

OEB COST ALLOCATION REVIEW

Generic Minimum System Results

November 2, 2005 John Vrantsidis

ONTARIO ENERGY BOARD COMMISSION DE L'ÉNERGIE DE L'ONTARIO

SUMMARY

- Objective
- Stratified Approach & Density Boundaries
- Source of Generic Results
- Joint Cost Accounts
- Low, medium and high density results
- Vintage of Ontario studies
- Sensitivity
- Supplemental Questions

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Objective: Standard Customer v Demand Categorization Percentages

- Goal is to arrive at what % of certain joint distribution costs can be classified as:
- Customer-related, or
- Demand-related
- Results to be built into filing model as generic minimum system customer v. demand percentages

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Stratified Generic Minimum System Results

• A prior report for the Ontario industry suggested:

"categorization percentages vary by customer density. Other things being equal, the higher the customer density, the lower the customer component percentage"

(Recommendations for the Equitable Categorization of Distribution Costs)

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Three Density Stratums

Staff and advisory team's current views:

- There should be separate minimum system percentages for the following classes of distributors:
 - low density
 - medium density
 - high density

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Density Boundary Lines

- Involves judgement
- Based on input from consultants and advisory team, Staff currently suggests:
- 30 customers per kilometer be the dividing line between low and medium density distributors
- 60 customers per kilometer be the dividing line between medium and high density distributors

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Measurement of Density

- To promote more consistent results, it is suggested that each individual streetlight <u>not</u> be counted as a "customer"
- Advisory team also suggested that kilometers per customer should be calculated per pole length (i.e. not per circuit length)



Source of Generic Minimum System Results

Staff and advisory team located all known examples of Ontario minimum system studies

 several members of advisory team had participated in these studies and could verify approach



Comparisons to other Jurisdictions

Further background research by Staff, consultants and advisory team located other North American minimum system studies

 Ontario results fell within range of these studies, so Staff and advisory team are comfortable that local results are reasonable for use in the upcoming informational filings

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Joint Cost Accounts

Joint accounts to be split into customer v. demand percentages using generic minimum system results

- Line Transformers (accounts 1850)
- "Distribution" (defined as accounts 1830 1845)





Low-density Results

Staff and advisory team suggest:

- line transformers: 60% customer
- distribution: 60% customer

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High-density Results

Staff and advisory team suggest:

- line transformers: 30% customer
- distribution: 35% customer

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Medium-density Results

Staff and advisory team suggest:

- line transformers: 40% customer
- distribution: 40% customer

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Vintage of Ontario Minimum System Studies

- Some studies were recent (e.g. Toronto Hydro)
- Some from mid-1980's (e.g. Ontario Hydro rural study)
- Engineers on advisory team agreed that results from these past Ontario studies reviewed were still applicable

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Sensitivity of Generic Results

- Minimum system results can vary based on a variety of factors:
- size of "minimum" system assumed in study
- treatment of overhead and underground assets
- treatment of large urban network systems
- Density stratification results may vary if take into account clusters (compact urban area with adjacent low density service territory)

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Supplemental Filing Questions

Staff and advisory team suggest:

Supplemental questions be included in filing that will allow better interpretation of model results

 for example, to identify all Ontario utilities with a major downtown "network" distribution system





Utility-Specific Minimum System Studies

- Given proposed stratification of generic results, supplemental questions to be proposed, and project timelines
- Staff and advisory team suggest that distributors not be required to file an updated minimum system study as part of these informational filings

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