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April 25, 2025

Alberta Utilities Commission
Eau Claire Tower
1400, 600 Third Avenue SW
Calgary, Alberta T2P 0G5

Attention: Nicole Morter, Director Electric and Gas Transmission Rates

Dear Ms. Morter:

**Re: FortisAlberta Inc. (FortisAlberta or the Company) Comments on Alberta Utilities Commission (AUC or Commission) Draft Report: Time Varying Rates, Assessment of Costs and Benefits, March 24, 2025**

FortisAlberta has received the Commission's draft report on the adoption of time varying rates (TVR) in Alberta (TVR Report or Report) and provides the following comments. The Company appreciates the opportunity to provide this feedback and looks forward to the ongoing engagement regarding the design and implementation of time variable rates in Alberta.

In this feedback, FortisAlberta notes that the TVR Report acknowledges that time of use (TOU) rates are a subset of TVR but the two terms are, at times, used interchangeably. TOU rates are widely understood, but there is less clarity regarding what constitutes TVR. The Company submits that parties would benefit from clarity of terminology in future engagements.

FortisAlberta also submits that the implementation of TVR broadly, or TOU rates specifically, should be completed in conjunction with the work being done by the Independent System Operator (ISO) with respect to the restructured energy market (REM), ISO tariff redesign, and the Commission's work on the development of distribution system plans. In particular, the Company understands that shorter settlement intervals may provide benefits beyond those contemplated for purposes of the REM. For example, shorter interval settlement with customers in the application of regulated ISO and distribution tariff price signals may assist customers in becoming price-responsive, which could assist in grid optimization and the orderly, economic and efficient development of the transmission and distribution system(s).

In the TVR Report, the Commission has relied on high-level benefit analysis conducted by London Economics International LLC (LEI) and the analysis conducted by Guidehouse Inc. (Guidehouse) as part of the AUC's net-zero study[1], as well as on a cost analysis performed by Pricewaterhouse Coopers International Ltd. (PwC) on hourly meter reading using the current decentralized load settlement framework as compared to a centralized load settlement framework. Recognizing that the Commission plans to engage in a further consultation process, FortisAlberta highlights a few key areas for further consideration, below.

[1] Net-Zero Analysis of Alberta's Electricity Distribution System, January 22, 2024.

## 1. Cost-Benefit Considerations

The Company notes that PwC conducted its analysis without the benefit of input from relevant stakeholders and review by such stakeholders would enable validation of the input data. FortisAlberta suggests that distribution facility owners (DFOs) should be provided with an opportunity to review the PwC report in order to increase utility confidence in the inputs and to validate the reported results. For example, it would be helpful to understand the assumptions supporting the increase in ongoing operating expenditures from $2 million to $4 million for all DFOs.

While the Company understands that the TVR Report has concluded that the benefits of TVR outweigh the costs, the cost analysis has excluded multiple material inputs. These include, but are not limited to, the implementation of TOU rate capability for advanced metering infrastructure (AMI) meters, retailer and DFO billing system upgrades or changes needed to facilitate TVR, customer education programs, and costs associated with increased data management due to shorter settlement intervals by DFOs. For example, though installed metering infrastructure may have the capability of introducing TOU rates, the physical and information technology infrastructure may require upgrading to implement TOU rates in practice. Required infrastructure investments should be analyzed thoroughly and all related costs incorporated in the cost-benefit analysis to provide an accurate assessment of the net impact of TVR.

Although there is potential that TVR, in the form of TOU rates or other initiatives, may reduce capacity requirements and avoid system costs, analysis supporting this conclusion must also account for the inevitability of new customer connections and incremental capacity requirements driven by microgeneration and distributed generation. The distribution system must be designed to accommodate the capacity needs of all customers, including generators that are exporting onto the system. FortisAlberta submits that further study is required to validate any avoided costs conclusions with consideration to all sources of capacity upgrades

Even with these upfront costs that need further accounting in the ultimate analysis, FortisAlberta is of the view that there continues to be potential benefits that outweigh these costs, if due consideration is given to coordinated implementation.

## 2. Centralized Meter Data management

The centralized meter data management model included in the TVR Report appears to largely maintain the status quo, with the key distinction being that the DFO-validated meter data is routed through a centralized database prior to retrieval by the retailers. FortisAlberta is not clear how the centralized model would operate in Alberta given the details currently available in the TVR Report. In particular, the Company recommends that the AUC provide additional details or consideration regarding:

1. The role that DFOs would play in a centralized model; and
2. How the centralized model would or could overlay on the current financial commitments held by retailers vis a vis DFOs and DFOs vis a vis the ISO.

## 3. Technical Considerations

The cost-benefit analysis presented in the TVR Report largely focuses on the implementation of TOU rates for EV loads. As the Commission is aware, FortisAlberta received approval to conduct a managed EV

charging pilot (the Managed EV Charging Pilot) in its 2023 cost-of-service decision.[2] During the Managed EV Charging Pilot, the Company found that the incentive to shift demand away from the higher priced peak-demand period to the ostensibly lower demand period could have the unintended outcome of creating a "shadow demand peak."[3] FortisAlberta submits that the Commission and DFOs could benefit from additional information or research on shifting peak demand (i.e., other jurisdictional experiences) and recommends that the cost-benefit of associated mitigation options should be carefully considered when evaluating TOU rate implementation.

As noted by the Commission in the Report, the benefits derived by TVR are highly sensitive to the assumptions regarding the rate of EV adoption. While LEI assumed that 100% of EV charging would be exposed to TOU rates, the assumption that demand during peak hours would be reduced by 25% may be over-optimistic. As a point of reference, FortisAlberta found it challenging to achieve a 10% participation in its Managed EV Charging Pilot, which is similar to other jurisdictions with managed EV charging. The reasons for limited participation varied; for instance, some customers preferred to align their EV charging with their residential solar production.

## 4. Scope Considerations

FortisAlberta agrees with the Commission that different forms of TVR should be explored in detail to determine the specific rate designs most suitable for Alberta, with customers and their potential responses to time varying prices at the forefront.

The Company submits that the benefits of TOU rates beyond demand from residential, small commercial, and farm customers should be considered, including benefits that may be derived from large commercial and industrial customers response to TOU rates. FortisAlberta submits that other demand side management programs, including, but not limited to, demand response, can contribute to the objective of grid optimization and would be supportive of further exploration of such initiatives. The Company also encourages expanding the assessment scope to consider the upstream benefits to the transmission system and potential cost reduction/avoidance, rather than limiting the scope to the distribution system.

The TVR Report suggests that distribution wire costs could be subject to TVR; however, in practice, this would offer limited benefit to customers, as a significant portion of wire-related costs are recovered through fixed charges. The Company recommends assessing whether limiting TVR application to energy charges alone is the most cost-effective application, particularly in consideration of variability in customer TVR adoption assumptions.

The Company submits that there are also opportunities over and above TVR initiatives associated with the implementation of shorter settlement intervals that should be explored in conjunction with distribution system roadmap plans.

[2] In compliance with Commission direction in Decision 26615-D01-2022, the Company will file a report on the Managed EV Charging Pilot results in support of further requests for EV program funding in future rates applications, as relevant.

[3] See results described in the working paper: Electric Vehicles and the Energy Transition: Unintended Consequences of a Common Retail Rate Design.

## 5. Ratemaking Considerations

FortisAlberta submits that TVR should be viewed as a long-term initiative aimed at future cost avoidance, which is an outcome that has not been clearly substantiated in the TVR Report. Further analysis must be conducted prior to TVR implementation to understand the future implications of TVR on performance based regulation (PBR) rate structures and DFO cost recovery mechanisms and to ensure that the revenue mechanisms under the current price cap PBR ratemaking framework will continue to be appropriate. Implementation Considerations

The Company submits that the implementation of TVR in Alberta should proceed with consideration for the REM and other DFO initiatives that may provide insight into optimal TVR design. It will be critical to involve the ISO, DFOs, competitive retailers, regulated retailers, as well as the Commission, in the design and implementation of TVR going forward. Coordination and alignment are critical, as developing TVR for distribution wires costs in isolation may result in unintended conflicts, such as contradictory price signals, with energy-based retailer TVR or AESO rates (i.e., local distribution peak demands do not necessarily align with the highest energy pool prices or transmission system peak demands). Further support and input should be collected from other stakeholder groups, such as the Utilities Consumer Advocate, Energy Futures Lab, and Alberta Energy Efficiency Alliance.

FortisAlberta also recommends that the Commission establish clearly defined objectives and key performance indicators (KPIs) as a part of the TVR initiative. In order to establish a baseline for measurement, the Company submits that AMI and shorter settlement interval periods should be operational for a predetermined period of time. It will be important to accurately measure and track the value of TVR and/or TOU rates to understand the costs and benefits conferred to customers. Furthermore, these KPIs should, ultimately, contemplate the entire value chain, from generation to retail.

In summary, FortisAlberta looks forward to working with all relevant stakeholders to define an economically sustainable path forward for TVR; ultimately one that is designed to provide net benefits to Alberta utility customers. This will likely include further study, quantification of costs and benefits, as well as learning from pre- and post- implementation comparative analysis conducted by jurisdictions that have recently gone through the same transition.

Please contact me at (403) 514-4969 or Regulatory Affairs via regdept@fortisalberta.com if you have any questions with respect to this submission.

Sincerely,

/Amy Johnson/
Amy Johnson
Director, Regulatory Affairs