

K1-7

Ontario Energy Board	
FILE No.	EB-2018-0028
EXHIBIT No.	K1.7
DATE	March 7, 2019
	<i>ps</i>

EB-2018-0028

Hydro One Networks Inc. Compendium

7-VECC-47

INTERROGATORY

Reference: Exhibit 7, pages 8-9 / Appendix 2-Q

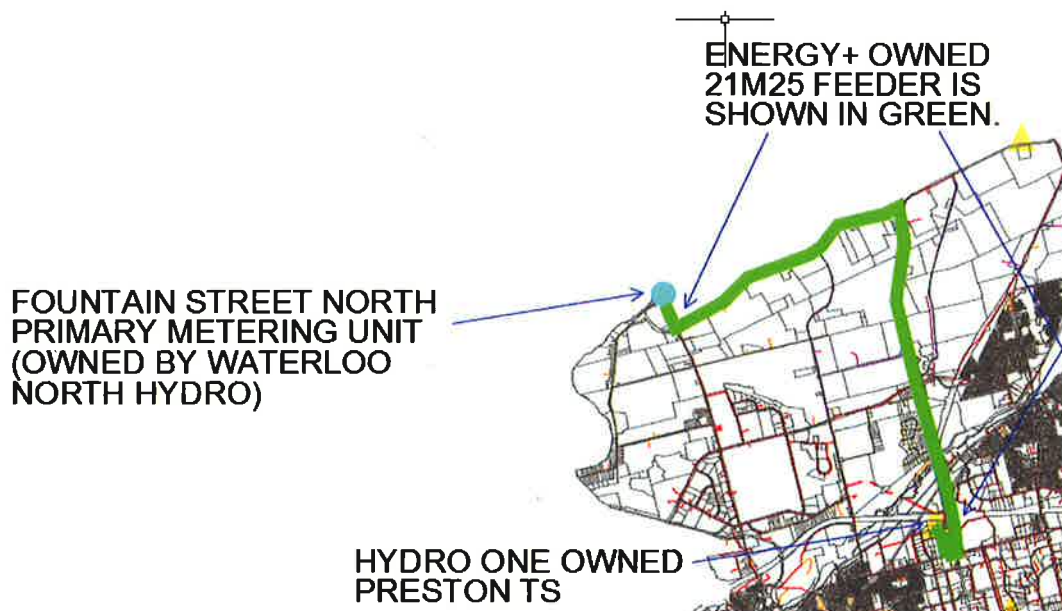
- a) For each of the Embedded Distributor customer classes, please describe the supply arrangements in terms of what facilities owned by Energy+ are used to supply the customer(s) and how these facilities connect to HONI's transmission system.

RESPONSE

The supply arrangements in terms of what facilities owned by Energy+ are used to supply the customer(s) and how these facilities connect to HONI's transmission system for each of the Embedded Distributor customer classes, is described below.

Waterloo North Hydro – Fountain Street North at Riverbank Drive (Cambridge)

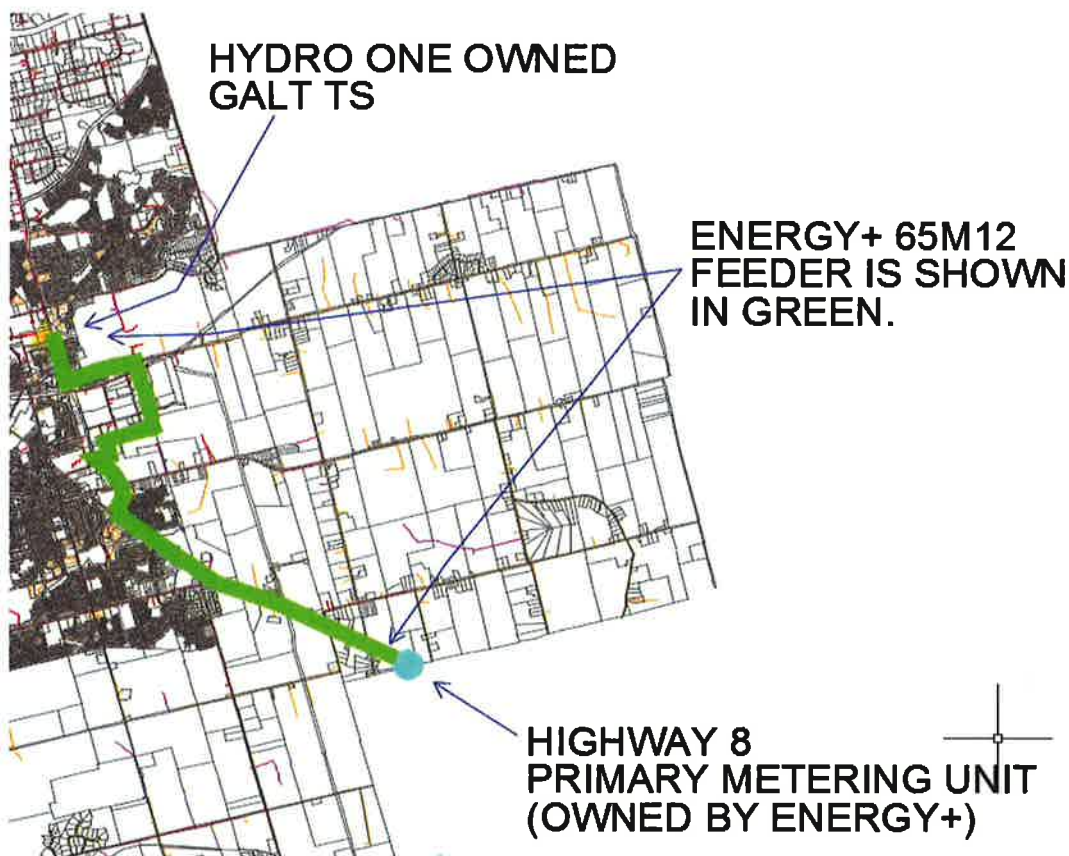
Energy+ provides a three phase 27.6kV supply to Waterloo North Hydro on Fountain Street North at Riverbank Drive in Cambridge where the Energy+ service area meets the Waterloo North Hydro service area. Please refer to the map below for the location.



The source of the power is normally from the Energy+ owned three phase 27.6kV 21M25 feeder from the Hydro One Networks owned Preston TS. The 21M25 feeder supplies Energy+ customers between Preston TS and Fountain Street North. A primary metering unit at Fountain Street North and Riverbank Drive then measures the power consumed by Waterloo North Hydro. From the metering unit, the Waterloo North Hydro portion of the 21M25 feeder goes north into Waterloo North Hydro's service area. The power at Preston TS is measured by Energy+ owned 230kV metering. The primary metering unit on Fountain Street North at Riverbank Drive is owned by Waterloo North Hydro.

Hydro One Networks Inc. (CND Service Territory)

Energy+ provides a three phase 27.6kV supply to Hydro One Networks on Highway 8 at the boundary between the Township of North Dumfries and the City of Hamilton where the Energy+ service area meets the Hydro One Networks service area. Please refer to the map below for the location.



The source of the power is normally from the Energy+ owned three phase 27.6kV 65M12 feeder from the Hydro One Networks owned Galt TS. The 65M12 feeder supplies Energy+ customers between Galt TS and the boundary between the Township of North Dumfries and the City of Hamilton on Highway 8. A primary metering unit on Highway 8 at the boundary then measures the power consumed by Hydro One Networks. From the metering unit, the Hydro One Networks portion of the 65M12 feeder goes South into Hydro One Networks service area. The power at Galt TS is measured by Energy+ owned 230kV metering. The primary metering unit on Highway 8 is owned by Energy+.

Brantford Power Inc.

Energy+ provides a three phase 8.32kV supply to Brantford Power at 119 Jennings Road (Brant Conservation Area). Please refer to the image below for the location.



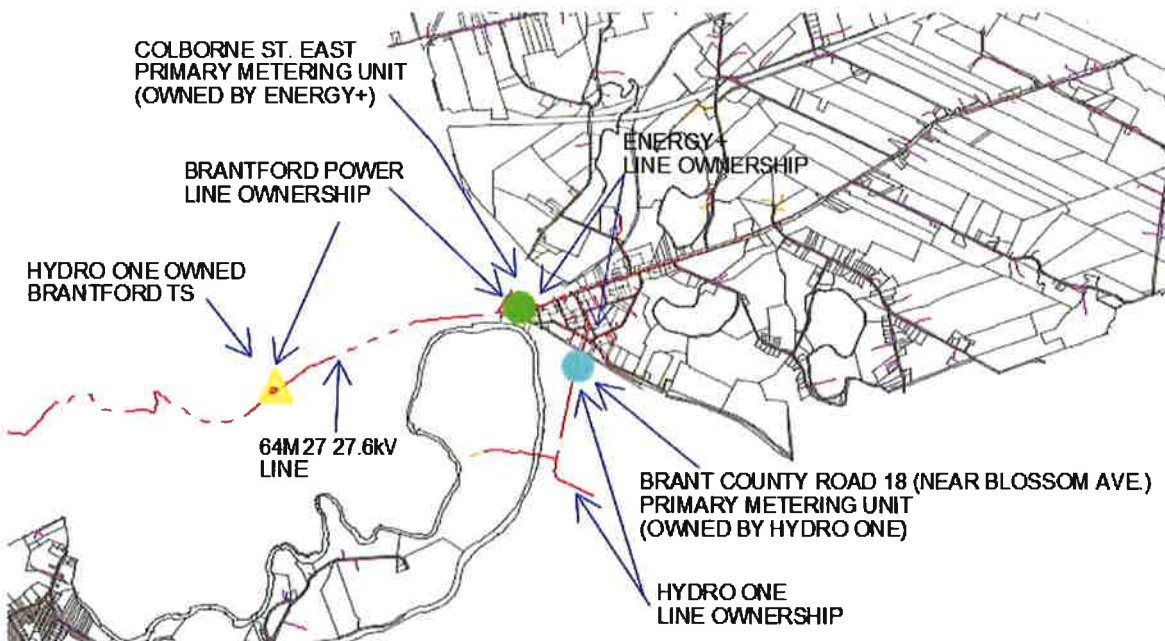
The source of the power is normally through an Energy+ owned three phase bank of 27.6/16kV-8.32kV stepdown transformers located on Greens Road South of Robinson Road that feeds an Energy+ owned 8.32kV overhead line going East on Robinson Road to Jennings Road which

also supplies other Energy+ customers. The upstream 27.6kV supply to the stepdown transformers is normally the Brant TS 12M11 27.6kV feeder. Brant TS is owned by Hydro One Networks. Energy+ owns the 12M11 27.6kV feeder.

At 119 Jennings Road, Energy+ owns a 50' Class 4 wood pole that was installed in 2012. Energy+ also owns the 8.32kV primary metering unit.

Hydro One Networks Inc. # 1 (Brant Service Territory) - Brant County Road 18 (near Blossom Avenue)

Energy+ provides a three phase 27.6kV supply to Hydro One Networks on Brant County Road 18 (near Blossom Avenue) where the Energy+ service area meets the Hydro One service area. Please refer to the map below for the location.



The source of the power is normally from an Energy+ owned three phase 27.6kV line on the Hydro One Networks owned Brantford TS 64M27 feeder. Brantford Power owns the 64M27 feeder from Brantford TS to the service area boundary with Energy+. At the service area boundary between Brantford Power and Energy+ on Colborne Street East, there is an Energy+ owned 27.6kV primary metering unit to measure the power withdrawn from Brantford Power's

distribution system. Energy+ owns the 27.6kV line and supplies its customers within its service area on the East side of the City of Brantford (known as Cainsville). The 27.6kV line then continues into the service area of Hydro One Networks. At the service area boundary between Energy+ and Hydro One Networks on County Road 18 (near Blossom Avenue), there is a Hydro One Networks owned 27.6kV primary metering unit which measures the power consumed by Hydro One Networks.

Hydro One Networks Inc. # 2 (Brant Service Territory) – *Brian Drive, Burford, King Street, Burford, Pleasant Ridge Road, King Edward Street, Paris*

Brian Drive

A Hydro One Networks owned three phase 27.6kV primary metering unit is located on Brian Drive in the community of Burford where the Energy+ service area meets up with Hydro One Networks. Hydro One Networks owns the main line 27.6kV 12M21 feeder from Brant TS to Brian Drive in the community of Burford and beyond. The metering unit is required since the 12M21 feeder also supplies Energy+ load between Brant TS and Brian Drive.

The source of the power is normally from a Hydro One Networks owned three phase 27.6kV line supplied from the Hydro One Networks owned Brant TS 12M21 feeder. Hydro One Networks owns the main line 12M21 feeder between Brant TS and Brian Drive in Burford. The Hydro One Networks owned feeder supplies Energy+ customers as it is running through the Energy+ service area. A primary metering unit at Brant TS measures the power at the start point of the 12M21 feeder. Primary metering units on Brian Drive in Burford, on King St. in Burford (at Burford DS) and on Pleasant Ridge Road measure the outflow of power to Hydro One Networks. The difference is the consumption by Energy+. The primary metering unit on Brian Drive is owned by Hydro One Networks.

King Street

A Hydro One Networks owned three phase 8.32kV primary metering unit is located on King Street in the community of Burford at Hydro One Networks owned Burford DS. Hydro One Networks owns the main line 27.6kV 12M21 feeder from Brant TS to the community of Burford and beyond. The metering unit is required since the 12M21 feeder also supplies Energy+ load between Brant TS and Brian Drive. The primary metering unit is located on the 8.32kV Burford

DS F2 feeder. There is no load on the Burford DS F1 feeder. Hydro One considers anything metered at less than 13.8kV to be secondary metered.

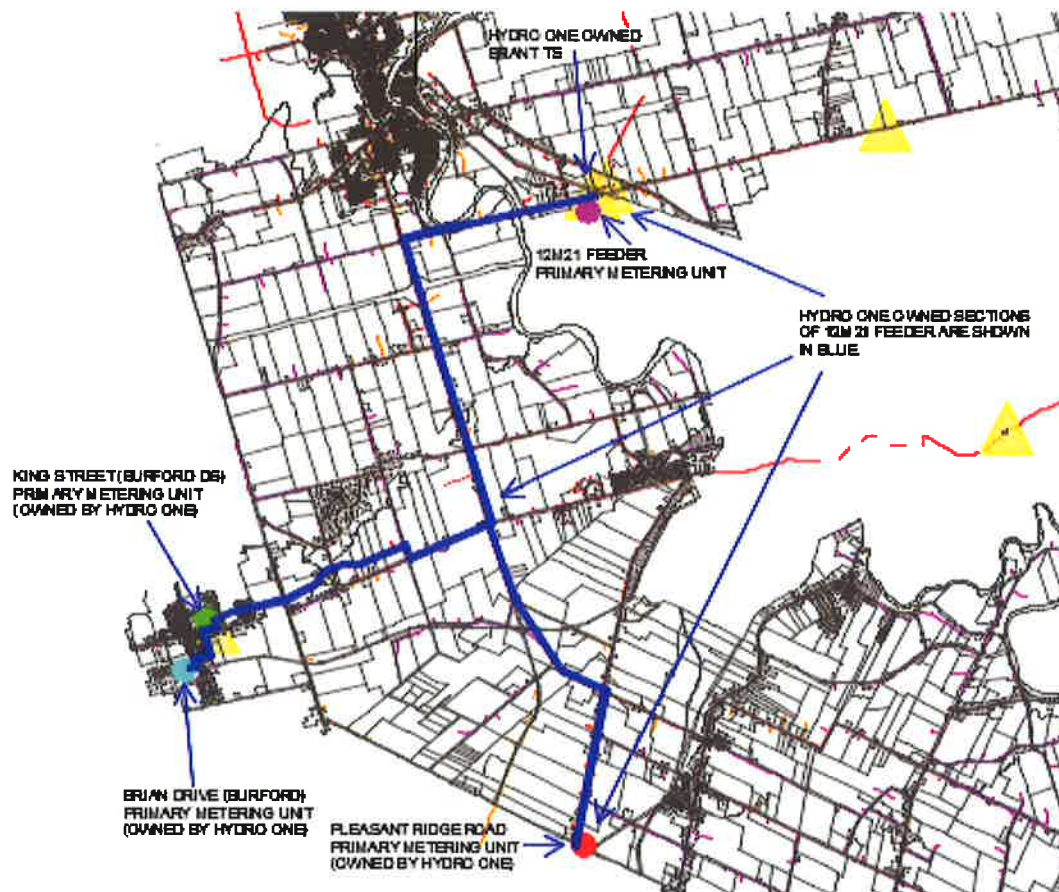
The source of the power is normally from a Hydro One Networks owned three phase 27.6kV line supplied from the Hydro One Networks owned Brant TS 12M21 feeder. Hydro One Networks owns the main line 12M21 feeder between Brant TS and King Street (Burford DS) in the community of Burford. The Hydro One Networks owned feeder supplies Energy+ customers as it is running through the Energy+ service area. A primary metering unit at Brant TS measures the power at the start point of the 12M21 feeder. Primary metering units on Brian Drive in Burford, on King St. in Burford (on 8.32kV Burford F2 feeder at Burford DS) and on Pleasant Ridge Road measure the outflow of power to Hydro One Networks. The difference is the consumption by Energy+. The primary metering unit on King Street (Burford DS) is owned by Hydro One Networks. Other than Burford DS, all other primary metering units are 27.6kV.

Pleasant Ridge Road

A Hydro One Networks owned three phase 27.6kV primary metering unit is located on Pleasant Ridge Road where the Energy+ service area meets the Hydro One Networks service area. Hydro One Networks owns the main line 27.6kV 12M21 feeder from Brant TS to the primary metering unit location on Pleasant Ridge Road. The metering unit is required since the 12M21 feeder also supplies Energy+ load between Brant TS and Pleasant Ridge Road.

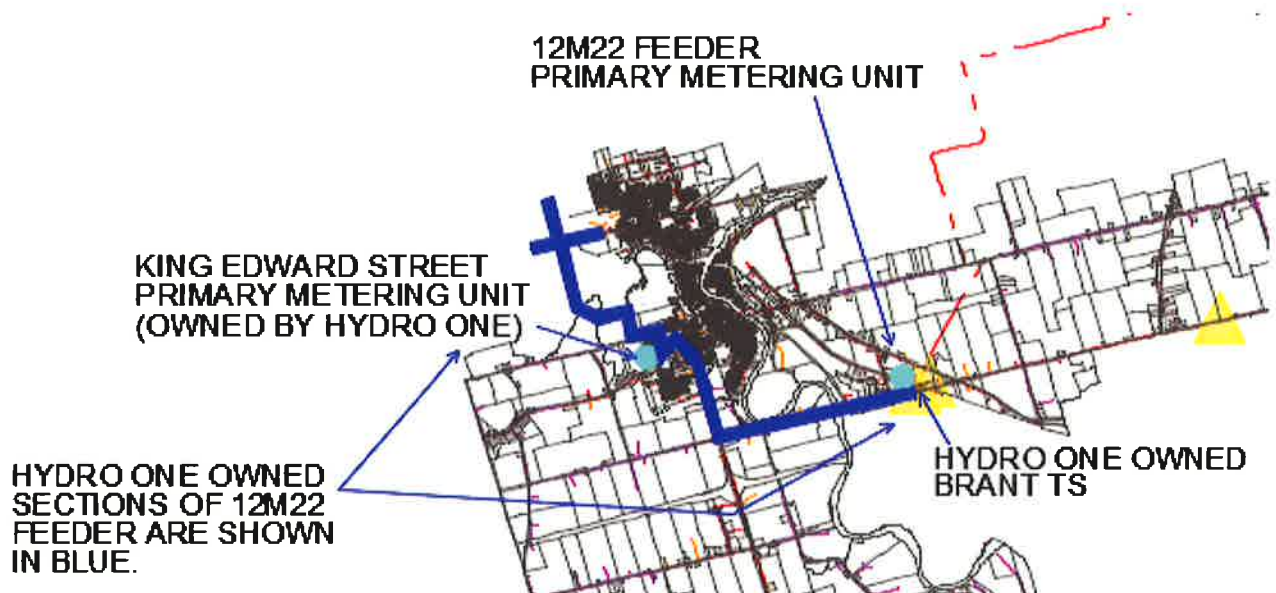
The source of the power is normally from a Hydro One Networks owned three phase 27.6kV line supplied from the Hydro One Networks owned Brant TS 12M21 feeder. Hydro One Networks owns the main line 12M21 feeder between Brant TS and Pleasant Ridge Road. The Hydro One Networks owned feeder supplies Energy+ customers as it is running through the Energy+ service area. A primary metering unit at Brant TS measures the power at the start point of the 12M21 feeder. Primary metering units on Brian Drive in Burford, on King St. in Burford (at Burford DS) and on Pleasant Ridge Road measure the outflow of power to Hydro One Networks. The difference is the consumption by Energy+. The primary metering unit on Pleasant Ridge Road is owned by Hydro One Networks.

The image below shows the map for Brian Drive, King Street, and Pleasant Ridge Road.



King Edward Street

A Hydro One Networks owned three phase 27.6kV primary metering unit is located on Pleasant Ridge Road where the Energy+ service area meets the Hydro One Networks service area. Hydro One Networks owns the main line 27.6kV 12M21 feeder from Brant TS to the primary metering unit location on Pleasant Ridge Road. The metering unit is required since the 12M21 feeder also supplies Energy+ load between Brant TS and Pleasant Ridge Road. Please refer to the map below for the location.



The source of the power is normally from a Hydro One Networks owned three phase 27.6kV line supplied from the Hydro One Networks owned Brant TS 12M22 feeder. Hydro One Networks owns the main line 12M22 feeder between Brant TS and King Edward Street in Paris. The Hydro One Networks owned feeder supplies Energy+ customers as it is running through the Energy+ service area. A primary metering unit at Brant TS measures the power at the start point of the 12M22 feeder. A primary metering unit on King Edward Street in Paris measures the outflow of power to Hydro One Networks. The difference is the consumption by Energy+. The primary metering unit on King Edward Street is owned by Hydro One Networks.

VECC TCQ -78

**Reference: Exhibit 8, page 18
Settlement Proposal, RTSR Harmonized
OEB Filing Requirements, Chapter 2, page 55**

- a) Please confirm that all customer classes, including the Embedded Distributors are assessed RTSR charges.
- b) Given that the Filing Requirements call for the “allocation of forecasted LV costs to customer classes (generally in proportion to transmission connection rate revenues)”, please explain why the Embedded Distributors were not included in the allocation of LV costs.

RESPONSE

- a) Energy+ confirms that that all customer classes, including the Embedded Distributors, are assessed RTSR (Network and Connection) charges. Please refer to Response to Staff Interrogatories Table 8-Staff-87 e): Harmonized RTSR Rate Calculation filed September 14, 2018.
- b) Consistent with the approach utilized in the 2014 and 2010 Cost of Service Applications for the former Cambridge and North Dumfries Hydro Inc. (“CND”), the Embedded Distributors have not been included in the allocation of LV costs.

It is Energy+’s understanding that the charges levied by Hydro One to Energy+ for LV charges recover the Sub-Transmission (“ST”) costs as a result of Energy+ being an embedded distributor, and that Hydro One’s embedded distributor load in Energy+’s service territory is not included in the computation of the ST charge.

The charges levied by Brantford Power Inc. to Energy+ for LV may include the load for servicing Hydro One.

UNDERTAKING NO. JTC1.6:

ENERGY+ TO PROVIDE A BREAKOUT OF HOW MUCH OF THE 507 IS RELATED TO HYDRO ONE ST CHARGES AND HOW MUCH COMES FROM BRANTFORD.

RESPONSE

Energy+ provided the 2019 LV revenue of \$507,967.

(Reference: Response to Technical Conference VECC-TCQ-77 a)

The breakdown of the LV costs between Hydro One and Brantford Power is \$355,939 of costs from Hydro One and \$152,028 from Brantford.¹

¹ EB-2018-0028 Technical Conference Transcript, Page 48, Lines 9 and 10.