

Stakeholder Comments and AESO Replies Matrix

AESO Consultation – 2018 Abbreviated Budget Review Process (BRP) - 2018 General & Administrative Budget Amendment Meeting: January 23, 2018



The AESO has asked market participants and interested parties to comment on the proposed amendment to the 2018 General & Administrative Budget presentation given at the Budget Review Process (BRP) stakeholder meeting on January 23, 2018. Stakeholder comments received are provided in the following matrix. The matrix also includes AESO management's response to these comments.

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Alberta Direct Connect (ADC): Comment 1

ADC understands the strain on AESO resources with the increased efforts required for the Capacity market and the renewables procurement. Our membership wants to ensure that the AESO also allocates sufficient resources to priority areas such as the 2018 GTA, 2016 and 2017 deferral account settlement, LSSI procurement, and ongoing customer service.

AESO Response: Comment 1

The AESO confirms that it has allocated sufficient resources to all required areas and initiatives including those mentioned above.

Capital Power Corporation (Capital Power): No Comments

ENMAX Corporation (ENMAX): No Comments

Independent Power Producers Society of Alberta (IPPSA):

IPPSA has reviewed the BRP material and supports the need for the AESO to be sufficiently resourced to work with stakeholders in the capacity market transition. We recognize this to be an extra-ordinarily complex change to the status quo and stakeholders are keen to understand and

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pressure-test assumptions and design elements. We support the AESO's decision to increase its resources accordingly.

AESO Response:

Agreed. The capacity market design and implementation is a significant and substantial undertaking. The 2018 proposed amended G&A budget provides an additional \$2.0 million in additional staff and \$3.1 million in additional consultants, for a total additional amount of \$5.1 million, from the original 2018 budgeted amount. The AESO believes the resources added will be sufficient to achieve the 2018 deliverables for the capacity market initiative. The AESO will continue to engage stakeholders as a part of this initiative.

Industrial Power Consumers Association of Alberta (IPCAA): Comment 1

The proposed AESO G&A budget is now well over \$100 M, at \$111.5 M. For several years, IPCAA has stated that a substantive review of the AESO's G&A budget should be undertaken once the budget exceeds \$100 M. Given the suspension of the AESO's 2018 Tariff Application, now would be an appropriate time for the AESO to file its G&A budget as part of its re-filed Tariff Application, to seek AUC approval for this amount.

AESO Response: Comment 1

The stakeholder consultation through BRP was established to find efficiencies to facilitate the regulatory process with respect to the approval of the AESO's Own Costs. The Transmission Regulation establishes several relevant provisions in this regard. The BRP participants, comprising of the AESO and stakeholders, began this process in 2005 to provide stakeholders with greater transparency of the AESO's planning processes and an increased understanding of the operations of the organization. Also, this process facilitates the AESO Board receiving stakeholder comments prior to making a decision in respect of the AESO's budgeted Own Costs. The AESO is committed to providing transparency and allowing for a comprehensive review of its Own Costs through the BRP. The movement of the AESO G&A budget over \$100 M does not change the above rationale for continuing to follow the BRP process. The AESO is open to discuss what additional information may enhance the process.

IPCAA: Comment 2

If the overall G&A budget was perceived as low, compared to other markets, additional review would not be necessary; however, the estimated cost of \$1.83/ MWh is the highest of all market operators in North America. A simple comparison of peer costs is provided in the table below:

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ISO / RTO	2018 Revenue Requirement	Forecast 2018 Demand (in TWh)	2018 Revenue requirement in \$/MWh US	2018 Revenue Requirement in \$/MWh CAN	Authorized FTEs
AESO	\$111.5 M CAN	61		\$1.83/MWh	499
IESO*	\$196 M CAN	130		\$1.51/MWh	760
PJM**	\$294 M US	866	\$0.339/MWh	\$0.42/MWh	705
ERCOT**	\$222 M US	364	\$0.611/MWh	\$0.75/MWh	749
ISO-NE**	\$196 M US	142	\$1.377/MWh	\$1.70/MWh	590
NYISO**	\$156 M US	158	\$0.987/MWh	\$1.22/MWh	579

Sources:

* Independent Electricity System Operator – Business Plan 2017-2019

** http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2017-09-27/05_NYISO%202018%20Budget%20Overview.pdf

While IPCAA recognizes that scale is always an issue, many of these organizations already undertake many more services than the AESO at a substantially lower cost of service. These additional services include the following:

- Day ahead markets
- Capacity markets
- Real Time Security Constrained Cooptimized Energy and Ancillary Services
- Contracting for energy and capacity
- Outage planning

IPCAA submits that the AESO should undertake a peer review comparison of other ISO/RTO entities to better understand how costs can be controlled.

AESO Response: Comment 2

The AESO and other ISOs / RTOs have performed peer reviews of costs in the past and these reviews have not resulted in the development of information that would be useful for a comparison. As you have indicated the functions that the ISOs / RTO's

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perform may be different and the services they provide may be on a different scale. As your chart demonstrates, the larger the scale of operations the lower per \$/MWh recovery of costs.

TransAlta Corporation (TransAlta): Comment 1

TransAlta supports the AESO spending as much as required to ensure that the capacity market is successful. The capacity market initiative is the most important endeavor that the AESO has implemented in more than two decades. It has far reaching impacts to existing investments, new investment and to consumers and all market participants. There are billions of dollars at stake that depend on the AESO designing, adopting and seamlessly implementing the right capacity market for Alberta. We cannot emphasize enough that the budgetary spend in the next few years is an investment into Alberta's future – the \$13.7 M for capacity market development is insignificant relative to the billions of dollars in investment that may be significantly and materially impacted by the wrong design choices being made. We suggest that the amounts budgeted in 2018 for consulting on the capacity market may need to be increased to ensure that the level of analysis is sufficient to ensure that proper consideration is paid to selection of design elements. To date, the availability of analysis to support working group efforts has been light and made it difficult to arrive at conclusions to the discussion.

AESO Response: Comment 1

Noted. See AESO Response to IPPSA comment, above. The additional resources are intended to support work group efforts with the objective of delivering the 2018 deliverables of the capacity market program.

TransAlta: Comment 2

TransAlta also understands that there were uncertainties that contributed to high variability in 2018 budget such as the unexpected and late announcement of a transition to a capacity market in December 2016. We note that these initiatives significantly contributed to the general and administrative costs increasing by approximately 10% from 2016 Actual and 2017 Projected. While we understand, appreciate and support the AESO proactively spending on these initiatives, we also see a need to ensure that there is high transparency about future spending and budgets. In this respect, we ask that the AESO where possible provide all stakeholders with its views about future costs, if possible to the first year of implementation (2021). We are in a period of significant change and all stakeholders expect that costs will increase but stakeholders would like to differentiate between temporary increases in costs to understand how these costs may look when we fully transition. Differentiating between temporary and permanent cost increases provides greater insight into the spending decisions the AESO is making, for example, whether it uses more consultants or hires permanent staff.

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AESO Response: Comment 2

The AESO will continue to provide transparency of its business initiatives, forecasts and budgets. Also, the AESO will consider providing its views about future projected costs beyond the budget year, related to capacity market, in future AESO BRP processes when the information can reasonably be determined.

Utilities Consumer Advocate (UCA): Comment 1

Thank you for the presentation and the opportunity to comment on the AESO's 2018 G&A Budget Amendment. The UCA seeks more clarity on the increased costs expected by the AESO.

The AESO is seeking a 12% budget increase at a time when the Alberta economy is experiencing much lower growth and inflation is in the neighbourhood of 2%. While we recognize that the AESO is tackling new and complex initiatives, there are other ways to manage a budget shortfall rather than increasing the budget. Can the AESO explain, in addition to the budget increase, what sort of cost cutting measures, such as project deferrals, or resource re-allocation, were considered when proposing to revise the budget and what was the dollar impact of those measures?

AESO Response: Comment 1

As part of the annual planning process, AESO Management conducts an extensive and iterative review of its respective business initiatives and corresponding general & administrative costs to deliver on those initiatives. The AESO focuses its resources on the business initiatives outlined in the business plan that are required to be delivered on and on base business operations. Over the last few years the AESO has maintained a flat budget, and any potential budget increases were effectively offset by efficiency gains or the reallocation of resources to maintain the budget. Also, the AESO does not maintain any contingencies in its budgets that can be reduced and reallocated to an initiative when required. So any further reallocation of resources would limit the AESO's ability to deliver on business initiatives and maintain base business operations.

UCA: Comment 2

The AESO amended budget is increasing staff by 30 people. Please provide all business cases and justifications for each of these positions. Please include the alternatives to creating each new position that were considered. How much redistribution of work was initiated and how many new positions did that avoid?

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AESO Response: Comment 2

The AESO reviewed the respective initiatives relative to the current staff complement and determined that additional staff resources were required to deliver on the initiatives. This is consistent with the AESO's annual budgeting process. Prior to the initiation of the subsequent hiring process for each employee the relative department will go through the AESO's Vacancy Management Process where a rationale is provided to the Vacancy Management Committee (VMC). The VMC must review any vacant and newly created positions and approve the position requirement which includes position mandate, responsibilities and job description in the context of the whole organization.

UCA: Comment 3

Please provide the business plan that explains the amended \$13.4 M budget for Renewables.

AESO Response: Comment 3

See AESO's response to UCA's comment 2. The AESO has assessed the resources, staff and consulting, to deliver the renewables program for 2018 which are reflected in the proposed budget amendment. The increase in the required budgeted costs for renewables relates to additional competitive processes that were not anticipated for in the original approved 2018 budget.

UCA: Comment 4

The AESO states that higher resource requirement is consistent in many jurisdictions for CIP and Cyber Security. The AESO is seeking a 400% increase in additional staff and another \$2M. Is the AESO consulting with other jurisdictions proactively to avoid these under-estimations on other 2018 projects, such as renewables and capacity markets? What are the results of those consultations?

AESO Response: Comment 4

To clarify, the AESO's original approved budget for 2018 was \$4.8 million for CIP and cyber security and the proposed amendment of \$2.0 million brings the budget to \$6.8 million for 2018 (approximately a 40% increase from the original approved 2018 budget). The AESO's renewables program design is unique to Alberta so comparing against other jurisdictions would not be beneficial, also the increase in the required budgeted costs for renewables relates to additional competitive processes that were not anticipated for in the approved 2018 budget and are not as a result of underestimating the budgeted costs. As for the capacity market budgeted costs, the project is still in early stages of development and the comparison to other jurisdictions may be performed by the AESO at a future date once the operating model is determined if it is deemed beneficial. The AESO has collected some information related to the cost of implementing the related information technology systems from other jurisdictions. The AESO continues to normalize

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and apply this information in our budgeting process in alignment with the future Alberta market design as it develops.

UCA: Comment 5

Please describe in detail the AESO's enhanced understanding of the scope of work necessary on Capacity Markets. Please include learnings/findings pertaining to design components, project management; AES forecasting; general integration and implementation; rule development; industry training; impact to AESO IT and EMS operations.

AESO Response: Comment 5

Please refer to the AESO's capacity market process on the AESO's website for such details on the capacity market development and considerations to-date. The technical design of the capacity market is currently underway and is to be completed by June 30, 2018 with subsequent stakeholder engagement on the final design scheduled to be completed by July 25, 2018.

UCA: Comment 6

Please explain what is meant by "increased protections and efficiencies" when referring to leveraging CIP advancements on slide 19. Please define and explain "general processes".

AESO Response: Comment 6

The focus of "increased protection" relates to advancing the AESO's cyber and CIP security programs to manage increasing cyber risks. The AESO has implemented several processes related to cyber security and CIP over the last few years and is subsequently looking for opportunities to streamline processes which should then "increase efficiencies".

UCA: Comment 7

Did the AESO employ any Human Resource Consulting firm(s) to benchmark the salaries allotted for the 30 new positions. If so, please share the results. If not, please explain how the AESO determined the salaries to be paid to the 30 new positions.

AESO Response: Comment 7

The salaries used for budgeting are based on the actual average existing employee salaries which represent an estimated cost for budgeting purposes. During the hiring process, to establish the market value for AESO positions, positions are compared to other

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similar positions in the market based on defined duties and responsibilities. The AESO uses annual compensation surveys published by compensation consulting firms for this purpose.

UCA: Comment 8

Is it safe to assume, with these significant cost and resource increases in 2018, that in 2019 the budget will not increase or will decrease? Please explain fully.

AESO Response: Comment 8

At this time the AESO cannot determine if a 2019 budget increase or decrease is required. The AESO will develop its proposed 2019 budgets in mid-2018 and will initiate its Budget Review Process (BRP) with Stakeholders thereafter. The AESO will follow its annual budget development process by determining its 2019 business initiatives and then developing the related budget to deliver on those initiatives.

UCA: Comment 9

Referring to the table on slide 10, please explain how and to whom the \$1.4M proposed salary adjustment for non-exec will be distributed. Please also explain why the AESO feels the salary adjustments are necessary. Was a salary benchmarking study conducted? If so, please provide the results. If not, please describe how the AESO determined the salaries adjustments for non-execs.

AESO Response: Comment 9

The \$1.4 million in salary adjustment would be provided to non-executive staff as an average 2 percent increase. Compensation benchmarking, review and analysis are completed annually. Based on this review, no salary increases were provided in 2016 and 2017. For 2018, management has determined a 2 percent increase is required to maintain industry competitive compensation, and ensure the AESO has the expertise to deliver outcomes on the AESO's key initiatives. Salary increases are allocated on an employee by employee basis, based on 2017 measured performance. It was communicated to stakeholders that any proposed salary adjustment for 2018 would be reviewed at the end of 2017 and approved by the AESO Board as required as a part of the 2017-2018 BRP.

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UCA: Comment 10

Slide 21 reflects an increase of \$0.5 M for Other changes in the summary; however, the chart below shows an increase of \$0.6M. Is the difference due to rounding?

AESO Response: Comment 10

Confirmed, the difference is due to rounding.

UCA: Comment 11

Also referring to slide 21, please describe in detail the InfoTech & EMS enhancements needed and provide a thorough breakdown of the increase of \$0.4M identified for these items in Other changes.

AESO Response: Comment 11

The increase relates to ensuring the reliability of an increasingly complex suite of critical AESO systems that support the grid and market operations function. This includes the validation phase of an initiative to expand the redundancy of the critical EMS SCADA network. This also includes operational improvements to sustain the reliability of a number of other grid and market systems.

Other Comments

Do stakeholders have any other comments to offer at this time?

ADC: Comment 2

The ADC would appreciate a breakdown of the allocation of the additional costs to the transmission tariff and the market trading charges including the rationale behind.

AESO Response: Comment 2

The allocation of the incremental costs to transmission and the energy market are \$4.9 million and \$5.3 million, respectively. The remainder is allocated to renewables and load settlement.

The allocation of costs is based on the direct or indirect relationship the costs have to one of the services. If an operating cost is directly associated with a service, the cost will be assigned directly to that service (e.g., a consultant cost in the transmission group would be assigned 100 per cent to transmission and recovered through the transmission tariff). Alternatively, if an operating cost is not directly associated with any one service (typical for corporate service areas), the cost will be allocated to the services based on the value of the directly assigned costs. This methodology assumes that the service with the higher direct costs would contribute to a higher demand for general costs (such as corporate services) and therefore be assigned a higher percentage allocation.

IPCAA: Comment 3

IPCAA is concerned that through this abbreviated BRP, there will be no opportunity for stakeholders to present to the AESO's Board of Directors. This is a concern for IPCAA. Our members value the opportunity to provide direct feedback to the Board.

AESO Response: Comment 3

As this was an abbreviated BRP, and consistent with prior abbreviated BRPs, a meeting with the AESO Board was not part of the established process. However, as a part of the annual BRP stakeholders will continue to have the opportunity to meet with the AESO Board as the AESO believes it is an important part of the process for the AESO Board to hear directly from stakeholders. For future budget amendments, should they occur the AESO will consider if stakeholder meetings with the AESO Board are appropriate in the circumstances.

Other Comments

Do stakeholders have any other comments to offer at this time?

TransAlta: Comment 3

TransAlta notes that the 2018 renewable budget has increased by \$2.4 Million, which is more than 100% of its original budget. We wish to fully understand the reasons that the budget has increased by such a large amount. We have yet to see the schedule for future REP procurements and question what is driving the need for increasing the staff compliment by new full time resources. We are concerned that the decision to add staff could be impact by a government decision to proceed with fewer REPs in 2018 and going forward.

AESO Response: Comment 3

See AESO response to UCA's comment 3. To clarify, the increase in the renewables budget is \$3.1 million which is an increase of 30% over the original 2018 budget. The AESO does not think this incremental amount of staff in the proposed amended 2018 G&A budget will impact a government decision on the number of REPs in 2018 and going forward.

TransAlta: Comment 4

TransAlta would like better insight into future capacity market costs to understand the costs for the initiative. We note that IT aspects are expected to be implemented in 2019 and 2020 and would expect that some of this work may have be advanced into 2018. We wish to know if the preplanning work to execute the implementations has been captured in the 2018 budget. We also would like to know what if any contingency has been included in the \$8.6 Million increase from original budget as well as the potential for higher than expected costs given that the capacity market process that the AESO has adopted has already undergone significant changes.

AESO Response: Comment 4

See AESO responses to UCA Comment 4 and TransAlta Comment 1. To clarify, the AESO's original 2018 approved budget for capacity markets was \$8.6 million and the proposed amended budget is \$13.7 million for an increase of \$5.1 million. Yes, the preplanning work to execute on the capacity market implementation has been captured in the 2018 budget. The AESO does not build contingency into its budgets. However, the incremental \$5.1 million for the capacity market was determined through the review of the required budget for the initiative and its associated deliverables.

TransAlta: Comment 5

TransAlta also wishes to more fully understand the \$4.8 Million in CIP and cybersecurity costs. This charge is more than three times higher than the original budget amount. Unlike the Capacity Market transition and Renewable Electricity Program initiatives, CIP was well known by the

Other Comments

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AESO. The CIP standards themselves were adopted as Alberta Reliability Standards on the authority of the AESO. The justification provided was that there was a higher resource requirement which was consistent with the finding in many jurisdictions. If so, why did the AESO not consult with those RTOs/ISOs when the original budget was proposed so that a more reasonable estimate was provided in the first place. The AESO also states that it “will leverage on advancements in CIP and cyber-related security programs to increase protections and efficiencies in other processes”. We wish to understand how these benefits are being realized when the costs seem to be higher rather than lower than previously estimated.

AESO Response: Comment 5

To clarify, the AESO’s original approved budget for 2018 was \$4.8 million for CIP and cyber security and the proposed amendment of \$2.0 million brings the budget to \$6.8 million for 2018 (approximately a 40% increase from the original approved 2018 budget).

The AESO did consult with other entities and they were also going through CIP v5 transition programs in a similar timeframe (a year ahead of the AESO but the project and operational impact was still not fully understood nor conveyed by them, at the time the original AESO 2018 budget was developed. The reference the AESO made that “*this is consistent with other jurisdictions*” is relative to what the AESO and other entities currently understand, not what the AESO understood at the original AESO 2018 budget process. This combined with the fact that the AESO is going directly to v5 of CIP, unlike the other ISOs and the AESO’s business practices and systems differ from the other ISOs, results in differing resource requirements to maintain compliance with the CIP standards. In 2018, the ISOs continue to discuss how best to optimize their CIP programs. The AESO’s CIP optimization work stream is about investing money to drive efficiencies that will be realized in future years. The AESO needs to spend money in 2018 to realize efficiencies in future years, not the current year. There is both a G&A and capital element to CIP optimization.

UCA

The UCA is of the view that, especially for such a significant increase, stakeholders that would like access to your Board, after receiving responses to their comments, should have it granted.

AESO Response

See AESO’s response to IPCAA’s comment 3.