

CROSS-SUBSIDIZATION AND RATE STRATEGY

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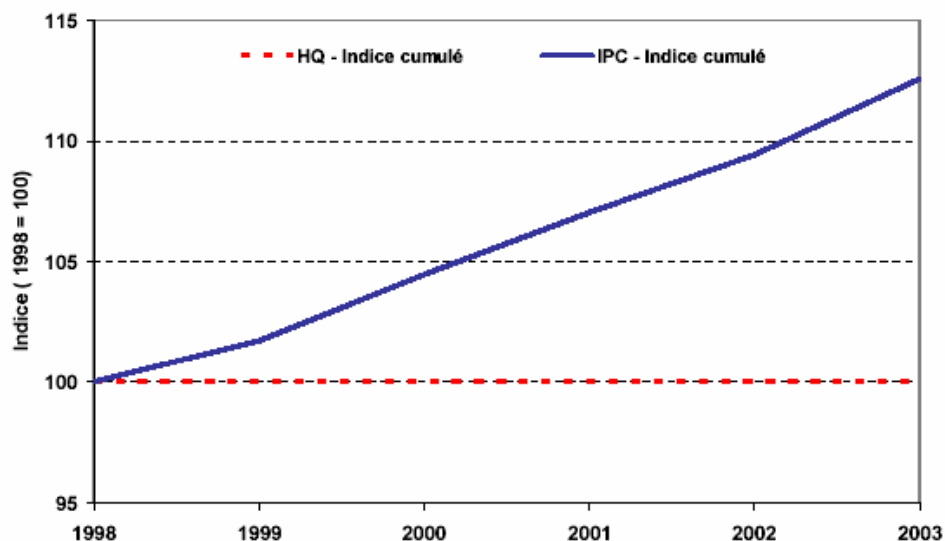
1. CONTEXT OF THE DEMAND

1 The rates contained in tariff regulation number 663 were fixed on May 1st, 1998, and
2 have been maintained at their present level for more than 5 years, in a context of
3 general price increases. Thus, Québec customers have benefited from low rates and
4 substantial gains in real terms.

5 Figure 1 highlights the real gains Hydro Quebec Distribution's customers benefited from
6 since the rate freeze came into effect, while the consumer price index increased by
7 12.6%.

FIGURE 1

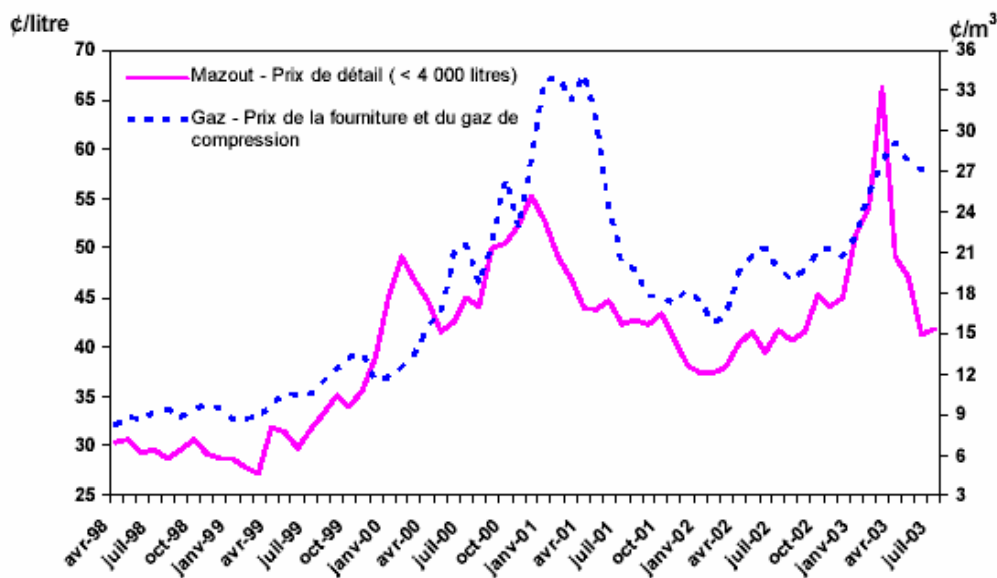
CHANGE IN THE INDEX OF ELECTRICITY RATES AND INFLATION 1998-2003



8 As demonstrated in Figure 2, Hydro Quebec Distribution customers have benefited from
9 the stability of electricity prices during a period in which the prices of fuel oil and natural
10 gas saw marked growth and high volatility.

1 Indeed, between May 1st 1998 and May 1st, 2003, for an average one family house of
2 158 m², a customer that heated his home with natural gas saw his bill increase by 56%,
3 whereas the same customer who heated his home with fuel oil had an increase of 53%,
4 which represents an average yearly increase of approximately 9%.

FIGURE 2
CHANGE IN FUEL PRICES



5 During this period, Hydro Quebec Distribution invested a great deal of resources to
6 improve its performance and efficiency (to see HQD-2, document 1). However, in spite
7 of a decrease of the financial expenses due to favorable economic conditions and the
8 positive impacts of an increased optimization of the distribution network, Hydro Quebec
9 Distribution's financial projections show a significant shortfall for the years 2003 and
10 2004, if current electricity rates are maintained.

11 According to Table 1, the Distributor's required income represents a total amount of
12 \$8,925 M in 2003. Considering the current rates and the demand forecasted for the
13 Québec market, the Distributor's forecasted income for the same year reaches \$8,500

1 M. This results in a shortfall of \$425 M. If there is no rate adjustment, the shortfall in
2 2004 will rise to \$492 M.

TABLE 1
DISTRIBUTOR DEFICIT 2003 AND 2004

Year	Required Income (\$M)	Forecasted Income (\$M)	Deficit (\$M)
2003	8 925	8 500	425
2004	9 090	8 598	492

3 Part of this shortfall is related to the BT Rate that is subjected to a special regulatory
4 treatment and for which the Régie is requested to approve a deferred expenses account
5 (see HQD-3, document 2). If one excludes the BT Rate, the shortfall of the Distributor
6 remains quite significant and is valued at \$414 M in 2003 and \$415 M in 2004.

7 To make up this shortfall, increases to the rates are necessary. These increases will
8 allow the Distributor to regularize its financial situation and make it similar to other
9 regulated distributors.

10 The Distributor articulates its rate strategy around the following points:

- 11 • gradual cost recovery;
- 12 • attain the full return allowed by the Régie;
- 13 • absence of retro-active billing;
- 14 • respect of cross-subsidization;
- 15 • distinct regulatory treatment of the shortfall associated to the BT rate.

2. ESTABLISHMENT OF THE LEVEL OF CROSS-SUBSIDIZATION BY CONSUMER CATEGORIES

2.1 D-2003-93 Decision of the Régie Relative to the Cross-Subsidization

1 In the D-2003-93 decision, the Régie interprets article 52.1, subparagraph 4, before
2 deciding upon a method of measuring the level of cross-subsidization. This paragraph
3 stipulates that the rate for a category of consumers cannot be modified in order to
4 reduce cross-subsidization. According to the Régie, it must be interpreted in a manner
5 that respects the main principles of rate making, on the one hand, and to reflect the
6 evolving nature of cross-subsidization, on the other hand.

7 Concerning the measure of the level of cross-subsidization, the Régie retained the
8 commonly used revenue to cost ratio and the index proposed by the Distributor (HQD
9 Index), which takes into account the particular situation where the return is not reached.
10 These two measures are equivalent in the situation where the return is reached.

11 The Régie also retains the establishment of a benchmark that will allow a follow-up of
12 the evolution of the cross-subsidization over time, without excessive rigidity. The year
13 2002 has been chosen as the base year to establish this benchmark, as it constitutes
14 the first year of the application of the new legislative provisions. The Régie believes
15 however that a strict application of this benchmark would be inappropriate because the
16 examination of the rate application must allow consideration of the context within which
17 a rate case is filed. This question will be addressed in section 2.3.

18 Finally, the Régie requested the Distributor to present separately the special contracts
19 and the rates for both real-time and back-up energy to the cross-subsidization tables, to
20 allow a more complete assessment of the revenues, costs and rate adjustments

1 granted. Therefore, the table illustrating cross-subsidization now incorporates
2 information for special contracts and the rates for both real-time and back-up energy,
3 which will allow those rates to be treated in a differential way.

2.2 Calculation of the Cross-Subsidization for Years 2002 to 2004

4 Tables 2 to 4 present, by consumer category, the required revenues before cross-
5 subsidization, the forecasted income (or real) on the basis of the present rates, the
6 cross-subsidization indexes and the required income with cross-subsidization for the
7 years 2002, 2003 and 2004. The consumer categories are composed of the residential
8 customers (rates D, DM, DH and DT), the small capacity customers (rates G, G-9,
9 streetlight and all-inclusive), the medium capacity customers (rate M) and the large
10 capacity customers (rates L and HS). The tables are completed with the addition of the
11 special contracts and the real-time (rates BT, MR, LR and LC) and back-up energy rates
12 (rates GD, LD and LP), in order to get results that present a complete picture of the
13 revenues and costs.

14 The required revenues before cross-subsidization by consumer category represent the
15 total costs for supply, transmission, distribution and customer service, including the
16 return on shareholder's equity, required by the Distributor to offer the service to its
17 customers. The revenues for 2003 and 2004 have been established on the basis of the
18 present rates, without any increase to the rates.

TABLE 2
ASSESSMENT OF THE CROSS-SUBSIDIZATION INDEX IN 2002

	(1)	(2)	(3)=(2)/(1)	(4)	(5)=(1)*(4)
	Required Revenue Before Cross-Subsidization (\$M)	Real Revenue (\$M)	Cross-Subsidization Index (%)	Cross-Subsidization HQD Index (%)	Required Revenue With Cross-Subsidization (\$M)
Residential	4 377	3 231	73.8	80.2	3 510
Small capacity Users	952	1 079	113.3	123.1	1 172
Medium capacity Users	1 223	1 471	120.2	130.6	1 597
Large Users	1 624	1 746	107.5	116.8	1 897
Total – Regular Rates	8 176	7 527	92.1	100.0	8 176
Special Contracts	487	487	100.0	100.0	487
Real time and back-up Rates	59	54	91.3	100.0	59
Total	8 722	8 067	92.5	100.0	8 722

- 1 The HQD Index for the level of cross-subsidization is derived from the following equation
- 2 which takes into account the fact that the Distributor's total forecasted revenue is
- 3 currently lower than its total required revenue.

$$\frac{\text{Forecasted Revenue of the Category} / \text{Total Forecasted Revenue}}{\text{Required Revenue Prior to Cross-Subsidization of the Category} / \text{Total Required Revenue}}$$

- 4
- 5 When the Distributor reaches its return and the total forecasted revenue equals the total
- 6 required revenue, the calculated cross-subsidization index with the simplified formula
- 7 shown in column (3) of Table 2 gives the same result as shown using the HQD method.

1 The total required revenue and the total forecasted revenue correspond to the revenue
2 generated by the regular tariffs and therefore exclude the special contracts and the real-
3 time and back-up tariffs.

4 Since the tariff conditions for the special contracts are fixed by the government, resulting
5 in no loss for the Distributor, the required revenue corresponds to the forecasted
6 revenue¹. Since the Régie does not have the authority to modify the level of revenue
7 generated by this category of customer, the forecasted revenue must necessarily
8 correspond to the required revenue with cross-subsidization: therefore, the index of
9 cross-subsidization for this category of customer equals 100%.

10 With regard to the real-time and back-up tariffs, the Distributor believes that these tariffs
11 must generate revenues equal to the required revenue. This proposal is in conformity
12 with paragraph 2 of article 52.1 specifying that the real-time and back-up tariffs can be
13 fixed by the Régie in accordance with any other method judged appropriate, notably
14 according to market prices. Since this factor does not apply to the other category of
15 customer, it is appropriate to exclude the real-time and back-up rates from the
16 equalization which exists between the rates and to fix the cross-subsidization index for
17 those rates at 100%.

¹ Article 52.2, paragraph 3 of the *Act on the Régie de l'énergie*: "For the special contracts agreed to in virtue of the Hydro Quebec Act (chapter HS 5), the cost of supply corresponds to the rate foreseen in the contract from which a deduction is made for the costs of transportation and applicable distribution according to their feature of consumption, and where this doesn't affect the supply costs of the electricity distributor applicable to the other categories of consumers for purposes of article 52.1."

TABLE 3

ASSESSMENT OF THE CROSS-SUBSIDIZATION INDEX IN 2003

	(1)	(2)	(3)=(2)/(1)	(4)	(5)=(1)*(4)
	Required Revenue Before Cross-Subsidization (\$M)	Forecasted Revenue (\$M)	Cross-Subsidization Index (%)	Cross-Subsidization HQD Index (%)	Required Revenue With Cross-Subsidization (\$M)
Residential	4 429	3 412	77.0	81.1	3 590
Small Capacity Users	934	1 078	115.4	121.4	1 134
Medium Capacity Users	1 224	1 535	123.4	129.8	1 615
Large Capacity Users	1 693	1 864	110.1	115.9	1 961
Total – Regular Rates	8 299	7 889	95.1	100.0	8 299
Special Contracts	551	551	100.0	100.0	551
Real time and back-up Rates	75	60	80.8	100.0	75
Total	8 925	8 500	95.2	100.0	8 925

TABLE 4
ASSESSMENT OF THE CROSS-SUBSIDIZATION INDEX IN 2004

	(1)	(2)	(3)=(2)/(1)	(4)	(5)=(1)*(4)
	Required Revenue Before Cross-Subsidization (\$M)	Forecasted Revenue (\$M)	Cross-Subsidization Index (%)	Cross-Subsidization HQD Index (%)	Required Revenue With Cross-Subsidization (\$M)
Residential	4 437	3 404	76.7	80.6	3 579
Small Capacity Users	940	1 088	115.6	121.6	1 143
Medium Capacity Users	1 269	1 573	124.0	130.3	1 654
Large Capacity Users	1 715	1 889	110.1	115.8	1 986
Total – Regular Rates	8 362	7 954	95.1	100.0	8 362
Special Contracts	581	578	99.4	100.0	581
Real time and back-up Rates	146	66	44.7	100.0	146
Total	9 090	8 598	94.6	100.0	9 090

2.3 Evolution of Cross-Subsidization

1 Table 5 presents the summary of cross-subsidization indexes by tariff category for the
 2 years 2002 to 2004, while using the present tariffs. These figures constitute a reference
 3 to reflect the impact of the proposed rate increase.

4 The results show little change in the cross-subsidization indexes from one year to the
 5 other. However these results also illustrate, as the Régie outlined in its D-2003-93
 6 decision, that cross-subsidization is a concept that changes constantly based on the
 7 evolution of the sales and associated costs of each rate category. The indexes of Table
 8 5 therefore represent benchmarks around which cross-subsidization must be
 9 maintained.

TABLE 5

EVOLUTION OF THE HQD CROSS-SUBSIDIZATION INDEX FROM 2002 TO 2004

	2002 (%)	2003 (%)	2004 (%)
Residential	80.2	81.1	80.6
Small Capacity Users	123.1	121.4	121.6
Medium Capacity Users	130.6	129.8	130.3
Large Capacity Users	116.8	115.9	115.8
Total – Regular Rates	100.0	100.0	100.0
Special Contracts	100.0	100.0	100.0
Real time and back-up Rates	100.0	100.0	100.0
Total	100.0	100.0	100.0

3. RATE STRATEGY

3.1 Proposed Rate Increase

1 With the government's adoption, on August 11, 2003, of the decree abolishing the rate
2 freeze that was to last until April 30, 2004; the Distributor is allowed to request from the
3 Régie an increase in electricity rates starting in 2003. However, the Distributor does not
4 desire retro-active billing and must have sufficient time between the Régie's decision
5 and the implementation of the new rate grid.

6 The Distributor then requests the Régie to approve, by a decision to be rendered no
7 later than September 12, 2003, a uniform rate increase of 3% as of October 1st, 2003.

8 The Distributor also asks the Régie to approve a uniform rate increase of 2.98% for April
9 1st 2004, based on the prices proposed in Appendix 1 of the evidence. The Distributor
10 proposes for 2003 and 2004 a gradual cost recovery, through uniform rate increases
11 that do not affect the present cross-subsidization level, in accordance with the opinion of
12 the Régie. The two rate increases will also apply evenly on the various components of

1 the rate since the study of the rate structures will be conducted during phase 3 of the
2 present hearing².

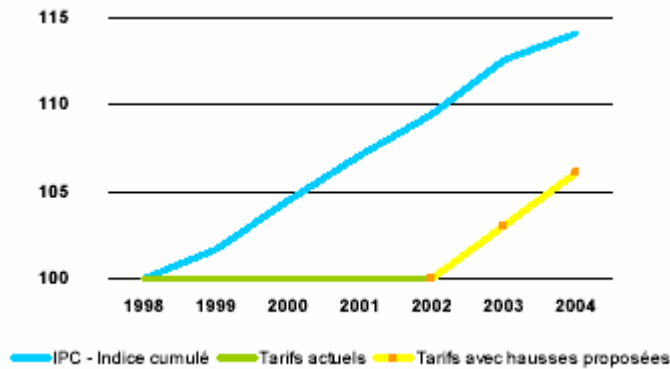
3 These rate increases also apply to the real-time and back-up tariffs whose prices were,
4 historically and equitably, adjusted according to the increases for the general rates
5 (rates BT, GD and LP) or, for the more recent rates, according to an understanding with
6 the Generator, as is the case with rate LD³.

7 Figure 3 shows the trend in the tariffs of Hydro Quebec Distribution and the Consumer
8 Price Index since 1998, including the two proposed increases. The rate of inflation
9 forecasted for the years 2003 and 2004 are 2.9% and 1.3% respectively, meaning that
10 with the two requested increases of 3% and 2.98%, the result for the customers is an
11 average increase in real terms of less than 1% for these two years. The gains in real
12 terms that accrued to the customers since 1998 are thus essentially maintained.

² As decided in the procedural decision on the phase 2, D-2003-138, July 7, 2003.

³ For the LD rate, see R-3466-2001, Document 1, page 8.

FIGURE 3
EVOLUTION OF ELECTRICITY RATES AND CONSUMER PRICES



1 Table 6 illustrates the effects of the proposed increase to the residential consumers. For
 2 the average residential consumer, the yearly electricity bill will increase by \$33 and \$34
 3 respectively in 2003 and 2004.

TABLE 6
EFFECTS OF THE PROPOSED INCREASES ON THE AVERAGE MONTHLY INVOICES FOR THE RESIDENTIAL SECTOR

Average Yearly Consumption	Average Monthly Bill			Increases	
	Actual (in \$)	2003 (in \$)	2004 (in \$)	2005 (in \$)	2006 (in \$)
Average customers (17 849 kWh)	91.68	94.43	97.24	2.75	2.81
Average customers heated with electricity (20 461kWh)	103.93	107.04	110.23	3.11	3.19
Average customers not heated with electricity (12 745 kWh)	67.75	69.78	71.86	2.03	2.08
Customer living in a one-family house heated with electricity (26 000 kWh)	132.42	136.42	140.42	4.00	4.00

3.2 Rate Increase Impact on the Spread Between Required Revenues and Forecasted Revenues

1 This rate application allows the Distributor to increase its revenue by \$65 M in 2003 and
 2 \$415 M in 2004, as presented in Table 7. Due to these rate increases, the Distributor's
 3 deficit will be reduced to \$360 M in 2003, whereas in 2004, the forecasted revenue will
 4 be equal to the required revenue, by assuming the set up of a deferred account to
 5 recover the losses due to the BT rate. More precisely, the rate increase of 2003 and
 6 2004 will allow the Distributor to achieve a profit of \$181 M in 2004.

TABLE 7
REVENUES GENERATED BY THE RATE INCREASE OF 2003 AND 2004

	2003	2004			Variation Total of Revenue
	Increase 1 st Oct 2003 (M\$)	Increase 1 st Oct 2003 (M\$)	Increase 1 st Apr 2004 (M\$)	Total 2004 (M\$)	
Residential	29	102	68	170	200
Small Capacity Users	9	33	24	56	65
Medium Capacity Users	12	47	35	82	94
Large Capacity Users	14	57	43	99	113
Total – Regular Rates	64	239	170	408	472
Special Contract	0	3	0	4	4
Real-time and Back-Up Rates	1	2	1	3	4
Total	65	244	171	415	480

TABLE 8

**DEFICIT OF THE DISTRIBUTOR BY RATE CATEGORIES IN 2003 AND 2004
INCLUDING THE RATE INCREASE OF 3% OF OCTOBER 1ST, 2003
AND OF 2.98% OF APRIL 1ST, 2004**

	2003			2004		
	Required Revenue	Required Revenue after Increase	Difference	Required Revenue	Required Revenue after Increase	Difference
Residential	4429	3441	-987	4437	3574	-863
Small Capacity Users	934	1087	152	940	1144	204
Medium Capacity Users	1244	1547	304	1269	1656	387
Large Capacity Users	1693	1878	185	1715	1988	273
Total – Regular Rates	8299	7953	-346	8362	8362	0
Special Contract	551	551	0	581	581	0
Real-time and Back-Up Rates	75	61	-14	146	69	-77
Total	8925	8565	-360	9090	9012	-77

3.3 Impact on Cross-Subsidization

- 1 The tariff increases do not change the cross-subsidization indexes when applied evenly.
- 2 The slight variations that can be observed in Tables 9 and 10 are explained by the non-
- 3 concordance of the beginning of the financial year with the date of the rate increase. In
- 4 effect, each category of consumer has a yearly profile that is unique. For example, the
- 5 residential consumers are characterized by a seasonal consumption profile - with peak
- 6 during winter rather than the summer – hence, a rate increase after the winter period will
- 7 generate relatively less revenue from these clients when calculated on the basis of the
- 8 financial year.

TABLE 9

ASSESSMENT OF THE CROSS-SUBSIDIZATION INDEXES IN 2003 INCLUDING THE RATE INCREASE OF 3% OF OCTOBER 1ST, 2003

	Required Revenue Before Cross-Subsidization (M\$)	Required Revenue Before Increase (M\$)	Increase Rates for 1 st Oct 2003 (M\$)	Required Revenue + Increase 1 st Oct 2003 (M\$)	Cross-Subsidization Index (%)	Cross-Subsidization HQD Index (%)
Residential	4429	3412	29	3441	77.1	81.1
Small Capacity Users	934	1078	9	1087	116.3	121.4
Medium Capacity Users	1244	1535	12	1547	124.4	129.8
Large Capacity Users	1693	1864	14	1878	110.9	115.8
Total – Regular Rates	7299	7889	64	7953	95.8	100.0
Special Contract	551	551	0	551	100.0	100.0
Real-time and Back-Up Rates	75	60	1	61	81.6	100.0
Total	8925	8500	65	8565	96.0	100.0

TABLE 10
ASSESSMENT OF CROSS-SUBSIDIZATION INDEXES IN 2004
INCLUDING THE RATE INCREASES OF 3% OF OCTOBER 1st, 2003
AND OF 2.98% OF APRIL 1st, 2004

	Required Revenue Before Cross-Subsidization (M\$)	Required Revenue After Increase of 2003 (M\$)	Increase Rates for 1 st Apr 2004 (M\$)	Required Revenue+ Increase of 2003 and 2004 (M\$)	Cross-Subsidization Index (%)	Cross-Subsidization HQD Index (%)
Residential	4437	3506	68	3574	80.6	80.6
Small Capacity Users	940	1120	24	1144	121.7	121.7
Medium Capacity Users	1269	1620	35	1656	130.5	130.5
Large Capacity Users	1715	1946	43	1988	115.9	115.9
Total – Regular Rates	8362	8193	170	8362	100.0	100.0
Special Contract	581	581	0	581	100.0	100.0
Real-time and Back-Up Rates	146	67	1	69	46.9	100.0
Total	9090	8842	171	9012	99.2	100.0

4. COMPETITIVE POSITION

1 Although it has a monopoly on the retail trade of electricity in Québec⁴, the Distributor
 2 faces competition for certain uses and in certain markets.

3 4.1 Competitive Position in Quebec

4 In Quebec, competition is mainly present on the heating market, where natural gas and
 5 fuel oil constitute an alternative for consumers. To have a full appreciation of the
 6 competitive position of the energy options in this market, it is not only necessary to take
 7 into account the energy price but also to consider other factors, such as costs of
 8 acquisition, installation and maintenance.

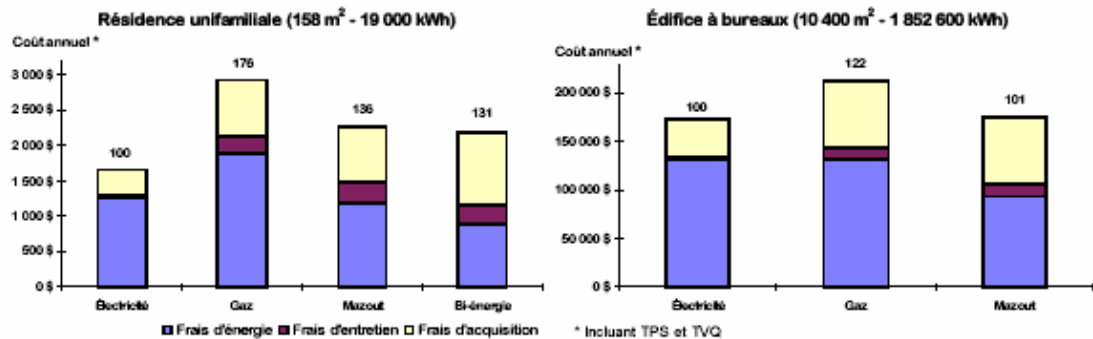
9 As Figure 4 indicates, electric heating of water and buildings on the residential market is
 10 distinctly advantageous for a standard one family residence when one takes into
 11 consideration the low acquisition, installation and maintenance costs of electric systems.
 12 In the commercial sector, electricity for heating also remains advantageous although
 13 competition is more prevalent.

⁴ With the exception of the municipal networks and the regional cooperative of electricity of St.-Jean - Baptist-Of-Rouville.

1 Nevertheless, to the competitive edge in favor of electricity in the commercial and
2 institutional sector, one must add the advantage of prices evolving in a more stable
3 manner that are independent of unforeseeable events on the international stage. In
4 effect, the recent variations of energy prices were significant, creating an unsteady and
5 unattractive environment for the consumer.

6 Therefore, the proposed rate increase will only have a negligible impact on the
7 competitive position, for both the residential and commercial sectors.

FIGURE 4
COMPETITIVE POSITION OF ELECTRICITY FOR WATER AND SPACE
(JULY 2003)



4.2 Comparison of the Prices in North America

1 Hydro Quebec Distribution also evaluates its competitive position by closely monitoring
2 the trend of electricity prices on the North American market because access to reliable
3 and cheap energy contributes much to the vitality of the Quebec economy.
4 Thus, the residential customers of Hydro Quebec Distribution benefit from the comfort of
5 electricity, at a cheap and reliable cost, for a better quality of life. In other respects, the
6 cost of electricity, for similar reason as the availability of raw materials and a reliable
7 workforce, is an important criteria for companies when considering their localization. As
8 the cost of electricity represents an important component of operating costs in numerous
9 sectors of industrial activity, the customers of Hydro Quebec Distribution have a
10 considerable advantage on their competitors.

11 Indeed, as indicated in Table 11, the Distributor's rates are comparable with the rates of
12 the other companies. Only the rates of Manitoba Hydro and BC Hydro are equal or
13 lower to those of Hydro Quebec Distribution. Their low rates can be explained by
14 several factors that vary from company to company; for example: older facilities
15 (therefore depreciation costs are smaller), smaller transmission networks, lower deficits
16 for autonomous networks, less electric heating and a lower level of cross-subsidization
17 between the rate categories.

TABLE 11⁵
COMPARATIVE INDEXES OF THE ELECTRICITY PRICES IN NORTH AMERICA
ACTUAL RATES OF HYDRO-QUÉBEC DISTRIBUTION
(MAY 2002)

	Residential (1000 kWh)	Small Users (40 kW – 10,000 kWh)	Medium Users (1000 kW – 400 000 kWh)	Large Users (5000 kW – 3 060 000 kWh)
Canadian Cities				
- Montreal (Quebec)	100	100	100	100
- Edmonton (Alberta)	185	147	143	172
- Toronto (Ontario)	160	118	131	174
- Vancouver (BC)	101	89	75	100
- Winnipeg (Manitoba)	98	77	73	80
American Cities				
- Boston (Massachusetts)	299	263	269	324
- Chicago (Illinois)	202	201	189	228
- New York (New York)	321	255	248	269
- Seattle (Washington)	185	125	147	219

Prices calculated in Canadian dollars and excluding any sale tax

1 Besides, since May 1st, 1998, a majority of companies have raised their rates.
2 BC Hydro, which had a rate freeze since 1993, plans to submit for approval to its
3 regulatory body, the BCUC, requested increases of 3% to 6.5% per year from 2004 for a
4 period of 3 years⁶. On the other hand, in Canada, significant bill increases were
5 observed over the last few years in Alberta and in Ontario, where the retail market has
6 been deregulated. In this context, the level and the predictability of the prices that Hydro
7 Quebec Distribution offers gives to businesses the opportunity to make better long term
8 decisions for growth and expansion.

⁵ Source: Hydro Quebec (2002), Comparison of the prices in big North American cities.

⁶ BC Hydro's Service Plan for Fiscal Years 2003/2004 to 2005/2006 (February 2003)

5. PROPOSED RATES

5.1 New Grid Rates

1 The new rate grid is presented in Appendix 1.

5.2 Calculation of the New Rates

2 The structure of a rate is formed of three components: the fixed charge, the power
3 (capacity) and energy (consumption). Each of these elements assigns a price expressed
4 in ¢/day or \$/month, or in \$/kW and in ¢/kWh, on which one applies certain constraints
5 with a preoccupation for simplicity to the customers. The two main constraints that the
6 Distributor gave itself are the following:

- 7 • Prices are limited to two decimals. Among other things, the prices of energy
8 (¢/ kWh) and of the power (\$/ kW) are limited to two-digit after the decimal point.
9 For example, the present price of the first tier for rate D is of 4.74¢/ kWh.
- 10 • The applicable prices on a monthly or weekly basis must be divisible by the number
11 of corresponding days in order to assure the invoicing of the service for a number of
12 different days. For example, the monthly rate for rate G is currently \$11.67 / month.
13 If the customer is invoiced for a period of 20 days, the amount of the fee would be
14 equal to \$11.67 / 30 days, being \$0.389 / day. That number is multiplied by 20 days,
15 equaling \$7.780⁷

⁷ See Article 310 of the Regulation rate n°663.

- 1 The uniform increase of the rates consists of:
- 2 1. modifying the price of each of the elements of the increased rate proposed,
 - 3 2. adjusting these prices so that they respect the previously mentioned constraints,
 - 4 3. ensuring that the final result, meaning the rates for the same consumer category
 - 5 taken as a whole, generate additional revenues equal to the proposed rate
 - 6 increase.
- 7 For every rate category, all elements of the rates have been changed in conformity to
- 8 this process.
- 9 The revision of the service fees are excluded in the present hearing and will be debated
- 10 during phase 3.

**Appendix 1 -
ELECTRICITY RATES GRID**

**(Average rate Increase of 3% as of October 1st, 2003
and of 2.98% as of April 1st, 2004)**

Article	Rates	Description	Actual Price	Price 1 st Oct 2003	Price 1 st Apr 2004	Var. 1 st Oct 2003	Var. 1 st Apr 2004
8	D	Fixed charge per day The first 30 kWh / day Remaining energy Optimization charge, winter(> 50kW)	39.00¢ 4.74¢ 5.97¢ 3.06\$	40.17¢ 4.88¢ 6.15¢ 3.15\$	41.34¢ 5.03¢ 6.33¢ 3.24\$	3.0% 3.0% 3.0% 2.9%	2.9% 3.1% 2.9% 2.90%
19	DM	Fixed charge / day by multiplier 30 first kWh/jr by multiplier Remaining energy Optimization charge, winter (> 50kW)	39.00¢ 4.74¢ 5.97¢ 0.75\$	40.17¢ 4.88¢ 6.15¢ 0.78\$	41.34¢ 5.03¢ 6.33¢ 0.81\$	3.0% 3.0% 3.0% 4.0%	2.9% 3.1% 2.9% 3.8%
21	Reduction for supply on average or in high voltage	5 Kv, but lower than 50 Kv 50 Kv, but lower than 170 Kv 170 Kv	0.199¢ 0.25¢ 0.340¢	0.205¢ 0.257¢ 0.350¢	0.211¢ 0.265¢ 0.360¢	3.0% 2.8% 2.9%	2.9% 3.1% 2.9%
27	DT	Fixed charge per day T° > = -12°C or -15°C T° < -12°C or -15°C	39.00¢ 3.47¢ 15.54¢	40.17¢ 3.57¢ 16.01¢	41.34¢ 3.68¢ 16.49¢	3.0% 2.9% 3.0%	2.9% 3.1% 3.0%
38	DH	Fixed charge / day Summer, remaining winter 6 with 11h and 15 with 22h, week winter	39.00¢ 3.51¢ 12.96¢	40.17¢ 3.62¢ 13.35¢	41.34¢ 3.73¢ 13.75¢	3.0% 3.1% 3.0%	2.9% 3.0% 3.0%
42	G	Fixed charger per month Optimization charge (> 40 kW) The first 11 700 kWh per month Remaining Energy Minimum energy per month - Polyphase	11.67\$ 13.59\$ 7.41¢ 3.74¢ 35.01\$	12.03\$ 14.01\$ 7.63¢ 3.85¢ 36.09\$	12.39\$ 14.40\$ 7.86¢ 3.96¢ 37.17\$	3.1% 3.1% 3.0% 2.9% 3.1%	3.0% 2.8% 3.0% 2.9% 3.0%
47	G Short Duration	Increase to the Fixed charge and the minimal monthly amount to the tariff G Increase of the premium of monthly power to the tariff G in period of winter	11.67\$ 4.71\$	12.03\$ 4.86\$	12.39\$ 5.01\$	3.1% 3.2%	3.0% 3.1%
49	Winter Activities	Increase to the invoice	8%	8%	8%	s.o	s.o
51	G-9	Optimization charge Price of Power Minimum energy per month - single-phase Minimum per month - polyphase	3.51\$ 7.67¢ 11.67\$ 35.01\$	3.60\$ 7.91¢ 12.03\$ 36.09\$	3.72\$ 8.14¢ 12.39\$ 37.17\$	2.6% 3.1% 3.1% 3.1%	3.3% 2.9% 3.0% 3.0%
54	G-9 Short Duration	Increase of the minimal monthly amount to the tariff G-9 Increase of the premium of monthly Optimization charge to the G-9 tariff in winter period	11.37\$ 4.71\$	12.03\$ 4.86\$	12.39\$ 5.01\$	3.1% 3.2%	3.0% 3.1%
59	GD	Optimization charge Price of energy - summer Price of energy - winter	4.35\$ 4.50¢ 11.49¢	4.47\$ 4.64¢ 11.83¢	4.59\$ 4.78¢ 12.18¢	2.8% 3.1% 3.0%	2.7% 3.0% 3.0%
65	M	Optimization charge First 210 000 kWh Rest of energy	11.97\$ 3.72¢ 2.42¢	12.33\$ 3.83¢ 2.49¢	12.69\$ 3.95¢ 2.56¢	3.0% 3.0% 2.9%	2.9% 3.1% 2.8%
68	M	Surcharge for monthly excess	12.78\$	13.17\$	13.56\$	3.1%	3.0%
72	M Short Duration	Increase of the monthly optimization charge in winter	4.71\$	4.86\$	5.01\$	3.2%	3.1%
83 & 84	Grinding of new equipment	Average price increase	4%	4%	4%	s.o	s.o
100	MR	Optimization charge First 210 000 kWh Rest of Energy	11.97\$ 3.724¢ 2.42¢	12.33\$ 3.834¢ 2.494¢	12.69\$ 3.95¢ 2.56¢	3.0% 3.0% 2.9%	2.9% 3.1% 2.8%

		Prime energy going beyond monthly	12.78\$	13.17\$	13.56\$	3.1%	3.0%
105	L	Optimization charge Energy	10.95\$ 2.42¢	11.28\$ 2.49¢	11.64\$ 2.56¢	3.0% 2.9%	3.2% 2.8%
108	L	Surcharge for daily excess	6.38\$	6.57\$	6.78\$	3.0%	3.2%
		Surcharge for monthly excess	19.14\$	19.71\$	20.34\$	3.0%	3.2%
115	L (municipalities)	Multiplier applied to the invoice of the customer to the tariff L with the option (b)	1.3358	1.3759	1.4169	3.0%	3.0%
119	LC (élect . excéd.)	Yearly fixed charge	1000\$	1000\$	1000\$	s.o	s.o
129	LC	Surplus or electricity consumed without authorization (by kWh)	1.00\$	1.00\$	1.00\$	s.o	s.o
134	LP (Tariff combustible breakdown service boiler)	Yearly fixed charge	1000\$	1000\$	1000\$	s.o	s.o
		Supply in high voltage: winter	7.29¢	7.51¢	7.73¢	3.0%	2.9%
		Supply on average tension: winter	10.11¢	10.41¢	10.72¢	3.0%	3.0%
		Supply high voltage: summer, first 300 hres	3.63¢	3.74¢	3.85¢	3.0%	2.9%
		Supply high voltage: summer, remains	7.29¢	7.51¢	7.73¢	3.0%	2.9%
		Medium Average Fourniture energy: summer, first 300 hres	3.63¢	3.74¢	3.85¢	3.0%	2.9%
		Medium Average Supply: summer, remaining energy	10.11¢	10.41¢	10.72¢	3.0%	3.0%
143	LP	Penalty per kWh consumed without authorization	1.00\$	1.00\$	1.00\$	s.o	s.o
148	H	Optimization charge	4.35\$	4.47\$	4.59\$	2.8%	2.7%
		days of week in winter Energy:	3.87¢	3.99¢	4.11¢	3.1%	3.0%
		days of week in winter	14.70¢	15.14¢	15.59¢	3.0%	3.0%
149.4 a)	LD (tariff of breakdown service)	Optimization charge	4.35\$	4.47\$	4.59\$	2.8%	2.7%
		Énergie power: other that days of week in winter	3.87¢	3.99¢	4.11¢	3.1%	3.0%
		Energy: days of week in winter	14.70¢	15.14¢	15.59¢	3.0%	3.0%
149.4 b)	LD (tariff of breakdown service)	Optimization charge / day – planned	0.44\$	0.45\$	0.46\$	2.3%	2.2%
		Prime Power per day – not planned	0.87\$	0.90\$	0.92\$	3.4%	2.2%
		Energy	3.87¢	3.99¢	4.11¢	3.1%	3.0%
		Maximum per month – Prime Power	4.35\$	4.47\$	4.59\$	2.8%	2.7%
157 & 158	Grinding of industrial processes	Average price increase	4.0%	4.0%	4.0%	s.o	s.o
162 b)	Tests of equipment	Multiplier applied in summer (by kw)	10.00¢	10.00¢	10.00¢	s.o	s.o
		Multiplier applied in winter (by kw)	30.00¢	30.00¢	30.00¢	s.o	s.o
176	Payment in \$US	Incomes of reference in \$ American (factor)	1.035	1.035	1.035	s.o	s.o
		Incomes of reference in \$ Canadian (rate) brought up to date	3%	3%	3%	s.o	s.o
		Value of the incomes of reference (rate)	9.3%	9.3%	9.3%	s.o	s.o
183	Payment in \$US	Increase of the rates of exchange	1.035	1.035	1.035	s.o	s.o
199 6)	LR (interruption)	Price of energy in period of interruption	50.00¢	50.00¢	50.00¢	s.o	s.o
212	interruption (reduction fixes)(reduction variable)	Option I	27.65\$				
		Option II	35.41\$				
		Option III	39.23\$				
		First kWh associated with the interruptible power	6.94¢				
		kWh for hres with interruption following	34.50¢				

219	Interruption (defect of interruption)	Penalty per kw Maximum Penalty, Option I Maximum Penalty, Option II Maximum Penalty, Option III	3.00\$ 4.00\$ 8.00\$ 12.00\$				
221	Interruption (cancellation)	For calculation of the compensation	9.25%				
221.7	Interruption II Annual Fixed Reduction Variable Reduction	Option A Option B Option A Option B	15.00\$ 8.00\$ 8.50¢ 5.50¢				
221.13	Interruption II Annual Fixed Reduction Variable Reduction	(defect of interr.) Penalty per kw, Option A Penalty per kw, Option B Maximum Penalty, Option A Maximum Penalty, Option B	1.25\$ 0.75\$ 5.00\$ 3.00\$				
221.14 7)	Interruption II	Surplus of consumption	50.00¢				
229	Purchase of power in emergency	Price of bought energy	5.50¢				
232	Purchase of power in emergency (déf. to stop)	Penalty per kw, 15 minutes	5.50¢				
253	BT (reduction for supply)	5 Kv, but lower than 50 Kv 50 Kv, but lower than 170 Kv 170 Kv	0.199¢ 0.250¢ 0.340¢	0.205¢ 0.257¢ 0.350¢	0.211¢ 0.265¢ 0.360¢	3.0% 2.8% 2.9%	2.9% 3.1% 2.9%
254	the 1st nonconformity the 2nd nonconformity	Take precedence over the max. power called Prime on the called max. power	12.78\$ 12.78\$	13.17\$ 13.17\$	13.59\$ 13.59\$	3.1% 3.1%	3.2% 3.2%
266	BT	Going beyond of more than 10 % contractual power	12.78\$	13.17\$	13.59\$	3.1%	3.2%
267	(Without installation of suitable measuring) (With installation of suitable measuring)	Monthly fixed charge Royalty on the power contr. (/kw) Price on energy except point monthly Royalty basic monthly Royalty on the power contr. (/kw) Price on energy except point First hours peak Remaining energy at a peak	33.15\$ 6.18¢ 3.32¢ 33.15\$ 6.18¢ 3.32¢ 7.41¢ 46.00¢	34.14\$ 6.36¢ 3.42¢ 34.14\$ 6.36¢ 3.42¢ 7.63¢ 46.00¢	35.19\$ 6.57¢ 3.52¢ 35.19\$ 6.57¢ 3.52¢ 7.86¢ 46.00¢	3.0% 2.9% 3.0% 3.0% 2.9% 3.0% 3.0% s.o	3.1% 3.3% 2.9% 3.1% 3.3% 2.9% 3.0% s.o
270	Energy shortage	Remaining consumption off-peak Power during peak period	7.41¢ 46.00¢	7.63¢ 46.00¢	7.86¢ 46.00¢	3.0%	3.0%
271	D (res. Autonomous)	Energy exceeding 30 kWh per day	26.50¢	27.30¢	28.11¢	3.0%	3.0%
272	DM (res. Autonomous)	Energy exceeding 30 kWh per day by multiplier	26.50¢	27.30¢	28.11¢	3.0%	3.0%
274	G, G-9, M res. autonomous	Penalty on the energy for heating	58.57¢	60.33¢	62.13¢	3.0%	3.0%
278	T1 (daily newspaper) T2 (weekly) T3 (30 days or more)	Prime Power per Day Maximum per Week Prime Power per Week Maximum per Week Prime Power per Month	3.57\$ 10.71\$ 10.71\$ 32.13\$ 32.13\$	3.68\$ 11.06\$ 11.06\$ 33.09\$ 33.09\$	3.79\$ 11.41\$ 11.41\$ 34.08\$ 34.08\$	3.1% 3.3% 3.3% 3.0% 3.0%	3.0% 3.2% 3.2% 3.0% 3.0%
279	T (min/max amount)	Minimum per month - single-phase Minimum per month - polyphase	6.45\$ 19.35\$	6.63\$ 19.92\$	6.84\$ 20.52\$	2.8% 2.9%	3.2% 3.0%
282	Street Lighting	Up-dating rate	9.30%	9.30%	9.30%	s.o	s.o
284	Street Lighting (General Service)	Price of power	7.41¢	7.63¢	7.86¢	3.0%	3.0%
290	Street Lighting	Sodium vapor: 3 600 lumens	15.36\$	15.81\$	16.29\$	2.9%	3.0%

	complete service standardized Luminaries Tariff by luminary	Vapor of sodium: 5 000 lumens Vapor of sodium: 8 500 lumens Vapor of sodium: 14 400 Vapeur lumens of sodium: 22 000 Vapeur lumens of mercury: 10 000 lumens Vapor of mercury: 20 000 lumens	16.89\$ 18.39\$ 19.83\$ 23.28\$ 22.26\$ 29.25\$	17.40\$ 18.93\$ 20.43\$ 23.97\$ 22.92\$ 30.12\$	17.91\$ 19.50\$ 21.03\$ 24.69\$ 23.61\$ 31.02\$	3.0% 2.9% 3.0% 3.0% 3.0% 3.0%	2.9% 3.0% 2.9% 3.0% 3.0% 3.0%
291	Street Lighting complete service non-standardized Luminaries Tariff by luminary	Incandescence + reflecting: 1000 lumens Incandescence + reflecting: 2500 lumens Incandescence + reflecting: 4000 lumens Incandescence + reflecting + difference: 2500 lumens Incandescence + reflecting+ difference: 4000 lumens Incandescence + reflecting+ difference: 6000 lumens Mercury vapor: 7 000 lumens Vapor of mercury: 50 000 lumens Tariff in force Increase for luminaries not aimed by art. 290 and 291	24.21\$ 28.50\$ 33.30\$ 28.50\$ 33.30\$ 37.68\$ 19.98\$ 59.82\$ 1.6%	24.93\$ 29.37\$ 34.29\$ 29.37\$ 34.29\$ 38.82\$ 20.58\$ 61.62\$ 3.0%	25.68\$ 30.24\$ 35.31\$ 30.24\$ 35.31\$ 39.99\$ 21.18\$ 63.45\$ 2.98%	3.0% 3.1% 3.0% 3.1% 3.0% 3.0% 3.0% 3.0% s.o	3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 3.0% s.o
295	Sentinel (front EC. post) Tariff by luminary	7 000 lumens + post 20 000 lumens + post	31.25\$ 41.13\$	32.16\$ 42.36\$	33.12\$ 43.62\$	3.0% 3.0%	3.0% 3.0%
296	Sentinel (without post) Tariff by luminary	7000 lumens 20000 lumens	24.51\$ 35.37\$	25.26\$ 36.42\$	26.01\$ 37.50\$	3.1% 3.0%	3.0% 3.0%
298	Expenses for subscription. To the electricity service	Administrative charge Expenses of Opening of File Expenses of powering following a request for suspension (minimum)	20\$ 50\$ 130\$	20\$ 50\$ 130\$	20\$ 50\$ 130\$	s.o s.o s.o	s.o s.o s.o
299	Expenses concerning the modes of supply	Unit amount for transformer with 2 enrout. (2 \$ per kilovolt-ampere of transformation installed)	2\$	2\$	2\$	s.o	s.o
300	Expenses concerning connection with the network	Expenses of permanent connection Special expenses of connection First 20 kW (total) Over 20 kW (per kW) Allowance for Usage (2000\$/unit) Interest rate applicable to the payments by payments Bimestriellement Annually Annual credit per unit of housing Factor of spreading out over 5 years Annual credit based on enery/kw Annual credit according to enery/kWh Allowance for use other than residential/kw Expenses of temporary connection Expenses of disconnection at the point of connection Annual interest rate for calculation of value brought up to date of the	200\$ 5000\$ 250\$ 2000\$ 1.493% 9.3% 520\$ 0.26 85\$ 7.05\$ 325\$ 100\$ 100\$ 9.3%	200\$ 5000\$ 250\$ 2000\$ 1.493% 9.3% 520\$ 0.26 85\$ 7.05\$ 325\$ 100\$ 100\$ 9.3%	200\$ 5000\$ 250\$ 2000\$ 1.493% 9.3% 520\$ 0.26 85\$ 7.05\$ 325\$ 100\$ 100\$ 9.3%	s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o	s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o s.o

		expenses of exp., ent. of the inst. and of réinv. of the equipment Expenses of AD for wk.. of prolongation or modif. network and connection	30%	30%	30%	s.o	s.o
301	Expenses concerning the cond. of sale of electricity	Expenses for cheque turned over by a financial institution for insufficient provision Expenses for re-establishment of service (minimum)	10\$ 50\$	10\$ 50\$	10\$ 50\$	s.o s.o	s.o s.o
301.3	Service VISILEC	Monthly amount	89\$	89\$	89\$	s.o	s.o
303	Reduction for supply on average or in high voltage	5 Kv, but lower than 15 Kv 15 Kv, but lower than 50 Kv 50 Kv, but lower than 80 Kv 80 Kv, but lower than 170 Kv 170 Kv	0.501\$ 0.804\$ 1.788\$ 2.193\$ 2.934\$	0.516\$ 0.828\$ 1.839\$ 2.256\$ 3.018\$	0.531\$ 0.852\$ 1.893\$ 2.322\$ 3.108\$	3.0% 3.0% 2.9% 2.9% 2.9%	2.9% 2.9% 2.9% 2.9% 3.0%
304	Readjustment for losses of transformation	Increase of the reductions in article 303 Reduction on the premium of power	13.20¢ 13.20¢	13.59¢ 13.59¢	13.98¢ 13.98¢	3.0% 3.0%	2.9% 2.9%