Distributor–Owned Transformation (>50 kV) - Handout A
Background Discussions (December 16, 2005)

Potential Information Disclosure Issues:

Some Ontario LDCs have their own transformer stations (>50kV).

The Phase 1 technical group discussions agreed to, at a minimum, separately report such costs as part of the model outputs (which will include other agreed-upon cost groupings/"functions").

It is documented here to ensure it is remembered at the subsequent stages of cost allocation process (filing instructions and model), and to flag the issue for phase 3 discussions of useful changes to the current USoA accounting requirements (although Staff notes that the planned scope of such discussions will focus on improvements for cost allocation purposes).

An Advisory Team member further suggested that it may be useful for some purposes if these facilities (i.e. >50 kV) were accounted for differently and not defined as "distribution" assets.

The above issues relate to transformation from transmission to distribution (either subtransmission distribution or primary distribution, as defined for cost allocation purposes). They should not be confused with issues regarding the allocation of costs or credits for other forms of transformation that are wholly within the defined distribution system, for example, distribution stations (typically from subtransmission or primary distribution voltage to another primary distribution voltage) or line transformers (typically from a primary distribution voltage to secondary voltage).[1]

Technical Background:

Hydro One Transmission normally supplies power to LDCs at voltages below 50kV. The cost of transforming power from transmission voltage to the LDC supply voltage (13.8, 27.6 or 44kV) is recovered from the LDC via a Retail Transformation Connection Rate. This cost is in turn passed along to LDC customers. Any variances between the Hydro One charge and the LDC revenue from transformation are accumulated in a variance account for eventual disposition as a credit or debit to customers. Transformation costs are kept separate from distribution costs.

This process is complicated when a distributor builds its own TS, in order to avoid the Hydro One Transformation Connection Rate. If the distributor places the transformation asset (TS) within its distribution asset group, it will no longer be fully comparable to other distributors (which was a concern of some stakeholders on the phase 2 advisory team, although not raised by Staff as a core concern of the cost allocation project).

[1] See separate material on transfer allowance update.

Customers will be charged for transformation connection in two different ways, and the cost/benefit of the decision to build the TS will be untraceable.

If additional relevant cost information is collected as part of the upcoming informational filings, then the above (new) concerns may be helpfully addressed.

An additional complication is where Hydro One has required the distributor to make a capital contribution towards the construction of a Hydro One owned TS. This capital contribution is a transformation connection cost and not a distribution cost.

Distributor–Owned Transformation (>50 kV) - Handout B (December 16, 2005)

<u>Phase 2 Advisory Team Discussions</u>

Stakeholders have suggested Distributors place transformation assets and associated servicing costs for stations operating at >50kV in separate accounts.

Those LDCs with their own TS costs can combine both the HONI and their own transformation costs (including costs for LDc owned TSs and capital contributions to Hydro One owned TSs) in the charge to customers.

A stakeholder suggested that in the long-run, the objective should be to have a Retail Transformation Connection Rate that includes all the costs of transformation connection service from transmission to distribution voltage irrespective of whether it is wholly or partially owned (financed) by the distributor or the transmitter. If this results in higher or lower cost to consumers, the benefit of having the LDC own its transformation facilities can be easily identified. Customers would continue to have one charge for transformation connection and the accounting would be "behind the scenes".

In this way, distributor–owned transformation will not confuse the correct identification and allocation of distribution costs.

This will also allow better comparability of Retail Transformation Connection Rates between utilities because they will include all the costs of transformation from transmission voltage.

Finally, it was suggested the above would facilitate more reasonable future comparison of Distribution Rates between utilities (because some stakeholders would then feel that "true" distribution costs will not be confused with cost of Transformation Connection).