## May 23 2024

## Transmitter Section Framework Municipal Focused Session

Hi, I attended the webinar and want to thank you for the presentation and being able to give some feedback. There was a lot to digest and I understand there are a lot more moving parts behind the scenes that could not be brought forward in a one hour meeting. I also understand that this meeting was mainly on the transmission lines and touched the basics on each phase of this large scale project. As a participant sitting on the sidelines I have some questions that may or may not have already been addressed.

In the last few years the government has been pushing for a carbon free Canada at breakneck speeds that seem to be at any cost. I understand and welcome the change if it is for the good for all Canadians. I think the government has done a great job on giving incentives to the public to reduce electrical use such as fridge's, AC and lighting etc. It has proven to make a huge difference in the power consumption. As taxpayers my big concern is decisions are being made way too fast before all the studies have been completed. If I heard correctly in the meeting the mandate to come up with a power solution plan for the future has to be in place within a year. I could be wrong but it seems ambiguous and there is a lot of money being spent at a high rate.

The main focus of this seminar was geared towards meeting and forecasting the future power by putting into place large scale projects. There was no mention or comments about any studies on the secondary/transmitter infrastructure. We all know certain grid areas have had little to no maintenance for years and are most likely to be overloaded due to population growth. I feel there is a lot of wasted energy that is being turned into heat. I feel all of our goals in the end are to:

Reduce electricity consumption (especially at peak times when it is hot and equipment is under heavy load),

## Reduce carbon

Have a robust power grid (that is brought up to code) so it reduces the risk of a brown outs and finally to have a safe electrical system in place that can be easily maintained. This was not mentioned in the session?

## My questions are:

Is there a detailed report on the redundancies or inefficiencies of the current secondary (Transmitter/consumer side equipment and lines)?

Examples are anything that consumes hydro on the consumer's side. Inefficient/old and or undersized transformers or **substations** that are breaking down inside, undersize conductors, bad isolators, and redundant grid lines?

I know this is an issue because the cost was imposed on me to bring old bell lines up to code before the hydro was brought to my new house. The entire line is ancient (glass insulators) and nowhere near close to being to today's code and standards. These inefficient lines are all over Ontario.

It was mentioned that there were approx 15 transmitters (Ontario hydro was mentioned) that will make the decisions of what, where and when these new plans are going to be implemented. Have they had the chance to express their concern? What are they saying about the secondary/consumer side of the electrical grid?

Has a hydro comparison report done by area? One town of a size compared to another to compare redundancies?

My other concerns are the huge push for relatively new technology (BESS- which again was not mentioned in the meeting as well) with a lot of unknown experience at the taxpayers' expense for alternative hydro. There has been very little to no information publicized. I have only heard that a BESS system can provide 4 hours of hydro? Is that the real truth?

Again I feel this is putting the cart before the horse. If the secondary/transmitter side of the system is subject to failure/brownouts what good does this do?

Large scale battery storage systems? BESS

Has anyone done a study of the carbon footprint from the "ground up" including life span, maintenance, disposal, extra resources needed - fire equipment and trained safety personnel that has to be on hand for each municipality, insurance risk costs and environment impact?

I have yet to see an estimated cost or cost savings of time for one of these systems?

What are the costs that incur keeping this BESS climate controlled 24/7 at the cost of the taxpayers?

Is there any estimation of savings using this system since the hydro is being injected into the grid which is interconnected to the USA? How is that power accounted for? Are you currently working with the USA to make sure they are providing us with the same service?

Has there been any discussion of the risk of contamination and devaluation of adjacent property owners?

I would assume a BESS would have met today's codes (ESA standards) but is someone looking at the design or where the components come from? There seems to be a lot of design trust from the suppliers that it is safe.

Last but least, why is there no mention of hydro (water dam) electricity? I know there are several that are not being utilized and are carbon free? Quebec is doing very well with their system.

Thank you Chris Vajda Electro mechanical engineering technologist / electrician/ robotics