

A More Equitable Model of Electrical Distribution Pricing for Alberta

Issue

The cost of transmission and distribution of electricity to customers has created disparity in pricing across Alberta. Extremely high power bills in some parts of the province are mainly driven by higher distribution charges. Distribution costs are higher in rural and northern service areas, with consumers in these areas paying up to 400% more for distribution services compared to consumers in urban service areas. Moreover, with customers in Saskatchewan and British Columbia paying significantly lower electricity rates than customers in most of Alberta, Alberta's overall competitiveness and ability to attract business is further impacted.

Background

Electricity industry structure in Alberta

In Alberta, electrical generation and retailing make up the de-regulated sectors of the market while transmission and distribution are government regulated sectors. Because electricity delivery is a fully regulated service, the Alberta Utilities Commission (AUC) reviews and approves the rates to ensure they are fair and reasonable for Alberta customers.¹ According to its mandate, the AUC considers and protects the social, economic and environmental interests of Alberta where competitive forces do not.²

However, depending on where you live or operate a business in Alberta, there is disparity in these charges: residential, farm and commercial customers in rural and northern areas pay significantly higher electricity costs than those in more urban areas. Charges for distribution are higher in rural and northern areas because of the low population density and longer distances between consumer sites. A distribution system that serves rural areas costs more than those serving urban areas because there are longer distances between customers; the utility must build, operate and maintain more poles, wires and facilities to serve each customer; and there are fewer customers on systems in rural areas sharing the costs.³

As shown in figures A and B, distribution and transmission charges are highest in ATCO's service area, followed by FortisAlberta's service area. ATCO primarily serves Northern Alberta and parts of Eastern Alberta. FortisAlberta serves the south and western more rural areas of Alberta.

Breaking down the charges: Transmission and Distribution

Energy delivery charges in Alberta include two components: transmission and distribution (in addition to rate riders). *Transmission* charges cover the cost of moving electric energy from generating facilities through high-voltage transmission lines to the distribution system. Charges are based on the electricity used by the consumer, and make up between 14% to 20% of a customer's total bill. In 2018, monthly transmission charges paid by the average residential

¹ Alberta Utilities Commission <http://www.auc.ab.ca/pages/distribution-rates.aspx>

² Alberta Utilities Commission <http://www.auc.ab.ca/Pages/review-process-steps.aspx>

³ Alberta Utilities Commission <http://www.auc.ab.ca/pages/distribution-rates.aspx>

customer with 600kWh of consumption ranged from \$19.75 (EPCOR's service area) to \$24.82 (ATCO's service area).⁴

Distribution charges cover the cost of moving electric energy from substation transformers through local, lower-voltage lines that carry electricity to a customer's meter. These charges make up between 22% and 47% of a customer's total bill. In 2018, monthly distribution charges paid by the average residential consumer with 600kWh consumption ranged from \$21.58 (ENMAX's service area) to \$81.24 (ATCO's service area).⁵ Consumers in the ATCO zone can pay twice as much for distribution compared to rural consumers in the ForisAlberta zone, and nearly 400% more than residential consumers in Calgary.

Figure A

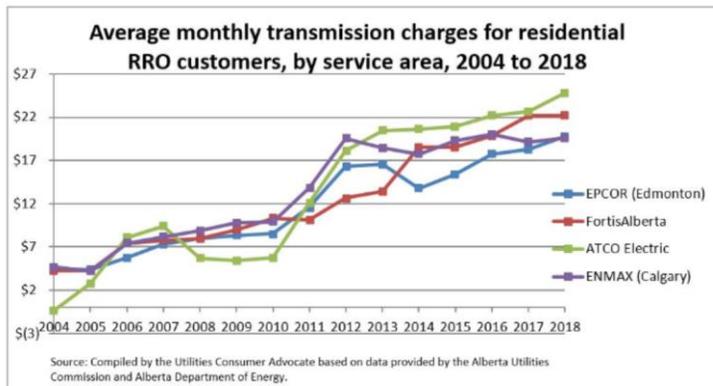
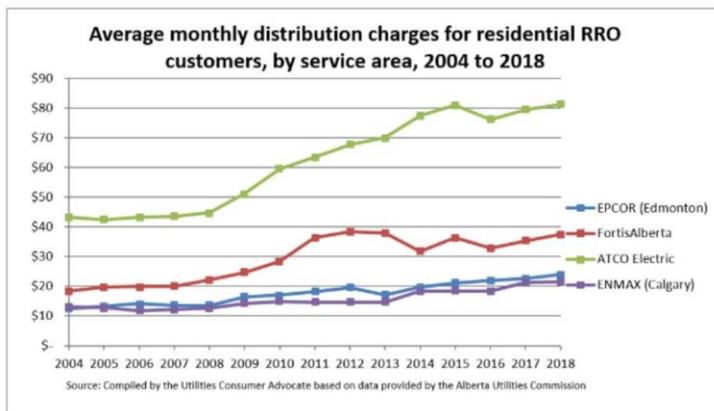


Figure B



⁴ Alberta Consumer's Advocate
[https://ucahelps.alberta.ca/documents/Alberta%27s%20Energy%20Utility%20Regulatory%20System%20-%20Oct%202022%202019.pdf#Alberta's Energy Regulatory System](https://ucahelps.alberta.ca/documents/Alberta%27s%20Energy%20Utility%20Regulatory%20System%20-%20Oct%202022%202019.pdf#Alberta's%20Energy%20Regulatory%20System)

⁵ Alberta Consumer's Advocate
[https://ucahelps.alberta.ca/documents/Alberta%27s%20Energy%20Utility%20Regulatory%20System%20-%20Oct%202022%202019.pdf#Alberta's Energy Regulatory System](https://ucahelps.alberta.ca/documents/Alberta%27s%20Energy%20Utility%20Regulatory%20System%20-%20Oct%202022%202019.pdf#Alberta's%20Energy%20Regulatory%20System)

Alberta's current electrical system creates further economic penalties for Alberta ratepayers
While disparities in electricity rates exist within Alberta, much lower electrical transmission and distribution rates in both Saskatchewan and British Columbia are also impacting Alberta's ability to attract and retain business. Alberta business owners with property in the two neighbouring provinces report paying much lower rates in Saskatchewan and BC.⁶ While this has negative implications for Alberta's ability to compete in the global market, it particularly impedes economic growth and development in rural communities along provincial borders.

In addition, as electricity costs increase, consumers are exploring other alternatives, with some installing their own generation. According to a recent AUC study, an increasing number of industrial facilities have been installing their own generation sources and individual Albertans and small businesses are doing the same.⁷ With fewer customers to share costs of the electrical system, remaining electricity customers, particularly those in areas of low customer density, may be further penalized by the higher rates.

Conclusion

A reliable, efficient *and fair* electrical system that can deliver affordable electricity to Alberta homes, farms, businesses and industry is critical not only for all Albertans' well-being, but for the strength and well-being of Alberta's economy and overall competitiveness. Further consideration must be taken to developing an electrical system that does not penalize communities and business owners based on their geographic location – one that protects the social, economic and environmental interests of all Albertans.

Recommendation:

1. Make improvements to Alberta's electrical system, creating a more fair and equitable model of electrical distribution pricing and conditions for customers across Alberta, to support the well-being and growth of all Alberta communities and economic development throughout the province.

⁶ AUMA <https://auma.ca/advocacy-services/resolutions/resolutions-index/disparity-transmission-and-distribution-charges-across-alberta>

⁷ AUC http://www.auc.ab.ca/regulatory_documents/Consultations/DistributionGenerationReport.pdf p. 8, 39.