

Distribution Density Study

Background and Scope of Study

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2008 Distribution Application (EB-2007-0681)

Decision pgs.30-31

- “The Board directs Hydro One to provide a more detailed analysis of the relationship between density and cost allocation to the Board.”
- “ should consider whether the number of Residential and General Service classes is adequate and whether the customer class demarcations approved offer the best reflection of cost causation.”
- “ ... include the consideration of alternative density weightings”
- “Comparisons with the costs of distributors similar in size and location to Acquired Distributors would also be useful”

2010/11 Distribution Application (EB-2009-0096)

- **Phase 1 report by Elenchus Research**
- **Intervenor (SEC) evidence**
- **Decision ... pages 66-67**

“The Board will direct Hydro One to comply with the Board’s prior direction regarding this issue”

“ ... will not specify at this point the precise methodology or approach Hydro One is to use”

“ ... expects Hydro One to work cooperatively with the parties but leaves it to Hydro One’s discretion to determine how best to conduct the study taking into consideration timing, feasibility and cost”

“ ... expects Hydro One to manage the project efficiently”

Existing Density Based Rate Classes

Residential	Criteria	General Service
Urban	>3000 cluster & >60 per km	UGSe, UGSd
R1 – High Density	>100 cluster & > 15 per km	
R2 – Normal Density	remainder	GSe, GSd

Density Weighting Factors

- Used to allocate Overhead Lines and Transformer related costs
- Two Components:
 - Fixed Cost weighting factors based on the number of customers (lines related) or NBV of transformation assets (transformer related) by class for each feeder
 - Variable Cost weighting factors based on energy by customer class by feeder

Existing Weighting Factors

	Overhead Lines		Transformers	
	Fixed Costs	Variable Costs	Fixed Costs	Variable Costs
UR	0.19	0.18	0.77	0.75
R1	0.66	0.64	0.93	0.88
R2	1.61	1.42	1.23	1.12
Seasonal	1.20	1.60	0.87	1.28
GSe	1.11	1.15	1.00	1.04
GSd	1.14	1.18	1.05	1.01
UGe	0.24	0.18	1.03	0.79
UGd	0.31	0.30	0.76	0.94
Dgen	1.00	1.00	1.00	1.00
ST	1.00	1.00	1.00	1.00
St Lgt	1.00	1.00	1.00	1.00
Sen Lgt	1.00	1.00	1.00	1.00

Moving Ahead

- Hydro One intends to engage a consultant to complete the Density study
- Looking for input from stakeholders on the scope of the study in order to issue RFP
- Hydro One will gather stakeholder input and communicate to the OEB the approach it intends to follow in order to satisfy the Board Direction

Draft Scope of Study - 1

- Develop options for the “density” definitions that will be evaluated as part of this study
- Develop methodology for collecting the data required to assess the relationship between costs and density for the various options
- Gather the necessary data

Draft Scope of Study - 2

- Analyze the data collected to develop rate class and weighting factor alternatives that will be put through the cost allocation model.
- Evaluate the cost allocation model results and assess the impacts on customers' bills.
- Prepare Final Report documenting the work undertaken.

Timing of Study

- Issue RFP and award contract: Dec 2010
- Develop study methodology and collect necessary data: Apr 2011
- Analyze data and propose cost allocation model inputs: May 2011
- Run model, evaluate results and assess customer impacts: Jul 2011
- Prepare Final Report: Aug 2011