Stakeholder Comment Matrix – May 28, 2020

Participant-Related Costs for DFOs (Substation Fraction) and DFO Cost Flow-Through Technical Session (2B)

Period of Comment:	May 28, 2020	through	June 11, 2020	**Contact:**	Larry Shaben, Dan Thackeray
Comments From:	ATCO Electric Ltd.			**Phone:**	[redacted]
Date:	2020-06-11				[redacted]
				Email:	[redacted]
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Instructions:

1. Please fill out the section above as indicated.
2. Please respond to the questions below and provide your specific comments.
3. **Please submit one completed evaluation per organization.**
4. Email your completed comment matrix to tariffdesign@aeso.ca by **June 11, 2020**.

The AESO is seeking comments from Stakeholders with regard to the following matters:

	Questions	Stakeholder Comments
1.	Please comment on the Techncial Session 2B facilitated by the AESO on May 28, 2020. Was the session valuable? Was there something we could have done to make the session more helpful? Please advise and be as specific as possible.	Generally, ATCO feels that the session was conducted in an efficient manner that allowed the AESO to present its position effectively, drawing on the comments received from various parties, and clearly demonstrating a desired path to resolution. Parties were generally granted equal time to respond or comment – with both supporters and detractors engaged effectively to ensure that an unbiased and multi-faceted position was accessible to all attendees. Despite the entrenched positions of many parties, the format did provide an arena for meaningful discussion, in spite of the limitations inherent to web conferencing formats.
2.	The following five questions are seeking comments on the Technical Session 2B discussion regarding the outstanding design details identified on Slide 27. Please comment if (1) your organization does have or does not have agreement in principle and (2) any additional clarity or consideration to provide on the **following outstanding design details:** • Substation fraction = 1 for DFOs	(1) ATCO agrees in principle with the Substation Fraction = 1 for DFO facilities. (2) ATCO's understanding of this principle or application is that the calculation of a fraction for the STS/DTS at a DFO connected substation would no longer be completed. The AESO would simply assign the DFO substation an equivalent fraction of "1" regardless of any STS contract in place at the POD. This would assign future upgrade costs associated with the substation to the DFO, which would subsequently be passed on to load customers via the DFO tariff. DCGs would be responsible only for incremental costs associated with their interconnection and would only be accountable for future transmission upgrade costs if these transmission upgrades are the result of upgrading or increasing the capacity of the DCG facility.

3.	Please comment if (1) your organization does have or does not have agreement in principle and (2) any additional clarity or consideration to provide on the **following outstanding design details:** • Determing a $/MW charge for DCG	(1) ATCO generally agrees with the principle of developing a $/MW charge based on the size of the DCG in order to establish a contribution associated with transmission access for the DCG facility. (2) ATCO views that development of an appropriate DCG charge will require considerable effort if it is based on an analysis (and potential lengthy debate) of actual costs incurred by DFOs and TFO at each substation and a determination of the costs that can be directly attributed to the benefits received by the DCG in having access to the transmission system. Developing a charge on this basis in a fair and transparent manner at a level of detail that enables all parties to clearly understand the basis for the charge at each POD may impede achieving all the principles established for this consultation. ATCO's primary concerns for this charge would be to seek a solution that meets or balances the following: a) Postage stamp application – In order to ensure efficiency and simplicity and avoid "POD-shopping" by DCG applicants, a province-wide application of a DCG charge/contribution should be implemented, regardless of TFO or DFO service area. This would enable equal access for all DCG, and a transparent charge regardless of location. b) Sizing Signal – The charge needs to be sufficient to provide a price signal relative to the avoided cost of a transmission connection to assist in appropriate sizing of DCG facilities. This would ensure that large facilities that are more appropriately sized to interconnect directly with the transmission network seek transmission connection rather than connection to the distribution network. The available capacity on the distribution system would more appropriately be available to smaller DCG facilities that do not have a transmission connection option. c) Charge Certainty – The definition or basis of the charge should be set in a manner that provides a level of cost certainty to generators, wires and substation facility owners – with some degree of continuity that is tied to multiple years. The desired cost-certainty benefit for DCGs would be undermined if the basis for this charge (or the cost components underpinning it) is re-evaluated on an annual basis.

4.	Please comment if (1) your organization does have or does not have agreement in principle and (2) any additional clarity or consideration to provide on the **following outstanding design details:** • Determining the applicability of the DCG charge	(1) ATCO agrees in principle with the applicability concept presented by the AESO. (2) ATCO views that the applicability criteria are imperative to ensuring that appropriate sizing signals are provided to DCGs so that they are located effectively relative to load. This concept helps to avoid the building of transmission-sized generation on the distribution network as a way to avoid transmission connection timelines and capital costs where such large generation facilities would better serve the AIES by being directly connected to the integrated transmission network. ATCO's understanding of the AESO proposal is that feeder level metering data would be analyzed by the DFO to determine the expected reverse flow in MW that would be charged the DCG per MW rate. A consistent approach or defined methodology amongst DFOs for determining minimum feeder loading levels and the resulting expected reverse flow caused by the DCG may be helpful to DCG proponents. This would also support ATCO's position that 8760 feeder load data currently requested by many DCG proponents in multiple iterations of the same application is unnecessary, excessively burdensome for the DFO and can compromise load customer confidentiality in many instances. The AESO mentions the possibility of a sizing limitation on DCGs – ATCO's view is that this should not be necessary if the appropriate criteria and price signals are in place to incent DCGs to adequately size based on load. Substation sizing alone provides different access capabilities that are available at different substations – so a blanket approach to limiting DCG facilities may not be warranted. If there is load of an appropriate size available to utilize the generation capacity of the DCG, along with adequate hosting capacity on that feeder, the sizing of the DCG is less of a concern to the DFO.

5.	Please comment if (1) your organization does have or does not have agreement in principle and (2) any additional clarity or consideration to provide on the **following outstanding design details:** • Determining the administration of the DCG charge	(1) ATCO agrees in principle with the administration concepts presented by the AESO. (2) ATCO submits that the collection of the DCG charge should be done uniformly across all DFOs and PODs to promote efficiency and appropriate pricing signals. The DFO should continue to receive the DCG charge to offset their accumulated aggregate D to T contributions. Further, this offset to decrease the D-T contribution will ultimately decrease D-T capital in Dx rate base, which will appropriately pass this benefit on to load customers. This avoids the need for a DFO or a POD specific DCG charge. Future upgrades at a POD would be paid for by contributions by the DFO – and ultimately paid for by load customers – therefore this approach would allow for recovery of a share of these DFO contributions from new DCG that may connect to the upgraded POD in the future. This approach to administration would also facilitate a future environment where DFOs may be able to invest in DCG interconnection costs and recovery ~~of~~ these costs over time via an AUC approved distribution tariff for DCGs. This concept is a subject of discussion in the current AUC Distribution Inquiry.

6.	Please comment if (1) your organization does have or does not have agreement in principle and (2) any additional clarity or consideration to provide on the **following outstanding design details:** • Looking towards implementation	(1) ATCO agrees in principle with the AESO's identified implementation plans and next steps. (2) ATCO notes that the following concepts are critical to the implementation of changes to the substation fraction methodology: - Regulatory Efficiency – To provide market stability and investment opportunities for wires facilities and generators, the speed in which the proposal can be fully developed, and approval can be obtained is paramount. - Past CCDs Applicability – Regardless of direction, the proposal needs to provide clarity with respect to treatment of past CCDs in order to provide cost certainty to both DFOs and to DCGs to enable these facilities to proceed or continue to operate without unknown financial risks. - Communication Requirements – Communication needs to be clear and directive. It would be helpful to include within this communication some specific examples of the implementation and administration for varied sizes of DCG to facilitate common understanding of the application of the AESO's agreed principles and related details that are ultimately approved. Further ATCO submits that the following outstanding issues will need to be determined in short order: a) The development of the $/MW charge for transmission access including the calculation to determine applicability needs to be developed. As described above for simplicity, ATCO submits that this should be a province-wide postage stamp rate based on historical costs b) The determination of incremental and shared costs associated with various components of each facility to the extent this is required to determine historical costs. As pointed out by multiple parties, there are both joint and individual components within a substation that would need to be assigned to the correct proponent (DFO / TFO / DCG). c) A descriptive procedure that clearly identifies the financial flow of the $/MW charge and how it would be administered needs to be developed and mapped to ensure the correct party receives the benefit.

	Additional comments	ATCO submits the following comments to underscore positional statements made above and within workshop sessions. - Distribution connected generation and transmission connected generation are important components to the interconnected electrical system. It is important that facilities are sized appropriately to optimize generation connections for the greater electrical system. - To highlight the volume of large DCG applications, since 2016 (not quite 5 years yet), ATCO has been approached with more than 100 DCG applications. Of these applications, approximately 25% are larger than 15MW. - Finally, ATCO submits that a risk arising from large DCG connections is the potential impact of these facilities on the TFO-owned substation transformer, which have the potential to experience reverse power flow as high as their full rating on transformers that were designed for one-way flow. This risk is still being assessed by the industry and it is not yet clear what the impact of this would be to asset lifecycle of this equipment in the near to mid-term. Since the number and size of smaller DCG is largely limited by the hosting capacity of the distribution system, the potential for high levels of reverse flow arises primarily from large DCG utilizing one or more dedicated "express" distribution feeders. Costs associated with these potential challenges on the transmission system further support implementation of appropriate price signals via a DCG charge.

Thank you for your input. Please email your comments to: tariffdesign@aeso.ca.