

Background paper on the occasion of the conference "Privatiser Hydro-Québec: pourquoi et comment" by Claude Garcia and Marcel Boyer (August 29, 2007)

**Deregulation of the North American energy market and a wider opening of the electricity sector at the continental level together clear the way to consider options for reform that have received little attention up to now. In Quebec, the government is the sole shareholder of Hydro-Québec, a state corporation that holds almost a complete monopoly of electricity distribution across the province. Various possibilities for the privatization(1) of Hydro-Québec are worth considering as a way of enhancing the sector's profitability along with energy efficiency and the health of public finances.**

**This document presents two different proposals that both go in this direction. The first proposal argues that fully privatizing Hydro-Québec could help fulfil the goal of repaying the public debt. If this happens, what portion of the debt could we hope to eliminate by applying the proceeds of privatization? The second proposal asserts that, even if the state wished to retain its majority shareholding in Hydro-Québec, partial privatization would lead to major gains. How could we then ensure that the economic value of Hydro-Québec would be optimized to everyone's benefit?**

## POINT OF VIEW OF CLAUDE GARCIA

Some people in Quebec envy Alberta, which has fully eliminated its debt and enjoys the lowest tax rates in Canada, with no provincial income tax. Alberta has substantial oil and gas resources. Quebec, for its part, has renewable and low-cost hydraulic resources.

Alberta has left the exploitation of its natural resources to the private sector and pays for oil at market prices. If oil prices rise sharply, Albertans, like everyone else in Canada, must agree to pay more for their gasoline. Alberta receives high royalties from the private companies that handle the exploitation of its energy resources. The Alberta government does not, however, seek to set prices for gasoline.

Quebec has chosen a different strategy: with few exceptions, it is the government, through Hydro-Québec, that handles the exploitation of our hydroelectric resources. Hydro-Québec recently had to start paying a royalty for the use of water, but this is far from the level paid in Alberta for oil resources. Following an extended rate freeze, Hydro-Québec now can ask the Régie de l'énergie for approval to raise rates based on increases in its costs. In the last few years, however, electricity rates have risen far more slowly than the prices of oil products. This is why Quebec residents pay much less than market value for electricity. Residential electricity rates in Toronto are 75% higher than Quebec rates. In New York, the rates are three times as high.

### *The unsuspected value of Hydro-Québec*

Quebecers own a company with a medium-term profit potential higher than that of any company listed on the Toronto Stock Exchange. How much would Hydro-Québec be worth after the rate increase suggested below? This is a fundamental issue that our society must analyze and debate. The situation has changed enormously in the last 20 years.(2) Deregulation of the North American energy market has raised Hydro-Québec's intrinsic value quite considerably.

1. In this document, the term "privatization" refers to the sale to the private sector of a company owned by the government, not to be confused with the buyout of all shares of a company to remove it from the stock exchange, a type of operation much talked about lately in connection with Bell Canada.

2. See the work by Henri Lepage and Michel Boucher, *La libéralisation des marchés de l'électricité*, Éditions Saint-Martin and MEI, 2001.

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Excluding extraordinary items, Hydro-Québec's 2006 profit was \$2.8 billion. Raising electricity rates by four cents a kilowatt-hour (kWh) would produce the same average rate paid by Toronto residents. Such a rise would increase Hydro-Québec's profit by about \$7 billion a year. This is based on the realistic assumption that the billions of kWh not consumed by Quebecers after a rate increase would easily find buyers in export markets.

As a state corporation, Hydro-Québec pays no tax on its profits. It would obviously be subject to this tax if it became a publicly traded company. If it paid one-third of its profit in tax, its net profit, as a private company, would be \$6.5 billion following the suggested rate increase. Valuations of energy-producing companies listed on the Toronto Stock Exchange lead us to conclude that Hydro-Québec's worth would exceed \$130 billion.

### ***A debt-free Quebec***

Quebec has an opportunity to get rid of its debt quickly through more effective exploitation of its hydraulic wealth. On March 31, 2006, Quebec's debt stood at \$122.6 billion. Raising rates by four cents per kWh before heading to the stock market would enable us to eliminate Quebec's debt entirely.

A debt-free Quebec would save \$7.6 billion a year in debt service. This saving would fall to about \$5.5 billion a year after taking account of the reduced contribution from Hydro-Québec to public revenues. This amount would still allow for income tax cuts of 33%. Cuts of this magnitude would stimulate Quebec's economic growth enormously since we would then have a highly competitive tax environment.

### ***A transition to be laid out***

Hydro-Québec need not be listed on the stock market in a single block. To minimize the impact of the proposed rate increase on the economy and on Quebec consumers, this rise should be staggered over

several years. Since Hydro-Québec's structure has already been divided into four autonomous entities (Production, TransÉnergie, Distribution and Équipement), these divisions could be the basis for a gradual listing of the company on the Toronto Stock Exchange. The first division to be privatized would be Hydro-Québec Distribution. Once this is done, it would be easy to adjust rates based on the costs incurred in obtaining electricity since a private company must operate at a profit.

In a second phase, the assets of Hydro-Québec Production could be spun off into several groups that would be sold in turn to the already privatized Hydro-Québec Distribution. This sale would be done according to predetermined financial parameters that would reflect the real value of the assets being sold. Quebec electricity rates, which would be based on costs, would gradually move closer to market costs as successive privatizations occurred. This way of proceeding would have the advantage of spreading the rate increase over several years without selling assets at a discount as would be the case if the entire sale took place in the short term. This would also allow for a harmonious transition between a state corporation and a joint stock company listed on the exchange.

### ***Conclusion***

Many observers are concerned about the effects of the Quebec population's rapid aging on our ability to maintain our universal health care system, given that Quebec residents are already among the most heavily taxed and most heavily indebted people in North America. The preceding analysis suggests that it is up to us alone to make the necessary adjustments and alter this situation. In exchange for what truly amounts to a reasonable hike in electricity rates, Quebec could enjoy a highly competitive tax environment without having to sacrifice its social programs.

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## POINT OF VIEW OF MARCEL BOYER

Repaying the debt is not the only factor justifying an eventual privatization of Hydro-Québec. Indeed, Hydro-Québec's worth supports Quebec's public debt.

Repaying this debt by selling some public assets would reduce the government's *liabilities* but also its assets.

(3) The operation would not change the government's net worth and would not lead to direct wealth creation for Quebecers. Thus, the economic value of privatizing Hydro-Québec cannot lie in repaying the debt.

### ***How should a value be put on Quebec's energy resources?***

On the other hand, even a partial privatization of Hydro-Québec would help in valorising our energy resources more accurately by favouring more equitable prices that would convey the right incentives. In April 2006, the average price per kWh in the residential sector was 6.6¢ in Quebec compared to 11.2¢ in Toronto, 19.2¢ in New York and 23.8¢ in Boston.(4) Similar differences apply in the commercial and industrial sectors. GDP per capita based on purchasing power parity(5) was US \$29,100 in Montréal in 2004, whereas it was 20% higher in Toronto, 81% higher in New York and 99% higher in Boston. Low electricity prices do not guarantee a high level of wealth creation or living standards.

The *proper* electricity prices, those that provide powerful incentives for technological innovation and that encourage more productive behaviour in controlling energy consumption and protecting the environment, correspond to market prices.

The market price is equal to the opportunity cost of our consumption, or the value forfeited by consuming the last kWh consumed: what price could we get on the market for our kWh if we did not consume them? These *proper* prices promote efficiency by inducing all parties including firms to adapt to the value of electricity, based on their technologies and on their privileged information regarding the competitive pressures they face. Thus, *proper* prices are likely to mean that our energy potential will be used in ways that result in lower social costs, greater efficiency and higher profits. It is not *low* manipulated prices that are sources of growth and wealth, but *proper* prices.(6)

The energy bill for an average house of 158 square metres heated by electricity rose by 14.4% in eight years (between May 1, 1998, and April 1, 2006), whereas the bill for the same house, heated with fuel oil or natural gas, went up 130% and 58% respectively.(7) If we regard Hydro-Québec as a supplier of electric energy to all Quebec consumers, this cost advantage is praiseworthy. But if we view Hydro-Québec as a business jointly owned by everyone in Quebec, the outlook is very different. What concept of equity can justify favouring certain citizens-owners at the expense of others by offering "abnormally" low legislated electricity rates? Civic equity, which means determining rates in a way that provides comparable treatment to each citizen who is an owner or shareholder of Hydro-Québec, would justify raising electricity prices to market levels.

3. According to the Quebec department of finance (2007-2008 Budget Plan), "total government debt," including so-called direct debts and net liabilities in public employee pension plans, stood at about \$122.4 billion as of March 31, 2007, whereas "long-term public sector debt" totalled \$191.7 billion (this latter figure also includes the debt of the education, health care and social service networks, of Hydro-Québec, of the municipalities and of other government companies). The Financial Management System (FMS) devised by Statistics Canada provides for comparisons of provincial debt levels, in particular net debt levels. Based on the FMS, the net debt of financial assets reached \$100 billion in Quebec in 2005 (latest year available), or \$13,172 per inhabitant (36.5% of GDP) compared to \$8,843 (20.6%) in Ontario, \$19,387 (46.6%) in Newfoundland and minus \$6,609 (-9%) in Alberta. On this subject, see Marcel Boyer, *La performance économique du Québec: constats et défis (III)*, May 2007, <http://cirano.qc.ca/pdf/publication/2007s-12.pdf>. To get a better picture of the debt problem, we need to add various unrecorded items and subtract the value of real estate assets, evidently a sizable amount, taking account of all public infrastructure and equipment.

4. Hydro-Québec, *Comparison of Electricity Prices in Major North American Cities*, 2006, [www.hydroquebec.com](http://www.hydroquebec.com).

5. OECD, *Territorial Reviews: Competitive Cities in the Global Economy*, November 2006.

6. On this subject, see Marcel Boyer, *Higher electricity prices can unleash the value of Quebec's energy potential*, Montreal Economic Institute, April 2007; Marcel Boyer, *Raise Electricity Prices in Quebec – and Benefit Everyone*, C.D. Howe Institute, March 2005.

7. Hydro-Québec Distribution, *Requête du Distributeur et pièces ou soutien de la demande*, Régie de l'énergie du Québec (File R-3610-2006), Exhibit B-1, August 16, 2006, p. 15.

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### *The advantages of privatization*

Privatization would help greatly in the necessary process of revising Hydro-Québec's mandate, turning its main function into maximizing the value of its shareholders' capital by selling all electricity at market prices. If the government wishes to continue protecting or subsidizing certain groups of people or businesses, such as low-income households or aluminium producers, it will need to do so through direct subsidies rather than by manipulating electricity prices.

To make this change in mandate credible, governments must be denied the right to reach into Quebecers' collective inheritance and squander their energy resources.<sup>(8)</sup> By partially privatizing Hydro-Québec, around 25% of shares for example,<sup>(9)</sup> the board of directors, including representatives of the new shareholders, would really have a duty to maximize the value of the company for all shareholders: it would propose a rate structure at market prices, invest in all money-making projects, and ensure tight management of operations.<sup>(10)</sup> Herein lies the true advantage for all Quebecers of privatizing Hydro-Québec, even partially.

This privatization could be conducted by issuing shares that would provide for large quantities of new funds to be raised, thereby providing much of the financing for investments in various sources of electric energy for the coming years.<sup>(11)</sup> The income this would generate could also be used to reduce taxes or repay part of the debt, depending on the goal being sought.

### *Conclusion*

The announcement of this partial privatization and of higher electricity prices rising to their market value, with this perhaps spread over several years, would send a credible signal that wealth creation, based on creativity, innovation and truth in pricing, would from then on be the standard of sound management and good governance in public affairs. Defending a policy of this nature is to bet on Quebecers' abilities to adapt, create, innovate and show entrepreneurial spirit.

8. Subsidies to aluminium producers provide a good example. On this subject, see Jean-Thomas Bernard and Gérard Bélanger, *Subsidies for aluminum producers: Benefits that don't add up*, Montreal Economic Institute, April 2007.

9. See Marcel Boyer, *Le bas prix de l'électricité impose des coûts réels au Québec*, AIEQ, May 3, 2006 (*La Presse*, May 4, 2006; *Le Devoir*, May 4, 2006; *National Post*, May 11, 2006; *Les Affaires*, May 12, 2006).

10. On the same line of thinking, a new mandate should be set out for the Régie de l'énergie by having it control the market power of Hydro-Québec and verify the competitive aspect of rate proposals.

11. Following the example of the partial and highly successful privatization of several large French public corporations (France Télécom, Gaz de France, Électricité de France), the government could promote widely distributed ownership with shares held by a large number of Quebecers, making rate increases politically more acceptable. Some shares could perhaps be reserved for Hydro-Québec employees.



The first part of this document was prepared by **Claude Garcia**, former president of Standard Life, former assistant deputy minister at the Quebec Department of Social Affairs and member of the board of the Caisse de dépôt et placement du Québec and of Cogeco inc. The second part was prepared by **Marcel Boyer**, Vice President and Chief Economist of the MEI, holder of the Bell Canada Chair in Industrial Economics at the University of Montreal and fellow at the CIRANO.

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