

## Feedback – AESO CP Bulk charge

This paper by Depal Consulting Limited (Depal) provides feedback and recommendations on the Bulk Charge coincident peak issues discussed with the AESO and Stakeholders at the AESO consultation session held on March 12, 2018. It primarily provides feedback regarding the issues raised by Altalink through its consultant, E3.

It is the view of Depal that modifying the Bulk charge on this early analysis is in appropriate. The AESO should hold a separate module to discuss this significant issue since the analysis required to change over 50% of the AESO tariff costs should be much more rigorous, inclusive and complete.

In its presentation, Altalink, the CCA and the UCA presented the following Argument and solutions:

- Customers have a strong signal to generate to eliminate the Bulk Charge. Generation costs are \$10K MW/month, while the AESO Bulk tariff costs are \$9K MW/month.
- Altalink estimates that the correct marginal cost of new bulk transmission is \$3.4K MW/month.
  - Cost shift from Cogen and price responsive loads to other customers is \$191 Million/year
  - New Customers of 1815 MW over the next 5 years will cause a cost shift of \$313 Million/year.
- Altalink proposes to fix this issue by:
  - Creating a new bulk charge for incremental bulk costs (1/3 of bulk costs)
  - Collect the remaining 2/3 on billing capacity (including contract level)
  - Do a cost of service study. Altalink is proposing to move 240 kV lines to regional costs, keep only 500 kV in bulk
- CCA proposes to collect bulk costs on an NCP basis.
- UCA advocates for shift from bulk to regional and using CP for bulk, but top 12-hours/ month (instead of only one hour).

Depal provides the following feedback on the Altalink argument and alternate proposals.

## Review and Feedback

It is appropriate to review the Bulk capacity charge allocation method. However, the proposals from Altalink, the UCA and CCA are being provided very late in the 2018 tariff process. There is inadequate time within this process to conduct a new cost of service study or to closely examine the price signal provided by the CP method. Therefore, Depal advocates that the AESO should again propose to hold a separate stakeholder discussion and module on this issue, distinct from the 2018 tariff process. It is better to be thoughtful than to rush this important issue.

Altalink is proposing to use billing demand, which includes contract capacity, to allocate Bulk costs. Additionally Altalink and the UCA are advocating for transferring 240 kV lines from Bulk to Regional.

Depal disagrees that DTS contract levels should be used as a billing factor for Bulk charges. The AESO does not use DTS contract levels in its demand forecast.<sup>1</sup> The AESO 2017 LTO does not explicitly use DTS contract levels in its bottom up Point of Delivery load forecast but rather uses “historical load values”.<sup>2</sup> Finally, if DTS contract levels were used for Bulk charges it would certainly lead many customers to renegotiate DTS contracts, reducing the aggregate level of DTS in Alberta and creating less of an overall reduction in bulk charges than some parties expect. Therefore moving from CP to the use of contract capacity is inappropriate.

This stakeholder consultation process encourages a discussion on the cost allocation methodology for “the CP method and, if necessary, the DFO customer contribution”<sup>3</sup>. The Allocation of Bulk and Regional charges is clearly not in-scope. The AESO has confirmed, for over a year, its methodology in this regard and therefore modifying the split between Bulk and Regional should be discussed at a later date, in conjunction with a new cost of service study.

---

<sup>1</sup> AESO rebuttal evidence, Proceeding 22244, page 2-3

<sup>2</sup> AESO 2017 Long term - Outlook.pdf – page 13

<sup>3</sup> Exhibit 22942-X0112, paragraph 19

<sup>2</sup> AESO 2017 Long term - Outlook.pdf – page 13

<sup>4</sup> AESO System Reliability and Energy Revenue Modeling, Jan 26, 2018 – Capacity

<sup>3</sup> Exhibit 22942-X0112, paragraph 19

While the argument of Altalink is well presented, the assumptions leading to Altalink's conclusions are incomplete. For example:

- Altalink has proposed that the levelized cost of a simple cycle generation unit is \$10K/MW- month. However the AESO in its capacity work has forecasted this cost at 12.3 K/MW – month.<sup>4</sup> The difference is likely due to Altalink's use of the low end of the range of capital costs while the AESO used the mid-range. If the high end of capital costs is utilized, the cost could increase to 14.6 K/MW- month.
- This cost forecast is for one unit. Given forced and planned maintenance of the generator, it is likely that a by-pass customer would still be subject to Bulk charges in 1 or 2 months per year. This could increase the overall cost for the simple cycle alternative by about \$1 K/MW- month.
- Given this analysis, the high-end cost of a simple cycle unit could be over \$15 K/MW – month. While benefits of installing this capacity are significant with the Bulk charge of \$9K/MW- month, it is by no means a risk free to recoup a BTF investment. Customers that choose to install a generator to eliminate the bulk charge still face significant risks including: Construction costs, regulatory change, capacity and energy market revenues, operating costs and risks, maintenance risks, etc.
- Altalink has estimated the incremental cost of Bulk transmission is \$3.4K/MW- month. However, this assumes that only \$500 Million is added to Bulk costs. The AESO recently put out a rate impact sheet showing over \$6 Billion in total system cost additions in the next 10 years<sup>5</sup>. If only \$1.3 Billion is added to Bulk, using Altalink's methodology, the incremental Bulk charge is equal to the existing level of bulk charges. The level of Bulk additions is uncertain since it is highly dependent on Government policy and generator additions; therefore, the appropriate level of incremental bulk tariff costs is variable. At this time, there is inadequate proof that the incremental Bulk charge identified by Altalink is correct.
- The other issue with the cost shift is the assumed level of Behind the Fence (BTF) Generation and price responsive load receiving benefit.

---

<sup>4</sup> AESO Summary of Integrated Capacity and Energy Revenue Modeling, Jan 26, 2018 – Capacity market CMD 1.

<sup>5</sup> [https://www.aeso.ca/assets/Uploads/TRP-Factsheet-2018.pdf?utm\\_source=Stakeholder+Newsletter&utm\\_campaign=5d4d9513c5-EMAIL\\_CAMPAIGN\\_2018\\_03\\_13&utm\\_medium=email&utm\\_term=0\\_4de5e0990d-5d4d9513c5-237959201](https://www.aeso.ca/assets/Uploads/TRP-Factsheet-2018.pdf?utm_source=Stakeholder+Newsletter&utm_campaign=5d4d9513c5-EMAIL_CAMPAIGN_2018_03_13&utm_medium=email&utm_term=0_4de5e0990d-5d4d9513c5-237959201)

Using the total MW of consumption for BTF units is inappropriate since required grid back up is likely less than total load. Also, the cost shift will only occur if the load still exists. If the Bulk charge proposed by Altalink occurred it is likely that some price responsive load may leave the Province. It is similarly likely that some Cogen may reduce its level of grid back up or choose to Island. A lower level of MW for this load reduces the level of cost shift that is either present or that will occur.

While the structure of the Altalink argument has appeal, the analysis and assumptions do not clearly support the conclusions. Restructuring the allocation of 51.4% of the AESO tariff based upon this analysis is inappropriate and premature.

Altalink has outlined a concern that higher bulk charge may create an incentive for more customers leaving the grid. This is a serious concern that requires monitoring. Depal has discussed the issue with the AESO's capacity market team and the AESO will be monitoring the types of projects that receive capacity payments. If BTF generators become the common technology type that wins new capacity contracts, the AESO will consider using this technology to calculate Gross and Net Cost of New Entry (CONE). This change in reference technology would then reduce capacity costs and align the capacity market with the Bulk Tariff charges. Using the capacity market as the tool to monitor and address this concern reduces the likelihood of fewer customers paying system Bulk charges.

## Conclusions

The appropriate cost allocation methodology for bulk system costs is important and an analysis on this issue should not be rushed. The work completed to date is insufficient and inconclusive. Depal recommends deferring this topic to a separate module to allow adequate time for the analysis and to enable the 2018 AESO tariff process to proceed.

In any event, Depal advocates that it is inappropriate to use the DTS contract level to allocate bulk system costs. Bulk system planning is not based upon the level of executed DTS contracts.