

AESO BOARD DECISION 2021-BRP-001

AESO 2021 Business Plan and Budget Proposal



Table of Contents

1.	Introduction	3
	Budget Review Process	
	Strategic Plan and Business Initiatives	
	AESO 2021 Budget and Forecast Cost Summary	
	2021 General and Administrative, Interest and Amortization	
	2021 Capital Costs	
	2021 Other Industry Costs	
	2021 Wires Costs, Transmission Line Losses Costs, Ancillary Services Costs	
	Decision Overview	



1. Introduction

The following information documents the Alberta Electric System Operator ("AESO") Board decision ("Decision") on the AESO's 2021 Business Plan and Budget Proposal ("Business Plan") which includes the AESO's 2021 business initiatives and related budgets for general and administrative, interest, amortization, capital and other industry costs, as well as the 2021 forecasts for wires, transmission line losses and ancillary services 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, capital and other industry costs (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 prudent by the Alberta Utilities Commission ("AUC") unless an interested person satisfies the AUC otherwise. Transmission line losses and ancillary services costs, once approved by the AESO Board, are also 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

An overview of the 2021 BRP, terms of reference, and proposed process calendar providing the 2021 BRP milestone activities leading up to this Decision can be found in the Business Plan (Section 3). A summary of the key 2021 BRP steps and dates from 2020 is provided in the following table:

Key BRP Dates	Purpose
July 7, 2020	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.
August 11, 2020	First Stakeholder meeting – Stakeholder meeting to discuss the preliminary list of business initiatives proposed for 2021.
September 21, 2020	Second Stakeholder meeting – Stakeholder meeting to discuss stakeholder feedback on preliminary list of business initiatives proposed for 2021 presented on August 11, 2020.
October 1, 2020	Third Stakeholder meeting – A technical review meeting to discuss transmission line losses and ancillary services costs forecasts for 2021 and the preliminary own costs budgets (general and administrative, interest, amortization, other industry and capital) proposed for 2021.
November 18, 2020	Stakeholder and AESO Board meetings (as required).

2021 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 previously noted key requirements of the T-Reg.

An enhancement to the BRP for 2021 was the addition of an initial meeting to engage stakeholders earlier in the process and to discuss and obtain feedback on a preliminary list of business initiatives with the relevant AESO Vice Presidents. This enhancement was incorporated into the 2021 BRP based on Stakeholder feedback obtained from the 2020 BRP.



During 2021, 25 Stakeholders participated in the BRP to varying degrees. The AESO Board and Management recognize the importance of Stakeholder participation in the BRP for the process to be successful and appreciate Stakeholders' time and effort.

As part of the BRP, four of the Stakeholders - Alberta Direct Connect Consumer Association (ADC), Greengate Power Corporation (Greengate), Independent Power Producers Society of Alberta (IPPSA) and Industrial Power Consumers Association of Alberta (IPCAA) each provided the AESO Board with written submissions on the Business Plan and met with the AESO Board on November 18, 2020 to present their submissions. Those Stakeholder submissions and other Stakeholder comments relating to the Business Plan 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 Business Plan (Section 5). The November 18, 2020 stakeholder submissions to the AESO Board, and Management responses to those submissions, can be found on the AESO website at www.aeso.ca.

AESO Board Key Findings

The AESO Board received the requisite information on the 2021 BRP, including an overview of the process undertaken, the disclosure of Stakeholder comments with corresponding Management responses and the Business Plan, and has performed a detailed review of the Business Plan with Management to develop this Decision. In addition, it should be noted that Management provides ongoing 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 its objectives and has met the requirements of the T-Reg².

-

² Subsection 3(1)(b)



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 2019-2023 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 establishes the AESO's objectives for the five-year 2019-2023 period, and the Business Plan outlines the specific tasks to be focused on in 2021 to meet those objectives. Some initiatives will be completed in 2021; others will require more than one year to be completed. The Business Plan provides transparency as to which externally focused initiatives will be priorities in 2021.

The Strategic Plan identifies three strategic objectives as areas of focus. The focus of these objectives include the AESO becoming a more dynamic organization with the expertise and agility to adapt to transformative change, delivering a stable electricity framework that provides reliability at lowest cost through competition as the AESO bridges from the current transition to the broader industry transformation, providing optionality for consumers and industry to integrate new technologies and approaches while maintaining the overall reliability of the grid. The Strategic Plan becomes the starting point for the development of the Business Plan. The AESO has, from time to time, amended its objectives on its own initiative or in response to Stakeholder feedback. The three strategic objectives were provided to Stakeholders as part of the Business Plan (Section 4, Appendix A).

Business Initiatives

The AESO's 2021 business initiatives are set out in the Business Plan (Section 4, pages 7-11) and provide Stakeholders with an understanding of the organization's corporate direction for 2021 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. Management believes the initiatives for 2021 as outlined in the Business Plan meet the objectives of the AESO and provide stakeholders with an understanding of the AESO's direction for 2021.

AESO Board Key Findings

The AESO Board has reviewed the Stakeholder submissions on the AESO's proposed business initiatives, listened to Stakeholder presentations of their submissions and reviewed the associated replies 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 2021. The AESO Board acknowledges that there were various comments by Stakeholders in their submissions to Management during the BRP. The AESO Board has considered the information they were presented and approves the business initiatives for 2021 as outlined in the Business Plan.



4. AESO 2021 Budget and Forecast Cost Summary

The following table provides a summary of the aggregated budgeted and forecasted costs recommended by Management to the AESO Board for approval:

	D. Jan	Page Refer- ence ³	Revenue Source (\$ million)					
	Budget Category/Year		Trans- mission	Energy Market	Renew- ables	Load Settle- ment	Total	
STS	General and Administrative	2021	20	61.8	26.9	2.2	0.9	91.7
Own Costs	Interest	2021	21	2.1	0.8	0.5	0.0	3.5
ŏ	Amortization	2021	21	19.4	6.0	0.6	0.2	26.2
	Capital	2021	23					25.3
	Other Industry Costs	2021	16	14.6	6.7	-	-	21.4
ION	Wires	2021	14	1,933.8	-	-	-	1,933.8
TRANSMISSION OPERATING COSTS	Transmission Line Losses	2021	14	104.4	-	-	-	104.4
TRAI OP	Ancillary Services	2021	15	198.3	-	-	-	198.3
ARY	Own Costs	2021		83.3	33.7	3.3	1.1	121.4
SUMMARY	Transmission Operating Costs	2021		2,236.5	-	-	-	2,236.5

Differences are due to rounding

³ Details provided on the referenced pages in Section 4 of the 2021 Business Plan and Budget Proposal dated October 29, 2020



5. 2021 General and Administrative, Interest and Amortization

General and Administrative

As part of the annual planning process, Management conducted an extensive and iterative review of the AESO's 2021 initiatives, activities and deliverables and corresponding general and administrative costs. Based on this review, the AESO's initial proposed 2021 general and administrative costs were \$94.2 million, which was a decrease of \$2.0 million or 2 per cent from the 2020 budget of \$96.2 million.

Given feedback and recommendations from the AESO Board, the 2021 general and administrative costs budget has been amended to remove the proposed staff compensation adjustment (e.g. inversions, compressions and promotions) and to reduce incentive pay to align with a reduced achievement factor. The impact of these adjustments is a budget reduction of \$2.5 million. The final recommendations are reflected in the table in Section 4 of this document. Therefore, the AESO's 2021 general and administrative costs have been amended to \$91.7 million, which is a decrease of \$4.5 million or 5 per cent from the 2020 budget of \$96.2 million.

An analysis of the proposed AESO's 2021 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 Business Plan (Section 4, pages 19-22). The following table provides a summary, as amended, of the proposed changes to the budgeted cost categories between years 2021 and 2020.

	Description of Cost	Amount (\$ million)
1.	Staff Costs	2.5 decrease
2.	Contract Services and Consultants	2.0 decrease
3.	Administration	0.5 increase
4.	Facilities, Computer Services, Maintenance & Telecommunications	0.5 decrease
	Change in general and administrative costs 2021 budget versus 2020 budget	4.5 decrease

Differences are due to rounding



The AESO's focus in 2021 will be on the initiatives outlined in the Business Plan, however the AESO will adapt to new and changing initiatives should they occur, while maintaining reliable operations of the transmission system and other core AESO functions. The AESO's general and administrative budgeted costs focus on the delivery of key initiatives which tend to be multi-year in nature.

The AESO continues to focus on its vision to shape the transformation of Alberta's electricity future to deliver reliability and enhance the quality of life for Albertans. To deliver on this vision the AESO is driven to be a dynamic organization with the expertise and agility to adapt to transformative change; to deliver a stable electricity framework that provides reliability at lowest cost; and to provide optionality for consumers and industry to integrate new technologies and approaches.

Over the past year, the provincial economy and the power industry have been significantly impacted by low commodity prices and COVID-19. As a result, the AESO's focus in 2021 will be on cost management and market and regulatory stability.

For 2021, the business initiatives will be focused on the following mandated and top priority initiatives:

- continue implementing the Government of Alberta Red Tape Reduction initiative;
- implement approved tariff provisions from the 2018 General Tariff Application (GTA) into the AESO's connection process and AESO business;
- continue with the ISO tariff modernization initiative to simplify the ISO tariff to be more accessible, clear and agile;
- continue implementation of the Distributed Energy Resources Roadmap;
- continue to focus on optimizing the grid and minimize need or extend timing out for new infrastructure;
 and
- advance the technology plan for integrating new electricity value chain technologies.

In addition, the AESO will continue to focus on other external and internal business initiatives to advance its strategic plan and to maintain safe and reliable operations. The AESO will continue to efficiently and effectively deliver on its activities to create value for stakeholders and the province.

In preparing the 2021 Business Plan, AESO Management considered the information currently available to assess the impact on both the business initiatives and budget requirements. As time progresses, new information or events may require a change to the AESO's planned activities that, if material in nature, may require consideration as to the impact on the budget.



Interest and Amortization

Management also provided Stakeholders with the proposed budgeted costs for interest and amortization, as part of the BRP. This information is also outlined in the Business Plan (Section 4, page 21-22). A summary of the proposed budgeted amounts is in the table below:

Interest Costs and Amortization (\$ millions)	2021 Budget	2020 Budget	2019 Actual
Interest	3.5	7.1	5.4
Amortization of Intangible and Depreciation of Property, Plant and Equipment	26.2	22.1	38.8

Interest expense is incurred as a result of bank debt held throughout the year and the associated borrowing rate. Bank debt is issued to fund intangible and capital asset purchases, prepayments of future expenses and working capital deficiencies due to timing differences in the collection of revenues and payment of expenses. Intangible and capital assets are financed through the AESO's credit facilities and recovered over the useful lives of the assets (included in amortization).

The 2021 budget reflects lower interest rates and reduced working capital deficiencies. Additional interest costs budgeted for 2020 related to accumulated working capital deficiencies, which were recovered throughout 2020 and others, such as portions of energy market and REP related deficiencies, which are deferred and recovered in future periods.

Intangible and capital assets are amortized over their estimated useful lives in accordance with generally accepted accounting principles and reviewed on an annual basis. The higher amortization in 2021 is mainly due to a higher depreciable asset base in 2021 and the impact of changes in the estimated useful life of significant information technology ("IT") systems resulting in increased depreciation in 2021.

AESO Board Key Findings

The AESO Board has reviewed and considered Management's amended proposed budgeted 2021 Own Costs and associated Stakeholder comments and responses from Management. The AESO Board approves the respective 2021 general and administrative as amended, interest and amortization budgeted costs as provided in the Business Plan.



6. 2021 Capital Costs

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.

Further details are provided in the Business Plan (Section 4, Appendix E). A summary of the proposed changes is provided in the table below:

Capital Expenditures (\$ millions)	2021 Budget	2020 Budget	2019 Actual
General Capital	25.3	29.3	28.9
Major Capital	-	-	11.5
Total Capital	25.3	29.3	40.3

Differences are due to rounding

In the Business Plan, Management proposed capital budgets of \$25.3 million for 2021, which is a decrease of \$4.0 million or 14 per cent from \$29.3 million for the 2020 capital budget. The decrease is mainly due to significant efforts to minimize and defer costs given current economic conditions and efficiency gains.

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 \$25.3 million for 2021 as provided in the Business Plan.



7. 2021 Other Industry Costs

Management provided a forecast to Stakeholders for 2021 of other industry costs forecasts as part of the 2020 BRP. This information is outlined in the Business Plan (Section 4, pages 16-18).

There is a proposed decrease of \$3.1 million to other industry costs from \$24.5 million in the 2020 forecast to \$21.4 million in 2021, which is mainly due to a decrease to the AESO's regulatory process costs for 2021 to \$1.3 million from the 2020 forecast of \$3.3 million. Decreases from the 2020 forecast for AESO's regulatory process costs are the result of the estimated lower number of potential unforeseen regulatory proceedings as well as a decrease in the costs related to the historical recalculation of loss factors. A summary of the proposed forecast amounts is provided in the table below:

Other Industry Costs (\$ millions)	2021 Forecast	2020 Forecast	2019 Actual
AUC Fees – Transmission	11.3	12.0	12.2
AUC Fees – Energy Market	6.6	6.4	6.5
WECC/NWPP/NERC Costs ⁴	2.2	2.8	2.4
Regulatory Process Costs	1.3	3.3	2.9
Total Other Industry Costs	21.4	24.5	24.0

Differences are due to rounding

AESO Board Key Findings

The AESO Board approves the other industry cost forecast of \$21.4 million for 2021 as provided in the Business Plan.

⁴ Western Electricity Coordinating Council/Northwest Power Pool/North American Electric Reliability Corporation



8. 2021 Wires Costs, Transmission Line Losses Costs, Ancillary Services Costs

The 2021 forecast for wires costs is \$1,933.8 million, which is \$17.8 million or 1 per cent higher than the 2020 forecast of \$1,916.0 million. The 2021 forecast is based on transmission facility owners ("TFO") tariffs (\$1,929.8 million) and the AESO's forecast for IBOC and LBC SO costs (\$4.0 million). Wires costs represent the amounts paid primarily to TFOs in accordance with their AUC approved tariffs.

The AESO's 2021 transmission line losses costs are forecast to be \$104.4 million and the ancillary services costs are forecast to be \$198.3 million. Both items are detailed in the Business Plan (Section 4, pages 13-16). 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 used for the 2021 forecast is \$54 per MWh, which is \$4 or 7 per cent lower than the forecast of \$58 per MWh used in 2020.

The 2021 forecast cost for transmission line losses is \$104.4 million, which is \$9.1 million or 8 per cent lower than the 2020 forecast cost of \$113.5 million. The 2021 volume forecast is based on 1.9 terawatt hours of energy, which is the same as the 2020 forecast. The forecasted lower transmission line loss costs are primarily a result of the lower forecasted pool price in 2021 compared to 2020.

The 2021 forecast for ancillary services costs is \$198.3 million which is \$59.5 million or 23 per cent lower than the 2020 forecast of \$257.8 million. This decrease can mainly be attributed to the decrease in the operating reserve cost forecast to \$159.9 million in 2021 compared to \$229.1 million in 2020, which is a decrease of \$69.2 million or 30 per cent. Contributing to lower operating reserve costs is the impact of the active operating reserves prices, which are the most significant operating reserve costs, which are derived from pool price and a premium or discount to pool price. During periods of low pool prices, the discounts offered reflect the offer strategies associated with the lower pool prices, which are low or small discounts. In periods of higher pool prices, the discounts will typically increase to correspond with the higher pool prices. While the prices of operating reserves procured are indexed to the pool price, changes to the average pool price do not result in proportional changes to the operating reserve costs. Operating reserve prices are forecasted to be lower due to the lower forecasted pool price in 2021. The 2021 operating reserves volume forecast is 7.2 terawatt hours, which is 0.6 terawatt hours or 8 per cent lower than the 2020 forecast of 7.8 terawatt hours, due partially to lower expected import volumes.

AESO Board Key Findings

The AESO Board understands that it is inherently difficult to forecast transmission line losses and ancillary service costs 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, 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 as are forecasted wire costs. 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.

9. Decision Overview

On balance, having regard for all comments provided by Stakeholders and its own assessment, the AESO Board finds the AESO's 2021 budgeted costs for general and administrative, interest, amortization, capital and other industry costs, and the forecasts for 2021 wires, 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 Costs budget as approved by the AESO Board may need to be revised for additional resource requirements to accommodate such uncertainty. If a revised Own Costs budget is required for 2021, the AESO is committed to follow its established BRP process to consult with Stakeholders as required. 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 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 14, 2021

For the AESO Board,

AESO Board Chair.

Karl Jobannson