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Object: Comments from Hydro-Québec on ENERGY STAR® Program Requirements – Product Specification for Smart Thermostats Products Draft 1 Version 2.0 and ENERGY STAR Smart Thermostat Products – Method to Demonstrate Field Savings Draft 1 Version 2.0

ENERGY STAR® Smart Thermostats Version 2.0

Hydro-Québec has always actively participated in promoting ENERGY STAR® on its website and energy efficiency programs. In addition, we won the Public Service of the Year Award — Provincial Stage from 2011 to 2015 as well as the Promotional Campaign of the Year for three consecutive years (from 2012 to 2014).

We were asked to provide feedback by August 19th, 2022, on the documents mentioned in the object. After reviewing the documents, our comments on specific points that should be taken into consideration are as follows.

Comments for Draft 2.0 ENERGY STAR Program Requirements – Product Specification for Smart Thermostats Products

Section	Points	Hydro-Quebec comment/concern
Table 1 - line 120, line 339-356	Static temperature accuracy (low voltage) VS control point precision (CSA C828)	Static temperature accuracy and control point precision refer to similar concepts. Control point precision is a metric commonly used for LVTs. In that regard we suggest that 'Static temperature' should mention 'for the LVTs: should be compliant with section 4.4.3 of CSA C828-19.'
Table 1 - line 120	Network standby power consumption	Due to their intrinsic operation, it is expected for line voltage thermostats to have higher standby power consumption than low voltage thermostats. The limit for LVTs should be fixed considering actual consumption data in order to make compliance possible.
Line 298-300	Tested as per CSA C828-19	LVTs must already meet thermic regulation criteria in several Canadian provinces. It is currently under review as a national obligation with NRCan. We are pleased that ENERGY STAR would also use these criteria to ensure that ENERGY STAR thermostats sold in the USA are also compliant with Canadian regulation and can be sold on both sides of the border.
Table 2 - line 200-226	Confidence limit of weighted national mean	We expect the metric values computed for the US vs Canada to slightly differ. If heating metric values are usually higher in colder climate zones the US threshold for heating would also make sense for Canada. This assumption should be confirmed.

Comments for Draft 2.0 ENERGY STAR Smart Thermostat Products – Method to Demonstrate Field Savings Draft 1 Version 2.0

Section	Points	Hydro-Quebec comment/concern
Line 116-120	Requires at least 30 thermostats in each climate zone	When line voltage thermostats are used, it is common to have multiple thermostats per household. We suggest that the minimal number of thermostats criteria should be replaced by a minimal number of households to mitigate the influence of possible abnormal thermostats usage on metric values.
	Climate Zone weightings	As LVTs are used only for heating, a product may not be present in all climate zones. This should be verified with manufacturers in order not to prevent LVTs qualification.

In summary, we believe that our comments are important for the development of ENERGY STAR® Smart Thermostats Version 2.0. In Quebec, 80% of homes use electricity as a primary source of energy. From these homes, 77% use LVTs as their primary control for their heating systems. Therefore, a large share of our customers could very well benefit from ENERGY STAR® certified LVTs.

Best regards,