

January 31, 2017

To Stakeholders

Re: **AESO Board Decision**

Please find enclosed the AESO Board's decision on the AESO's 2017 Business Plan and Budget Proposal.

I would like to thank Stakeholders for their participation in this year's Budget Review Process. This particular process was amended to focus the consultation on the business initiatives and AESO own costs for the first six months of 2017. It is Management's intention to consult with Stakeholders in the spring of 2017 on a more detailed 18-month business plan for the period from July 2017 to December 2018.

Should you have any comments, please feel free to contact Greg Spence at 403-539-2532.

Yours truly,



Todd Fior
Vice-President Finance

cc: Greg Spence, Director, Business Planning

AESO BOARD DECISION 2017-BRP-001

AESO 2017 Business Plan and Budget Proposal

December 2016

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1. Introduction

The following information documents the Alberta Electric System Operator (“AESO”) Board decision (“Decision”) on the AESO’s 2017 Business Plan and Budget Proposal (“Business Plan”) which includes the AESO’s 2017 business initiatives and related budgets for six months for general and administrative, interest, amortization and capital and full-year forecasts for transmission line losses, ancillary services and other industry costs. This Decision should be read in conjunction with the Business Plan, comments from Stakeholders who participated in the process (“Stakeholders”) and AESO Management’s (“Management”) responses to those comments, all of which are available on the AESO’s website at www.aeso.ca.

The *Transmission Regulation*¹ (“T-Reg”) includes provisions addressing the process for consultation and approval of the AESO budget for general and administrative, interest, amortization, other industry and capital (collectively referred to as “Own Costs”), as well as forecasts for transmission line losses and ancillary services costs. The T-Reg provides that the AESO must consult with Stakeholders likely to be directly affected by these proposed costs. It also provides that Own Costs, once approved by the AESO Board, are considered as prudent by the Alberta Utilities Commission (“AUC”) unless an interested person satisfies the AUC that such costs are not prudent. Transmission line losses costs and ancillary services costs, once approved by the AESO Board, are deemed to be prudent by the AUC. Subsequent to the AESO Board’s Decision, a Stakeholder may dispute that Decision pursuant to the Dispute Resolution provisions of the ISO Rules.

The practice established by the AESO to conduct consultation on these costs is the Budget Review Process (“BRP”). The BRP is an open and transparent process which facilitates a business initiative and cost review with Stakeholders. Consistent with prior years, a recommendation on the AESO’s business initiatives, budgeted Own Costs, and forecasted transmission line losses and ancillary services costs was prepared by Management and outlined in the Business Plan. This information was provided to the AESO Board for review and approval, or to be amended and approved, as appropriate.

¹ AR 86/2007

2. Budget Review Process

The Process

The BRP process for 2017 (“2017 BRP”) was amended to ensure that both the Stakeholder consultation and AESO Board approval processes remained efficient and meaningful while the AESO awaited the Government of Alberta’s policy decisions related to the implementation of its Climate Leadership Plan and assessed their implications on the AESO’s business initiatives. As a result of this, Management limited the consultation on the AESO’s business initiatives (rolled forward from 2016) and Own Costs to the first six months of 2017 (with the exception of other industry costs). A full-year forecast was provided for transmission operating costs² and budgeted other industry costs. It is Management’s intention to consult with Stakeholders in the spring of 2017 on a more detailed 18-month Business Plan for the period from July 2017 to December 2018.

An overview of the 2017 BRP, terms of reference, and proposed process calendar providing the 2017 BRP milestone activities leading up to this Decision can be found in Section 3 of the Business Plan. A summary of the key 2017 BRP steps and dates is provided in the following table:

Key BRP Dates in 2016	Purpose
July 21	Notice to Stakeholders – A notice was distributed to Stakeholders regarding the initiation of the 2017 BRP (i.e., Stakeholder consultation process), an overview of the process steps, terms of reference, and proposed process schedule.
September 13	Notice to Stakeholders – A notice was distributed to Stakeholders communicating that there would be a change to the 2017 BRP to allow more details on the government’s policy initiatives to become available prior to the AESO developing a comprehensive assessment of 2017 business initiatives and related budgets.
September 28	Notice to Stakeholders – A notice was distributed to Stakeholders communicating that the AESO is temporarily amending the annual BRP cycle and that the AESO would proceed with consultation on the budget through the submission of written comments. Also, that the AESO intended to roll forward its 2016 business initiatives and budgets in order to prepare a six-month budget for 2017 followed shortly by a more detailed 18-month budget.

² wires, ancillary services and transmission line losses costs

Key BRP Dates in 2016	Purpose
October 13	Notice to Stakeholders – A notice was distributed to Stakeholders providing them with a presentation and supplementary forecast and budget reference document which provided details of the: <ul style="list-style-type: none"> • 12-month transmission operating costs forecast; • 6-month business initiatives; and • 6-month own cost budget (12-month forecast for other industry costs).
November 1	Stakeholder Comments and AESO Responses – Stakeholder comments and Management responses on the summary presentation and supplementary forecast and budget reference document were distributed to Stakeholders.
November 7	Notice to Stakeholders – A notice was distributed to Stakeholders providing them with the AESO's 2017 proposed Business Plan.
December 2	Stakeholder Comments and AESO Responses – Stakeholder comments and Management responses on the Business Plan were distributed to Stakeholders.

2017 BRP

The AESO Board continues to believe that the BRP, which includes multiple stages, regular opportunities for interaction with Stakeholders, the disclosure of Stakeholder and Management positions and comments, and the publishing of this Decision, meets the above noted key requirements of the T-Reg.

During 2016, five Stakeholders participated in the BRP. The AESO Board and Management recognize the importance of Stakeholder participation in the BRP in order for the process to be successful and appreciate Stakeholders' time and effort.

As part of the BRP, five Stakeholders – Alberta Direct Connect Consumers Association, AltaLink Management Limited, Capital Power Corporation, Industrial Power Consumer Association of Alberta and Utilities Consumer Advocate – provided written submissions on the Business Plan and AESO presentation material from October 13, 2016. Stakeholder comments relating to the Business Plan, and those comments received throughout the process, have been considered in reaching this Decision. The comments received from Stakeholders during the BRP and Management's responses to those comments are documented in the Business Plan (Section 5). In addition, Stakeholder comments were received on the Business Plan and those comments and Management's responses were distributed to Stakeholders and published on the AESO's website.

AESO Board Key Findings

The AESO Board received regular status updates on the 2017 BRP and performed a review of the Business Plan with Management. In addition, it should be noted that Management provides updates to the AESO Board on a regular basis, through its Audit Committee, on the AESO's actual financial results compared to approved budgets and forecasts. Due to the amended 2017 BRP, the AESO Board did not meet with Stakeholders directly. The AESO Board is committed to meeting directly with interested Stakeholders as part of the next BRP consultation process which will be initiated in early 2017 (on the 18-month Business Plan for the period from July 2017 to December 2018).

The AESO Board believes that the BRP has achieved its objectives and has met the requirements of the T-Reg³.

3. Strategic Plan and Business Initiatives

Strategic Plan

The business initiatives as set out in the Business Plan are based on the AESO's five-year 2014-2018 Strategic Plan ("Strategic Plan"). The Strategic Plan is reviewed annually against the AESO's statutory obligations and current circumstances, and is amended as required as a part of the AESO's annual strategic planning process.

The Strategic Plan identifies three strategic objectives as areas of focus. The focus of these objectives include building on the electricity framework that has been successful to date, providing value to Albertan's as an organization and retaining and attracting the right people. The Strategic Plan becomes the starting point for the development of the AESO's Business Plan. The AESO has, from time to time, amended its objectives on its own initiative or in response to Stakeholder feedback. The strategic objectives were provided to Stakeholders as part of the Business Plan (Section 4, Appendix A).

³ Subsection 3(1)(b)

Business Initiatives

The AESO's 2017 business initiatives, which were the AESO's 2016 business initiatives rolled forward, are set out in the Business Plan (Section 4) and provide Stakeholders with an understanding of the organization's corporate direction for the first six months of 2017. No new business initiatives were added to the AESO's 2016 business initiatives, as many of the 2016 business initiatives were multi-year in nature. Management is anticipating that AESO's operations will continue as-is into the first half of 2017. The business initiatives were presented to Stakeholders as part of the BRP and the AESO Board understands that there were no substantive concerns raised by Stakeholders on the business initiatives being proposed by Management.

AESO Board Key Findings

The AESO Board has reviewed the Stakeholder submissions on the AESO's proposed business initiatives, and reviewed the associated responses from Management. The AESO Board finds that the business initiatives as outlined in the Business Plan are comprehensive and necessary to achieve the organization's objectives in the first half of 2017.

4. AESO 2017 Six-Month Budget and Full-Year Forecast Cost Summary

As previously indicated, Management has proposed a six-month budget with respect to the AESO's 2017 Own Cost budget to allow for continued operations at the current level of expenditures. To execute its mandate, the AESO is proposing a six-month general and administrative budget of \$49.7 million, interest expense of \$0.2 million, amortization of \$12.2 million and a capital budget of \$15.4 million for the period January to June 2017.

For forecasted transmission operating costs and budgeted other industry costs, Management provided a 2017 full-year for AESO Board approval. The full-year forecast for transmission operating costs are \$1,922.3 million and budgeted other industry costs are \$23.2 million.

The AESO's budget for general and administrative, interest, amortization and other industry costs are discussed in Section 5 of this Decision, the AESO's 2017 capital budget in Section 6 and the forecasts for transmission line losses and ancillary services costs are discussed in Section 7. The following table provides a summary of the aggregated costs identified in the Business Plan.

Budget/Forecast Category	Revenue Source (\$ million)					2017 Budget	
	Transmission	Energy Market	Renewables	Load Settlement			
General and Administrative ¹	34.4	12.8	1.9	0.6	49.7	#	
Interest ¹	(0.1)	0.3	0.0	0.0	0.2	#	
Amortization ¹	7.9	4.2	0.0	0.1	12.2	#	
Other Industry ²	15.6	7.7	-	-	23.2		
Wires ³	1,729.3	-	-	-	1,729.3		
Transmission Line Losses ⁴	74.1	-	-	-	74.1		
Ancillary Services ⁴	118.9	-	-	-	118.9		
Total Operating Costs	1,980.1	25.0	1.9	0.7	2,007.6		
Capital ⁵					15.4	#	
Total Budget	1,980.1	25.0	1.9	0.7	2,023.0		

Details provided on the following pages in the Business Plan (Section II: ¹page 19, ²page 17, ³page 14, ⁴page 15, ⁵page 20).

Indicates a six-month budget amount

5. General and Administrative, Interest, Amortization and Other Industry Costs Budgets

General and Administrative, Interest and Amortization

As previously indicated, Management has proposed a six-month budget for general and administrative costs, interest and amortization costs to allow for continued operations at the current level of expenditures while the AESO assesses the impact on its operations from the recent direction received from the provincial government on the implementation plan for the Climate Leadership Plan. AESO Management is anticipating that operations will continue as-is into the early part of 2017. The 2017 six-month budget is 50 per cent of the approved 2016 budget amounts.

Other Industry Costs

Management provided a 12-month budget to Stakeholders with an analysis of the proposed adjustments to other industry costs budgets as part of the 2017 BRP. This information is also outlined in the Business Plan (Section 4, pages 17 and 18). There is an increase from \$22.8 million in the 2016 budget to \$23.2 million in

the 2017 budget. The increase of \$0.4 million is mainly due to an increase in the estimated AUC fees for 2017.

AESO Board Key Findings

The AESO Board has reviewed Management's Business Plan, Stakeholder comments on the Own Cost budgets for the first six months of 2017 (12 month for other industry costs) and reviewed the associated responses from Management and approves the general and administrative, interest, amortization and 12-month other industry cost budgets as provided in the Business Plan.

6. Capital Budget

The AESO Board, as indicated in previous decisions, continues to believe that the AESO's IT systems and related infrastructure represent a central underpinning of the AESO's business, including maintaining the efficacy of the functioning of the market and the interconnected electric system. The AESO budgets its capital costs on a discrete basis where each budget period is reviewed independently as to the expenditures to be incurred in the budget. The AESO takes into consideration those capital projects which are already in progress and those which will be initiated within the period to determine the budget amount for the upcoming period. In the 2017 Business Plan, Management proposed a six-month capital budget with a related expenditure of \$15.4 million with further assessment to occur in the July 2017 to December 2018 BRP. Further information is provided in the Business Plan (Section 4, Appendix E).

A major information technology initiative and a facilities initiative comprise \$7.4 million of the \$15.4 million six-month capital budget. The information technology initiative is the Energy Management System Upgrade project, which is foundational to the AESO's operations. It will ensure that the AESO can continue to realize the value of the electricity framework and will allow for continued robust competition and reliable operations. The facility-based initiative is the System Coordination Centre ("SCC") Expansion project, which is a multi-phased, multi-year project intended to address the incremental staff requirements associated with the increase in the number of programs provided by the AESO, address the inherent loss of efficiency in support of grid operations when the personnel are not physically located at the SCC; and take into account Alberta Reliability Standards Critical Infrastructure Protection Standards. The AESO will provide Stakeholders with regular updates, including at the next BRP, on both projects as they progress in 2017.

The AESO continues to utilize a capital projects portfolio management process and, on a quarterly basis, the AESO Board through the AESO's Audit Committee reviews the portfolio against the approved budget. Any material changes are communicated to Stakeholders as required as a part of the AESO's quarterly reporting.

AESO Board Key Findings

The AESO Board approves the capital cost budget of \$15.4 million for the first six months of 2017. The AESO Board continues to support the AESO's capital projects portfolio management process.

7. Transmission Line Losses Costs and Ancillary Services Costs

The AESO's 2017 transmission line losses costs are forecast to be \$74.1 million and the ancillary services costs are forecast to be \$118.9 million. Both of these items are detailed in the Business Plan (Section 4, page 15). The forecasts are based on volume forecasts determined by the AESO and market-based commodity price forecasts developed by a third party. The average pool price forecast for the 2017 transmission losses and ancillary services costs is \$32 per megawatt hour which is 22 per cent lower than the 2016 forecast price of \$41.

The 2017 forecast for transmission line losses is \$37.8 million or 34 per cent lower than the 2016 forecast cost of \$111.9 million. The 2017 volume forecast is based on 2.3 terawatt hours of energy, which is 0.3 terawatt hours or 11 per cent lower than the 2016 forecast of 2.6 terawatt hours of energy.

The 2017 forecast for ancillary services costs is \$63.7 million or 35 per cent lower than the 2016 forecast of \$182.6 million. The 2017 operating reserves volume forecast, which is the most significant component of the annual ancillary services costs, is 7.3 terawatt hours, which is 0.7 terawatt hours or nine per cent lower than the 2016 forecast of 8.1 terawatt hours. The decrease is primarily attributed to a decrease in the forecasted procurement of operating reserves volumes associated with standby-regulating reserves.

AESO Board Key Findings

The AESO Board understands that it is inherently difficult to forecast these costs accurately as these costs are a function of volume and market-based commodity price forecasts. Volume forecasts tend to generally be reasonably accurate as volumes (generation and load) can be projected with a higher degree of certainty over time, generally reflecting historical trends. However, commodity price forecasts, and specifically pool price forecasts, are subject to greater variability as the forecasts are subject to various underlying factors (e.g., generator offer strategies, unplanned outages, load requirements) which are difficult to estimate. The AESO Board believes the methodologies and assumptions used by Management to forecast these costs are reasonable and the forecasts are approved. It is recognized that these forecasts are estimates and Management makes reasonable efforts to forecast these costs as accurately as possible using the best information available.

8. Decision Overview

On balance, having regard for all comments provided by Stakeholders and its own assessment, the AESO Board finds the AESO's 2017 first six-month budgets for general and administrative costs, interest costs, amortization costs and capital costs, and the full-year forecasts for 2017 transmission lines losses, ancillary services costs, budgeted other industry costs as identified in the table on page 7 of this Decision, to be reasonable and are hereby approved.

The AESO Board is supportive of Management's intent to develop an 18-month general and administrative, interest, amortization and capital budgets (July 2017 to December 2018) and 2018 full-year forecasts for ancillary services, transmission line losses costs and other industry costs. The next BRP will be conducted in the first half of 2017 which will include the opportunity for Stakeholder meetings with the AESO Board. Management plans to provide Stakeholders with process details in early 2017.

In closing, the AESO Board would like to highlight its appreciation to Stakeholders for their valued contributions and participation in the BRP and commends Management for its efforts to inform Stakeholders and to seek their input on the Business Plan.

The AESO Board welcomes any comments from interested parties on improvements to the BRP and has requested that Management continue its discussions with Stakeholders toward ongoing process improvement.

Signed at Calgary, Alberta on January 31, 2017.

For the AESO Board,



Robert McClinton
AESO Board Chair