# **Stakeholder Comments and AESO Replies**

2022 Budget Review Process (BRP) Stakeholder Engagement Session 2 - Sept. 29, 2021



The AESO invited all interested stakeholders to provide their comments on the 2022 BRP Stakeholder Engagement Session 2, the business initiatives and the 2022 preliminary forecasts and budgets presented at the virtual session hosted on Sept. 29, 2021. The AESO values stakeholder feedback and we thank you for sharing your perspectives with us. View all stakeholder comments received and the AESO replies below.

1.	Please comment on the 2022 BRP Session 2 hosted on Sept. 29, 2021. Was the session valuable? Was there something the AESO could have done to make the session more helpful?
Alberta Direct Connect (ADC)	The ADC found the session valuable and appreciates the opportunity to participate.  The Government is currently contemplating changes to the transmission regulation which will impact a number of AESO initiatives. The plan needs to have enough flexibility to consider any changes. Further, the ADC recommends the AESO examine affordability and industry competitiveness as a component of the business initiatives. The AESO should be knowledgeable on the impact electricity costs and tariff design have on jobs, growth, and the economy.
AltaLink Management Ltd. (AltaLink)	The second session was valuable as it allowed stakeholders the opportunity to ask clarifying questions and/or provide further comments. AltaLink appreciated the opportunity to provide further comments and ask questions at the September 29 <sup>th</sup> session.
Capital Power Corporation (Capital Power)	Capital Power appreciates the AESO efforts in having its senior leadership available at the session to respond to stakeholder questions and encourages this practice to continue. The materials made available by the AESO to review ahead of the sessions were also helpful in preparing for and to facilitate more focused discussion about the AESO's planned initiatives, forecast and proposed 2022 budget. Going forward, Capital Power believes that less time in the session can be spent on the overview of the content of these materials and more time should be allocated on exploratory discussion (e.g., questions and answers).  While the information provided in the materials ahead of time were useful in understanding the business initiatives themselves,
	clarity regarding their level of priority and AESO resource allocation for each (i.e., staffing, capital spend, etc.) could be improved.  The materials provided to date indicate three levels of priority—i) Mandated; ii) Top Priority; and iii) Normal Course Initiatives. For example, the General Tariff Application and Red Tape Reduction initiatives were identified as "Mandated" Top Priorities (Session 2 slides 17 & 21) suggesting these items take precedence over the remaining initiatives. The Market Sustainability/Evolution and Settlement Audit initiatives had neither the "Mandated" nor "Top Priority" labels (Session 2 slides 18 & 19) implying these were the lowest priority initiatives of the nine identified. The remaining initiatives were designated as "Top Priority" (Session 2 slides 22-26). The materials provided no additional information on the relative order of priority for the initiatives other than the aforementioned nomenclature used in the headings to describe each item. Going forward, the AESO's view on this would be helpful to stakeholders in better understanding what initiatives are driving resource and budgetary needs.

Stakeholder Comments & AESO Replies - 2022 BRP Session 2 - Sept. 29, 2021

Page 1

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1.	Please comment on the 2022 BRP Session 2 hosted on Sept. 29, 2021. Was the session valuable? Was there something the AESO could have done to make the session more helpful?
	The AESO also did not provide any indication of the resources it expects to allocate to each initiative creating a disconnect with how AESO Own Costs were derived. Capital Power recommends that these details be provided in the BRP materials for stakeholders to review.
ENMAX Corporation (ENMAX)	ENMAX would not only like to see more detail provided about how many internal AESO resources are allocated to each of the Business Initiatives (measured in FTE equivalents or person-hours), but also have them separated out by year so it is clear what is being allocated on an annual basis for each of the initiatives that span multiple years.
EPCOR Distribution & Transmission Inc. (EPCOR)	Yes, the session was valuable. See comments below re: Red Tape Reduction.
Heartland Generation Ltd. (Heartland)	Yes, the session was useful. In the future, Heartland Generation suggests that the AESO indicate how many resources (staff and spend) it plans to put towards each initiative. This ranking information would put stakeholders in a better position to provide input on the AESO's BRP. The AESO should also provide a relative ranking for each of the initiatives presented.
Independent Power Producers Society of	Yes, the session was useful. In the future, we would suggest that the AESO provide a breakdown of its Own Costs per Business Initiative. This would help stakeholders appreciate the AESO's relative ranking of these Initiatives. That ranking would better inform stakeholders' input into the AESO's BRP and help stakeholders to align their own resources to engage with the AESO in pursuing common goals in the year ahead.
Alberta (IPPSA)	Where possible, we'd also ask that the AESO create succinct 'problem statements' to help stakeholders understand what it's initiatives are intended to resolve. These would be one or two sentences that state the problem and - ideally - whose progress can be measured. We'd imagine that the AESO intuitively knows what the problem statements are (give that its initiatives have made it to the plan and that some have resources and budgets attached). So the request is to convey those concerns succinctly. E.G. What problem is the Mothball rule/OR review/Settlement Audit/Distribution Coordination intended to resolve? Stakeholders could use the BRP process to comment on the problem statements. This would help the AESO and its stakeholders get on the same page and collaboratively define the issues we want to work towards.
	The AESO's Own Costs are increasing. However, the BRP material does not connect the AESO's Own Costs to the nine Business Initiative that are driving these costs. In the future, we recommend that the AESO provide a breakdown of its Own Costs per Business Initiative.
Industrial Power Consumers Association of	The session was valuable. IPCAA appreciates the AESO executive team attending and presenting on their respective areas. Obviously, this would be easier in person than on MS Teams. In terms of online platforms, AESO sessions are easier to participate in on Zoom.



1.	Please comment on the 2022 BRP Session 2 hosted on Sept. 29, 2021. Was the session valuable? Was there something the AESO could have done to make the session more helpful?
Alberta (IPCAA)	As stated in previous BRP stakeholder engagements, IPCAA submits that Cost Management should be a stand-alone priority item. The AESO should be allocating additional resources to managing wires costs in Alberta, including both transmission and distribution costs. This should be a high enough priority to have its own critical business initiative and an AESO VP dedicated to achieving cost reductions.
	The AESO has a full plate of initiatives in listed here, without fully contemplating possible Transmission Regulation changes that could require additional efforts.
	See previous comments on lack of prioritization on Cost Management.
TransAlta Corporation (TransAlta)	The AESO should provide budgeted resourcing and costs associated with each initiative  The session was valuable as it provided clarity about the scope and prioritization of the proposed business initiatives. In the next stage of this work, the AESO should provide more detailed information regarding the interdependencies between initiatives, as well as identification of the multi-year plans, for the initiatives highlighted in the presentation. More specifically, the Market Sustainability and Evolution, Optimizing the Grid, Tariff Modernization, Technology Integration and Grid Resiliency initiatives. The AESO should also provide more information regarding the cost and resourcing for each initiative. Stakeholders require transparent information to understand and assess how the proposed activities will drive the AESO's resource needs and associated costs so that we can meaningfully comment on the prioritization of those activities to maximize efficiency and value.

- The AESO acknowledges and appreciates stakeholders' comments in this section.
- The AESO is committed to managing cost and ensuring our transmission system delivers value to Albertans. Key to this commitment is our strategic focus on optimizing the use of our existing grid while minimizing or deferring the need for new infrastructure where appropriate. The AESO has strived to ensure that our proposed preferred rate design changes have been supported by robust quantitative and/or qualitative rationale. We have shared an incredible amount of detailed analysis and design contemplation as we have gone through this engagement and responded to an extensive amount of stakeholder questions. The AESO filed its Bulk & Regional Rate design application with the AUC on Oct. 15, 2021, including the mitigation proposal and DOS modernization proposal. A number of comments provided here relate to that application and are best addressed through that proceeding. Materials can be found on the Bulk and Regional Tariff Design webpage.
- The AESO provides certain cost information by business initiative in relation to the budgeted consulting, legal and capital costs that are expected to be incurred in relation to each business initiative in 2022. As noted previously, estimating the cost of resources is complex for multiple reasons. First, the AESO assesses its staff requirements holistically. Staff will be required to deliver on both base load work and business initiatives in 2022. Third party consultants and legal services are utilized when the work is deemed to require specialized knowledge or skills and when the work may exceed the capacity of internal resources. Second, staff utilization is always evaluated with a specific focus on creating efficiencies through cross collaboration and understanding interdependencies. In addition, work related to initiatives must be carefully managed and prioritized to remain within budgeted expectations. This critical need to remain agile may result



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in some initiatives advancing faster than others. As a result, staff focus may be shifted between initiatives based on needs and timing. Finally, initiatives identified may not have each stage planned in detail at the time of the BRP process. Similar to the following comment, the AESO does not see value in estimating resource time to be spent on initiatives as it does not impact the initiatives to be undertaken. All initiatives are considered necessary to deliver on our mandate.

- In regard to the prioritization of business initiatives, the AESO undergoes a significant review of its strategy each year, contemplating economic, environmental and political shifts that impact Albertans and the electric industry. Above all, the AESO works to ensure we are continually planning for and delivering on our mandate. The business initiatives identified are those that the AESO feels are necessary to this achieve this end and are therefore all of importance. An exercise to prioritize does not provide value given all the work is considered necessary to deliver on our mandate. Prioritization occurs at the delivery level in that we work diligently to contain costs and allocate limited resources across the initiatives, while being agile to changing conditions. Timing and approach may be modified, but not the initiatives to be undertaken.
- We acknowledge IPSSA's recommendation for "problem statements" to be provided in the future and will take this into consideration for the following year. We also note the comment regarding cost management as a stand-alone initiative. It is clearly a key focus and goal for our entire organization to manage transmission costs, and our grid optimization is directly connected to helping to achieve that goal. All VPs are dedicated to achieving cost reductions within the sphere of influence of their accountabilities and prioritizing our resources towards that goal. As such, we do not see it to be beneficial to have just one VP dedicated to this objective. As it relates to distribution costs, the AESO is focused on ensuring coordinated planning with DFOs and ensuring any transmission needed for DFO requirements is strongly supported. The AESO does not have the mandate to manage DFO distribution costs generally, the DFOs and the AUC have that mandate.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative? (i) General Tariff Application
ADC	The AESO needs to provide a timely 2022 tariff update. Considering that the AltaLink rate relief expires, consumers will be looking at a material increase of over \$200M in 2022 based on the AESO forecast of wires costs.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	N/A
IPCAA	N/A
TransAlta	No additional comments.
AFSO Respons	Q

• Noted. The AESO plans to file the 2022 tariff update by the end of November 2021.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (ii) Market Sustainability and Evolution
ADC	The AESO continues to talk about need for resource adequacy and flexibility, but has not set any priorities to work with flexible load so that they can continue to be a more effective grid resource. The preferred tariff will effectively put these loads at risk and potentially remove 400 MW of flexible load resources from the mix.
AltaLink	No further comments.
CanREA	N/A
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	While we appreciate that the projects contemplated for the markets division are classified as 'narrow in scope', it is not clear that are the initiatives should be pursued given other priorities.  For example, Heartland reiterates that it is unclear why an OR market review is needed at this time. Simply put, what significant issues warrant an investigation and how does the AESO define what it means by making the OR market 'more competitive'?
IPPSA	Of the AESO's 2022 work, we think the AESO's market monitoring studies - with a focus on flexibility and revenue sufficiency - will be of acute interest to industry given the dramatic changes expected in Alberta's dispatchable supply and intermittent supply over the near-term. The nature of Alberta's power supply will be impacted by future carbon prices that are intended to rapidly accelerate decarbonization. Stakeholders will want to be involved in these studies every step of the way given how they may inform the market's future.
	We appreciate Ms. Keating Erickson's comments during the latest BRP webinar that the other items contemplated for the market's area were really 'narrow in scope'. This commitment recognizes industry's need for policy stability and recognizes the need for the AESO to prioritize other matters. (e.g. response to T-reg changes, Grid Optimization). We also appreciate the AESO's commitment that it will not proceed with change without consultation.
	Additionally, we do appreciate Ms. Keating Erickson's comments that the focus on the OR review will be on removing barriers to entry. We look forward to working with the AESO on the scope of that review and to define terms such as 'improving competition.' The OR review should proceed with a clear – and narrow - objective in mind.
	As noted in our response to question 1, above, some of the market initiatives may benefit with a clear problem statement, defining what the initiative is intended to resolve.
IPCAA	The AESO states: "Following updated analysis based on 2021 LTO and scenarios (long-term adequacy, revenue sufficiency, system flexibility assessment, etc.), identify any other required market initiatives to support long-term sustainability and



#### (ii) Market Sustainability and Evolution

competitiveness of the energy-only market, with a long-term view of potential market changes within the existing structure needed to facilitate continued resource adequacy and increased flexibility." Does this include re-examining the price floor in light of the high penetration of renewable projects that is expected?

#### **TransAlta**

#### New technology and future reliability requirements should be the focus of market sustainability and evolution

TransAlta recommends that the AESO focus its efforts on identifying and planning for the reliability needs associated with high renewable penetration that we expect in Alberta. The AESO should approach this issue by identifying the reliability needs and exploring the right market-based approaches to meet those needs. TransAlta supports the initiatives that continue the development of market rules that contemplate new technology and more specifically energy storage.

TransAlta disagrees that the operating reserves initiative, which is currently scoped to pursue changes to enable Distributed Energy Resources (DER) resources participation, should be pursued at all. We raised several significant concerns in our October 30, 2020 and March 17, 2021 submissions made in the consultation on DER Market Participation Options that remain unaddressed (and appear to have been ignored in the prioritization reflected in this BRP), including asymmetrical obligations (must offer) for large and small providers, the lack of any details of practices or system changes that will ensure that small and large provider are directed to provide operating reserves in the same manner and the lack of cost information that demonstrates that individual DER participation is cheaper than an aggregation approach. TransAlta recommends that the focus of any operating reserves initiative be tied back to the planning for future reliability needs. This is the model being used in most markets that are facing similar issues with system inertia that Alberta has experienced recently and we expect it will become a bigger concern as the supply mix rapidly changes.

- The AESO appreciates the feedback received on market evolution and sustainability.
- With respect to the OR market competitiveness enhancements, the AESO plans to hold a stakeholder session in late November where more information will be shared regarding what is in scope, and out of scope for the review. At this session, stakeholders will gain a deeper understanding of the issues and opportunities the AESO has noted in the OR market, and have an opportunity to discuss, gain further clarity and provide feedback on what the AESO should further consider in its review.
- We appreciate the comments from stakeholders around AESO's market monitoring studies and will ensure we engage with stakeholders at key points throughout the process. As to whether the AESO plans to re-examine the price floor at some point in the near future, the AESO monitors the pricing framework periodically, and may again review this framework in the future if warranted.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (iii) Settlement Audit
ADC	No comment
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	N/A
IPCAA	IPCAA continues to support a complete, independent, end-to-end settlement audit and welcomes the AESO's commitment to such an audit. IPCAA is disappointed that prior to undertaking the audit, the AESO did not request stakeholder input on the Terms of Reference. In addition, ISOs in other jurisdictions do not require stakeholders to sign NDAs to see the audit reports. Can the AESO come up with a way of making the report public, while satisfying confidentiality concerns? Perhaps look to other jurisdictions for guidance.
TransAlta	No additional comments.

• The AESO appreciates your thoughts. Confidentiality is considered important as the report speaks to critical systems of the AESO and we are always diligent in our efforts to mitigate against potential cyber-related crime. The AESO will consider the option of redacting information to satisfy confidentiality concerns.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative? (iv) Red Tape Reduction
ADC	The ADC supports continued review of AESO Rules and reliability standards to eliminate any that don't have a direct and material impact to grid operations and reliability.
AltaLink	AltaLink supports this business initiative with the following recommendation to be included within the business plan:  AltaLink commends the AESO on its commitment to review the development and associated compliance monitoring for Alberta Reliability Standards (ARS) requirements. AltaLink believes there are numerous opportunities to reduce the burden on all market participants through a comprehensive review of the standard development process through to the monitoring and audit process that will maintain or improve the safe, reliable, and economic operation of the Alberta Interconnected Electric System. The timing is ideal for this review as the first Critical Infrastructure Protection and Protection and Control (CIP) Standards tri-annual audit cycle has closed. Moving forward where all market participants have a common understanding of requirements and expectations with enough advanced notice to obtain the necessary resources to comply will reduce the regulatory burden. The focus should be on reducing costs and regulatory burden while improving security and reliability.  AltaLink also supports any other comments provided by stakeholders on this initiative that will assist in creating a path forward to address ARS compliance concerns.
Capital Power	In response to stakeholder comments, the AESO noted that it was open to exploring market participant concerns regarding regulatory burden in areas such as ARS compliance monitoring. Capital Power appreciates the AESO's willingness to consider these concerns and reiterates its previous comments seeking the broadened usage of a risk-based approach to the AESO's compliance monitoring & enforcement program. Capital Power also encourages the AESO to host an ARS specific stakeholder engagement in (or around) Q1 2022 where industry and the AESO can collaborate to enhance the existing ARS program including a review of the standards and, the self-certification and audit processes. To these ends, sessions should occur on a regular basis (e.g., biannually) and include the solicitation of stakeholder feedback and reports outlining the results of these discussions.
ENMAX	The AESO stated in Session #1 that they would be willing to share the quantitative methodology used to calculate their red tape reduction work to date. ENMAX would like to see this detail as well as a clear plan on how the AESO is planning to meet the remaining percentage of reductions in order to meet their goal. Is this information will not be shared broadly, please email cmccleave@enmax.com to discuss how we can obtain this information.  In ENMAX's view, an important consideration is how a proposed change directly translates into cost savings not just for industry, but the AESO as well. As such, the cost benefits should be clearly outlined and provided through the Budget Review Process or similar forum.  Currently, it remains unclear how the efficiencies being achieved through the Red Tape Reduction initiative correlate with AESO cost reductions.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative? (iv) Red Tape Reduction
	In addition to the comments above, ENMAX requests the AESO to host a Q1 2022 ARS specific stakeholder consultation session where industry can collaborate with the intent of enhancing the ARS program, including Standards, Self-Certification and Auditing. These sessions should take place twice a year and include a matrix for participants to document their suggestions, findings and feedback. This would help identify which areas could benefit from red tape reduction efforts. ENMAX has several ARS related topics already identified that it is prepared to discuss in more detail.
EPCOR	EDTI views the current ARS programs in Alberta as an important component to maintaining a safe and reliable system and believes there are opportunities to streamline and enhance the current ARS program.
	EDTI believes there is value in bringing together the AESO, MSA and market participants to review Alberta's approach to Alberta Reliability Standard drafting, stakeholder consultation, implementation and compliance, to ensure that there is an appropriate balance of compliance efforts and costs while ensuring the secure and reliable operation of the bulk electric system.
Heartland	Heartland Generation appreciates that Red Tape Reduction is government mandated. However, some of the objectives such as looking at line losses appear to use man-hours that may not be warranted at this time given the AESO's other priorities.
IPPSA	With regard to reliability standards, IPPSA recommends that the AESO adopt a 'risk-based' approach to compliance monitoring and enforcement. This would see the AESO focus its resources in proportion to the standard's impact on system reliability.
IPCAA	While IPCAA would agree that Red Tape Reduction is important, we emphasize that it should not simply be undertaken as a method to reduce transparency.
	Under "How we plan to proceed" the AESO states: "The AESO is open to exploring other areas where market participants have concerns about regulatory burden, such as loss factors and ARS compliance monitoring." With respect, being "open to exploring areas" is not a concrete plan for proceeding. IPCAA members have expressed concerns with regard to ARS compliance monitoring and would appreciate more of a process for addressing these than the AESO being open to a discussion.
TransAlta	Red Tape Reduction should translate into reduced costs and increased efficiency for both the AESO and market participants and the BRP should clearly specify these savings
	TransAlta appreciates the AESO's decision to include a potential review of the loss factors calculation process and the ARS compliance monitoring if the focus is truly on rationalizing the regulatory requirements to reduce the regulatory burden on market participants, rather than just relieve the AESO of regulatory requirements.
	To the extent that the red tape reductions are related to AESO requirements, we would like to be provided with more transparency into how those reduced requirements translate into cost reductions and efficiencies for the AESO. Our expectation is that reductions that are pursued <u>under this initiative will not contribute to more AESO costs, require additional</u>



#### (iv) Red Tape Reduction

<u>AESO resources</u> to realize the red tape reduction initiative or push requirements from the AESO to the market participants (leading to greater burden).

Additionally, TransAlta would like to understand how the ~ \$350,000 in estimated savings mentioned in the AESO presentation (slide 21), as well as other savings in hiring external resources, are reflected in the budget

- As it relates to the ARS program, the AESO has added a business initiative specific to this work in order to make clear the AESO's
  willingness to explore the application of risk-based approaches to the development, monitoring and audit of ARS. The AESO plans to
  engage industry in Q4 2021 in order to invite feedback from stakeholders that will assist the AESO in its determination of the scope and
  prioritization of work to be undertaken in 2022. For additional information, please see the 2022 Business Plan and Budget Proposal
  document, specifically Section 4 for details pertaining to our Business Initiatives, available on the AESO's website.
- In response to the RTR comments, the AESO would note that the Government of Alberta has established guidelines to standardize how the program is being implemented across Alberta. The AESO follows those guidelines when determining the number of regulatory requirements in its current documents and when calculating reductions.
- The AESO generally agrees that the work done pursuant to the Government of Alberta's RTR initiative should result in an overall reduction in costs and/or resources for industry and not simply shift the burden of requirements to other market participants or agencies. However, reviews conducted as part of red tape work may reveal opportunities to align accountabilities more properly across industry. If so, the AESO will include a consideration of those opportunities in addition to its considerations of costs.
- The changes made to date pursuant to the RTR initiative at the AESO are estimated to result in cost savings of \$350,000, the majority of which will relate to avoided external process costs, capital costs and labour costs. Process cost savings include those related to the enablement of electronic funds transfers for settlement and are estimated to be approximately \$45,000. The AESO's estimate of these savings was premised on historical transaction volumes and the per-transaction costs borne by each of the AESO and pool participants. With respect to avoided capital and labour costs, the RTR changes made this year are estimated to result in the following significant savings throughout 2022:
  - (i) \$200,000 in savings realized through approved waivers and variances under ISO rule 304.9, Wind and Solar Aggregated Generating Facility Forecasting, related to requirements and associated costs for meteorological equipment;
  - (ii) \$30,000-40,000 in savings to be realized through changes to ISO rule 502.8, SCADA Technical and Operating Requirements, whereby SCADA connections have been streamlined;



- 2. Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?
  - (iv) Red Tape Reduction
  - (iii) \$45,000-50,000 in savings as a result of changes to the AESO Measurement System Standard which will reduce the number of required site trips; and
  - (iv) \$30,000-40,000 in savings due to the simplification of the refund methodology included in ISO rule 505.2, Performance Criteria for Refund of Generating Unit Owner's Contribution.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (v) Optimizing the Grid
ADC	The ADC supports efforts to optimize the grid, especially with the objective of utilizing existing assets as a priority and minimizing future transmission build.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	Within this Initiative, we recommend that the AESO prioritize non-wires solutions such as the provision of connection maps, probabilistic planning, and dynamic line ratings as it seeks to optimize the grid. These are all very good ideas.
	We reiterate our previous comments that the AESO's solutions to grid optimization need to avoid disrupting the wholesale market. The greatest risk for disruption comes with any decision by the AESO to contract/dispatch a non-wires asset (e.g. supply, demand response, storage). As such, the ideas to optimize the grid noted above should be explored and exhausted first.
IPCAA	IPCAA submits that the AESO should publish a comprehensive and consistently updated map detailing connection options and transmission capacity available. This will enable better, more transparent decision-making, particularly for renewables. Does the AESO's current "Transmission Capability Mapping" satisfy stakeholders, particularly renewable energy developers? This is vital to prioritizing the utilization of the existing transmission system.
TransAlta	Transmission capability mapping, dynamic line ratings and developing a framework for non-wires alternatives should be key priorities
	TransAlta looks forward to the release in Q4 of 2021 of the methodology and approach to transmission capability mapping and welcomes the additional information regarding the scope and timelines.
	TransAlta supports the launch of a cross functional team to develop a business case to assess possible implementation of dynamic line ratings in Alberta.
	TransAlta also supports the AESO's proposed development of an enhanced framework for consideration of non-wires alternatives. However, it will be important for the AESO to share specific details on this initiative and the assessed prioritization to allow market participants the opportunity to provide comments and feedback.



- 2. Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?
  - (v) Optimizing the Grid

• The AESO appreciates the support for the focus areas we are pursuing to optimize the grid. We will engage with stakeholders on all three of these focus areas (transmission capability mapping, dynamic line ratings, non-wires solutions) as we progress them forward. We look forward to stakeholders' insights and feedback on these focus areas through these engagements. The first engagement will be on Transmission Capability Mapping which will be scheduled for Nov. 23, 2021.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (vi) Tariff Modernization
ADC	Transmission costs are the key concern of ADC members. Members sacrifice many hours of production to manage transmission costs by responding to high prices and the CPD. The AESO proposed tariff will force many members off the grid or out of the province. Decisions to halt capital expenditure in Alberta have already been made as result of the unsuccessful tariff mitigation process. Considering the other priorities, the ADC submits there must be a better tariff alternative for the high load factor and flexible loads. It's not too late for the AESO to pause, examine any changes to the transmission regulation and self-supply and export rules, and work with impacted loads to value their flexibility and keep their businesses contributing to the transmission revenue requirement.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	We recommend that the AESO prioritize Demand Opportunity Service modernization as a key step in the removal of barriers to energy storage.
	We also caution that should the forthcoming transmission regulation include significant changes, the AESO may need to reshuffle a number of its 2022 priorities. As the AESO is aware, that regulation contains incredibly complex matters including losses, unconstrained transmission planning, congestion management, GUOC, non-wires alternatives, among others. Changes to any of these matters would require significant and broad consultations with stakeholders.
IPCAA	As stated on many occasions, IPCAA would prefer not to have two major tariff overhauls in short order. We need to provide consumers with clarity and certainty. IPCAA is very concerned that the AESO's plan to "modernize" the tariff prior to possible implementation of T-Reg changes will result in multiple tariff "modernizations".
	With regard to possible government T-Reg changes, the AESO states: "Should Transmission Regulation changes result from the current government engagement, [the AESO will] assess and initiate changes to the ISO tariff required to implement." There is always an option to leave the tariff as is until the results of the DOE consultation are known.
	In addition to possible T-Reg changes, there are other potential changes that will also impact the tariff including: government policy with regard to self-supply and export; and ensuring alignment between transmission-level (ISO Tariff) and distribution rates, which is currently being discussed by the AUC. We will likely never have 100% policy certainty; however, we currently have major issues under discussion. It is prudent to leave the tariff as is until these key items are settled.



#### (vi) Tariff Modernization

#### **TransAlta**

The AESO should address questions and concerns about bulk and regional tariff design in the stakeholder process rather than in the regulatory proceeding to reduce costs

To improve regulatory efficiency and reduce the high costs of contested regulatory proceeding, we recommend that the AESO refocus its efforts on addressing all questions and outstanding issues raised thus far in the stakeholder sessions, including the information requests posted by staff of the Alberta Utilities Commission. TransAlta discourages the AESO from taking the approach of using the regulatory proceeding as the first place that it attempts to respond to these issues because it will result in a prolonged proceeding that ultimately drives AESO and market participant costs higher.

With respect to the proposed bulk and regional tariff, TransAlta also asks the AESO to consider the negative impacts of its preferred rate design on exporters and present mitigation proposals accordingly. TransAlta notes that the AESO only appears to be considering applying rate shock mitigation to demand transmission service customers, which is unfair and unequitable to export customers that will be impacted by rates that will double under the AESO's proposal.

TransAlta also recommends that the AESO review its approach to with respect to DOS and contemplate creating an interruptible rate in order to truly modernize its tariff.

- The AESO appreciates all stakeholder feedback regarding tariff modernization.
- The AESO filed its Bulk & Regional Rate design application with AUC on Oct. 15, 2021, including the mitigation proposal and DOS
  modernization proposal. A number of comments provided here relate to that application and are best addressed through that
  proceeding.
- AESO will monitor any future policy changes closely and address priorities and any design changes as needed. The new modular application approach to the ISO Tariff will enable Tariff modernization activities to progress in a dynamic, adaptive manner.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (vii) Distribution Coordination
ADC	ADC supports this effort
AltaLink	No further comments.
Capital Power	N/A
ENMAX	In addition to the previous comments submitted to the AESO, ENMAX reiterates that while the AESO appears to have numerous processes in which it engages with stakeholders on distribution, it would be extremely helpful if the AESO established a clear and consistent process on who and how they engage with stakeholders on this topic.
EPCOR	N/A
Heartland	N/A
IPPSA	N/A
IPCAA	IPCAA supports efforts will ultimately reduce the overall distribution and transmission costs. IPCAA is concerned that distribution utilities are not incented to participate in these efforts.  IPCAA supports the "focus on probabilistic planning, connection process improvements, and exploring how distributed resources may assist in optimizing the grid."
TransAlta	Ensuring consistency in planning, coordinating information, applying the same standards on distribution connected generation should be key priorities
	TransAlta supports better coordination between DFOs, TFOs and the AESO, particularly the coordination of hosting capacity mapping with the AESO's transmission capability mapping. TransAlta also supports the work the AESO is doing to ensure that distribution connected generators meet the same requirements as transmission connected generators under the generation standards. This is not only needed to ensure reliability but also to maintain a level playing field.

• The AESO appreciates the feedback on this focus area and will work to improve the coordination between DFOs, TFOs and the AESO.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (viii) Technology Integration
ADC	No comment
AltaLink	No further comments.
Capital Power	N/A
ENMAX	In the AESO's response, it indicated that the AESO's first Technology Forward and Technology Summit in Q4 2021 is intended, among other things, to initiate dialogue on evolving technologies including potential implications to the industry and more specially the AESO's mandate.
	We look forward to learning more about the opportunities and challenges that lie ahead as new technologies emerge, however, as noted by ENMAX in its previous comments to the AESO, mandate implications should not be assumed as this topic is within the purview of the Government of Alberta to consult and provide further direction on.
EPCOR	N/A
Heartland	Heartland Generation reiterates our previous comments that the AESO should consider its treatment of any new technology through the lens of FEOC.
IPPSA	Within this Initiative, we recommend that the AESO prioritize DOS methodology as a means to remove a barrier to entry for technologies like storage.
	With regard to integrating any new supply or demand technologies, we reiterate our previous comments that the AESO should focus on removing barriers to entry and should not favour any one technology over another, or one competitor over another. To the point, DER and grid connected generation should compete on a level playing field against each other. Demand response technology and supply technology should also compete on a level playing field against each other.
IPCAA	It would be useful to understand how the AESO is coordinating with other entities in the Alberta innovation eco-system. These entities should be invited to participate in the "Technology Summit" and provide input going forward.
	As stated previously over the past decade, IPCAA supports the AESO and TFOs undertaking Dynamic Line Ratings on the transmission lines connected to wind generation, in order to maximize the transmission lines' capability.
TransAlta	TransAlta looks forward to the Technology Forward Report and the summit the AESO plans to host in Q4 2021. The pace of new technology integration is increasing and the need for this forum has increased. TransAlta recommends that the focus should be on contemplating new technology integration and updating the market rules to provide clarity on how these technologies can participate in the market.



(viii) Technology Integration

#### **AESO Response**

• The AESO appreciates the feedback on this focus area. We look forward to engaging industry on technology impacting the electricity value chain during our Technology Summit on Dec. 1, 2021. As this will be our first Technology Forward and Summit, we look forward to industry feedback on how we can improve this engagement, the content of our Technology Forward, and the priority of technology integration to pursue. The AESO remains technology agnostic and considers FEOC a key principle to guide the effective integration of new technologies.



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative?  (ix) Proposed: Grid Resiliency
ADC	No comment
AltaLink	No further comments.
Capital Power	Capital Power supports this proposed initiative and submits that this should take priority over others such as Technology Integration which has the same "Top Priority" designation. Within the Grid Resiliency business initiative, five items were listed as issues the AESO would pursue as part of its plan to proceed. Unless the Most Severe Single Contingency ("MSSC") is included in the scope of "frequency response capability," Capital Power believes that it should be added as its own item and afforded the same high level of priority.
	The existing MSSC threshold was last broadly discussed in 2015 when the AESO issued an information document for stakeholder consideration. At that time, the AESO had recognized that there was a growing interest in connecting larger generators (some greater in size than the MSSC) but concluded that no changes were necessary. The AESO also noted that it "has not placed any size restrictions on new generator proponents."
	The AESO is now re-engaging stakeholders regarding MSSC with a session scheduled for early November 2021. Capital Power supports the review of MSSC given that the AESO recently decreased the MSSC threshold during islanded conditions in response to system events observed over the past year and to mitigate impacts from similar conditions going forward (ID #2011-001R). Though unclear how long such measures will be in place, Capital Power views that it is critical that it be temporary in nature while the AESO works to increase the system's capabilities to manage under-frequency issues through improved frequency response. Capital Power appreciates the current reliability environment that the AESO faces, but also believes that the AESO must make reasonable efforts to provide system access on a non-discriminatory basis and work to facilitate (not encumber) competition and enhance (not reduce) the potential for efficiency gains. As such, Capital Power believes that the AESO should prioritize this issue due to its impact on reliability, the operations of existing and future supply resources, and the functioning of the wholesale market.
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	We appreciate that the AESO has delineated the priorities it will pursue within this Business Initiative. That adds important clarity for stakeholders.
	We note that this is a 'proposed' initiative. Can the AESO confirm whether its Own Costs budget includes the staff and capital cost investments required to implement this initiative? Or will the AESO's Own Costs be adjusted after its approved?



2.	Do you have any additional comments on the 2021 multi-year business initiatives and the proposed 2022 business initiative? (ix) Proposed: Grid Resiliency
IPCAA	N/A
TransAlta	Planning for future reliability and resiliency needs is a critical, top priority initiative  TransAlta agrees that this is a top priority initiative and supports its prioritization over all other initiatives. This is a new initiative and should be pursued by the AESO with a clear problem statement, scope, deliverables and timing. More specifically, the AESO has listed a large number of different sub-initiatives under this category that it intends to focus on in 2022. The list is quite broad in scope and there is a concern that it can become unwieldy and lead to poor execution unless it is well planned. TransAlta suggests that a roadmap may be appropriate as this appears to be multi-year initiative and a roadmap clearly identify how the sub-initiatives are planned to be staged and progressed in an efficient, coordinated and effective manner.

• The AESO appreciates the feedback on this focus area. Grid Resiliency is part of our core business and the specific initiatives we will pursue to enhance grid resilience will also be part of our core business. Various existing resources will be prioritized through the year to focus on these initiatives as needed based on the topics and progress them forward. The AESO can confirm the Most Severe Single Contingency (MSSC) topic is one of these initiative areas. The AESO will consider developing a plan to assist industry with understanding the work associated with enhancing grid resiliency in Alberta.



3.	Do you have any comments on the 2022 Preliminary Forecasts and Budgets components?  (i) Load Outlook
ADC	The ADC has suggested in the past that affordability of grid power will continue to impact DTS load growth. The current tariff design, while difficult on the industrial processes has at least kept high load factor and price responsive loads connected to the grid. The AESO should endeavor to study the impact on DTS load growth of their proposed tariff. This should include load that leaves the grid to self-supply, leaves the grid for more cost competitive provinces, or doesn't locate in Alberta due to affordability of electricity. The review should also include second order impacts on sectors which rely on energy intensive products such as compressed gasses, or pulping which takes the wood waste from numerous Alberta sawmills.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	N/A
IPCAA	The AESO continues to focus on AIL and points out load growth. IPCAA reminds the AESO that it is the DTS load that pays the vast majority of electricity costs. The forecasted 2022 DTS load has yet to reach 2018 levels. The AESO has indicated that they no longer forecast DTS peak demand, which is confusing because it is an input used to forecast rates. The AESO should focus on DTS (primary) demand, as other jurisdictions do.
TransAlta	No additional comments.

- The AESO has shared the analysis and information it has developed and relied upon to support its Bulk & Regional application throughout the Bulk & Regional stakeholder engagement process.
- The AESO appreciates the feedback on DTS load. As part of the 2022 BRP, the AESO has developed load outlooks for different load measures including AIL, net-to-grid load, system load, and DTS load. The AESO continues to evaluate and update its load forecasting models to include up-to-date information and emerging load drivers. For the 2022 BRP, additional variables are included in the DTS load forecast model to capture the growth in load served by distributed generation, which has an offsetting effect on DTS load. The AESO has also included DTS load forecasts in the 2021 LTO.



3.	Do you have any comments on the 2022 Preliminary Forecasts and Budgets components? (ii) Ancillary Services Costs
ADC	No comment.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	The costs information was useful.
IPPSA	Related to the AESO's OR market review, we'd ask that the AESO define what it means by making the OR market 'more competitive.' We assume the AESO does not have a cost target in mind. Please confirm. (To the point, when reviewing recent history, AS costs appear to reflect a normal range and/or market fundamentals.) As noted before, the OR market initiative may benefit with a clear problem statement.
IPCAA	Recent announcements regarding the retirements of KH1 and SD4 will clearly impact pool price forecasts. Does the AESO feel the impact is sufficient that the pool price forecast should be updated instead of using a forecast published on August 16th?
TransAlta	No additional comments.

- As indicated in responses to feedback in the 2021 BRP process, the Operating Reserve (OR) Market Competitiveness Enhancement
  initiative is focused on reviewing and fostering competitiveness in the operating reserve market to support efficient market outcomes.
  This initiative was added as a result of the conclusions drawn in the Market Power Mitigation Review for the Government of Alberta
  released in 2020. The scope of and decision to proceed on any particular changes will be determined via a stakeholder engagement
  process.
- The AESO does not intend to update its price forecast from the August version. Forward prices have increased recently, driven in part by increased natural gas prices, higher prices in interconnected markets and the announced retirements of KH1 and SD4 thermal units. Prior to TransAlta's announcement for the retirement of KH1 and SD4, both units had been announced to be operating only on natural gas starting January 1, 2022 at respective outputs of 70 and 113 MW. Consequently, the announced retirement referenced in the comment has a lesser impact on the forward curve than the full capacity of the assets as reduced production was already factored in. Forward market prices and forecasts will continue to evolve with market expectations as we get closer to 2022. Regardless of forecast timing, the AESO anticipates some deviation between forecast and actual prices and that existing deferral and settlement processes will capture differences between expected and actual costs.



3.	Do you have any comments on the 2022 Preliminary Forecasts and Budgets components? (iii) Transmission Line Losses Costs	
ADC	The AESO claimed that the HVDC lines would contribute to reduced losses in the province. It would be beneficial for participants to understand the losses costs savings achieved from these assets.	
AltaLink	No further comments.	
Capital Power	N/A	
ENMAX	No further comments at this time.	
EPCOR	N/A	
Heartland	N/A	
IPPSA	N/A	
IPCAA	See comments on pool price above.	
TransAlta	No additional comments.	
AECO Deenene	AECO Beanance	

• The AESO will provide a high-level estimate of the loss cost savings associated with the HVDC (high voltage direct current) lines.



3.	Do you have any comments on the 2022 Preliminary Forecasts and Budgets components? (iv) General and Administrative Budget
ADC	No comment.
AltaLink	No further comments.
Capital Power	As noted above, Capital Power recommends that the AESO provide stakeholders with details related to resources dedicated to each of the nine business initiatives so stakeholders can clearly see the importance and priority associated with them.
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	Generally, the trend of the AESO increasing its own costs is concerning. We believe that the AESO's growth is out of step with other governmental agencies and the economic realities that the Province has faced since COVID-19. We appreciate the thoughtful and forthcoming information provided and appreciate that hiring in some areas of the AESO is required. However, to keep costs in check, less important initiatives should be abandoned to free up additional resources. Stakeholders should be consulted on which initiatives should move forward in a given year.
IPPSA	As mentioned before, we would recommend that the AESO provide a breakdown of its Own Costs per Business Initiative. This would help stakeholders appreciate the AESO's relative ranking of these Initiatives. That ranking would better inform stakeholders' input into the AESO's BRP and help stakeholders align their own resources to engage with the AESO in pursuing common goals in the year ahead.
IPCAA	As we will present to the AESO Board again this year, the Alberta ISO continues to be one of the most expensive ISOs in North America.
TransAlta	More detail is needed about the proposed increase in G&A costs  TransAlta would like to better understand the reasons behind the proposed increase of General and Administrative (G&A) costs.  • The AESO stated that this is due to increases in facility operating costs and insurance costs, and staff resources required to advance strategic initiatives. The AESO should specify the drivers of these costs and explain whether these costs
	<ul> <li>increases are forming an increasing cost trend.</li> <li>The AESO also stated that forecasted G&amp;A costs for 2021 are higher than budgeted expectations due to lower vacancy rates than historical as well as the impacts of COVID- 19 on the timing and completion of work and administrative costs given a remote work environment. The AESO should provide the head count increase that occurred associated with this higher-than-budget expectation.</li> </ul>



#### 3. Do you have any comments on the 2022 Preliminary Forecasts and Budgets components?

#### (iv) **General and Administrative Budget**

TransAlta would like to better understand these trends because our expectation is that factors that may have driven costs higher in 2021 should not prevail in 2022. TransAlta expected to see a decrease in G&A costs relative to 2021 costs rather than the increase that has been proposed by the AESO.

Additionally, TransAlta does not see the need for more staff to advance the AESO's proposed initiatives. TransAlta asks the AESO for more transparency and details about the staff assigned so that stakeholders can better understand how each initiative drives resource needs. Identifying interdependencies between business initiatives could create efficiencies such as using the same staff and resources for similar or related activities. It also assists in identifying opportunities to adjust priorities and staging work to eliminate the need for more staff.

- Please refer to responses under item 1 about providing resources, costs and prioritization for initiatives. It is also important to note that AESO employees are not retained strictly for initiatives and perform integral functions across the organization. The decision to advance certain initiatives is based on the need to deliver on our mandate and not optional in the view of the AESO.
- In response to the reason for specific costs:
  - o Insurance premiums increased primarily due to the market for General and Professional Liability, which has seen significant impacts due to a claim made by another Canadian independent system operator as well as due to the recent, multiple claims being laid against the Electric Reliability Council of Texas ("ERCOT"). The AESO's historical provider of General and Professional Liability insurance was no longer willing to provide coverage and the AESO struggled to obtain coverage at high cost. The AESO experienced increases of 37% in premiums and our broker expects continued pressure in the upcoming renewal year.
  - Facility costs are due to resumed janitorial and facility costs that were reduce during COVID, increased sanitation costs, as well as the impact of property taxes and operating cost increases that are passed through on office space leases, which are not controllable costs of the AESO.
  - The increase in staff costs, as noted, is to support grid optimization around congestion analysis where the long-term cost benefit to Albertans of pushing out transmission costs could generate significant cost savings. Additional pressure was created through sustained and growing connection volumes. There is also the impact of turnover, wherein replacement positions are at a higher market cost given the duration of the current salary freeze. The vacancy rate assumption that was budgeted for 2020 is a \$3 million dollar reduction in staff costs. If the vacancy rate is not achieved, this becomes a significant variance. The cuts taken at the end of 2019 continue to be challenging in some areas of the organization and therefore the AESO has had less flexibility in taking time to fill vacant positions. It is guite possible that vacancy has also been impacted by COVID and general economic uncertainty. Finally, on occasion contracted positions are converted to employees. Consulting costs budgeted for 2022 are less than those budgeted in 2021.



3.	Do you have any comments on the 2022 Preliminary Forecasts and Budgets components? (v) Capital Budget
ADC	No comment.
AltaLink	No further comments.
Capital Power	N/A
ENMAX	No further comments at this time.
EPCOR	N/A
Heartland	N/A
IPPSA	N/A
IPCAA	N/A
TransAlta	No additional comments.
AESO Response  • N/A	



4.	Additional comments
ADC	Transmission costs are a key concern of ADC members. The AESO should be working with TFO's to reduce the existing revenue requirement. The AESO should provide transparency with respect to the utilization of transmission assets, in particular the CTI projects.
	The ADC appreciates the opportunity to comment and looks forward to meeting with the AESO Board.
AltaLink	No further comments.
Capital Power	Capital Power has no further comments at time.
ENMAX	None.
EPCOR	N/A
Heartland	Heartland Generation appreciates the AESO's efforts to restore its trading charge to historic levels. However, given that the decrease is in part from over-collection, Heartland Generation is concerned that this level of trading charge will not be maintained in the future. Every effort should be made to ensure that the trading charge does not increase.
IPPSA	We appreciate that the trading charge has shrunk to more normal levels and we reiterate our request that the AESO keep its costs down and its priorities tightly focused.
	Thank you for the opportunity to participate in this process.
IPCAA	Transmission Wires Costs are not included in this list, unlike previous years. IPCAA members are very concerned with the current level of wires costs in Alberta – see comments above regarding Cost Management as a priority item. The AESO should work with the TFOs to make every effort to reduce the existing revenue requirement. In addition, the AESO should publish the utilization of transmission lines, and the CTI projects in particular. These should be compared with what was expected when then projects were proposed. Key differences should be explained to consumers.
	Thank you for the opportunity to provide input into this process.
TransAlta	The timing and priority of initiatives should be coordinated with the timing of potential changes in legislation and/or regulation
	As the AESO is aware, the Government may be proposing legislative and regulatory changes that could impact several of these initiatives. For example, the Government may propose changes to the prescribed line loss methodology in the <i>Transmission Regulation</i> and that could impact the current approach to calculating line losses. These considerations should be taken into account in the timing and prioritization of the AESO's work.



#### 4. Additional comments

- With respect to the trading charge, the AESO recovers its operating and capital costs through four separate revenue sources. Each is
  designed to recover the costs directly related to a specific service as well as a portion of the shared corporate services costs. The
  AESO's operations integrate the functions of transmission, energy market, renewables and load settlement to maximize benefits under
  the Electric Utilities Act (EUA). The AESO recovers the costs of operating the real-time energy market through an energy market trading
  charge on all megawatt hours traded. The AESO trading charge will vary depending on the initiatives being progressed and the actual
  cost allocation of the specific services. It will also vary with forecasted load. The AESO diligently works to manage costs in all service
  areas while still delivering on its mandate.
- The AESO will engage industry in the discussion on transmission utilization during the Transmission Capability Mapping session. Aligning on appropriate transmission utilization metrics and what those metrics actually mean from a power system utilization perspective is an important first step as these metrics can then be calculated and provided to industry through a repeatable process in 2022. The AESO will await the Government's legislative changes, if any, for line loss methodology, prior to engaging resources in implementation of any such policy changes. The AESO continues to focus on cost management through our Grid Optimization initiative and will continue to coordinate with TFOs where opportunistic to do so for new infrastructure, respecting the accountability and obligations of the TFOs.



## **Overview of business initiatives**

2021 2022 2023 2024

**General Tariff Application** 

Market Sustainability and Evolution\*

**Settlement Audit** 

**Red Tape Reduction** 

**Optimizing the Grid** 

Tariff Modernization

**Distribution Coordination** 

**Technology Integration** 

**NEW: Grid Resiliency** 

**NEW: ARS Development & Monitoring** 

Legend: Complete Existing Multi-Year Initiative NEW Initiative

\*Merged Market Sustainability and Evolution I & II and Operating Reserve (OR) Market Competitiveness Enhancement Initiatives from 2021 BRP