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## Regional Infrastructure Planning – Asset Redefinition Working Group

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**Meeting Date:** November 26, 2012 **Time:** 9:30 am – 4:30 pm

**Location:** 2300 Yonge Street, 27<sup>th</sup> Floor

**Board Staff:** Chris Cincar, Ashley Hayle, Andres Mand, Nabih Mikhail

Board staff explained that the purpose of the second meeting of the Regional Infrastructure Planning Asset Redefinition Working Group (“ARWG”) was to address the following:

1. Discuss and finalize the Meeting Summary from the first ARWG meeting;
2. Discuss the current criteria used for defining transmission assets; and
3. Discuss some examples of the more obvious line connection assets that would likely be redefined if they were to be upgraded now.

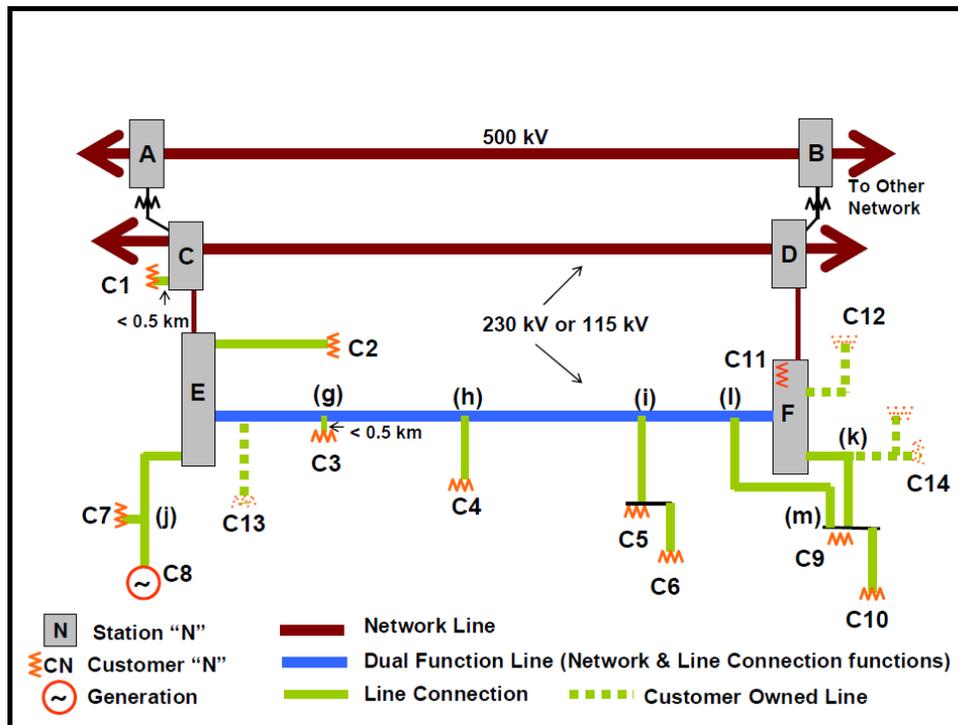
### Discussion of Draft Meeting Summary

The ARWG identified and accepted some minor revisions to the draft meeting notes summarizing the first meeting.

### Current criteria used for defining transmission assets

The purpose of discussing the current criteria used for defining transmission assets was to facilitate a common understanding among the ARWG members and inform the ARWG in relation to what criteria the ARWG was building on and may need to change. In order to facilitate the discussion, Hydro One provided a schedule from their most recent application that described the transmission assets related to the Network and Line Connection pools. The discussion focused on Figure 1 in that schedule which

provided a simplified illustrative diagram of the various types of transmission lines including Dual Function Lines as well as Line Connections and Network lines. That diagram is set out below:



Within the context of the discussion of the ‘current’ criteria, the ARWG discussed some of the ‘potential criteria’ that had previously been identified in the first meeting which could be used for redefining current Line Connection assets as Network assets. One of those ‘potential criteria’ was where it is determined that incremental investment is required (i.e., beyond meeting the ‘capacity’ needs of the distributor) to meet the Independent Electricity System Operator’s (“IESO”) Ontario Resource and Transmission Assessment Criteria (“ORTAC”) for system ‘reliability’ purposes, and the incremental investment should be redefined as Network. In terms of this ‘potential’ criterion, the discussion focused on potential complications, as it was noted much of the basis to currently define Line Connections was related to ‘capacity’ and that it would be difficult to quantify the amount related to meeting the IESO ORTAC ‘reliability’ criteria.

It was also noted that redefining some Line Connection assets as Network assets may not address the barriers related to the execution of regional plans. For example, simply because a transmission asset is currently defined as a Line Connection asset does not mean the full cost is recovered from the transmission customer (e.g., distributor). Under some circumstances, some of the cost is recovered

through the Line Connection pool. As such, in those cases, uploading the asset to the Network pool would only mean the same amount of the upgrade costs would be socialized across a slightly broader group of load customers. It was pointed out that 90% or more of the customers that pay Network rates also pay Line Connection rates. At the same time, it was noted that redefining such assets as Network would make it much simpler because it would no longer need to be addressed on a ‘case by case’ basis which would provide distributors with greater certainty in relation to cost responsibility associated with upgrading the asset. It was added that, if the asset was redefined as Network and therefore included in the Network pool, the burden of proof would be that the distributor should pay the costs related to an upgrade. In contrast, if it remained defined as Line Connection, the burden of proof would be on the distributor that it provided a Network function and the distributor should not pay the upgrade costs.

### **Examples: Line Connection Assets likely to be Redefined based on Functionality (if upgraded now)**

As a starting point for discussions, Hydro One provided a table with two columns – “Suggested” and “Needs Further Discussion” – related to transmission circuits that are currently defined as Line Connections and represented many of the examples that were the most likely candidates to be redefined as Network assets.

Hydro One also provided the following exhibits from their most recent transmission rate application:

- G1-02-01: Describes cost allocation methodology
- G1-03-01: Provides a detailed example of how Network and Connection facilities are currently classified
- G2-01-01: List of transmission lines by functional category
- G2-01-02: List of transmission stations by functional category

The Line Connections in the table denoted as “Suggested” represented those that would most likely be redefined as Network assets based on the functionality that they perform if they were upgraded now, while it was less certain if the Line Connections assets denoted as “Needs Further Discussion” should be redefined as Network assets.

It was noted that all of the “Suggested” Line Connections and many of the “Needs Further Discussion” Line Connections have “open” points and those denoted as “Needs Further Discussion” that do not have

“open” points directly connect two or more “hubs” or they connect two assets that are currently defined as Network facilities (or an asset that is currently defined as Network and another asset that is likely to be reclassified to be a Network facility).

The “Suggested” column included 21 circuits currently defined as Line Connection. The “Needs Further Discussion” column included 49 circuits defined as Line Connection.

As part of the discussion, it was noted an additional “criterion” that was important and should be considered for redefinition purposes is if the line is normally “open” or “closed”. If it was normally “open”, it should be redefined.

It was noted that all of the transmission circuits in the “Suggested Column” involve transmission paths which are quite long ranging from well over 50 km to 200 km.

A specific example discussed in the “Suggested Column” is a 115 kV Line Connection that runs from the Detweiler TS to the Burlington TS and involves the Kitchener-Waterloo-Cambridge-Guelph (KWCG) region, with Guelph located essentially in the middle (approximately 40 km from Burlington and 35 km from Detweiler). That line covers a broad regional area (over 75 km in length) and has disconnect switches, with one or more which may be operated normally ‘open’. There have been concerns extending back to 2004 in relation to circuit overloading problems and, if it is not upgraded, the reliability of supply to the KWCG area will continue to deteriorate. However, while that line provides broader regional benefits, the cost of the upgrade would be borne largely by the single distributor that triggered the upgrade given the current responsibility rules and the classification as a Line Connection asset.

When an example in the “Needs Further Discussion” column was discussed, another principle agreed upon by the ARWG is the classification of a line should not be determined based on the type of asset it is connected to (which is currently a criterion). In other words, if two lines perform the same function, it should be defined the same way regardless of whether they currently connect to a Network or a Line Connection asset. An example that was discussed within this context was the transmission lines from Allanburg to OPG’s Beck 1 115 kV station. The lines provide a network-like function because it forms a supply network connecting two major supply points but is defined as Line Connection only because the Beck 1 station does not happen to connect to the Beck 2 station 230 kV switchyard. For example, if there was an autotransformer connecting the two Beck station switchyards, the circuits connecting Allanburg to the Beck 1 station would be defined as Network assets.

A general principle that was agreed to by the ARWG is that the criteria used for redefinition purposes should not be based on the number of distributors, as distributor amalgamations could occur over time. Instead, it should be based on the function the asset performs and the broad number of delivery points involved. The function of the asset does not change if the asset is meant to serve a broad area whether there are one or many distributors involved.

In regard to certain scenarios that were discussed, the ARWG concluded that there will likely be a small number of 'exceptions' that will need to be addressed on a case by case regardless of the asset redefinition criteria that are ultimately adopted.

In terms of achieving the objective of the working group, the ARWG also discussed that a simpler approach may be to identify the criteria for lines that should remain defined as Line Connections and that would be used to determine which assets currently defined as Line Connection should be redefined as Network. One possibility that was brought up for discussion was that any line tap connecting a distributor to another line should remain Line Connection and the line that the tap connects to should be defined as a Network asset regardless of how it is currently defined. Board staff noted that this approach appeared to be consistent with the Board Report as the distributor would be the sole beneficiary and every distributor in the province would be responsible for the costs to upgrade their Line Connection (i.e., tap) to maintain cost discipline. Under this approach, it would also achieve the desired outcome set out in the Board Report. That is, placing all distributors on more of a level playing field in terms of cost responsibility.<sup>1</sup>

**ACTION ITEM: HYDRO ONE TO REVISE TABLE IDENTIFYING THE MOST OBVIOUS LINE CONNECTION ASSETS WHERE THE FUNCTION HAS CHANGED OVER TIME THAT WAS USED TO FACILITATE DISCUSSION OF APPROPRIATE REDEFINITION CRITERIA. REVISION IS TO ADD THE NAMES OF THE ASSETS.**

**ACTION ITEM: HYDRO ONE TO PROVIDE DIAGRAMS SETTING OUT THE FOUR EXAMPLES (I.E., SCENARIOS) THAT THE ARWG DISCUSSED TO FACILITATE DISCUSSION OF APPROPRIATE REDEFINITION CRITERIA.**

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<sup>1</sup> In the Board Report, it states *“the Board also concludes that the redefinition of certain line connection assets in a manner that better reflects the function that each asset performs will facilitate the implementation of regional infrastructure planning, and should also place distributors (and therefore all Ontario customers) on a more level playing field in terms of cost responsibility. To the extent that line connection assets are defined based on function, distributors (and their customers) will be responsible only for the costs associated with upgrades to assets that are used solely to supply a distributor or group of distributors (i.e., where such distributors are the sole beneficiaries).”* (emphasis added)

## **Other Matters: Potential Bill Impacts**

There was also some discussion of the potential bill impacts for certain customers as a result of the redefinition of Line Connection assets to Network assets. There was agreement that the bill impacts would be quite minor for reasons including the following: (1) Line Connection assets will only be redefined on a go forward basis as they are upgraded to facilitate the execution of regional plans; (2) there is little load growth in most parts of the province (and that will be the case for many years) that will trigger the need for upgraded assets that are currently defined as Line Connection; and (3) there have been few cases where it would have resulted in the redefinition of a Line Connection asset as a result of the regional plans done to date since the OPA started doing regional planning.

### *Next Scheduled Meeting*

December 10, 2012