Hourly Electricity Consumption Data by Forward Sortation Area

Report Criteria	Report Description
TITLE:	Hourly Consumption by Forward Sortation Area
CONFIDENTIALITY:	Public
PUBLICATION FREQUENCY:	Within the first 10 days of each month; for the data of two months prior to the current month. For example, on June 9, 2023, the data for March 2023 is published (to enable the completion of data quality processes involved in monthly billing of residential and small general service <50kW consumers).
PURPOSE:	Enable the use of data on Ontario's hourly electricity consumption, in kWh, for residential and small general service (<50kW) consumers aggregated by Forward Sortation Area (geographical unit based on the first three characters in a Canadian postal code).
GRANULARITY:	Hourly
CONTENT:	1. FSA: Forward Sortation Area, first three digits of the Postal Code (may be more highly aggregated for example two digits of the Postal Code if privacy criterion are not met). 2. Date: The date when electricity consumption took place. 3. Hour: The hour in which electricity consumption took place in hour ending format. 4. Customer Type: Market segment to which the customer belongs, Residential or Small General Service < 50kW, also known as Distributor Rate Class.

	5. Price Plan: Price Plan chosen by this customer type e.g., TOU (Time-of-Use), Tiered, also known as Commodity Rate Class.
	6. Total Consumption: Aggregated electricity consumption for the premises in this line record, provided in kWh.
	7. Premise Count: Number of premises in this line record.
NOTES:	Data Quality and Privacy Rules have been applied to this data set for each equivalence class (unique combination of Postal Code, Customer Type, Price Plan, and Hourly Interval Date Time). 1. The privacy criteria used to evaluate the minimum number of premises per equivalence class, or K factor, is greater than or equal to 15. If this criterion is not met, the values for that equivalence class are aggregated to one less postal code digit or eliminated. 2. If consumption exceeds 100 kWh in a given hour for an individual meter, that consumption is considered to exceed the high usage threshold and is filtered out before aggregation takes place and the premise count is adjusted. High usage can occur due to meter error or misclassification of customer type etc. 3. If the consumption is negative, or flagged as Needs Verification or Editing (verification and edited to be completed by the local distribution company) in an hour for an individual meter, it is removed and the premise count is adjusted. 4. Coefficient of Variation (COV), which is the ratio of the standard deviation to the mean for each equivalence class must be greater than or equal to 0.1. The total consumption of the group must be greater than zero (0). Values not meeting these criteria will be removed or further aggregated until the criteria is met, to avoid the risk of re-identification due to a lack of variability. 5. The Dominance rule (DOM), requires that if any premise accounts for over 75% of the total consumption in a given equivalence class, the premise is removed or further aggregated until this rule is no longer violated.