1	Q.	In th	e Mediator's Report included in Appendix H of the Decision and Order of		
2		the I	Board (Order No. P. U. 14 2004), Hydro agreed (point "aa") to "propose a		
3		peer	group of utilities and measures upon which to compare its performance		
4		not l	ater than six months following the date of the Board Order in this		
5		proc	eeding. Upon approval thereof, Hydro will collect and report such		
6		mea	sures for itself and the peer group annually beginning in 2005". It is		
7		understood that Hydro filed the report entitled Defining a Utility Peer Group			
8		for N	for Newfoundland and Labrador Hydro dated December 2004 in response to		
9		this agreement. Please respond to the following:			
10					
11		a.	Please, for the record, file the aforesaid December 2004 report in this		
12			proceeding.		
13		b.	Please provide all reports relating to Hydro's performance relative to		
14			the peer group beginning with the annual report filed in 2005.		
15		C.	Why does Hydro's Annual Report on Key Performance Indicators		
16			dated April 2006 (Exhibit JRH-1) include no reference to a peer group		
17			of utilities?		
18		d.	What is the current status and plan going forward relating to Hydro		
19			reporting of its performance relative to the peer group?		
20		e.	On page 3 of the report entitled <i>Defining a Utility Peer Group for</i>		
21			Newfoundland and Labrador Hydro, note 3 states that Hydro		
22			understands that CEA COPE was developing (in December 2004) a		
23			policy paper outlining the limitations associated with use of		
24			performance metrics for regulatory purposes. Has this report been		
25			completed, and if so, can a copy be made available?		
26		f.	On page 10 of the report entitled Defining a Utility Peer Group for		
27			Newfoundland and Labrador Hydro, note 9 states that Hydro		
28			understands that CEA COPE has had discussions with international		

1			organizations with a view to facilitating international utility performance
2			measurement in a consistent and effective manner. What is the status
3			of these discussions?
4			
5			
6	Α.	a.	See Attachment 1, report titled Defining a Utility Peer Group for
7			Newfoundland and Labrador Hydro Pursuant to Order No. P.U. 14
8			(2004).
9			
10		b.	Hydro's December 2004 report to the Board referred to above
11			recommended that "the most cost effective and administratively
12			feasible choice for the selection of a peer group of utilities for Hydro's
13			external benchmarking purposes is the peer groups already
14			established within the CEA and CEA COPE frameworks. Hydro
15			recommends that CEA be used as the means for Hydro to externally
16			benchmark to its industry counterparts operating elsewhere in
17			Canada."
18			
19			Hydro has not received any further direction from the Board arising
20			from this report. However, subsequent to Hydro's report, CEA finalized
21			a policy paper for its member utilities on benchmarking data in
22			regulatory settings. Due to the complexity of peer benchmarking,
23			trending the performance of an individual utility over time was
24			recommended as opposed to peer-to-peer benchmarking. CEA
25			undertook to develop a set of high-level indicators for use in regulatory
26			settings. CEA's work on regulatory KPIs remains ongoing and as a
27			result Hydro has not engaged in any external benchmarking.
28			
29		C.	Please refer to CA 4(b) above.

1	d.	Hydro intends to adhere to CEA policy and guidelines respecting
2		benchmarking data in regulatory settings. CEA has indicated that it
3		targets completion of regulatory performance indicators during 2007.
4		
5	e.	See Attachment 2, policy paper Canadian Electrical Association Policy
6		Paper Benchmarking Data in Regulatory Settings (BD/RS), October
7		2005.
8		
9	f.	CEA reports that it has not entered into any subsequent agreements
10		with any international bodies regarding performance benchmarking
11		data development and sharing.

CA 4 NLH Attachment 1 2006 NLH GRA



Defining A Utility Peer Group For Newfoundland and Labrador Hydro

Pursuant to Order No. P.U. 14 (2004)

Newfoundland and Labrador Hydro December 2004

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1.0 Introduction

The Board of Commissioners of Public Utilities ("the Board"), in Order No. P.U. 14 (2004) ("PU14"), required Hydro to file, no later than December 31, 2004, a report proposing a "peer group" of utilities for the purposes of external benchmarking of its key performance indicators ("KPIs"). This report is submitted in response to PU14. It describes Hydro's existing internal KPI framework for performance measurement, reviews possible data sources and issues pertaining to defining a suitable peer group, and makes a recommendation for proceeding with external benchmarking.

2.0 KPI Classification

Hydro historically reported on a number of KPIs to the Board prior to its 2003 General Rate Application. As part of its ongoing internal review of strategic planning issues and corporate performance review, Hydro developed a comprehensive set of KPIs for performance monitoring, which included additional KPIs. This has previously been reviewed by the Board¹. The Board in PU14 directed Hydro to report on these KPIs in its annual reports to the Board, commencing with the 2004 annual report.

Hydro views KPIs as generally falling into one of two groups: technical KPIs, and financial-economic KPIs. Technical KPIs primarily relate to the physical performance of assets such as those relating to generation assets (e.g. forced outage rates, capability factors, etc.), transmission and distribution reliability (e.g. SAIDI and SAIFI measures), and other more or less standard utility non-financial measures (e.g. thermal efficiency and customer satisfaction).

Where KPIs relate to financial and/or economic corporate level data, notably as with the 'cost-per-unit-of-something', the KPI moves from being asset-based to more financial and economic based. Once dollars are directly brought into a KPI calculation, the

¹ See Grant Thornton's report "Report on Regulatory Performance Measures for Newfoundland and Labrador Hydro" as filed with Board on July 17, 2003 (Information #4).

measure can begin to reflect the particular resource endowments, environment and operational factors, and economies of scale of the jurisdiction of the utility in question. This tends to create some limitations when interpreting KPIs across jurisdictions.

The technical and economic KPIs, which the Board in PU14 directed Hydro to report on, are:

Table 1: Requested Key Performance Indicators
Technical KPIs
Customer Satisfaction Index
Weighted Capability/Incapability Factor
Weighted DAFOR
SAIDI/SAIFI Transmission
SAIDI/SAIFI Distribution
SARI
Hydraulic Conversion Factor
Thermal Conversion Factor
Economic KPIs
Corporate Controllable Unit Cost
Generation Controllable Cost
 Generation OM&A\$ per MW Installed Capacity
Generation OM&A\$ per MWH Generated
Transmission Controllable Cost
Distribution Controllable Cost

3.0 External Benchmarking

Hydro has developed its existing KPI framework largely for the purposes of its own performance measurement and its own performance improvement. The focus has been on past performance, with the target being one of continuous improvement. In recognition of the additional value of external benchmarking, Hydro agreed, during the mediation stage of the 2003 GRA, to establish and report on performance measures based on a peer group of utilities.

In industry terms, Hydro is generally considered to be a vertically integrated electric utility monopoly, meaning that it is the primary firm providing and/or delivering electric power services in the Province from power generation, to bulk transmission, through to distribution at the end-use customer level. This integration across industry functions is clearly partial in scope with respect to distribution services as Hydro provides distribution services only to the more remote or rural areas of the Province. As a result, there will be some difficulty in comparing Hydro's cost performance in its distribution services with that of core distribution utilities². While the potential difficulties associated with comparing performance in Hydro's distribution function with other utilities is obvious, similar problems would likely be present for both the generation and transmission functions as well, simply by virtue of operational and geographical differences.³

² For example, Hydro has measured that primary distribution utilities in Canada have in the order of 400 distribution customers per employee. By contrast, Hydro has about 40 distribution customers per employee.

³ Hydro understands that CEA COPE is presently developing a policy paper outlining the limitations associated with the use of performance metrics for regulatory purposes.

3.1 A Review of External Data Sources Pertaining to Performance Measurement

3.1.1 Defining Data Requirements

There are a number of data sources that Hydro can pursue to obtain external benchmarking KPIs on a comparative, continual, and consistent basis. From a practical perspective, the collection of external data must be controlled through an established utility performance database that is updated annually. The maintenance of such a database would require a significant commitment of Hydro's resources if it had to be developed and maintained by Hydro from the ground up. Moreover, if the required data were not readily available in a consistent form in public documents, then the cooperation and commitment of a large number of utilities would be required. These are important factors to consider in keeping with a goal to minimize the costs of data procurement and related administration, while at the same time providing adequate and useful benchmarking data in relation to the KPIs listed in Table 1.

3.1.2 Regulatory Boards

Utility regulatory bodies listed under the Board's website links were reviewed to ascertain if there were performance measurement information sections already developed that would readily serve as consistent and reliable data sources for defining a utility peer group vis-à-vis performance measurement with Hydro. It was quickly apparent that the required datasets for technical and economic KPIs are neither readily identifiable nor available through the public websites of utility regulatory bodies in Canada. For the US, a review of the National Association of Regulatory Utility Commissioners (NARUC) website was undertaken. Again, this was not a source of utility performance data.

3.1.3 Annual Reports and Websites

Annual Reports and websites for numerous utilities in Canada were reviewed to determine the availability of KPI utility performance data that could contribute to a peer group on a reliable and consistent basis. The scope of utility reporting on technical KPIs by utilities in Annual Reports and websites varies from utility to utility. Therefore such an approach for data acquisition would not be a reliable approach for consistent peer group comparisons. In addition, the reporting of utility functional cost data in Annual Reports and websites, (e.g. generation, transmission, or distribution), is the exception rather than the rule.

There does appear to be a limited opportunity for certain high-level corporate KPI measures that could be developed using Annual Reports and websites, and these are:

- ➢ Installed MW per Employee,
- Energy Delivered per Employee,
- ➢ OM&A\$ per Employee,
- > OM&A\$ per Unit Energy Delivered,

This approach does enable Hydro to directly define its peer group as being the vertically integrated utilities operating in Canada⁴, notwithstanding some limitation on distribution services. Accessing public domain data through annual reports and websites is the only manner by which Hydro can compare itself along a continuum of identified utilities⁵.

However, in the context of the required utility KPIs listed in Table 1, annual reports and websites have peer data that is inconsistent and/or of limited value when comparing performance across utilities.

⁴ E.g. BC Hydro, Manitoba Hydro, Sask Power, Hydro Quebec, New Brunswick Power, and Nova Scotia Power.

⁵ This can be useful for providing context to KPI inter-utility comparisons when it may be observed, for example, that the largest identified utilities have the best performance and the smaller utilities have the lower performance.

3.1.4 Canadian Electrical Association

The Canadian Electrical Association ("CEA") is the national forum and voice of the electricity business in Canada. At the core of CEA, are its corporate utility member companies accounting for the vast majority of Canada's electric power generation, transmission, and distribution sectors' activities.

CEA regularly prepares utility industry performance measures for many technical KPIs based directly on data collected from its member utilities⁶. Thus, for most of Hydro's technical KPIs contained in Table 1, there is an existing CEA industry performance measure against which Hydro can readily benchmark its own performance. Thus, Hydro's peer group becomes the full complement of Canadian utilities participating in CEA and its various reliability-reporting surveys.

Hydro's financial-economic KPIs track the trends in operating, maintenance and administration costs in relation to the output or assets of the company that give rise to the need to incur OM&A costs in the first place (i.e. controllable unit costs). Four out of five of these KPIs listed in Table 1 track OM&A costs at the utility functional business unit level, namely, generation, transmission, and distribution. Utility OM&A costs by business function can only be derived by unbundling the corporate organization of an integrated utility into its core business functions, or alternatively by preparing a traditional functionalized utility cost of service for an integrated utility. Sourcing applicable utility datasets to enable external benchmarking on functionalized KPIs is an additional consideration that is beyond the basic industry performance reporting undertaken by CEA. Fortunately, there is a committee within CEA that develops and maintains functionalized databases for use in various KPI and performance initiatives. This committee is called the Committee on Corporate Performance and Productivity Evaluation ("COPE"), and is "user-pay" in nature.

⁶ E.g. various generation, transmission, and distribution reliability measures.

COPE's objectives are:

- > To establish a common basis for inter-utility performance measurement;
- To maintain and update common definitions and terms used in performance measurement;
- To establish a framework for the integration of performance information collection and measurement to minimize costs for CEA and utilities; and
- To provide guidance in the collection, use and application of the information for the benefit of individual utilities' performance achievement.

CEA utility members voluntarily subscribe to COPE and its business unit data services depending on their corporate interests and performance measure activities⁷. For example, a primary distribution company may subscribe and participate in the COPE distribution business unit, while an integrated utility may subscribe for and provide data to all COPE business units. Almost all of the principle utilities in CEA participate at some level in COPE. Thus, the industry peer group for financial-economic KPIs is pre-determined within the COPE approach according to utility membership in each of the distinctive industry business units. The confidentiality protocol of COPE is such that inter-utility comparisons are not permitted, as utility specific KPIs cannot be released to the public domain, only the utility composite KPI data points. In order for Hydro to become a full COPE member, the incremental subscription fee to CEA is approximately \$15,000 per year.

⁷ The COPE business units are Power Supply, Transmission, Distribution, Customer Services, Corporate Services, and Corporate Overall.

3.1.5 US Based Organizations

Hydro has identified several key US-based utility benchmarking services.

The Electric Utility Benchmarking Association ("EUBA") is described as an association of electric utility companies that conducts benchmarking studies to identify the practices that improve the overall operations of the members. Such studies are process specific, and do not result in the maintenance of an ongoing database of performance metrics.

The Electric Utility Costing Group ("EUCG") was originally formed to provide a professional working forum for the electric utility industry to share confidential information to help companies improve their operating, maintenance, and construction performance. The EUCG today operates in a similar manner to CEA COPE, including annual data collection, and includes some Canadian utilities in its membership⁸. EUCG is also used as a valuable networking function for its members through conference and committee meetings of topical interest to its members. The EUCG committees of interest would be Hydro, Fossil, and Transmission & Distribution. The direct cost to join is approximately \$4,000 CDN per committee or \$12,000 CDN in total for the committees of interest. However, its KPI scope for Hydro's purposes in this instance would be limited as EUCG data is confidential and cannot be distributed to non-EUCG parties, thereby restricting its use for regulatory external benchmarking purposes.

A remaining long-established firm specializing in utility benchmarking is PA Consulting Group BenchmarkingTM (formerly Theodore Barry & Associates (TB&A) BenchmarkingTM). PA Consulting undertakes annual utility surveys in the areas of Transmission & Distribution (including distribution reliability), Customer Service, and Corporate and Shared Services. These surveys and benchmarking analysis are well known for their detail and comprehensiveness, but the data requirement level is well beyond Hydro's present KPI external peer data requirement. As with EUCG, there is the

⁸ Hydro is in fact a member of the EUCG Hydroelectric Committee.

issue with PA consulting respecting the appropriate scope of KPIs for Hydro's purposes. In terms of costs, PA Consulting fees average some \$20,000 CDN per year per survey to participate in and receive data from these benchmarking surveys.

Finally, we reviewed the mandatory Form 1 utility reporting files available with the Federal Energy Regulatory Commission (FERC). There are in excess of 200 US utilities filing corporate data to FERC on an annual basis. However, the information reported is largely financial and therefore does not provide the data necessary to supply the KPI reporting requirements as directed under PU14. Moreover, a comprehensive research undertaking would be required in order to properly review the reporting US utilities in order to build a suitable "peer group" database.

4.0 Conclusions

To achieve the desired consistency and quality of benchmarking data requires the cooperation and commitment of a large number of utilities. Given the differences between utilities' operating environments and associated economies of scale, it is important to at least ensure consistency in the data used to benchmark relative performance. Hydro does not possess the resources necessary to, itself, undertake the development of utility performance databases that would be sufficiently detailed to meet the reporting requirements of Hydro's KPIs as outlined in Table 1. A review of public domain external data sources indicates that the required availability and/or consistency in utility performance data are simply not present. It is more appropriate and cost-effective to rely on a national industry association that already coordinates the efforts of its member utilities in developing a comprehensive and consistent performance related databases for its member utilities. For a broader international context, Hydro also reviewed the key US based utility benchmarking services and noted various constraints

that limit the value of such services given Hydro KPI reporting requirements⁹.

Hydro concludes that its utility peer group external benchmarking should be initially focused on the Canadian electrical market, and in particular, aligned to various key performance measures as developed by CEA. Hydro's existing KPI framework, as presented in Table 1, was in fact developed in a manner consistent with CEA's approach to performance measurement.

5.0 Recommendation

The most cost effective and administratively feasible choice for the selection of a peer group of utilities for Hydro's external benchmarking purposes is the peer groups already established within the CEA and CEA COPE frameworks. Hydro recommends that CEA be used as the means for Hydro to externally benchmark to its industry counterparts operating elsewhere in Canada. This recommendation will require Hydro to become a member of CEA COPE at an incremental operating expense of approximately \$15,000 per year. Hydro believes this course of action will address the Board's directives contained in PU14 respecting key performance indicators, peer group selection, and external benchmarking.

⁹ It is noted that CEA (COPE) has had discussions with such international organizations with a view to facilitating international utility performance measurement in a consistent and effective manner. Such considerations are ongoing and Hydro believes this to be the appropriate avenue to international utility performance comparisons due to the extensive data issues to be dealt with.



Canadian Electricity Association Policy Paper Benchmarking Data in Regulatory Settings (BD/RS)

As approved by the CEA Executive Committee 14 October 2005

1.0 Overview

CEA and its members are seeking to improve their common frame work for utility performance measurement and best practices in order to ensure that the industry, shareholders, customers and rate-payers benefit from improved performance.

For many years, Canadian utilities have been participating, via CEA and other benchmarking organizations, in studies concerning the continuity of service, customer's satisfaction, employee safety and cost related indicators. The main purpose of these efforts was to improve the operational performance of the participating utilities. The process involved:

- Identifying participating utilities and the key performance indicators
- Gathering data on various performance indicators
- Conducting analysis to identify "best performers"
- Establishing working groups to validate "best performers" and determine "best practices" in the various business areas. In many cases this effort included a review of reporting practices to validate "best performers".

Since the main focus of these efforts was to improve operational performance, through the identification of utility "best practices", the data collection methods were not of sufficient quality for use in benchmarking for Regulatory purposes.

Regulators in Canada are increasingly requesting data and results from these benchmarking studies as a basis to assess electric utility company performance. While CEA and its members believe there are limitations to the use of benchmarking data in regulatory processes, CEA and its members are actively engaged with regulators to improve regulatory reporting in Canada.







2.0 Context

Many of the current indicators used are intended for operational purposes and as such do not require the degree of accuracy implicit in regulatory proceedings

Participation in benchmarking studies typically are voluntary. Regulatory actions using data for purposes it was not intended is likely to result in incorrect results and could therefore inhibit participation in benchmarking activities for the purpose of operational improvement. This would adversely impact the ability to identify best practices and the pursuit of performance improvement and ultimately will do a disservice to the ratepayer.

CEA believes it has a responsibility to develop the appropriate cautions concerning the use of non-verified benchmarking data in regulatory settings, and provide these cautions to members for their use when interfacing with regulatory bodies.

Given the inherent challenges in benchmarking with others, utilities have tended to limit the use of "peer group" benchmarking to discovery and identification of "best practices". For utilities, the relative ranking of the participants or the comparison of a utility to a composite has limited value and, when taken at face value, has little correlation to individual utilities' performance. The ultimate goal is performance improvement through informed decision making and the determination and utilization of "best practices".

By its very nature, "peer group" benchmarking is an extremely challenging undertaking. Attempts to account for unique operating and business environments are complex and require detailed information. This detailed information, while more than adequate for the "discovery" process which is at the heart of performance benchmarking, is often not of sufficient quality to be used in regulatory environments.







3.0 Policy

3.1

Policy 1

Appropriate benchmarking performance information (which is accurate, verifiable, and verified and includes the proper consideration, caveats, standardized interpretations and collection methodologies) will be developed by CEA for use in Regulatory settings. Participating CEA members commit to work towards providing data that meets these criteria, on a yearly basis, that will be used in the development of an agreed-to set of indices.

3.2

Policy 2

CEA members do not support a peer-to-peer approach when assessing a company's performance and especially to establish pass/fail criteria for breach and consequence, due to the complexity of identifying true "peers". This complexity is due to differences between companies' geography, climate, customer mix, growth rate, system age, resource mix, degree of interconnection, impact of significant events, and a range of other factors.

3.3

Policy 3

As a result of the complexity of "peer" benchmarking, trending the performance of an individual utility over time should be used as opposed to peer-to-peer benchmarking

3.4

Policy 4

CEA and its members will work cooperatively with regulatory authorities to ensure that indicators used in regulatory settings are accurate, verifiable and verified, and are meaningful. Through CEA's Councils, and in cooperation with members of CAMPUT, appropriate benchmarking indicators for assessing individual company performance over time will be developed.

3.5

Policy 5

CEA members will meet or exceed standards of data quality, integrity and consistency of reporting for these indicators







3.6

Policy 6

Improved productivity and performance result in significant benefits to companies, shareholders and customers. CEA therefore will continue to promote the use of benchmarking to identify best practices for performance improvement.

3.7

Policy 7

Only composite benchmarks deemed appropriate for regulatory environments, will be produced. Participants are cautioned that publication of metrics not identified as appropriate for regulatory environments in composite or other form in a regulatory forum or elsewhere may result in blocking further participation by that member or the termination of further CEA benchmarking on that metric.

3.8

Policy 8

CEA will subject all proposed new or modified indices to an agreed review process by the appropriate Council to ensure that the qualifying criteria are met.







4.0 Impact on CEA Activities

CEA Councils will develop as appropriate a short set of high-level indicators to be proposed as appropriate for regulatory purposes.

CEA Councils will provide direction to CEA data gathering bodies. This will include direction on the appropriate breadth and scope of data being gathered, and any changes required to the current indicators.

CEA's data gathering programs will establish standards for data quality, integrity and consistency of reporting.





5.0 Implementation

The CEA Policy on the use of Benchmarking Data in Regulatory Settings will be developed and refined by the Task Group.

The CEA Policy will be presented to Councils in August-September for review.

Once vetted by the Councils, the Policy will be submitted for approval to the CEA Executive Committee and Board of Directors in October and November, and, pending approval, will become public..

Beginning in fall 2005, the Councils will work with CEA data gathering programs to define the appropriate indicators for use in regulatory settings.

CEA Councils will provide strategic direction of data gathering bodies and activities beginning in 2006.

