

Tariff Design Advisory Group November 15, 2019



Transition

- Transmission planning
- Coal phase-out
- Tariffs & cost allocation

Transformation

- How electricity is produced, consumed and exchanged
- Consumer expectations
- Industry disruptors & beyond

Technology advancement

2023



AESO Stakeholder Engagement Framework

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OUR APPROACH TO STAKEHOLDER ENGAGEMENT: Stakeholder engagement is conducted strategically and in a coordinated manner such that the organization is compliant

with its legislative and regulatory obligations, and stakeholders are provided with a consistent and meaningful experience.

PRINCIPLE ONE: INCLUSIVE AND ACCESSIBLE

PRINCIPLE TWO: STRATEGIC AND COORDINATED

PRINCIPLE THREE: TRANSPARENT AND TIMELY

PRINCIPLE FOUR: CUSTOMIZED AND MEANINGFUL

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Discussion:

- What's working with Tariff and TDAG engagement?
- What could be improved?

Identified items:

- Reconsider TDAG membership with removal of capacity cost allocation scope
- Meeting frequency and length to efficiently align with key information sharing and decision points
- Continued development and sharing of tools to evaluate options



Tariff Redesign Objectives

Where are we?

And how did we end up here?

- Transmission costs are sunk and costs are high
 - Little efficiency to be valued in reducing incremental build
- Regulatory construct: postage stamp and load only tariff
 - Look for new ways to achieve efficiency within existing regulation and legislation
 - New technologies (i.e. energy storage) are stretching the fit within regulatory construct
 - Commission suggests that the AESO has more legislative discretion than currently using
- Future build is primarily driven by factors other than load
 - Very limited efficiency can be incorporated given our rigid regulatory construct
- Customers have made investments (sunk costs)
 - Fairness is critical and also may be efficient
- Current pricing signals do not align with planning signals
 - Commission directed AESO to review bulk and regional tariff design
 - Customers are responding to the price signal but hasn't materially impacted the build

7

Tariff Redesign Guiding Objectives

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Effective Long Term Price Signals 1.

- Efficient use of the transmission system by aligning price signals and planning signals
 - Optimization of existing system •
 - Optimize future build (cost/benefit) •

Regulatory

harm price-

signals

- Flow through of transmission cost signals to end-use customers _
 - Where possible and applicable •
 - Align transmission signals and communicate "information" to • simplicity in DFO rate design design to not

Facilitate Innovation and Flexibility 2.

- Adaptive and agile
- ISO tariff not a barrier to innovation
- Provide optionality
- Reduce "command & control" and allow customer innovation
- Use pilot or phased in approaches

Tariff Redesign Guiding Objectives (cont'd)

3. <u>Reflect accurate costs and value of grid connection</u> and services

- Value the "products" of the AIES (reliability, access to markets, voltage, frequency, . . .)
- Fairness for all customers and technologies connecting to the grid
- Minimize or eliminate cross-subsidies

4. Explore options within legislation and regulation

- Postage stamp (including rates and rate classes)
- Interruptible rate locational option like an "anti DOS"
- Provide a range of alternatives within existing legislation and regulation

5. <u>Path to change that is effective and minimally</u> <u>disruptive</u>

- Transmission rates will enable, or be an asset to, the AB economy
- Use pilots or phased in approaches

Problem Statement for Bulk and Regional Tariff Redesign

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Develop a 2020 tariff application that results in transmission tariff pricing signals that:

- result in efficient long-term price signals to optimize current and future incremental transmission costs
- allow market participants to innovate and provide economic value to all of Alberta
- effectively reflect both the cost of transmission and the value created by having a connection to the AIES across transmission and distribution systems

Comments?

- What is the impact of inefficient price signals on costs and reliability of the grid?
- Do different customer types (industrial, industrial with co-generation, distribution facility owner customers . . .) view transmission price signals differently?
- What opportunities do you see for the ISO tariff to be more adaptive, agile, flexible, allow innovation?

Next Steps Objectives \rightarrow Concepts \rightarrow Tariff Mechanisms



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Schedule



Schedule

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	2019				2020													
Transmission Tariff Redesign 2020		Q٥		Q4		Q1			Q2		Q٥		Q4					
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TX Rate Design Objectives / Concepts / Mechanism																		
Rate principles: review of other industries																		
Rate principles: jurisdictional review																		
Develop Alberta rate options																		
Evaluate Alberta rate options against Rate Design Objectives																		
Propose rate design including rate classes and rate design]							
Develop bill estimates & propose mitigation (if required)																		
Prepare filing													Т	arrif A	pplic	ation f	iled	

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Study	Description	Stage / Next steps		
P1 – System Planning	 Overview of costs, drivers and transmission planning in Alberta Includes past and future system project costs 	TTWG Feedback		
F1 – Tariff Design Overview	 Historical ISO tariff design overview Other industry pricing and tariffs review Jurisdictional review including functionalization, classification, allocation and opportunity services review. 	In progress		
F2 – Line Correlation Analsyis	 Correlation analysis of line power flow versus system load and regional load First Stage: 240kV or greater lines or line segments 	Data presented to TTWG lead		

TTWG Studies (cont'd)

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Study	Description	Stage / next steps
A1 – Historical and Forecast Load, Historical Generation	 Hourly historical and forecast load, historical generation by market participant category, type and region 	Data posted on AESO website on September 11th
C1 – Classification – Average & Excess	 Cost classification can be achieved through analyzing line loading and determining average and excess line loading to create fixed, volumetric and variable classifications 	On hold
C2 – Classification – Minimum System	 Cost classification can be achieved through analyzing minimum system and optimum system to create fixed, volumetric and variable classifications 	On hold
C3 – Classification – Fixed and Variable	 Cost classification can be achieved through analyzing fixed and variable costs to create fixed, volumetric and variable classifications 	To be discussed at the next TTWG

TTWG Studies (cont'd)

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Study	Description	Stage / next steps
R1 – Value of Service	 Review the value of electricity service to customers and their potential responses 	On hold
A2 – Rate Classes	 Alberta legislative and regulatory review of barriers and hurdles for new rates or rate classes 	To be discussed at next TTWG
R3 – Bonbright Review and Report	 Bonbright's criteria of rate design and applicability to the transmission tariff 	Complete
R4 – Historical Coincident Peak Response	 Review past market participant response to monthly coincident peak pricing signal – monthly MWs and monthly dollars. 	In progress



Thank you