Electric Distribution System Inquiry

The Alberta Utilities Commission is opening an inquiry into Alberta’s changing electric distribution system. The purpose of the inquiry is to map out the key issues related to the future of the electric distribution grid, to aid in developing the necessary regulatory framework to accommodate the evolution of the electric system.

As is the case for other electric networks around the world, Alberta’s electric distribution grid has begun a fundamental long-term transformation. Our electric network is growing in complexity as consumers increasingly both consume energy from the grid and produce energy to be put onto the grid, becoming what is known as “prosumers.” In addition, the growing popularity of distributed generation and community generation are necessitating changes to the network. On the system side, utilities and the communities they serve are increasingly embracing energy efficiency, demand response, renewable energy, and energy storage, among other emerging trends.

These emerging trends include the rapid growth in popularity of electric vehicles - marked in part by more manufacturers moving away from internal combustion engines – and the design and construction of new homes that are often highly energy efficient, some to the point they use zero net energy. Some electricity consumers, large and small, and aided by technological improvements, are considering battery storage. This brings the prospect of independence from the distribution grid closer to reality.

These resources and technologies are becoming more affordable and more widely available with many benefiting from the Alberta government’s support, public policies and goals for cleaner energy use and greenhouse gas reductions through its Climate Leadership Plan and affiliated programs.

The evolving nature of electric generation, consumption, storage and the system has significant implications for the grid, incumbent utilities, consumers, grid managers and the regulatory framework. These are among the central matters the AUC will examine in its distribution inquiry.

As the Alberta electric system evolves, we face new challenges and opportunities. Utilities will need to manage distributed energy resources in a system originally designed for centralized generation and one-way power flow. These emerging requirements at the distribution level will involve new types of investments and operating expertise to allow management of distributed resources in a manner that enables more efficient and economical solutions for consumers.
At the same time, some forms of distributed energy resources offer the promise of creative new ways to manage energy demand. Utilities can reduce, defer or avoid traditional investments to meet growing demand by adopting energy efficiency initiatives, renewable energy, demand response or other non-wires alternatives. For the Commission, the changing energy system raises fundamental questions about traditional planning approaches, rate structures, cost-recovery mechanisms, incentives and the evaluation of prudent utility costs.

The Commission expects that advancements in distributed energy resources and smart technologies will require a proactive approach to regulation. Understanding the convergence of information and operational technology in the distribution grid is fundamental in determining what types of investments will facilitate the alignment of distributed resources and changing consumption patterns to ensure the continued provision of reliable service at reasonable rates.

The Commission also recognizes that the prospect of technology adoption raises questions about the current distribution system business model, and whether alternative models will be required to enable incumbent utilities to absorb the potential risk of significant distributed energy resource deployments.

Finally, a key issue for the Commission, given its mandate, is whether the current approach to rates and rate design needs to be re-evaluated in light of new technology advances and market entry of new and non-traditional participants providing alternative technology.

Given these demands, the results of this inquiry will assist the Commission in charting the regulatory agenda in the foreseeable future to effectively and efficiently achieve its mandate. In general, the inquiry is intended to help answer three fundamental questions:

- How will technology affect the grid and incumbent electric distribution utilities; and how quickly?
- Where alternative approaches to providing electrical service develop, how will the incumbent electric distribution utilities be expected to respond and what services should be subject to regulation?
- How should the rate structures of the distribution utilities be modified to ensure that price signals encourage electric distribution utilities, consumers, producers, prosumers and alternative technology providers to use the grid and related resources in an efficient and cost effective way?

The Commission invites interested parties to provide comments on the matters the Commission intends to examine in this inquiry. Initial comments should be limited to the scope and process for the inquiry. Please provide your comments in the Commission’s eFiling System under Proceeding 24116 by January 18, 2019.
The Commission has previously given guidance regarding the timing of Phase II tariff applications to address rate design for the distribution utilities under the 2018-2022 performance-based regulation plans (see Proceeding 23355, Exhibit X0274). Comments on the process for this inquiry should address whether these utilities should continue with their plans to file Phase II applications on their original timeline. Given that these applications will likely not incorporate the types of issues identified in this bulletin, comments should indicate whether Phase II applications need to be delayed until after this inquiry has concluded.

**Participation**

The Commission has pre-registered the electric distribution facility owners regulated by the AUC to participate in this inquiry. As well, given the interrelated nature of the electric distribution and transmission systems, the Commission has pre-registered the AESO as a participant. All other parties that wish to participate in this proceeding are asked to file a statement of intent to participate no later than 4 p.m. on January 4, 2019. If a party is represented by another party, the contact information for that representative should be included. If a submission is being made on behalf of a group, the contact person for the group and the details of the group members should be provided. Parties with similar interests are encouraged to participate as a group. All interested parties are encouraged to register to participate using the Commission’s eFiling System.

All submissions should be filed under Proceeding 24116 using the eFiling System. If required, the submission can be filed with the AUC by mail or fax. Please contact the AUC’s assistance and information services group at info@auc.ab.ca or 310-4AUC (310-4282) if you require assistance with the eFiling System, or if you do not have internet access, and they will assist you with your submission. For efficiency, please identify any communication with the AUC about this proceeding by indicating the proceeding number 24116.

**Cost recovery**

Parties who have been directed to participate in the inquiry by the Commission may apply for recovery of their costs, which will be assessed in accordance with AUC’s Rule 022: Rules on Costs in Utility Rate Proceedings.

Cost claims from other parties which will be assessed in accordance with the eligibility criteria, cost recovery principles and the scale of costs set out in AUC’s Rule 022. The Commission is prepared, however, to modify the eligibility criteria set out in Rule 022 for the purposes of enabling certain parties to participate in this inquiry who would otherwise be financially unable to do so, where the Commission considers their participation may assist it in its understanding of the matters to be addressed in the inquiry. Submissions must demonstrate a substantial interest in, and the potential to significantly contribute to, the Commission’s understanding of the issues to be addressed in the inquiry.
The Commission will determine costs eligibility on a case-by-case basis upon receiving submissions from interested parties. The process for these submissions will be communicated after the Commission finalizes the scope and process for the inquiry.

Costs associated with participation in this inquiry that are approved by the Commission, including both the distribution utilities’ own costs and costs incurred by other parties, will be paid by the electric distribution facility owners regulated by the Commission through the hearing costs Y factors.

Robert D. Heggie
Chief Executive