland County's position is that the proposed terminations are not reasonable or fair as the consequences of the terminations on an overall basis have not been identified by the Balancing Pool.

4. Parkland County has been preparing for the eventual retirement of the Sundance generating units. As noted on page 10 of the information package the Sundance A PPA is set to expire in 2017 in any event. The proposed terminations of Sundance B & C however could accelerate the retirement of the related generating units. That possibility is also identified on page 10 where it states that some of the underlying PPA units may be retired or mothballed.

   The retirement or mothballing of the underlying generating units resulting from the PPA termination will reduce Parkland County's assessment base and cause job losses for residents. These consequences of early retirement or mothballing of generating units have not been adequately identified in the information. These consequences must be factors in determining whether or not the proposal is reasonable and fair. The impact to our residents is in the tens of millions of dollars and is unacceptable.

5. As stated above, Parkland County has not had adequate time to fully respond to the specific points raised in the information package, but one initial concern relates to the analysis of offer control by market participant. Page 11 states currently the Balancing Pool

has 25% offer control with TransAlta holding 12%. Page 12 states that on termination of the PPAs the Balancing Pool will control 12% with TransAlta's offer control rising to 22%.

The change in offer control could create risks that the termination of the PPAs will not enhance the fair, efficient, and openly competitive operation of the market. The information package does not adequately address those risks.

Parkland County must be consulted on any impact to our residents and the community. We would suggest that this decision be set aside until all consumer and resident impacts are quantified and understood.

Yours truly,

Michael Heck MBA AGDM
Chief Administrative Officer

CC: Parkland County Council
CC: Mr. Brad Pickering Deputy Minister Municipal Affairs
CC: Ms. Colleen Volk Deputy Minister Energy
CC: Parkland Executive Team

parkland county

July 28, 2017

Chair Robert Bhatia and Members of the Board
Balancing Pool
2350, 330 – 5th Ave SW
Calgary, Alberta T2P 0L4
c/o sharleen.traynor@balancingpool.ca

Dear Chair Bhatia and Member of the Board:

Subject: PPA Cancellations of Sundance A, B, C

As you are aware, Parkland County is the most financially affected coal community impacted by the Government of Alberta's decision to phase out coal-fired power generation. On July 4th, we were made aware of the Balancing Pools' decision to cancel the Power Purchase Agreements (PPAs). Parkland County has put forward a number of arguments against the cancellations and want to voice our concerns directly with you. Parkland County is vehemently opposed to the cancellation of the PPAs, and do not believe full consideration has been given to the impacts of this decisions. The Off-Coal process has already created instability in the marketplace and within our community; this decision has the potential of another disruption to municipal viability. We have calculated a potential loss of tax revenue of over \$2 million per year, or \$40 million cumulative, as a result of the cancellation of the PPAs.

TransAlta has been identified to be compensated approximately \$170 million for the cancellation of these agreements but no thought or consideration has been given to the \$40 million loss to the municipality nor the short time for us provide comments on, or to plan for, the process. We believe the position the province must take is to ensure that the market pays the value of the power that is consumed, that market manipulation does not take place to maintain lower prices and that the significant impacts to the affected communities are dealt in a fair and just manner. If the PPAs are cancelled there are a variety of options TransAlta and other coal-fired power generators may take including shutting down all power generating units.

We understand there are a number of economic factors in this decision process including: savings in carbon levy the province needs to fund various programs; stability in energy market pricing; and, reliability of energy supply. We believe the right and responsible approach is for all parties involved in, or affected by, this decision is to ensure we maintain stability in the marketplace and safeguard impacted communities from undue economic and social hardships. We trust you will consider our comments when deliberating your decision.

Regards,

Rod Shaigec

Mayor Rod Shaigec

Copy: Hon. McCuaig-Boyd, Minister of Energy
Hon. Bilous, Minister Economic Development & Trade
Deputy Government House Leader Members of Executive Council
Hon. Anderson, Minister of Municipal Affairs
Parkland County Council
Mike Heck, CAO

MEDIA RELEASE

August 8, 2017

FOR IMMEDIATE RELEASE

Parkland County faces a significant budget impact due to PPA terminations.

PARKLAND COUNTY, AB – Parkland County is facing a potential budget impact upwards of $40 million after the Balancing Pool has recommended the termination of the Sundance A, B, and C Power Purchase Agreements (PPAs).

"The County is vehemently opposed to the cancellation of the PPAs at this time without a full cost and impact analysis that includes the impact to communities. These decisions cannot be made in isolation from the communities they affect," said Mayor Rod Shaigec. "Full consideration has not been given to the impact of these decisions. The end result could be TransAlta and other coal-fired power generators shutting down or mothballing power generating units earlier than planned, creating a potential loss of tax revenue of over $2 million per year and $40 million cumulative."

Parkland County was made aware of the Balancing Pool's proposal to terminate the Sundance A, B, and C PPAs on July 4, 2017. The County was initially given until July 20, 2017 to provide input on the terminations, which has the potential to have long-term budgetary impacts for the municipality.

"TransAlta has been identified to be compensated approximately $170 million for the termination of these agreements but no thought or consideration has been given to the potential $40 million loss to the municipality," said Mike Heck, CAO. "We cannot continue to have a crisis every week in the power generation markets. It is now significantly impacting communities and local governments."

PPAs, which took effect in 2001, were established to move Alberta's electricity system from a regulated to a competitive deregulated market. PPA Buyers would bear the risk of buying and selling electricity in Alberta in return for the opportunity to collect greater profits. In late 2016 and early 2017, many PPA holders began returning PPAs for coal-fired electricity generation to the Balancing Pool, citing the government's carbon levy on large greenhouse gas emitters as the cause. The PPA holders used an opt-out provision that allows the companies to terminate the agreements if any change in law makes the deals unprofitable or "more unprofitable."

"Parkland County and its residents are being disproportionally impacted here," said Heck. "As a municipality, we're dealing with impact after impact and all parties need to start considering the affected municipalities and their residents."

-30-

Parkland County is a rural municipality located immediately west of Edmonton. Covering an area of 242,595 hectares (599,500 acres), it is one of the largest in size and one of the highest populated of all rural municipalities in Alberta. Parkland County has grown to a community of over 30,000 people and has seen generations of families continue to enjoy country living.

For more information about this release, please contact Communications Services.

Phone: 780-968-8432
E-mail: communications@parklandcounty.com

utilitiesconsumer
advocate

July 20, 2017

Bruce Roberts
President and CEO
Balancing Pool
2350, 330 – 5th Ave SW
Calgary, Alberta T2P 0L4

(delivered by e-mail: PPAinquiry2017@mnp.ca)

RE: Comments on the Reasonableness of Power Purchase Arrangement ("PPA") Terminations

Dear Mr. Roberts,

I am writing on behalf of the Utilities Consumer Advocate (UCA) to provide our feedback on the reasonableness of the proposed terminations of Sundance A, Sundance B, and Sundance C PPAs. The UCA appreciates your consideration and efforts on this matter.

Background

On July 6, 2017 the Balancing Pool sent an information package to a number of customer representatives to facilitate the consultation process on the reasonableness of termination of Sundance PPAs. The Balancing Pool shared its view that terminating a subset of these PPAs is in alignment 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, openly competitive ("FEOC") market.

In response to the Balancing Pool's letter, the UCA would like to provide the following comments for the Balancing Pool's consideration.

UCA Comments

The UCA recognizes that the Balancing Pool is managing some of the PPAs at a loss and that Sundance PPAs are comparatively costly PPAs. The UCA is supportive of an approach that minimizes electricity prices for consumers and that is not contrary to a fair, efficient, and openly competitive market. As detailed below, the UCA would like to further understand the Balancing Pool's consideration of the impact on competition in the generation market and the impact on pool prices with the proposed PPA terminations.

The Balancing Pool stated in its information package that "Forecasts suggest that pool prices may increase as offer control shifts from the Balancing Pool, which has maintained a commercial but conservative offer strategy, to generation owners, who may employ more aggressive offer strategies or as some of the underlying PPA units are retired or mothballed." The UCA concurs with this statement and would to confirm that both a more aggressive offer strategy scenario and a retirement scenario are incorporated in your analysis and illustrated in the graphic on page 13.

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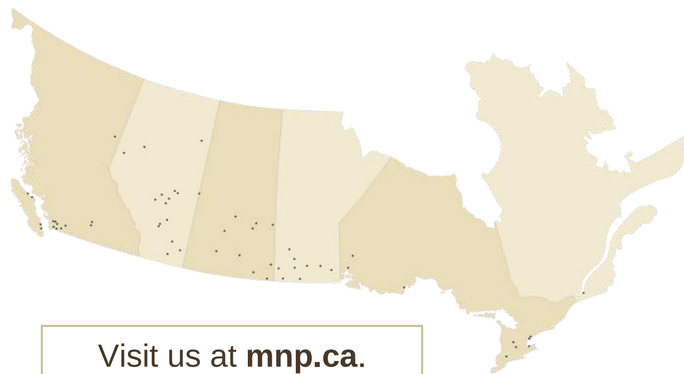
The UCA would also like to understand if the Balancing Pool has considered other options, including potential changes to its offer strategy, when evaluating the option of the proposed PPA terminations.

Thank you again for your consideration. For further information or if you have questions, please contact me at (403) 476-4998 or megan.gill@gov.ab.ca.

Sincerely,

Megan Gill
Manager, Market Policy and Analysis
The Office of the Utilities Consumer Advocate



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