# Options for Undertaking HV and LV Cost Comparisons

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### LV and HV Issues

Some distributors own HV equipment, some distributors do not. The costs associated with each situation are accounted for differently and reside in different places.

With respect to LV services, depending on who they are purchased from, the costs are accounted for differently and reside in different places.

This presentation will address the options for controlling for differences in LV and HV services across Ontario distributors in PEG's benchmarking analysis



### Controlling for Differences in LV Services

For embedded distributors purchasing LV services from host utilities, PEG will:

Add charges paid for LV services to embedded distributor's total distribution costs, calculated from RRR data

Staff currently finalizing a data request that will obtain data on LV charges from host distributors



### Controlling for Differences in HV Services

Two options for controlling for differences in HV services provided by distributors:

- 1. For distributors that do not own HV equipment, add an estimate of the cost of HV services they procure
- 2. Include a business condition variable in the econometric model that reflects differences in HV "intensiveness" across distributors
  - e.g. (Gross plant TS > 50 kV)/(Total Distribution Gross plant) (Estimated total cost of HV services)/(Total Distribution cost)



### Controlling for Differences in HV Services (Con't)

The first option:

- Adjusts the dependent variable in the econometric model and in the unit cost comparisons across peer groups
- Each distributor's cost would therefore include the estimated costs of HV services, whether that distributor provides those services from its own facilities or procures them from another utility

The second option:

- Does not adjust the cost of distribution services across utilities, but includes a business condition variable on the "right hand side" of the econometric model
- The prediction for each distributor's total cost would therefore reflect the amount of HV services provided by that distributor



# Merits of Option One

Advantages:

- Can be applied to both econometric and unit cost benchmarking models
- Assesses efficiency of each distributor's "build vs. buy" decision re HV services?

Disadvantages:

- Introduces biases in econometric estimates?
- Measure of cost misleading; distributors being compared on the basis of their "hypothetical" or "notional" costs, not their actual costs
- >>> inconsistency between costs used for benchmarking and costs that are the basis of distribution rates



## Merits of Option Two

Advantages:

- Fewer econometric/technical concerns
- Consistency between costs used for benchmarking and costs used to set distribution rates

#### Disadvantages

- Not applicable for unit cost, peer group efficiency assessments?
- No assurance that variables measuring differences in HV intensiveness will be statistically significant and, therefore, reflected in cost predictions





Controlling for differences in HV services a concern in benchmarking used in 3<sup>rd</sup> Generation IR

Difficult issue, comments on options welcome

