Rule 024 and micro-generation application processes questionnaire

Questions:

2 There are currently no specific 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 electrical 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 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.)

Input to consultative process:

1. Post approval compliance monitoring of compliance by micro-generators is critically important to sustain the fair and reasonable objective of ensuring such systems are built, operated and maintained to generate up to, but not more than, the customer's annual energy consumption.

2. While simple meter monitoring should be capable of detecting any variance from the regulatory limit on generational capacity, it is essential that the regulator(s) determine if any detected variance is due to deliberate or incidental (i.e. innocuous) causes.

3. Incidental variances are as likely to fall short of the maximum generation limit as they are to exceed it. As such, on a system wide basis, they are likely to warrant very little, if any, regulatory intervention. Such variations could be due to things as innocuous as:
   - the planting, or removal, of a shade tree
   - climate change increasing, or decreasing, the level of cloud cover, or
   - a change in the customer at the site...e.g. a family of 5 moving to a site previously occupied by a single senior citizen (or the reverse of that ownership change).

4. Deliberate variances, however, always intend to exceed the maximum generation limit, generally motivated by financial benefit. While there are many ways to intentionally generate >100% of ones annual energy consumption, they are all "cheats" which, on a system wide basis, have the potential to disrupt or destroy the micro-generation prices, programs and principals for everyone. For that reason, those customers who deliberately "cheat the system" should be the primary target of of regulatory action.

5. To successfully regulate (and eliminate) such "cheating" that micro-generation sites which export excessive amounts of energy to the grid be:
    - identified,
    - inspected/verified, and
    - brought into compliance (voluntarily or otherwise)

6. **Identification** - I recommend:
    - Suspected cheaters be identified through the routine (monthly and annual) analysis of the bi-directional meter data of all micro-generators. Such analysis would compare the monthly/annual electricity actually exported to the grid to the amount expected when the micro-generation site was approved.
    - Such routine analysis should be done by the energy retailer for ALL the micro-generation sites affiliated with it. That said, for such analysis to be fair and consistent, it is essential that ALL retailers use the same (i.e. identical) app or program to analyze their meter data.
    - Such a monitoring app/program should be designed, tested, maintained and updated by the owner of electrical line owner (or their provincial association) and provided free of charge to any and all retailers.

7. **Inspection/Verification –** When monitoring identifies excess generation is occurring I recommend:
    - Inspection/verification of suspect sites be prioritized, with the biggest suspected "cheats" being the first to be inspected.
    - The inspection be conducted by the lines owner and done with minimal or no advance notice.
    - There be no cost to the customer if the excessive generation is deemed to be due to innocuous or unintentional measures
    - The cost of the inspection be borne by the customer if the excessive generation is deemed to be a deliberate measures, i.e. a "cheat".

8. **Compliance** – I suggest:
    - The customer be given a specific and reasonable time frame (1 month or less) to voluntarily remove any/all deliberate measures associated with the "cheat" and reduce their generating capacity to the allowed level.
    - Customers who refuse or fail to bring their system into compliance in the specified time frame should, be immediately restricted (by their retailer) to the lowest electrical rate (nominally known as the "winter" rate) for any and all electricity they export to the grid.
    - Repeat offenders be restricted to the "winter" rate for an extended period of time (1 summer, 2 summers, etc) as deemed appropriate given the size and intentional nature of their first and subsequent cheats",
    - Customers who intentionally "cheat" not be permitted to move their micro-generation account to another retailer until their system is operating in compliance with the regulations and any term of restriction to the "winter" rate has expired.
    - In the event a micro-generation site is sold to a new owner, all restrictions and limitations should be suspended...but, should the site again be determined to be deliberately "cheating the system", the previous history should be included in the determination of what penalty is appropriate.