

BOARD STAFF #1

INTERROGATORY

Ref: Enbridge Ex B, Tab 1, Sch 1, page 2 of 22, para 6

Issue Number: 3.1

Issue: How should the X factor be determined?

Enbridge states in evidence that it is proposing a revenue cap, calculated on a per customer basis, adjusted annually.

- a) Please update PEG's revenue cap index research (Rate Adjustment Indexes for Ontario's Natural Gas Utilities dated June 20, 2007) to reflect a revenue per customer cap.
- b) Is PEG aware of any jurisdiction where a regulator has approved a revenue cap without a balancing account?
- c) Please describe how the balancing account should be calculated under a revenue per customer cap. For example, would a balancing account capture the difference between actual revenue (i.e., not normalized for weather) and the approved revenue requirement?

RESPONSE

- a) The PEG research results can be readily adjusted to provide the appropriate X factor. Suppose that the trend in the revenue requirement equals the trend in cost, which is the sum of the trends in input price and productivity indexes:

trend Revenue = trend Cost = trend Input Prices + trend Inputs.

Now

trend Revenue =

trend Input Prices – (trend Customers - trend Inputs) + trend Customers

so that

trend Revenue – trend Customer = trend (Revenue/Customer)

= trend Input Prices - (trend Customers - trend Inputs).

Witness: Mark Lowry

The relevant output index for a revenue/customer cap index is thus the *number of customers*, much as the relevant output index for a PCI is revenue-weighted.

PEG has consistently used the number of customers as the output index in productivity studies designed to support revenue per customer caps. Dr. Melvyn Fuss chose the number of customers as the output measure for his productivity index when he testified in support of the Enbridge O&M expense index in its TPBR plan and the Board agreed on its appropriateness. Enbridge and/or its consultants have employed the number of customers as an output measure in several of its own published productivity studies.

We can easily correct the revenue cap index that we propose in the June 20 report by adding a revenue per customer adjustment to the X factor. Results can be seen in the attached table Staff 1 Revenue per Customer Cap. The resultant cost growth is the same, as it should be. The resultant X factor is far higher than that which would result from the use of Bernstein's proposed revenue-weighted output index.

- b) No.
- c) A balancing account serves to "ensure dollar-for-dollar recovery of Commission authorized distribution amounts" (PG&E Advice Letter No. 2903-E). Some salient precedents of revenue-per-customer balancing accounts include plans for Southern California Gas (SoCal), Central Maine Power (CMP), and Puget Sound Power & Light in Washington State (Puget).

In the early 1990s, SoCal implemented a balancing account for gas distribution services called the Core Fixed Cost Account (CFCA). The CFCA operated to insure that SoCal over time would recover in rates "exactly the amount of Commission-authorized margin, regardless of the actual level of customer demand" (Decision 97-07-054). To calculate the authorized margin, recorded customer count and core throughput from a historic test year were normalized to average temperature conditions to establish the starting point for indexing. The difference between actual and allowed annual revenues was deferred to the CFCA. Although SoCal now operates under a comprehensive revenue cap plan rather than revenue-per-customer, it has preserved a modified version of the CFCA (Advice Letter No. 3714).

Likewise, during the early 1990s, CMP also had in place a revenue-per-customer balancing account, called the Electric Revenue Adjustment Mechanism (ERAM). The ERAM was applied by first allocating total (historical) test year adjusted non-fuel revenues to each month during the test month of the test year. Then the monthly amounts from the test year were divided by actual customers for each month in the test year to determine the allowed monthly revenue-per-customer. At the end of the year, the annual allowed revenue per customer was multiplied by the actual average customers for the prior twelve months to determine the total allowed revenue for the twelve month period. Any differences between this total annual allowed revenue and the revenues accrued for the prior twelve months accrued to balancing account, to be reflected in a surcharge or refund during the following year.

The ERAM initially worked in conjunction with the attrition mechanism in place for Maine electric utilities. However, on January 12, 1992, after the first year under the ERAM, CMP filed a request to withdraw the rate increase because of the "recent sharp decline in interest rates" (Docket 91-174). Because of the continued economic recession in Maine following its implementation, the ERAM was terminated on November 30, 1993, as per a request by CMP (Docket 90-085-A).

During the same time period, Puget had in place the periodic rate adjustment mechanism (PRAM). Under the PRAM, "base costs" were divided by the number of customers on Puget's system, providing the authorized revenue per customer; thus Puget's booked revenue grew or shrank in accordance with its number of customers. The disparities between authorized and collected revenue were reconciled in the annual periodic rate adjustment proceeding. After being extended for three additional years (Docket UE-921262), in September 1995 the PRAM was cut short by the Commission's approval of Puget's request for its elimination (Docket UE-950618).

IGUA 12 Revenue/Customer
Revenue Per Customer Cap Indexes:
Results Using PEG Calculations

	Enbridge	Union
Productivity Differential [A]	0.89	0.52
Revenue Per Customer Adjustment [B=B1-B2]	0.44	0.19
Customer Growth [B1]	3.27	2.11
Output Growth [B2]	2.83	1.92
Input Price Differential [C]	0.27	0.22
Stretch Factor [D]	0.50	0.50
X Factor ^{RCI} [E=A+B+C+D]	2.10	1.43
Customer Growth [F]	3.27	2.11
GDPIPI [G]	1.86	1.86
Indicated RCI Growth [G-E+F]	3.03	2.54

BOARD STAFF #2

INTERROGATORY

Ref: Union Ex. B, Tab 1, pages 36-37 of 48

Issue Number: 4.3

Issue: If so, how should the impact of changes in average use be applied (e.g., to all customer rate classes equally, should be differentiated by customer rate classes or some other manner)?

Union states in evidence that a simpler and more intuitive approach to calculate the X factor applicable to the general service rate classes (M2, Rate 01 and Rate 10) should be used. This would be calculated by adjusting the company wide average use factor by the combined revenue share of the general service rate classes. Further, Union recommends that there not be an average use factor adjustment for rate classes other than the general service rate classes.

a) Does PEG agree with Union's recommended approach? Please explain.

RESPONSE

Please see our response to Exhibit R-PEG Tab 5 Schedule 35

Witness: Mark Lowry