Responded by Carrie Zhang
on June 9, 2025

Rule 024 and micro-generation application processes questionnaire

Questions:

1. Should there be a standardized methodology or minimum information requirements for utilities' calculation of the estimated annual consumption at a customer's existing or new site and the calculation of the micro-generation unit's output? Please provide an explanation.

    a. Please identify and justify the best historical timespan for accurately assessing a customer's historical energy usage (for existing sites). Previous 1 year. Long enough to have a ballpark number to reflect recent energy use, but also easy to access data from utility bills.

    b. Please identify and justify the best way for accurately projecting a customer's future energy usage (for new sites). Obtain statistics data from ENMAX (e.g., kWh/sqft) for a similar site type with similar built year, then multiply by a factor to adjust # of household.

    c. Please specify and justify the minimum level of proof that utilities should accept if a customer explains that they intend to increase their electricity consumption shortly after installing a micro-generation system (such as electric vehicle proof of purchase, etc.). EV proof of purchase

    d. Please explain how a new micro-generation unit's yearly energy output should be calculated, including accommodation for any partial shading or coverage of a rooftop solar photovoltaic system. panel specs (kW/year) * estimated sunlight hours in Calgary (guidance /statistics from government) * coefficient reflecting shading area out of total panel area for a single day (need standardized modelling approach for all solar companies)

2. There are currently no specified mechanisms for monitoring the compliance of micro-generation systems with the *Micro-Generation Regulation* (i.e., the micro-generation system generates all or a part of, but not more than, the customer's yearly electricity consumption) after the system is approved. How important is post-approval compliance monitoring to ensure micro-generators are remaining aligned with the *Micro-Generation Regulation?* Please provide an explanation.

    a. Please identify and justify the best way to structure mechanisms for post-approval compliance monitoring, particularly regarding which party (or parties) should assume primary responsibility (such as the AUC, the AESO, utilities, etc.).

AUC could conduct audits of electricity generation and consumption on selected users. Utilities to provide utility bills. But should allow a x% threshold for the net output to grid due to the nature of unpredictable weather E.g., if the kWh generation is higher but within 5% of consumption, solar owner should not remove any panels. However, reviewing/auditing massive number of customers will result in massive costs but could lead to limited revenue. Not recommend to do so.

3. What type of inverter de-rating, and associated evidence of this de-rating, would ensure that a micro-generation facility will not later increase its system capacity beyond the micro-generation system size approved by the utility? Please provide an explanation.

    a. Should micro-generators be permitted to de-rate their inverters, subject to the previously described limitations? Please provide an explanation.

No idea

4. The City of Medicine Hat's micro-generation application process includes an initial step to determine a potential micro-generation system's maximum permissible size, which has been found to reduce the number of full applications received. Would it be useful for the micro-generation application process to include an initial sizing determination phase, where a utility first determines a customer's maximum permissible micro-generation system size before the customer makes a decision to proceed to a full application? Please provide an explanation.

   Yes that's helpful for customer to make decision from cost benefit perspective. Or better to give a range rather than maximum permissible size.

5. The AUC has heard from stakeholders that inverter standards for micro-generation systems often change, creating temporary misalignment with some AUC guidance documents and contributing to some confusion among micro-generation applicants. Would it be helpful for the AUC to facilitate a working group of relevant parties that reviews technical standards (for inverters, etc.)? Please provide an explanation.

   a. If yes, how often should the working group meet? (e.g. monthly, quarterly, bi-annually). Please provide examples of technical requirements, other than inverters, that should be included in the discussions. Bi-annually, depending on how fast the industry could advance.
   b. If no, please suggest a different way that the AUC can keep abreast of changing technical standards.

6. Please identify, and provide justification and details for, any other high priority micro-generation issues that should be addressed to ensure the effective and efficient functioning of the micro-generation landscape.

   Process and cost guidance of upsizing my solar system after the initial approval. I'm interested in purchasing EV and I'm sure more and more people are interested to do so.