February 7, 2005

VIA EMAIL & COURIER

Mr. John Zych
Board Secretary
Ontario Energy Board
2300 Yonge St, Suite 2601
Toronto, ON M4P 1E4

Dear Mr. Zych:

Ontario Energy Board – 2006 EDR
Board File No. RP-2004-0188
Energy Probe Response to Undertakings

Please find enclosed 8 hard copies of the Undertakings of Energy Probe Research Foundation and one copy in PDF format. A PDF electronic copy is being forwarded to Mr. Keith Ritchie of Board Staff.

The submissions are as follows:

- Undertaking E.10.1: For Energy Probe to provide comments on Exhibit D.6.3
- Undertaking E.10.2: To Provide for Friday, February 4th, 2005, Energy Probe's position on the content of Chapter 14 of the draft Rate Handbook

Should you require additional information, please do not hesitate to contact me.

Sincerely,

David S. MacIntosh
Case Manager

Enclosures

2006 EDR Handbook

Energy Probe's Recommendations for

Chapter 14, Section 14.1

Definitions

Cost Driver: input prices, output quantities and external business conditions that are factors influencing LDC costs.

Comparator: a measurable indicator of utility cost or performance that can be compared across utilities.

Cohort: a grouping of utilities based on similar external cost drivers.

Objective

The purpose of comparators and cohorts analysis is to highlight cost anomalies within the 2006 EDR.

Scope

The analysis of comparators will concentrate on operation costs but will include capital costs in the analysis of wires and interconnection services.

The analysis of comparators will address total operation costs, as well as cost for the following cost categories:

- Wires & interconnection services (opex and capex)
- Customer Care (opex)
- Administration (opex)

Input Data

The data to be used for comparators and cohorts analysis will be drawn from the existing PBR RRR data, the filing requirements set out in Section 14.2, and other available sources of data.

Identification of Cost Anomalies

In order to identify cost anomalies or outliers, the analysis of comparators will address total operation costs, as well as cost for each of the three cost categories noted above.

For each operation cost category, regression analysis will be used to identify cost drivers. The dependent variables in the regression will include costs defined as the cost amount and the cost normalized on a cost-per-customer basis.

The regression analysis will include 2004 cross section data and also panel data for the period 2002 to 2004.

Potential cost drivers to be included as explanatory variables for regressing total operation costs will include: input and output variables including but not limited to customer numbers; input prices including but not limited to labour cost; external factors including but not limited to customer density, customer types, peak demand, urban vs. rural service territory, municipal mandates, and local soil and tree characteristics.

To identify and quantify cost drivers, regression results will be interpreted with due regard for statistical significance of coefficients and standard statistical assessments.

Cost anomalies, or outliers, for the various classifications of cost (total opex, total wires, customer care opex, and administration opex) may be identified.

Cohorts will be determined on the basis of cluster analysis.

Clustering analysis will be based on 2004 data.

Clustering will be based on the cost drivers identified through regression results.

Identification of high cost LDCs will be facilitated by placing the LDCs in cohorts,.

Cross tabulation of the utilities that are identified as high cost in each cohort will be performed.

2006 EDR Handbook
Energy Probe Recommendations for
C&C Utility Filing Information Chapter 14, Section 14.2

Preamble:

The following document provides Energy Probe's proposed revisions to Exhibit 6.3, Robert Camfield's proposed filing requirements. For ease of comparison, this document follows the format of original. No deletions from the original are recommended, although some of the priority identifiers in the original are delete as noted below. All additions are noted as underlined in red. An appendix is added discussing adjustments to O&M expenses so that the consistency of comparisons is improved.

Item[1]	Variable	Already Reported?	Comments
Category: LABOUR			For the C&C Mechanism, Labour should be reported for the identified unbundled services including *Wires, Billings and Collections, Customer Service,* and direct costs associated with *Administration*. For small LDCs, labour resources may need to be allocated to the categories according to time expended in the defined unbundled functions. It is possible that some virtual LDCs may not utilize direct labour resources.
X	Number of Full-time Employees	Yes (PBR)[2]	
X	Number of Part-time Employees	Yes (PBR)	
X	Number of FTEs	Yes (PBR)	
X	Wages	Yes (PBR)	
X	Salaries	Yes (PBR)	
X	Benefits	Yes (PBR)	

[1] An "X" in this column indicate an essential data item.

[2] PBR indicates that the information is already reported as part of a distributor's annual PBR data filing (RRR s. 2.1.5).

Category: CAPITAL			Capital (asset accounts) should be reported separately for the unbundled services including *Wires and Interconnection*, *Billing and Collections*, *Customer Services*; and *Administrative Services*.
Total Assets			Includes all assets
X	Year End Gross Assets	Yes (PBR)	US of A accounts 1805-1860 may provide information
X	Accumulated Depreciation	Yes (PBR)	
X	Capital Additions	Yes (PBR)	
X	Capitalized Labour	No	
X	Cumulative Amount of Funding of LDC Facilities by Consumers in Previous Years, in the Form of Contributions In Aid of Construction	No	

Distribution Plant			Includes substations, transformers, land and right-of-way, conductor, poles, conduit, relays, reactors and capacitors, SCADA, control room and/or control monitoring equipment, capital invested in stores and inventory, buildings, trucks and other vehicles.
X	Year End Gross Assets	No	Regression Analysis for capital cost will only include Wires & Connection Services
X	Accumulated Depreciation	No	
X	Capital Additions	No	
X	Capitalized Labour	No	
	Cumulative Amount of Funding of LDC Facilities by Consumers in Previous Years, in the Form of Contributions In Aid of Construction[3]	No	

[3] Cumulative amounts should include amounts that are not currently in gross asset balances for the years 2002 to 2004.

Billing and Collections		Includes customer meters, vehicles, communication equipment, software, buildings or allocated shares thereof,[4] and office equipment and furniture.	
	Year End Gross Assets	No	Note that capital costs associated with Billing and Collections are not intended for regression analysis in the Camfield proposals. Therefore, priorization is lowered here.
	Accumulated Depreciation	No	
	Capital Additions	No	
	Capitalized Labour and Purchased Outside Construction Services	No	
Customer Services[5] .		Capital employed in the *Customer Services* function includes buildings or some allocated thereof, office equipment and furniture, computers, software, and communications equipment, all of which is typically reported in categories of general plant.	
	Year End Gross Assets	No	
	Accumulated Depreciation	No	
	Capital Additions	No	

[4] It is highly likely that *Billing and Collections* and *Customer Services* will be carried out in general office buildings. Office space will be shared with other corporate functions and activities, and it is thus necessary to allocate the capital costs associated with buildings to the relevant functions. It is necessary to specify allocation protocols and rules.

Administrative Services		Capital employed in the *Administrative Services* function includes buildings or some allocated thereof, office equipment and furniture, computers, software, and communications equipment, all of which is typically reported in categories of general plant.	
	Year End Gross Assets	No	Priorization lowered as for Billing and Collection.
	Accumulated Depreciation	No	
	Capital Additions	No	

Category: OPERATING EXPENSES		Operating and Maintenance Expenses are requested for the four unbundled services including *Wires and Interconnection*, *Billing andCollections*, *Customer Services*, and *Administration.* O&M Expenses are also requested to total O&M.	
X	Operations and Maintenance Expenses for Wires	Yes (PBR)	
	Forestry expenses	?	
X	Billing and Collection Expenses	Yes (PBR)	Where B&C is outsourced, service payments should be apportioned and reported appropriately.
X	Customer Service[5]	No	
X	Administration Expenses	Yes (PBR)	
X	Total O&M	Yes (PBR)	
X	Capitalized Operation Expenses	?	Refer to the appendix discussing adjusting data to account for Capex/Opex allocations.
X	IT Depreciation costs associated with billing collection and customer service activities	?	Refer to the appendix discussing adjusting data to account for Capex/Opex allocations.

[5] It is recognized that this may not be relevant in the current timeframe.

Category: OUTPUTS			
Residential Markets			
X	MWh (KWh) of sales to consumers	Yes (PBR +R)	
X	Number of Customers at Year End	Yes (PBR+ R)	
C&I Markets (General Service) (Commercial and Industrial customers with less than 5 MW of demand) – this includes moderately large commercial and industrial customers commonly identified as Intermediate (large demand but less than 5 MW). Includes Unmetered Scattered Load.			
X	MWh (KWh) of sales	Yes (PBR + R)	
X	Number of Customers at Year End	Yes (PBR+ R)	
Large Customers Large commercial/institutional/industrial customers with more than 5 MW of demand)			
X	MWh (KWh) of sales	Yes (PBR + R)	
X	Number of Customers at Year End	Yes (PBR + R)	
Street Lighting and Signals (We typically refer to street lighting, which sometimes includes traffic lighting. In some cases traffic lighting may be in GS as either metered service or as Unmetered Scattered Load.)			
X	MWh (KWh) of sales Yes	Yes (PBR + R)	
X	Number of connections at Year End	Yes (PBR + R)	For this customer class, the number reported should be the number of connections. There may be a single customer (e.g. the municipality responsible for the roads).
Sentinel Lighting			
X	MWh (KWh) of sales	Yes (PBR + R)	
X	Number of Customers at Year End	Yes (PBR + R)	
Other USL			
X	Cable amplifier customers	See RP 2003-0249	
X	Other USL customers (e.g. pay phones)	?	
Share Urban			
X	Share Urban of MWH sales	?	
X	Share Urban of Number of Customers at Year End	?	

Historical Measures of Output			
	Energy Sales (kWh) for each year of the 1990-2001 period.	No	LDCs that have undergone mergers, acquisitions and service area expansions may have to aggregate the relevant historical data.
	Peak Demand (MW or kW) for each year of the 1990-2001 period.	No	
	Number of customers – Residential – Year End for each year of the 1990-2001 period.	No	
	Number of customers – General Service – Year End for each year of the 1990-2001 period.	No	
	Number of customers – Large Use – Year End for each year of the 1990-2001 period.	No	
Peak Demand			
X	Winter Peak (MW or KW)	Yes (PBR)	Sum of the non-coincident integrated demands, as metered at the high-side of the interconnection with the transmission network, or the host LDC,within the Winter period (October to March).
X	Summer Peak (MW or KW)	Yes (PBR)	Sum of the non-coincident integrated demands, as metered at the high-side of the interconnection with the transmission network, or with the host LDC. Summer months include the April to September timeframe
Km of Conductor as a Measure of Transport Services			
X	Single-phase	Yes (PBR)	Circuit miles of single phase service
	Two-phase	Yes (PBR)	Circuit miles of two-phase service
X	Three-phase	Yes (PBR)	Circuit miles of three-phase service
Categories: SERVICE TERRITORY DESCRIPTORS			
	Total service area (km^2)	Yes (PBR)	
	Share of the service territory that is Urban, stated as a percent of total km of circuits	No	"Urban" refers to areas within the LDCs service territory that assumes a predominantly urban (i.e. built-up, developed) environment. "Urban" includes towns, cities, and large metropolitan areas.
X	Northern (1) or Southern (0) Ontario	No	Regional indicator where the North-South designation corresponds with that used by the Ministry of Northern Development and Mines. Northern Ontario is designated as the following 10 territorial districts: Kenora, Rainy River, Thunder Bay, Cochrane, Algoma, Sudbury, Timiskaming, Nipissing, Manitoulin, Parry Sound; and the District Municipality of Muskoka. All other areas in Ontario are designated Southern. (Hydro One Networks is the only distributor operating in both districts; all other LDCs operate uniquely in one district.)
	Canadian Shield, Stated as a Percent of the LDC's Total Service Territory	No	Indicator variable of whether the topography of the service territory assumes the characteristics known as the Canadian Shield. 1=Yes, 0=No

Transformers and Distribution Network Attributes			
X	Number and Total kVA of Pad-Mount and Pole Transformers used to Serve Consumers	Yes (PBR)	
	Number and Total kVA of Transformers that are the Property of Consumers	No	
	Number and kVA of Transformers that are the Property of Consumers, where the Transformers are Serviced by the LDC	No	
	Number and kVA of Transformers Used for Interconnection with the Transmission Network, or for Interconnection with Other LDCs, and are the property of the LDC	No	
	Number of Transformers and the Reporting LDC's Share (%) of Total kVA of Transformers where: a) the Transformers are Used for Interconnection with the Transmission Network or for Interconnection with Other LDCs; and b) the Transformers are Jointly Owned	No	
X	Total km of Underground Single Phase Circuits	No	
X	Total km of Underground Three Phase Circuits	No	

Category: OTHER			
	Weighted Depreciation Rates for the Capital Assets Used in Each of the Unbundled Services (except for Wires & Connections Services)	No	The depreciation weights for the various types of physical capital according the percent share of each asset type to total assets used in the unbundled service.
X	Weighted Depreciation Rates for the Capital Assets Used in Wires & Conection Services	?	The depreciation weights for the various types of physical capital (substation, towers, conductor and transformers) according the percent share of each asset type to total.
	Weighted Asset age for the Capital Assets Used in Each of the Unbundled Services (except for Wires & Connections Services)	?	The age weights for the various types of physical capital according the percent share of each asset type to total assets used in the unbundled service.
X	Weighted asset age for the Capital Assets Used in Wires & Conection Services	?	The asset age weights for the various types of physical capital (substation, towers, conductor and transformers) according the percent share of each asset type to total.
	Cash Outlays for Insurance, Income Taxes or PILs, Employment Taxes and Charges to Regulatory Asset Accounts within the Annual Report Period	No	
X	Presence of Control Centre and SCADA system	Yes (PBR)	Indicator variable if the distributor has its own system control centre and SCADA system. 1=Yes, 0=No
	Portion of service monitored by SCADA	?	

	Number of New Customers Connected to the LDC's Network Within the Calendar Year	No	"Customer Turnover" refers to the share of new customers at year end.
X	Population	Yes (PBR)	Required for Camfield's regression of Billing and Collections as per Ex. B4.
X	Voltage Level	Yes (PBR)	As per PBR data file column BT
X	Transmission Facilities	Yes (PBR)	As per PBR data file column BW
X	Special Circumstances	Yes (PBR)	As per PBR data file column BX

Appendix: Adjusting Data to Account for Capex/Opex Allocation

With respect to capital and operation expenses, we recommend adjusting data to account for capex and opex allocation. These adjustments involve capitalized operation costs and outsourced activities. We believe that these adjustments will be helpful to establish more directly comparable results whereas the raw data might reflect different treatments in reporting capitalized expenses.

The amount of capitalized operation expenses should be identified. These might include training, meter maintenance, or some call centre costs. If benchmarking is applied to capital cost, we recommend excluding capitalized operation expenses from the base capital amount. It is advisable that LDCs file total capitalized operation expenses broken down by cost category. As a proxy, these expenses could be associated with expenses exceeding a threshold as indicated in Chapter 4 of the Handbook.

On the other hand, some entities may report some outsourcing activities associated with customer care expenses as operation costs. However, for some other LDCs, assets associated with these activities are developed in house, and an important portion of these expenses allocated to capital costs. It appears that many non-operational IT activities dealing with billing, collection and customer care are susceptible to this type of reporting inconsistency. It is advisable that any IT depreciation related to billing, collection and customer care be moved from capex to opex.