

**FINAL REPORT TO THE
ONTARIO ENERGY BOARD**

**A REVIEW OF POTENTIAL
REGULATORY COST MEASURES**

**Prepared by
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1 INTRODUCTION

The Ontario Energy Board (“the OEB” or “the Board”) has committed to the objective of undertaking management initiatives that “...will enable it to work more effectively, using its resources efficiently and in a fair and transparent manner...”¹ and has explicitly stated this objective in the Business Plans the Board has published since its transition to a self-financed crown corporation in March of 2004. In its first Business Plan (for fiscal year 2004-05), the new Board committed to meeting this objective, in part, by “analyzing best practices of comparable regulatory bodies to continue to develop benchmark performance measures.” In its 2006-09 Business Plan dated December 2005, the Board further refined one way that it was going to achieve this objective by committing to “...publishing an appropriate measure of the cost of regulation for the Board...”

To assist it in fulfilling this commitment, the Board retained Elenchus Research Associates (ERA) to identify regulatory cost measures that could be implemented by the Board as objective performance indicators for fiscal 2007-08 and subsequent years as a basis for assessing the Board’s regulatory costs in a transparent and meaningful way.

RECOMMENDATION

Based on the survey information reported in ERA’s *Survey of Regulatory Cost Measures* prepared for the Board², ERA is of the opinion that appropriate measures of regulatory cost that could be reported by the Board to fulfill the commitment it made in its 2006-09 Business Plan are:

1. Three-year moving average percentage change in operating expenses,
2. Three-year moving average of operating expenses as a percentage of industry revenue (regulatory overhead), and

¹ OEB Business Plan for Fiscal Year 2004-2005, p. 11; OEB 2006-2009 Business Plan, p.15.

² Elenchus Research Associates Inc., (July 2006) *Survey of Regulatory Cost Measures*. A high level jurisdictional summary based on the Survey is presented in Table 2.

3. Three-year moving average of operating expenses per end-use customer.

For 2007, the OEB could publish an interim 2-year average as a transition to the 3-year measure. Measures for the years since the Board became a crown corporation are presented below. The moving averages would be calculated once additional time series data are available.

Table 1: Recommended Regulatory Cost Measures

	OEB	
	2004-05	2005-06
Operating Expenses ^a	\$24,544,752	\$25,481,267
Measure #1: Percentage Change in Operating Expenses		3.82%
Industry Revenue (\$B) ^b	\$19.1	\$21.4
Measure # 2: Operating Expense/ Industry Revenue	0.13%	0.12%
% change		-7.34%
Electric Customers ^c	4,461,799	4,500,244
Natural Gas Customers ^c	2,950,856	3,029,244
Measure #3: Operating Expense per Customer (\$yr/customer)	\$ 3.31	\$ 3.38
% change		2.11%

Notes:

- a) Source: Ontario Energy Board, Financial Statements, Year Ended March 31, 2006. The figure used is Total Expenses as reported in the Statement of Operations and Net Assets.
- b) ERA estimate based on various OEB and Statistics Canada sources.
- c) Number of electric and gas customers provided by OEB.

2 DISCUSSION

PRACTICES IN OTHER JURISDICTIONS

The first stage of this project consisted of a review of the practices of other jurisdictions. ERA surveyed 12 regulatory bodies engaged in energy regulation (three in Canada, four in the United States, four in Australia and one in the United Kingdom) to determine the respective regulatory cost measures that are currently being used. Subsequently, ERA analysed the published information from several other energy regulators (including the Régie de l'énergie representing Canada's second largest province by population,). The ERA survey found that most energy regulators are government agencies that have their global budgets determined primarily by government. In some jurisdictions, the regulator is an extension of, or contained within, a government department. Many of these government agencies do not publish independent financial information – their budgets are included in the overall government budgeting process in the same manner as other government agencies in the jurisdiction. Several of these government agencies do not publish regulatory cost measures – the implicit corporate goal and hence the regulatory cost measure is to restrict spending to be within the approved budget. However, financial reporting of these government agencies is available through other sources, such as government estimates and budget documents.

Regulators that are government agencies often do not publish regulatory cost measures. This is consistent with standard practice of government agencies. In ERA's view, this approach does not constitute the industry best practice in measuring performance with respect to the regulatory cost for a self-financed crown corporation such as the Ontario Energy Board.

An energy regulation agency that has a level of control over its global budget that is similar to the OEB is the UK's Office of Gas and Electricity Markets ("Ofgem").

- Ofgem produces a Corporate Strategy and Plan annually which details Ofgem's main priorities for the coming three years, and is developed with stakeholder consultation, as does the OEB.
- Ofgem's Plan provides financial data and information on Ofgem's performance against targets for the previous year. Similarly, the OEB provides audited financial results for its current year compared to previous year results and its achievement of business plan performance measures for the previous year.
- Starting from April 2005, Ofgem has adopted a cost control regime (a revenue cap) based on an incentive regulatory mechanism similar to that used to regulate network monopolies.

While noteworthy, in ERA's view Ofgem's revenue cap approach is not an appropriate approach for the OEB at this time. There are several reasons for this:

1. The major UK energy sector reforms are mature, with the most significant industry restructuring having been undertaken two decades ago. Ontario's energy sector (and the role of institutions such as the OEB) is still in flux as the industry structure evolves and matures.
2. Ofgem (and its predecessor organizations, Offer and Ofgas) have many years of experience with incentive regulation of restructured, privatized network monopolies, and the associated processes (including consultation and stakeholder relations).
3. Ofgem has likely reached its "critical mass" in terms of staff complement, understanding consulting requirements and the role expected of it by industry and stakeholders. Ofgem's expenses increased rapidly during the initial years after the merger of Offer/Ofgas.
4. In the recent past, Ontario stakeholders have expressed concern about the adequacy of the Board's resources and its ability to carry out its responsibilities (prior to the OEB's transformation to a self-financed crown corporation).

PRIMARY TYPES OF REGULATORY COST MEASURES (BENCHMARKS)

Among energy regulators that report regulatory cost measures, our survey shows that two types of measures are used: Standards Benchmarking and Comparative Benchmarking.

- **Standards benchmarking** involves comparing measures of a regulator's costs to one or more pre-defined standards. Regulatory cost measures used for standards benchmarking have included absolute cost standards (such as a revenue cap, budget target, or adjusted budget target)³, or an index of regulatory cost⁴, such as expenditure measured as the cost per utility customer, cost per capita, costs per unit of energy sold, or cost as a percentage of industry revenue.
- **Comparative benchmarking** involves a comparison of one or more measures of the regulator's costs to the same measure for other regulators. The ERA survey identified two regulators (BCUC and the NEB) that utilize comparative benchmarking. Both the BCUC and the NEB use the per capita regulatory cost (\$/Year) as a comparative benchmark. The BCUC also shows staffing levels and the annual budget of comparator regulators. Both the BCUC and NEB calculate these measures using the total annual costs of the regulator, without making any adjustments to reflect differences among the regulators that are compared that would explain the cost differences. It should be noted that while only the BCUC and NEB publish explicit comparisons with other energy regulators, any regulator that publishes a similar index of cost (per customer, per GJ, percentage of industry revenue) is offering a comparative benchmark to any other regulator that publishes a similar index of cost⁵.

³ Regulators who have used this type of standard include: The British Columbia Utilities Commission (BCUC); Régie de l'énergie (Régie); Essential Services Commission (ESC), Victoria, Australia; the National Electricity Market Management Company Limited (NEMMCO) which is the Australian equivalent of the Ontario Independent Electricity System Operator (IESO); the Independent Pricing and Regulatory Tribunal (IPART), New South Wales, Australia; and, Ofgem in the UK.

⁴ Regulators who have used this type of standard include BCUC, the Régie, IPART, NEMMCO, and Ofgem.

⁵ Obviously, comparative cost indexes can be calculated for any jurisdiction for which regulator costs and customer or other industry figures are available.

The ERA survey indicated that among the regulators that use cost measures, performance is not necessarily tracked consistently over time. It appears that some regulatory agencies only monitor and report cost indices along these lines during periods when they are operating in a relatively stable environment.

Establishing appropriate regulatory cost standards benchmarks is not an easy task because some of the most important cost drivers are not predictable. For example, demands on the OEB may be higher during periods when the Government has directed, or the OEB has chosen, to report on policy issues and increased reliance on multi-year incentive regulation (IR) could change the Board's total costs. In addition, in an environment which is still in flux, as is Ontario's, the scope of the regulator's legislative mandate could be changed. This may have significant impacts on its total costs (either positive or negative).

In developing comparative cost measures, it must be emphasized that any comparison of the costs of different regulators can be open to misinterpretation. This weakness can be mitigated, however, if the simple numerical benchmark is accompanied by information on the differences in mandate and operational requirements, which are important uncontrollable cost drivers both in terms of the rate of change over time and in terms of absolute cost. For example, if comparisons were made between the OEB and institutions such as public service or public utility commissions in some US states, it would be important to recognize that these institutions are responsible not only for the regulation of natural gas and electricity monopolies, but also in some cases for telecommunications, water and sewerage, and public transport (including in some instances, rail safety). In addition, many state regulators are responsible for funding ratepayer advocacy offices. This is obviously a much broader mandate than the OEB. Therefore, we do not recommend comparisons to US agencies.

Other regulators, such as Ofgem and IPART, are economic regulators only and unlike the OEB are not responsible for facilities approvals. Ofgem's regulatory responsibility is limited to gas and electricity, as its name suggests, while IPART is additionally responsible for water and transport, and has reviewed gambling and health care.

The scope of other Canadian utilities regulators, such as the BCUC and the Régie, are similar to the OEB.⁶ However, the number of utilities they regulate is limited to a handful compared with the 103 utilities regulated by the OEB. Balanced against this is the responsibility for full cost-of-service/rate-review for vertically integrated utilities including generation assets, a responsibility the Board has not yet carried out since the separation of Ontario Power Generation from Hydro One Networks.

ERA has concluded, based on its review of the practices of other regulators, that there is no single regulatory cost measure currently in use that will serve as a reliable standards and/or comparative measure of the OEB's regulatory costs. It is nevertheless useful to publish one or more measures of the OEB's regulatory cost in order to monitor cost trends and ensure that the trend is reasonable and justifiable, both internally and externally.

ERA identified several measures that would be appropriate for the OEB to report. Furthermore, while reporting one cost measure has the benefit of simplicity, using more than one measure would convey a broader measure of actual cost performance and would provide a more comprehensive window on Board costs.

APPROPRIATE MEASURES OF REGULATORY COSTS

As outlined above, although ERA has concluded that no one single cost measure is perfect; there are several that would be useful. One measure that has significant merit is the regulator's cost as a percentage of industry turnover (industry total revenue), which represents the industry's "regulatory administrative overhead". This measure is currently reported by Ofgem. It is also used in other sectors to gauge administrative efficiency (for example, insurance schemes in the health care sector). This is a useful indicator in that it shows how regulatory costs vary with industry costs/revenue.

⁶ The BCUC is now also responsible for regulating auto insurance (Insurance Corporation of British Columbia) and the Régie monitors gasoline and diesel prices and commercial practices.

A drawback of this measure is that consistent and well-defined data for Ontario are not currently available, although data on industry revenue are available for other jurisdictions (for example, BC, Quebec, and the UK). For the purposes of this report, ERA has estimated total industry revenue for Ontario using a combination of data sources.⁷ Until a consistent source for this data is established, the Ontario figure should be viewed as a preliminary estimate only. It may be appropriate for the OEB to establish procedures for collecting and reporting total industry revenues.

Furthermore, while this measure reveals the cost overhead as a percentage of industry turnover, which is a very useful measure to gauge overall administrative burden, it may not tell the entire story in isolation. For example, the relative price of energy and energy delivery varies across jurisdictions. Policies in different jurisdictions (for example, a price freeze, mandated price cut, or movement to market prices) can all have an effect on industry's administrative overhead although the actual regulatory burden attributable to the regulator's cost may be unchanged.

As the ERA survey found, many regulatory agencies that report costs use their total expenditure as a baseline cost comparator. This statistic would be useful as a high level standards measure; however, it is deficient as a stand-alone measure. It may mask the actual effort of the agency. For example, if the agency takes on additional industry responsibility, the agency's budget will increase, but its cost effectiveness may not have deteriorated. A classic example of this is the merger of Offer and Ofgas. One agency became responsible for both natural gas and electricity customers. Nonetheless, notwithstanding these shortcomings, monitoring year-to-year changes in total regulatory expenditures is a high level '*standards*' cost measure and is consistent with practices in other jurisdictions. Therefore, ERA suggests the annual change in actual operating expenses be adopted as a cost measure.

Total cost does not allow direct comparison with other regulatory agencies. Therefore, another statistic that is useful both as a standards measure, and also allows for comparative benchmarking, is cost per customer. This measure is currently used by the

⁷ The OEB for distribution and transmission revenues, the IESO for electric commodity costs, and Statistics Canada for natural gas commodity costs.

BCUC. The BCUC and NEB also report cost measure, both their own costs and other comparative agencies, on a per capita basis (that is per jurisdiction population). We caution against using this measure as it does not truly represent the unit regulatory cost. There are two main for this:

1. A single household may be a dual or triple customer (i.e., they may receive gas service, electricity service, and telecom service);
2. In some jurisdictions, not all households/customers are regulated. For example, in the US, some customers of municipal utilities are not regulated. For example, power and water customers in the City of Los Angeles (customers of the L.A. Dept of Water and Power) are not regulated by the state PUC. There are also a small number of gas and electric customers in Ontario that are not regulated by the OEB.

ERA also believes it is appropriate to apply a three-year moving average to any measure chosen for the purposes of standards benchmarking (e.g., a three-year average of operating expenses as a percentage of industry revenue, a three-year average of the annual change in operating expenses per customer and three-year average of operating expenses). For transparency, the actual annual figures should also be reported. Averaging will correct for year-to-year variations (up or down) caused by unusual regulatory demands that do not represent the longer term trend. While the three-year period for the moving average may be arbitrary, it is long enough to smooth out year-to-year fluctuations that do not represent a trend, while being current enough to reflect any trend which may be occurring.

TREATMENT OF SECTION 30 COSTS

In order to capture the total costs of the regulatory process that are controlled by the Board, as opposed to only the Board's direct costs, it may be informative to track all costs associated with the regulatory processes of the Board. A measure of regulatory process costs would include both direct OEB costs (such as salaries, accommodation expense, consulting fees, and other O&M costs such as IT) and cost awards ordered by the Board. It is our understanding that intervenor funding, provided directly by the Board from its own budget, when the Board requested stakeholder participation in consultative

processes, was discontinued as a means of funding stakeholder participation in Board processes during 2005-06. Through the balance of 2005-06 and in the future, cost awards which are costs payable by a person the Board designates under s.30 of the OEB Act, will be used at the Board's discretion to cover the costs of both intervenors and the Board in relation to both adjudicative and consultative processes.

Hence, a measure of regulatory costs that includes all section 30 cost awards would be an appropriate measure of the cost of the OEB's regulatory processes. Other Canadian energy regulators also exclude cost awards from their operating budgets, but report these costs in their annual reports⁸.

It is ERA's understanding that the Board's audited financial statements for the fiscal year 2005-06 include cost awards of \$119,017. Additional section 30 cost awards regulated entities were ordered to pay to eligible parties by the Board amounted to \$2,483,766 in 2005-06. The OEB has begun disclosing all section 30 costs in 2005-06 and will continue to do so in its future annual reports to ensure transparent reporting of all costs associated with OEB regulation.

A truly comprehensive measure of the regulatory cost in Ontario would also capture the private costs incurred by utilities and other stakeholders. However, the Board does not have access to the information required to provide a consistent and defensible measure that includes third-party costs.

⁸ The BCUC and the Régie.

3 CONCLUSION AND RECOMMENDED APPROACH

In summary, ERA is of the opinion that appropriate regulatory cost measures that could be reported by the Board commencing in fiscal 2006/07 in order to fulfill the commitment it made in its 2006-09 Business Plan are:

1. Three-year moving average percentage change in operating expenses,
2. Three-year moving average of operating expenses as a percentage of industry revenue (regulatory overhead), and
3. Three-year moving average of operating expenses per end-use customer.

ERA is of the view that using the three-year moving average for each measure would be appropriate as a means of smoothly the impact of unusual or cyclical regulatory requirements. Since three years of operating expense data are not yet available for the Board operating as a self-financed crown corporation, the OEB could publish for 2007 an interim two-year average as a transition to the three-year measure. These measures are presented in Table 1 on page 2. The moving averages would be calculated once additional time series data are available.

It should be noted that it would be inappropriate to draw general conclusions about organizational efficiency from the absolute level of any individual cost measure for the reasons discussed in preceding sections. Organizational efficiency in general relates to the level and quality of outputs per level of input. For a regulator, the operating environment and legislative mandate significantly affects the outputs required of the regulatory agency. The cost per customer represents nothing more than a measure of “regulatory overhead” over time (in self-comparison standards) and across jurisdictions (in comparative benchmarking).

Table 2: High Level Jurisdictional Summary

Attribute	Industry Regulated	Processes/ Mechanisms	Regulator Costs (2004/05 Cdn\$ MM)	Source of Funding	Staffing Level (including commissioners 2004/05)	No. of Regulated Energy Utilities	No. of Customers (Energy utilities, million)	Population (million)	Overall Comparability to OEB **
EUB	Energy Development (Elec., N.G., oil, oil sands, coal)	COS, quasi-judicial hearings (written/oral), ADR	112.2 (Total)	60%-cost recovered, 40%- Gov't	780	7 investor- owned utilities and some municipally- owned	1.4 (Electricity)	3.3	No (except for regulation of utilities)
	Utilities (Elec., N.G., Water)		8.2 (utilities)						
BCUC	Electricity, Natural Gas, Insurance	Public hearings, ADR, NSP, incentive mechanisms such as PBR, workshops and information publications	4.3 (includes auto insurance)	Fully cost- recovered	25 FT, 6 Temp	25	2.75	4.3	Similar (but also regulates insurance)
NEB	Certain areas of the Electricity, Natural Gas and Oil industries	Public hearings (written or oral), ADR	38.1	90 % cost recovered, 10% Gov't	307.6 FT 1 Temp	Not Readily Available	Not Applicable	32.4	No
OEB	Electricity, Natural Gas	Oral and written public hearings, technical conferences, ADR, and limited use of light- handed regulation.	24.5	Fully cost recovered	148	103	7.4	12.4	
FERC	Certain areas of the Electricity, Natural Gas and Oil industries	NOPR, technical conferences, public hearings, evidentiary hearings (written and oral) and ADR, PBR, traditional COS .	237.8	Fully cost recovered	1,230	Not Readily Available	Not Applicable	295.7	No
MPSC	Electricity, Natural Gas, Petroleum, Telecom, Motor Carrier	Traditional COS; with a few cases of PBR in the past -Averch-Johnson model	21.7	Fully cost recovered	157	31	7.5	10.1	Similar (but also regulates other sectors)
NYPSC	Electricity, Natural Gas, Steam, Telecommunications, Water utilities; Cable	COS or PBR; incentives; evidentiary hearings (oral/written)/ADR	84.4	98% cost- recovered; 2% Gov't	545	62	10.8	19.2	Similar (but also regulates other sectors)

* Acronyms: ADR - Alternate dispute resolution; COS – Cost of Service; NOPR – Notice of Proposed Rule;
NSP – Negotiated Settlement Plan; PBR – Performance Base Ratemaking.

** The Comparability column reflects ERA's view, based on the survey, of the comparability of each regulator to the OEB for purposes of cost benchmarking.

Attribute	Industry Regulated	Processes/ Mechanisms	Regulator Costs (2004/05 Cdn\$ MM)	Source of Funding	Staffing Level (including commissioners 2004/05)	No. of Regulated Energy Utilities	No. of Customers (Energy utilities, million)	Population (million)	Overall Comparability to OEB **
PPSC	Electricity, Natural Gas, Water, Telephone, Transportation	Hearings ; recommendations --public notice; -public hearings; -ALJ model	54.4	Fully cost-recovered	528	Not Readily available	5 million households	12.4	Similar (but also regulates other sectors)
ACCC-AER	Electricity, N. Gas, Telecommunications, Insurance , Aviation and Airports, Waterfront and shipping, Rail, Postal services, Petrol prices	Public Consultations (administrative processes)	70.9	Mainly Government (up to 99%)	458	22		20.1	Similar (only in relation to regulation of utilities)
ESC	Electricity, Natural Gas, Water, Ports, Rail and Grain Export Facilities.	PBR, light-handed rate regulation, through administrative processes involving public consultation. Heavy-handed reporting, compliance and enforcement	12.6	Primarily Gov't	64	8	3.8	5.0	Similar (but also regulates other sectors)
IPART	Electricity, Natural Gas, Water, and Public Transport	Administrative public consultation processes; analogous to "Notice and Comment" regulatory processes utilized in Ontario.	13.4	Mainly Gov't and Appropriations	76	8	Not Readily Available	6.7	Similar (but also regulates other sectors)
OFGEM	Electricity, Natural Gas	Light-handed form of regulation (PBR); regulatory processes are administrative processes involving public consultation (equivalent to OEB Notice & Comment regulatory processes)	86.9	Fully cost-recovered	291	26	49.4	58.1 (excludes Northern Ireland)	Similar industry and mandate; but different mechanisms, processes

* Acronyms: ADR - Alternate dispute resolution; COS – Cost of Service; NOPR – Notice of Proposed Rule; NSP – Negotiated Settlement Plan; PBR – Performance Base Ratemaking.

** The Comparability column reflects ERA's view, based on the survey, of the comparability of each regulator to the OEB for purposes of cost benchmarking.