Preamble

Micro-generation rules and regulations need to focus on efficient safe addition of renewable power generation. Exhaustive regulations impose unfair restrictions on micro-generation projects especially those less than 50kW, much less than the 150kW originally identified as small micro-generator. Ineffective and over regulation will turn away investment in renewable energy. Very small scale commercial power generators are not likely to be an effective solution.

Exhaustive regulation leads to conflicts in privacy of information. Data needs to be gathered only where necessary for safe operation.

Q1) a) For very small scale residential projects where customer and consumption will change with time, the size of the service and size of roof are better ways to characterize maximum installation. The solar system is part of the house asset and should be characterized as such.

My lived experience with our 14kW system presented the following learnings after installation

1) Demand size management- we looked closely at our consumption and began significant power reduction schemes such as LED lighting, shut off of always on items, improved appliance energy efficiencies.
2) Most recently our children have left home.
3) Increase in battery powered devices such as bicycles, (car not purchased yet)
4) Conversion of gas fire place to electric
5) Trees have grown, increasing shade
6) PV modules have aged
7) Increased winter vacations
8) Less use of large electronics in favour of small personal electronics
9) Change in hobbies from energy intensive to less energy intensive
10) More efficient use of air conditioning

Why would tracking such lifestyle activity result in a safer more compliant system?

Q1b) this is a ridiculous task as outlined above. For very small scale residential project set a must not to exceed xx, unless proven through historical billing or forecasted billing estimates

Q1c) as above

Q1d) as estimated by installer using accepted best practices.

Q2) On very small projects, capped by service size and roof capacity , post compliance is not worth pursuing until the project is a valid commercial operation.

Q3) De-rating inverters sounds like very inefficient use of resources.

Q4) A calculator to clarify max limitations is a good tool, however, it does not need to be regulated. If max limits were straight forward for very small projects this would not be an issue for the majority of projects.

Q5) Solar Alberta should be able to work with industry, and regulatory bodies. If Solar Alberta is not meeting industry needs then regulator may need to kick start a joint organization to bring together stakeholders.. Additional items maybe required including standards for recertification of used panels.

Q6) We are members of a retailer coop and find great satisfaction in how they understand and meet our needs. Our initial investment was based on this premise and any change in our situation would create a lack of confidence in the role of regulators in the province. Our journey in net zero includes many learnings far beyond the scope of micro-generator role.