

Stakeholder Comment Matrix & Proposal Evaluation – Nov. 5, 2020

Bulk and Regional Tariff Design Stakeholder Engagement Session 3



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| Period of Comment: Nov. 5, 2020 through Nov. 20, 2020 | Contact: Darren Hoeving |
| Comments From: FortisAlberta | Phone: 403-988-4336 |
| Date: [2020/11/20] | Email: darren.hoeving@fortisalberta.com |

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 evaluation to tariffdesign@aeso.ca by **Nov. 20, 2020**.

The AESO is seeking comments from Stakeholders on Session 3 and the preferred rate design option proposals. Please be as specific as possible with your responses.

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| 1. Please comment on Session 3 hosted on Nov. 5, 2020. Was the session valuable? Was there something the AESO could have done to make the session more helpful? | <p>FortisAlberta found the session helpful in that it provided an opportunity to hear the issues and concerns from the perspectives of end-use Customer groups.</p> <p>From FortisAlberta’s perspective, the AESO may want to separate the Energy Storage stakeholder issues/concerns to contain the scope of this ISO tariff design initiative. The Energy Storage proponents appear to be proposing that the ISO tariff be applied differently (or not at all) to Energy Storage proponents, as compared to other system users. Such proposals are more related to establishment of a non-wires alternative framework in Alberta (which currently does not exist) than the issue of bulk and regional tariff design. As such, FortisAlberta has limited its comments to proposals that propose a bulk and regional tariff design which can be applied equitably to all market participants.</p> |
| 2. Please complete Table 1: How Did Each Proposal Achieve the Rate Design Objectives for each of the proposals presented at Session 3. | FortisAlberta considers that the objective of this stakeholder engagement is focused on assisting the AESO in determining a future bulk and regional tariff |

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design that achieves a reasonable balance or “sweet spot” between the AESO bookends and in meeting the rate design objectives as presented by the AESO.

With respect to the objective of **Reflecting Cost Responsibility** (or Cost Causation), FortisAlberta finds that recovery of wires costs based on some form of a monthly NCP billing determinant is more reflective of cost causation than any 12 CP rate design can convey. This assertion is grounded in the physical reality that any wires element (whether it be at transmission or distribution voltage, or whether it is a power line / cable, switch, bus or transformer) must, at minimum, be planned and built to accommodate the maximum NCP flowing through the wires element, irrespective of the time that that maximum flow occurs. As such, this objective of reflecting cost causation is better met by Proposal 3 (UCA/AML/CWSAA/Conoco) and Proposal 4 (CCA).

With respect to the objective of providing **Efficient Price Signals** (i.e. sending price signal to alter behavior to avoid future transmission build), FortisAlberta considers that the use of 12 CP, while it provides a signal that larger sophisticated Customers can respond to, is not necessarily an economically-efficient price signal for purposes of altering Customer consumption behavior for purposes of avoiding future transmission build. Further, while FortisAlberta understands that part of providing efficient price signals is providing a signal that Customers can meaningfully respond to, the form of the price signal or billing determinant(s) should not allow Customers to avoid costs for which they should be responsible for, which is possible under the 12 CP structure.

Conversely, Proposals 3 and 4 which recover bulk and regional costs using a non-ratcheted NCP billing determinant would amount to a large and fixed price signal for which demand responsive Customers cannot effectively respond. FortisAlberta considers that such a bookend, if used exclusively for recovery of bulk and regional costs could potentially have the impact of driving large demand responsive Customers off the system and ultimately causing DTS billing determinant and revenue erosion. Such an outcome would not be economically efficient or in the best interests of the system or Customers, generally (i.e. the “utility rate death spiral”).

With respect to the objective of ensuring **Minimal Disruption** (i.e., Customers that have responded to the 12-CP price signal and invested to reduce transmission costs are minimally disrupted), FortisAlberta concurs with Proposal 1 proponents

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(ADC/DUC/IPCAA) in that CP-responsive loads, who have been responding to the currently approved 12 CP rate structure for over 15 years, should not be severely impacted by any abrupt change to the tariff structure. As such, while FortisAlberta submits that the 12 CP price signal is neither appropriate nor sustainable for wires cost recovery in the long term, the AESO should determine what its ideal (target) rate structure should be in the future and then establish the timeline and roadmap to transition from cost recovery using full 12 CP to a new bulk and regional tariff structure (once established). The timeline and pace at which the ISO tariff transitions to the new structure should be gradual and should fully consider the economic downturn that Alberta Customers are currently experiencing. Allowing a gradual transition to a rate structure that reflects cost responsibility and provides economically efficient outcomes for the development of the transmission system would promote rate stability and allow such Customers to plan their operations to gradually adjust to responding to the new target rate structure / price signals over a reasonable time period.

With respect to the objective of **Simplicity** (i.e. simple/clear price signals while achieving design objectives), the status quo (12 CP) Proposals 1 and 7 and the (non-ratcheted NCP) Proposals 3 and 4 could both be considered simple and clear price signals. However, 12 CP is not necessarily simple in that the CP price signal requires time-stamp information in the metering/billing systems and requires the Customer to forecast when the CP will occur in order to respond effectively. In addition, to provide rate mitigation to CP responsive Customers, Proposals 3 and 4 recommend some form of rate mitigation / transition, which FortisAlberta agrees will be required to ensure minimal disruption to this Customer group. However, Proposals 3 and 4 suggest that the way to affect such mitigation is by using grandparenting for only certain Customers or providing some sort of transitional credit mechanism to offset the rate/bill increases caused by the new target structure. From FortisAlberta's experience, such ratemaking / mitigation proposals are not simple as they will place the AESO and AUC in the position of always having to arbitrate and enforce the boundary between being eligible for such mitigation or not. This may ultimately lead to discriminatory treatment or intergenerational equity issues and a bifurcation of the ISO DTS tariff which, in FortisAlberta's view, will prove to be complex and unworkable.

Proposal 7 (Suncor) proposes a region-specific rate structure for recovery of regional costs, which, in FortisAlberta's view introduces unnecessary complexity in the tariff design. In the interests of maintaining simplicity, FortisAlberta

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| | <p>recommends that the AESO should consider bulk and regional cost recovery together (share the same rate structure) as both subfunctions are similar in that they provide shared use among all Customers in Alberta. Such an approach is simple and accords with the non-locational or “postage stamp” basis required for the ISO tariff in legislation.</p> <p>With respect to the objective of Innovation and Flexibility (ISO tariff provides optionality for transmission Customers to innovate while not pushing costs to other Customers), FortisAlberta considers that most proposals (with some modification) can be refined by the AESO over time to provide a level of innovation and flexibility for Customers. This could include further expansion of opportunity (i.e. such as DOS), interruptible and load attraction rates to maximize and/or optimize use of the existing system. Such optional rates beyond the base DTS rate would allow for improved efficiency or Customer use of the system while recovering additional contributions towards revenue (which would be to the benefit of all ratepayers).</p> <p>Please see Table 1 for FortisAlberta’s assessment of how each proposal achieves the rate design objectives for each of the proposals presented at Session 3 (excluding the energy storage proposals).</p> <p>FortisAlberta has also repurposed the “Example” column to do a similar assessment on its suggested Sweet Spot (Hybrid) alternative, as discussed further below.</p> |
| <p>3. Which rate design option proposal, including the AESO’s bookends A and B presented at Session 2, did you prefer? Why?</p> | <p>In reviewing the proposals provided by the stakeholders, FortisAlberta observes that the proposals are generally aligned with the AESO’s bookends in that they either advocate for the continuation of the status quo: 12 CP “Few Hours” or movement towards a monthly NCP “Fixed Charge”. Further, none of the proposals brought forward recommend recovery of any significant portion of bulk or regional transmission costs based on “All / Many Hours / Energy” - usage basis, even though the transmission system is planned, built, available and used to accommodate the transmission of energy to consumers 8760 hours per year. As such, FortisAlberta considers that none of the proposals in and of themselves (or without modification) are a preferable path forward.</p> <p>As such, FortisAlberta suggests that there is merit in the AESO considering a rate structure that has been successfully used in the past (circa. 1980s & 90s) to</p> |

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encourage Customers, particularly large demand responsive Customers, to improve their load factor generally.

Load factor is generally defined as the ratio of average to peak load and is really an indicator of how efficiently Customers are using the system, generally. The good news is that Alberta has had the luxury of having one of, if not, the highest load factors in any North American jurisdiction. In FortisAlberta's view, this is largely attributable to two factors: (1) Alberta has a higher weighting of large industrial loads which tend to operate at higher load factors than small Customers / groups, and (2) These large higher load factor load Customers have been exposed and have responded to the price signals conveyed by rate structures to flatten their load (whether that be, for example, responding to NCP/ load factor structures in TransAlta's Large General Service Rate 790 prior to 2001 or the ISO tariff's CP price signal in the last 15 years).

In AUC Proceeding 24116 (the "Distribution System Inquiry" or "DSI"), FortisAlberta re-introduced the concept of **Load Factor** rates by stating that rate structures that are largely capacity-based and send price signals that broadly encourage Customers to improve their load factor (flatten their load consumption profile) generally incent Customers to make the most efficient use of the existing distribution (or transmission) elements and capacities that serve them. That is, to the extent that Customers can flatten their load consumption through the distribution (or transmission) system elements that serve them, this has the general effect of potentially freeing up capacity for use by future Customers thus alleviating or deferring the need to build additional distribution and transmission capacity, generally.

As such, rate structures that generally incent Customers to improve their load factor and optimize the use of the existing system, such as load factor or on-peak period rates, align with the principle of economic efficiency and should, therefore, be considered in the future development of transmission and distribution (wires) rates in Alberta.

Based on the foregoing, FortisAlberta suggests that there is merit in the AESO pursuing the "Sweet Spot" by considering a two-part tariff design (the hybrid load factor rate structure) which is a hybrid of:

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| | <p>(1) a monthly non-ratcheted NCP component as advocated for in Proposals 3 and 4 (potentially modified for NCP demands registered in the broad on-peak hour periods / windows only), and</p> <p>(2) a load factor (energy) component which charges each market participant for energy up to a minimum load factor percentage / hours usage.</p> <p>This load factor rate structure, or sometimes known in industry as the “Wright” rate, is structured to apply an energy charge (\$/MWh) for all energy delivered up to a minimum load factor (or hours usage), and zero \$/MWh for all remaining energy (MWh) consumed above that minimum load factor.</p> <p>For example, this structure could be expressed as:</p> <p>For the first XX MWh / month / MW of Billing Capacity: a charge of XX \$/MWh</p> <p>For all additional MWh: a charge of \$0/MWh</p> <p>This load factor component rate structure (with a low minimum floor load factor for the 1st energy block, and zero price for any energy in the remaining block) could be used for recovery of a portion of total Bulk and Regional costs, along with the remaining portion (component) being collected via a monthly on-peak NCP demand charge.</p> |
| <p>4. Does your preferred proposal meet all the rate design objectives?</p> <p>If not, what trade-offs does your preferred proposal create between the rate design objectives?</p> <p>Why are those trade-offs appropriate?</p> | <p>Yes, as shown in Table 1, FortisAlberta considers that the suggested Sweet Spot (hybrid load factor) rate design meets the ISO tariff objectives better than the bookend proposals brought forward to date.</p> |
| <p>5. Which stakeholders are best served (or least impacted) by your preferred proposal? Why?</p> | <p>FortisAlberta’s preference is that whatever target rate design the AESO proposes and implements that all Customers should be treated in a transparent and consistent manner. That is, FortisAlberta’s preferred option of gradually transitioning to a hybrid load factor rate structure does not favor any specific Customer groups and is aimed to encourage Customers to avoid over contracting demands and maximizing or optimizing their hourly use of their contract capacity</p> |

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| | <p>(i.e., improving load factor), so the grid can be utilized more effectively and developed in an orderly, economic and efficient manner.</p> |
| <p>6. a) Which stakeholders are most impacted by your preferred proposal? Why?</p> <p>b) What mitigations, if any do you recommend for those who would be impacted by your preferred proposal?</p> | <p>(a) Customers who could effectively utilize their contracted loads and improve their load factors may benefit from the proposal while Customers who currently do not have that flexibility may be impacted. However, the level of the impact will be dependent on the weight of the components in tariff design and how effectively different groups of Customers will react to the price signals.</p> <p>(b) Through careful analysis and mitigation, the tariff could be developed to evolve gradually in a manner that allows Customers to improve their load factors while not experiencing significant billing impacts. This could be done through a phased in approach of slowly moving away from 12 CP to the hybrid load factor rate thereby allowing stakeholders to adjust operations accordingly. FortisAlberta expects that if the AESO also saw merit in pursuing the hybrid load factor structure, that they could analyze the bill impacts from moving from CP to NCP/load factor for each and every POD, and adjust both the weighting of cost recovery between NCP component and the load factor component, or adjusting the minimum load factor (fixed amount energy charge) to minimize the resultant bill impacts.</p> <p>Failing that (i.e., if further mitigation is still required), FortisAlberta recommends that, rather than shielding a specific subset of Customers through rate mitigation approaches such as the provision of transitional credits or establishment of separate rate classes (as contained in Proposals 3 and 4), a better approach would be for the AESO to continue with recovering a portion of bulk and regional through a third component - the existing 12 CP charge (which could be gradually phased out over time, in favor of the two part rate above - preferably after the pandemic / economic recovery). This would mitigate impacts to those currently 12 CP responsive loads. In any event, the takeaway for FortisAlberta is that the large Customers, who have the ability to alter their operations to respond to whatever price signals are being conveyed by the tariff, are a valuable resource for the system as a whole, and therefore any movement away from the 12 CP should be introduced gradually so as to not create abrupt financial impacts to these</p> |

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| | <p>Customers who have, in good faith, previously responding to price signals conveyed by the tariff.</p> |
| <p>7. a) How would energy storage resources be treated in your preferred proposal?</p> <p>b) Does your preferred proposal include specific elements in relation to tariff treatment for energy storage? Why or why not?</p> | <p>(a) & (b)</p> <p>Please also see our response to Question 1.</p> <p>The Energy Storage proponents appear to be proposing that the ISO tariff be applied differently to Energy Storage proponents, as compared to other market participants, which has more to do with establishment of a non-wires alternative framework than the bulk and regional tariff design. As such, FortisAlberta has limited its comments to proposals that provide a bulk and regional tariff design which is applied to all market participants and therefore has refrained from providing comments with respect to the proposals made by Energy Storage stakeholders.</p> <p>From transmission system cost causation and operational perspective, Energy Storage is no different than other load or generator Customers that use and are served by the grid and therefore should be subject to the same tariffs. The value of the services provided by Energy Storage or any other non-wire alternatives (NWA) would have to be addressed through establishment of a NWA framework in Alberta and within the context of AESO transmission planning.</p> |
| <p>8. What are the challenges or unresolved questions with your preferred proposal?</p> | <p>Although FortisAlberta did not present a proposal, FortisAlberta's recommendations in the DSI, also as restated in this comment matrix in response to Question 4 are subject to Customer acceptance and Customers' reaction to the price signals, level of billing impacts and an evolving economic and regulatory environment.</p> |
| <p>9. Additional comments</p> | <p>Please refer to the <i>P1 – System Planning Report (Sept. 10, 2019)</i> filed in the "Material" section of Session 1 (March 13, 2020) of this proceeding. This is a helpful in-depth report prepared by the AESO for the Transmission Tariff Work Group which discusses: the Transmission Planning process used in Alberta, drivers, and costs for recent transmission projects (2013 – 2019), and forecasted system projects drivers and costs. This report gives a clear understanding on the role of area, regional, and system coincident peaks in transmission planning, which drives system costs.</p> |

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| | <p>This report can be found at:</p> <p>https://www.aeso.ca/assets/Uploads/TTWG-P1-System-Planning-Report.pdf</p> |

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

Table 1: How Did Each Proposal Achieve the Rate Design Objectives

| Objective | Description | Sweet Spot (Load Factor Hybrid) | Proposal 1 ADC, DUC and IPCAA | Proposal 2 Energy Storage Canada | Proposal 3 CWSAA, UCA, AML, and Conoco | Proposal 4 CCA | Proposal 5 CanREA | Proposal 6 RMP Energy Storage | Proposal 7 Suncor Energy Inc. |
|------------------------------------|---|------------------------------------|----------------------------------|-------------------------------------|---|-------------------|----------------------|----------------------------------|----------------------------------|
| Reflect Cost Responsibility | Cost recovery is based on the benefit and value transmission Customers receive from the existing grid | | | No Comment | | | No Comment | No Comment | |
| Efficient Price Signals | Price signal to alter behavior to avoid future transmission build | | | No Comment | | | No Comment | No Comment | |
| Minimal Disruption | Customers that have responded to the 12-CP price signal and invested to reduce transmission costs are minimally disrupted | | | No Comment | | | No Comment | No Comment | |
| Simplicity | Simplicity and clear price signals while achieving design objectives | | | No Comment | | | No Comment | No Comment | |
| Innovation and Flexibility | ISO tariff provides optionality for transmission Customers to innovate while not pushing costs to other Customers | | | No Comment | | | No Comment | No Comment | |

*** Proposed rate design must fit within current legislation ***

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| Legend | Achieves objective | Potentially achieves objective with modification | Partially achieves objective | Potentially partially achieves objective with modification | Does not achieve objective |
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