
OEB COST COMPARISONS

Commentary Regarding the PEG Approach

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Comparison of Ontario Electricity Distributors' Costs
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AGENDA

Introduction

Direct Answers to the OEB Questions

Definitions of Benchmarking

- Metrics
 - Cost
 - Quality of Service
 - Safety
 - Other e.g. Environment
- Practices

Cost Benchmarking

- Balance of Metrics
- Capital
- Data Issues

Methodology

- Time-series
- Appropriate Peers

Summary

INTRODUCTION

Hydro One is supportive of the benchmarking initiative

- Opportunity to help regulators do their job to establish more efficient regulatory processes
- Process which can help the industry make improvements

Perspective from Hydro One

- Ontario's largest distributor, essentially no peers in the Province
- Deliveries mostly to wide a range of rural customers and embedded distributors
- Goals for reliability and service as well as cost
- Scope of characteristics of service territory

Goals for the discussion - to highlight the following

- Benchmarking and its uses
- The specific methodology
- Data issues

ANSWERS TO THE OEB QUESTIONS - DATA IMPROVEMENT ISSUES

Are the improvements necessary and worth the cost?

- The improvements are definitely necessary in order to make the benchmarking model more applicable in the ratemaking process. Without a series of improvements, the methods as currently outlined cannot be used fairly

Are there other issues that need to be addressed?

- There are several issues that need to be addressed other than those listed specifically in the Guide for Presentations
 - Addition of capital costs as well as OM&A to better represent utility operations
 - Consideration of service levels as well as costs
 - Association of timing with the analysis – e.g. single year vs multi year

What issues should be addressed in what time-frames?

- In the immediate term (2007-2009), key issues to address include
 - Key issues noted as “suggested high-priority data upgrades” in the OEB Guide document
 - Capital costs should be included in the analysis in the short term as well, to assure a complete cost analysis
- Service levels should be included in the analysis in the intermediate term (2008-2010)
 - Reliability impacts of cost decisions
 - Time-series analysis, comparing spending with other results
- In the long term, additional analytical approaches need to be considered
 - Some combination of economics and other methods to include quality of service, safety, etc.

Should the Board rely on one method for benchmarking, or a combination?

- More than one method should be included, to provide a properly balanced view of the performance of each regulated utility
 - Include all costs, not just OM&A
 - Include quality of service metrics

If new data are needed, how would the data be gathered, and how soon could the information be available?

- To gather the appropriate data on a consistent and accurate basis, more complete guidelines will be needed for data gathering, followed by arranging for all utilities to report consistently
- Setting the guidelines can be completed in 3-6 months following a decision. Actual data gathering and reporting might take up to 2 years for utilities to get their data-collection tools in place that will provide a consistent and timely stream of data

ANSWERS TO THE OEB QUESTIONS - BENCHMARKING USES IN RATEMAKING

What alternatives should be considered for setting an X-factor?

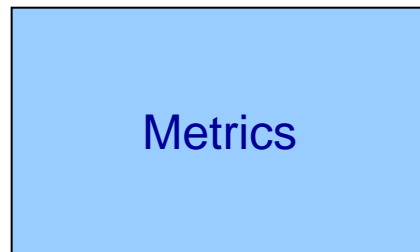
- Benchmarking presently in Ontario is at a stage that cannot be used for setting an X-factor
- Benchmarking needs to be developed to properly reflect cost, quality of service etc. definitions and data accuracy and reporting initiatives
- Once that has been achieved there are several possible alternatives:
 - Distribution Industry wide – one value
 - Grouped by utility size – several values that better reflect utility progress in efficiency improvements
 - Set in relation to a yardstick – could be based on a bandwidth (+/-) around an LDC average
 - Utility specific – to reflect the status of individual utilities along the spectrum of efficiency improvements

Should a staged approach be used for setting distributor-specific X-factors?

- It is unclear what is meant by a staged approach i.e. could that mean starting with an industry wide value and working towards a utility specific value?
- Setting a single value at the start may severely penalize those utilities that have made significant efficiency improvements whilst rewarding those utilities that are inefficient

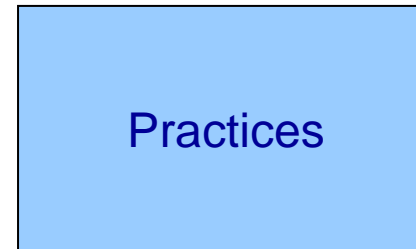
DEFINITIONS OF BENCHMARKING

Benchmarking is widely seen to have two major components:



Balanced Metrics

- Cost
- Quality of Service
- Safety
- Other



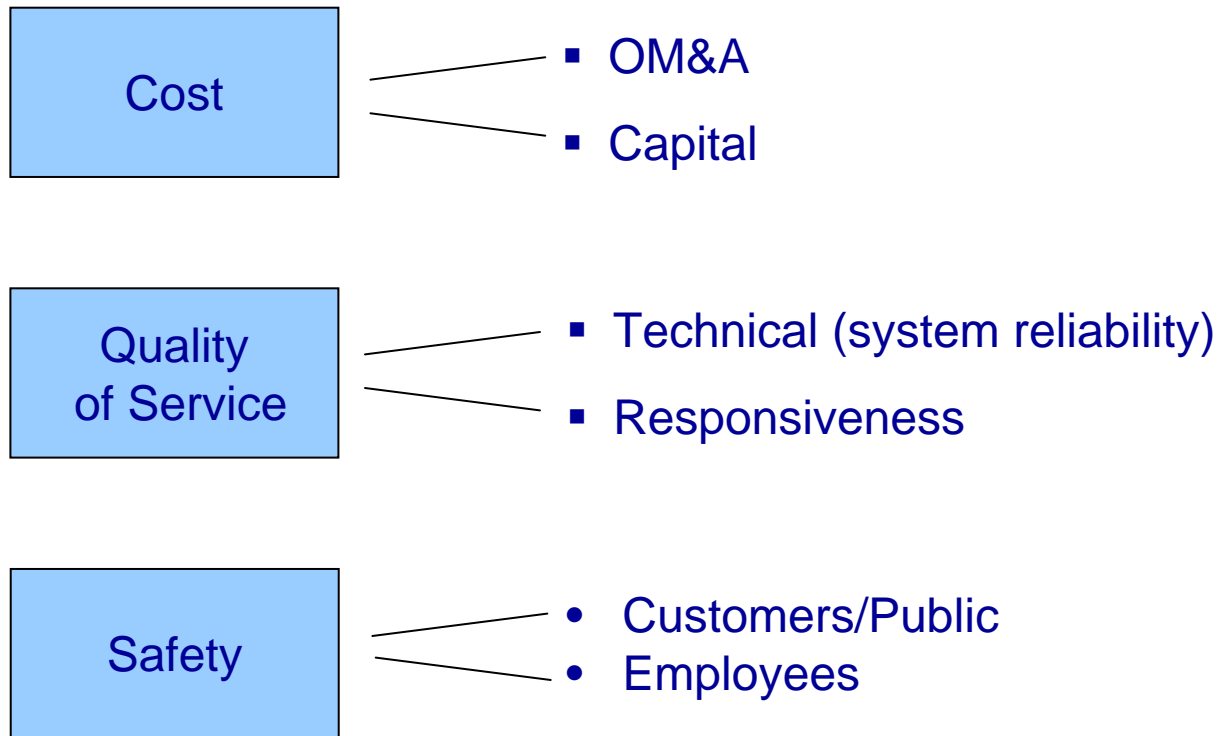
Multiple Aspects

- Technical
- Process
- Execution

The approach used by the OEB encompasses only one element of the major metrics employed in benchmarking.

A BALANCED BENCHMARKING APPROACH FOR METRICS IS APPROPRIATE

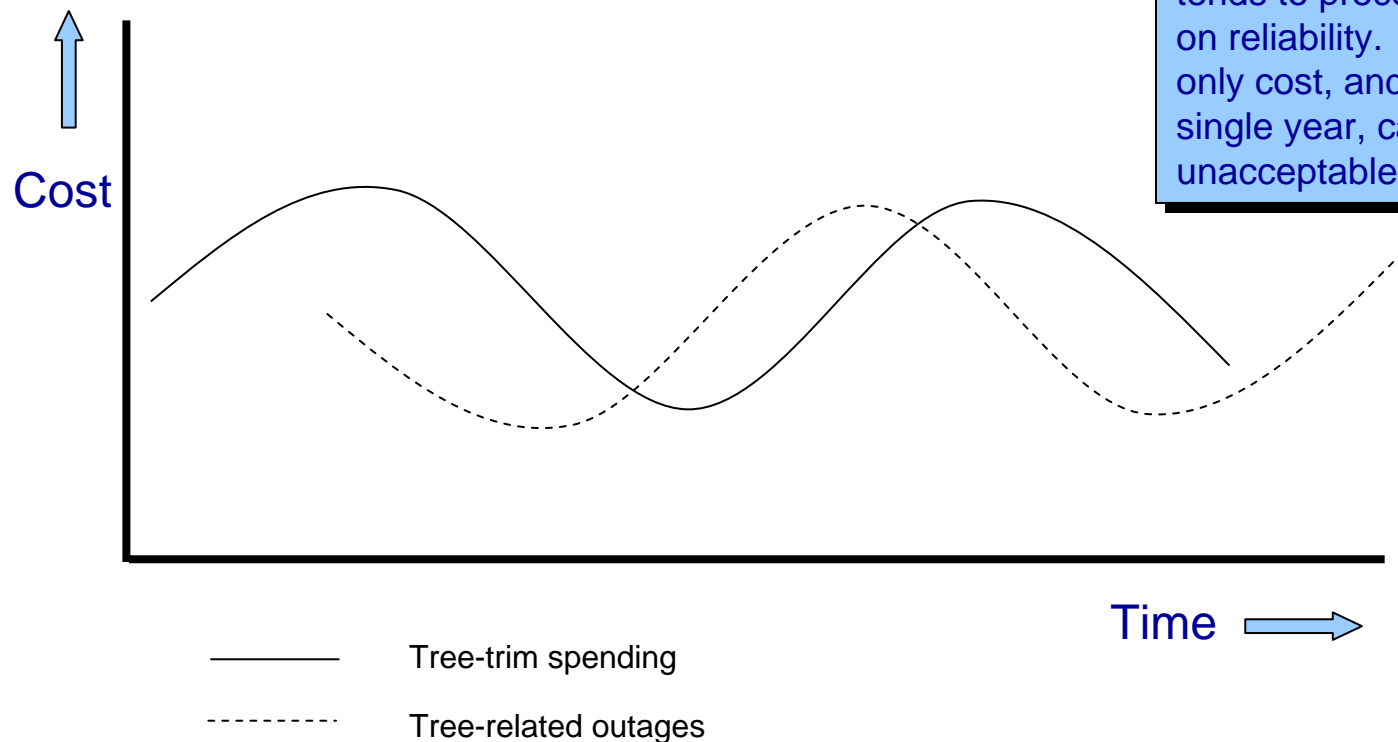
Legitimate tradeoffs often exist



METRICS BENCHMARKING

There are interactions between cost and outcomes of programs

- Vegetation management is a short-term example



Spending on tree-trimming tends to precede the impact on reliability. Measuring only cost, and only in a single year, can lead to unacceptable outcomes

Ignoring other outcomes while viewing only costs is limiting

PRACTICES BENCHMARKING

Utilities use benchmarking to

- Identify opportunity areas
- Identify best practices and processes
- Learn from other leading utilities and implement improvements

Companies using studies like the PA Benchmarking study have identified best practices such as:

- Mobile data dispatch for field crews
 - Tools and techniques
 - Work rules changes and supervisory/management changes needed
- Analysis tools for reliability improvement
 - Worst circuit approaches
 - Asset management techniques for risk mitigation
- Modified approaches to tree-trimming
 - Varied cycles for circuit trimming
 - Contracting approaches with vendors
 - Innovative tree-removal & replacement methods

Identification and implementation of best practices is a useful mechanism leading to better business management

EXCLUSION OF CAPITAL COSTS HAS UNPREDICTABLE CONSEQUENCES

OM&A can be affected by capital investments

- Choices regarding capital investments can have significant impact on maintenance requirements
 - Long-term investments can reduce OM&A requirements
- System design can affect operating characteristics
 - Examples include system automation, degree of back-up in system design, standards for utilization of capacity, etc.
 - Installation of smart metering can result in both reduced OM&A costs and improved quality of service
- Currently there is no consistency on how utilities trade-off between Capital & OM&A

Accounting approaches can influence OM&A versus capital

- Different treatments can result in significantly different outcomes
 - Clear definitions are needed for various investments
 - Consistent treatment and reporting of capital and OM&A items needs to be both agreed and enforced

DATA ISSUES

The high-priority data issues have been identified, both in the PEG report and in the commentary provided.

- Key to success will be tighter guidelines as to what is included in OM&A versus capital, more consistent definition of the individual OM&A cost categories, and more complete and accurate reporting of performance data
- Greater numbers of years of data collection is not the answer, until the guidelines and reporting issues are addressed and data is reported on a consistent basis
- Additional data regarding the volume of deliveries to embedded distributors is necessary to understand the total demands placed on each utility's distribution system
- Demographics data about the individual distribution systems will help in better analysis of the performance associated with the system
- Analysis should not proceed until all the high-priority data upgrades are completed
- The “high-priority data issues” comprise a critical path where the definitions of elements e.g. costs, quality of service; and accuracy of data gathering must be in place before taking consequent actions such as making information public

METHODOLOGY QUESTIONS

Hydro One recognizes the fact that for the purpose of benchmarking an analytical model may be, and has the potential to be, useful but needs to be further developed

A key concern is the underlying details of the model being used.

- Development of the key coefficients in the model isn't clear.
- A peer review process should be created, to assure a wider understanding of the modeling techniques

Using a single year of data can create misleading results

- Depending upon growth cycles and on system age, the spending of an individual utility can be very different, and legitimately so

Peer Comparison Concerns

- Use of appropriate comparators is critical for each individual utility
- Despite adjustments and indexes, there are fundamental differences among utilities which would be better addressed through separate comparison panels than by adjustments
 - System design characteristics such as OH vs UG, radial vs loop
 - Density of territory, and exposure to weather elements
 - Access to assets
- “Like” groupings of utilities would better serve the needs of the OEB
 - Result would be smaller groupings, but better modeling capability
 - Hydro One would need to draw from comparators outside Ontario

SUMMARY

Hydro One is supportive of the benchmarking process, but remains concerned about a few key elements

- Benchmark metrics should include more than costs
- Costs should include more than OM&A
- The peer sets need to be appropriate for each utility
- Methodology should include multi-year assessment
- Data guidelines and discipline for data accuracy need to be enforced