

December 16, 2015

To Stakeholders:

Re: AESO Board Decision

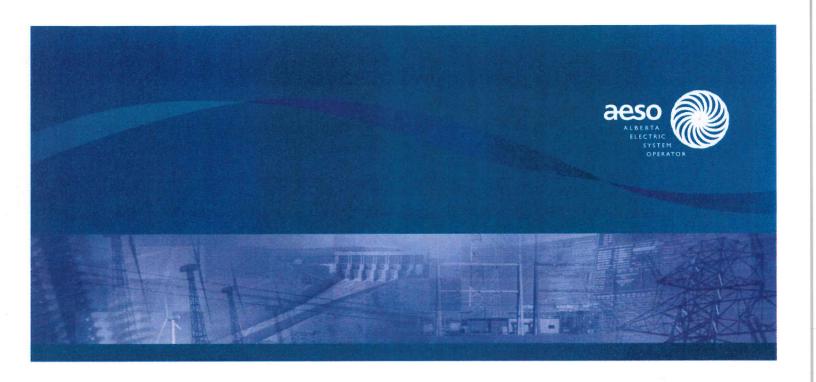
Please find enclosed the AESO Board's decision on the AESO's 2016 Business Plan and Budget Proposal.

I would like to thank Stakeholders for their participation in this year's Budget Review Process and to those who appeared before the AESO Board.

Should you have any comments, please feel free to contact Todd Fior at 403-539-2505.

Yours truly,

Robert McClinton
AESO Board Chair



AESO BOARD DECISION 2016-BRP-001

AESO 2016 Business Plan and Budget Proposal

December 2015



Table of Contents

1.	Introduction	
2.	Budget Review Process	4
	The Process	
	2016 BRP	4
	AESO Board Key Findings	5
3.	Strategic Plan and Business Initiatives	5
	Strategic Plan	5
	Business Initiatives	6
	AESO Board Key Findings	6
4.	AESO 2016 Budget and Forecast Cost Summary	6
5.	General and Administrative, Interest, Amortization and Other Industry Costs Budgets	7
	General and Administrative	7
	Interest, Amortization, and Other Industry Costs	8
	AESO Board Key Findings	9
6.	Capital Budget	9
	AESO Board Key Findings	10
7.	Transmission Line Losses Costs and Ancillary Services Costs	10
	AESO Board Key Findings	10
8.	Decision Overview	11



1. Introduction

The following information documents the Alberta Electric System Operator (AESO) Board decision (Decision) on the AESO's 2016 Business Plan and Budget Proposal (Proposal) which includes the AESO's 2016 business initiatives and related budgets and forecasts for transmission line losses and ancillary services costs. This Decision should be read in conjunction with the Proposal, comments from stakeholders who participated in the process (Stakeholders) and AESO Management's (Management) replies 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 (general and administrative costs, other industry and capital costs (collectively referred to as "Own Costs"), as well as 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 annual process which facilitates a detailed business initiative and cost review with stakeholders. Consistent with prior years, a recommendation on the AESO's business initiatives, budget for Own Costs, and forecast for transmission line losses and ancillary services costs were prepared by Management and outlined in the Proposal. This information was provided to the AESO Board for review and approval, or to be amended and approved, as appropriate.

1

¹ AR 86/2007



2. Budget Review Process

The Process

An overview of the BRP, terms of reference, and proposed process calendar providing the BRP milestone activities leading up to this Decision can be found in Section 3 of the Proposal. A summary of the key BRP steps and dates are as follows:

Key BRP Dates in 2015	Purpose				
August 21	Notice to stakeholders – A notice was distributed to stakeholders regarding the initiation of the BRP (i.e., stakeholder consultation process), an overview of the process steps, terms of reference, and proposed process schedule.				
September 21	First stakeholder meeting – Stakeholder meeting to discuss the 2016 business initiatives.				
October 5 (Calgary)	First technical meeting - Stakeholder meeting to review the 2016 own costs budgets (general and administrative, interest, amortization, capital and other industry costs) and for transmission line losses and ancillary services costs.				
October 7 (Edmonton)	Second technical meeting - Stakeholder meeting to review the 2016 own costs budgets (general and administrative, interest, amortization, capital and other industry costs) and for transmission line losses and ancillary services costs.				
November 20	Stakeholder and AESO Board meetings (as required).				

2016 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, the opportunity for Stakeholders to meet with the AESO Board and the publishing of this Decision, meets the above noted key requirements of the T-Reg.

During 2015, twelve 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 the time and effort expended by Stakeholders. It also should be noted that Stakeholders provided positive comments on the BRP conducted in 2015.



As part of the BRP, two Stakeholders - Alberta Direct Connect Consumers Association (ADC) and Industrial Power Consumers Association of Alberta (IPCAA) - provided the AESO Board with written submissions on the Proposal and met with the AESO Board on November 20, 2015 to clarify their submissions. Those Stakeholder submissions and other Stakeholder comments relating to the Proposal have been considered in reaching this Decision. The written comments received from Stakeholders during the BRP and Management's replies to those comments are documented in the Proposal (Section 5).

AESO Board Key Findings

Throughout the year, the AESO Board has received regular status updates on the BRP, including Management discussions with Stakeholders, and has performed a detailed review of the Proposal 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.

The AESO Board believes that the BRP has achieved the objectives of the BRP and has met the requirements of the T-Reg.²

3. Strategic Plan and Business Initiatives

Strategic Plan

The business initiatives as set out in the Proposal 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. These objectives focus on 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 BRP.

² Subsection 3(1)(b)



Business Initiatives

The AESO's 2016 business initiatives are set out in the Proposal (Section 4) and provide Stakeholders with an understanding of the organization's corporate direction for 2016 and beyond, as many of the AESO's business initiatives are multi-year in nature. The business initiatives were discussed with 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.

As outlined in the Proposal, the AESO will continue to focus on ongoing business initiatives such as: integrating the management requirements of the Fort McMurray West 500kV Transmission Project into ongoing operations; fulfilling the AESO's requirements as a part of the Transmission Facilities Cost Monitoring Committee; advancing projects identified in the 2015 Long-term Transmission Plan; implementing changes related to ISO Rule 9.1, Transmission Facility Projects; continuing to implement and monitor intertie restoration initiatives; implementing storage technology rules and system changes; developing and implementing the Alberta Reliability Standards Critical Infrastructure Protection program requirements; advancing the Market Systems Replacement and Reengineering project; advancing the Energy Management System Upgrade Implementation project; as well as a continuing to focus on increased effectiveness and efficiency of the AESO's operations in 2016. Management believes the initiatives for 2016 as outlined in the Proposal meet the objectives of both the AESO and Stakeholders.

AESO Board Key Findings

The AESO Board has reviewed the Stakeholder submissions on the AESO's proposed business initiatives, listened to Stakeholder clarifications of their submissions by way of presentations to the AESO Board and reviewed the associated replies from Management. The AESO Board finds that the business initiatives as outlined in the Proposal are comprehensive and necessary to achieve the organization's objectives in 2016.

The AESO Board acknowledges that there were various comments by Stakeholders in their submissions to Management during the BRP. The AESO Board has reviewed the submissions and supports Management's responses to the comments, The AESO Board, after consideration of the information presented to it, endorses the business initiatives for 2016 as outlined in the Proposal.

4. AESO 2016 Budget and Forecast Cost Summary

The AESO's total 2016 budgeted operating costs are \$2,120.8 million (2015 approved – \$1,792.7 million). The higher costs in 2016 are primarily attributable to a higher forecast for wire costs, based on currently approved transmission facility owner tariffs, due to higher capital and operating costs associated with new projects to add transmission capacity and higher costs to maintain and operate existing transmission



facilities, and a higher forecast for ancillary services and transmission line losses costs due higher expected volumes associated with forecasted load growth. The AESO's budget for general and administrative, interest, amortization and other industry costs are discussed in Section 5. The AESO's 2016 capital budget in Section 6 and the forecast for transmission line losses and ancillary services costs are discussed in Section 7 of this Decision. The following table provides a summary of the aggregated costs identified in the Proposal.

Budget/Forecast	2016 Costs Allocation (\$ million)					
Category	Trans- mission	Energy Market	Load Settlement	2016 Budget	2015 Budget	Change
General and Administrative ¹	67.4	25.3	1.3	94.0	94.0	0.0
Interest ²	(0.2)	0.6	0.0	0.4	0.3	0.1
Amortization ²	15.7	8.4	0.2	24.4	26.9	(2.5)
Other Industry ³	15.5	7.3	-	22.8	24.4	(1.6)
Wires ⁴	1,684.8	-	-	1,684.8	1,373.7	311.1
Transmission Line Losses ⁵	111.9	-	-	111.9	105.3	6.6
Ancillary Services ⁵	182.6	· -	- i' -	182.6	168.1	14.5
Total Operating Costs	2,077.8	41.5	1.5	2,120.8	1,792.7	328.1
Capital ⁶				38.0	29.0	9.0
Total Budget				2,158.8	1,821.7	337.1

Details provided on the following Pages in the Proposal (Section II: ¹Page 23, ²Page 25, ³Page 21, ⁴Page 18, ⁵Page 19, ⁶Page 26).

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

General and Administrative

As part of the annual planning process, Management conducted an extensive review of the AESO's 2016 general and administrative costs. For 2016, as in the prior year, this review included an in-depth review of the various activities and deliverables of the AESO and the associated costs. This type of activity-based cost reporting provides better transparency and understanding of the AESO's ongoing operating costs. Based on this review, the AESO's proposed 2016 general and administrative costs are \$94.0 million which is consistent with the 2015 approved budget of \$94.0 million. Additional information on the AESO's activity-based cost reporting can found in the Proposal (Section 4).



An analysis of the proposed AESO's 2016 general and administrative cost budget was provided to Stakeholders and the AESO Board by Management as part of the BRP and can be found in the Proposal (Section 4, Pages 23 and 24). The following table provides a summary of the proposed adjustments to the AESO's general and administrative budget:

	Description	Amount (\$ million)
1.	Staff Costs	3.4 increase
2.	Contract Services and Consultants	3.9 decrease
3.	Administration	0.2 decrease
4.	Facilities	0.1 decrease
5.	Computer Services, Maintenance and Telecommunications	0.8 increase
	Change in general and administrative costs - 2016 compared to 2015	nil

In 2016, Management advises it will continue to focus on optimizing the delivery of operations through effective management and prioritization and will continue to look for additional cost saving opportunities should they arise.

Interest, Amortization, and Other Industry Costs

Management also provided Stakeholders with an analysis of the proposed adjustments to the interest, amortization and other industry costs budgets as part of the BRP. This information is also outlined in the Proposal (Section 4, Pages 15, 17 and 25).

A summary of the proposed changes are as follows:

- Increase in interest costs of \$0.1 million due to an increase in the forecast for the AESO's debt financing requirements in 2016 compared to 2015.
- Decrease in amortization costs of \$2.5 million based on capital asset investments in previous years being fully amortized.
- Decrease in other industry costs of \$1.6 million due to a decrease in AUC fees and lower expected costs related to regulatory proceedings that are partially offset by an increase in Western Electricity Coordinating Council (WECC) costs.



AESO Board Key Findings

The AESO Board has reviewed Management's Proposal and Stakeholder comments on the Own Cost budgets for 2016 and approves the 2016 general and administrative, interest, amortization and other industry cost budgets as provided in the Proposal.

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 annual basis where each budget year is reviewed independently as to the expenditures to be incurred in the budget year. The AESO takes into consideration those capital projects which are already in progress and those which will be initiated within the year to determine the budget amount for the upcoming year. For 2016, the Proposal contains the AESO's proposed capital projects and the related expenditures which total \$38.0 million, an increase of \$9.0 million from the 2015 approved budget of \$29.0 million. Further information is provided in the Proposal, (Section 4, Pages 26, 27 and 28).

The increase is driven by two major information technology initiatives and one facilities initiative. The information technology initiatives consist of the Market Systems Replacement and Reengineering project and the Energy Management System Upgrade Implementation project. These two capital projects are foundational to AESO's operations and 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 facilities based initiative is the System Coordination Centre Expansion project. The System Coordination Centre Expansion project is a multi-phased, multi-year project intended to address the incremental staffing requirements associated with the increase in the number of programs provided by AESO. These three capital initiatives will be the AESO's focus resulting in a higher capital budget in 2016 compared to 2015.

Approvals for future phases of the Market Systems Replacement and Reengineering and System Coordination Centre Expansion projects to be undertaken in 2016 will be subject to consultation with Stakeholders as required by the BRP and approval by the AESO Board. The AESO will provide Stakeholders with regular updates on all three projects as they progress in 2016.

The AESO continues to utilize a capital projects portfolio management process and, on a quarterly basis, the AESO Board 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 \$38.0 million for 2016. The AESO Board continues to support the AESO's portfolio management process.

7. Transmission Line Losses Costs and Ancillary Services Costs

The AESO's 2016 transmission line losses costs are forecast to be \$111.9 million and the ancillary services costs are forecast to be \$182.6 million. The forecasts are based on volume and market-based commodity price forecasts determined by the AESO. Both of these items are detailed in the Proposal (Section 4, Page 19).

The 2016 transmission line losses costs are forecast to increase by \$6.6 million from the 2015 forecast of \$105.3 million. The increase is due to an expected increase in transmission volumes resulting from a forecast increase in total demand. The 2016 forecast is based on 2.6 terrawatt hours of energy, which is 0.1 terrawatt hours or four per cent higher than the 2015 forecast of 2.5 terrawatt hours of energy.

Ancillary services costs in 2016 are forecast to increase by \$14.5 million from the 2015 forecast of \$168.1 million. The increase is attributed to an increase in the procurement of operating reserves volumes, which is directly correlated to the load and generation growth forecast for 2016. This increase is partially offset by the net decrease in other ancillary services costs resulting from a decrease in load shed service for imports (LSSi) costs (the result of a lower number of required arming and tripping events being anticipated), and an increase in costs resulting from the introduction of the new transmission constraints rebalancing service. Further information is provided in the Proposal, (Section 4, Page 19).

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 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.

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Recognizing that these forecasts are estimates, Management makes reasonable efforts to forecast these

costs as accurately as possible using the best information available, which will minimize the differences that

will have to be addressed through the AESO's deferral account reconciliation process.

8. Decision Overview

On balance, having regard for all comments provided by Stakeholders and its own assessment, the AESO

Board finds the AESO's 2016 budget for general and administrative costs, interest costs, amortization

costs, other industry costs, capital costs, and the forecasts for 2016 transmission lines losses and ancillary

services costs as identified in the table on Page 7 of this Decision, to be reasonable and are hereby

approved.

The AESO Board acknowledges that from time to time due to uncertainty in the AESO's planned initiatives,

or unplanned initiatives as they arise, the AESO's Own Cost budget as approved by the AESO Board may

need to be revised for additional resource requirements to accommodate the uncertainty. If a revised Own

Cost budget is required for 2016, the AESO is committed to follow its established BRP process to consult

with Stakeholders. The AESO will notify Stakeholders of any proposed consultation should the need arise.

In closing, the AESO Board would like to highlight its appreciation to Stakeholders for their time and effort to

participate in the BRP and commends Management for its efforts to inform Stakeholders and to seek their

input on the Proposal.

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 December 9, 2015.

Case

For the AESO Board,

Robert McClinton

AESO Board Chair