Towards a Churchill River Action Plan-2041

Overview

The recent resignation of Premier Legault, along with the interruptions in negotiations by Hydro-Québec and Newfoundland and Labrador Hydro following the election of Premier Wakeham, may slightly alter some proposals in the MOU of December 12th, 2024. However, the MOU lacked some essential details. Additionally, my concerns about the deficiencies in the proposed prices and projects have been discussed in detail in my other commentaries. I believe that the MOU is simply a continuation of discussions that have taken place over the past fifty years. Jason Churchill, in his paper, "A History of Negotiations to Develop the Hydroelectric Resources of the Churchill River from 1949 to 2007," provides an excellent account of these negotiations.

Quebec initiated the MOU under its Action Plan 2035, amid droughts that disrupted Hydro-Québec's hydroelectric output and increased demand for affordable, clean electricity. The Government of Newfoundland and Labrador, through its Crown corporation, responded to Quebec's proposal. Quebec faced the challenge of assuring Newfoundland and Labrador that the new agreement offered a fair solution to disputes over the original 1969 Contract's fixed prices[1]. The carrot in Quebec's offer was the revenue that the debt-stressed Government of Newfoundland and Labrador would receive[2] over the new contract period.

We have stated that prudent management requires that the decision-maker consider a Best Alternative To a Negotiated Agreement (BATNA). The December 2024 MOU contained some specifics but lacked many others and so was a long way from being a negotiated agreement. The ongoing negotiations between the parties were working towards such an agreement[3]. A BATNA is not possible

[1] These nominal prices would decline in purchasing value over time due to inflation.
[2] A possible projected revenue was sold as an expected revenue.
[3] It would be helpful if the details of these negotiations were made public before the public was asked to give its opinion on the matter.

without a negotiated agreement in place. One can work towards an alternative by formulating, as Hydro-Québec has wisely done, an action plan.

This commentary aims to initiate such an action plan and is titled “Towards Action-2041”. I select 2041 as the end date for a few reasons. First, that year marks the expiration of the 1969 Contract, which currently governs CF(L)Co's operations. Second, given the rapidly evolving landscape of electricity demand and supply at both the national and international levels, certain aspects of long-term planning are nearly impossible to execute with high accuracy. Third, the timeframe aligns with that of Hydro-Québec, a well-managed public utility.

The question remains: what should be the long-term objectives of our Action Plan-2041? Despite the detailed provisions outlined in the December Memorandum of Understanding, it is reasonable to expect that its overarching aims will be upheld in future negotiations. For Newfoundland and Labrador, a primary objective is to enhance and secure fair value for electricity by increasing the rates paid to CF(L)Co for the existing power supply. Conversely, for Quebec, the main goal in the MOU is security of supply. For Action Plan-2041, the aim is to expand Newfoundland and Labrador’s electricity generation capacity and improve the province’s interconnectedness with the national grid. I will refer to this as “supply.” A third goal, which I’ll call “economic development,” is also significant.

The overall focus of the Action Plan is to explore how the natural resources of the Churchill River can be used to increase the general well-being of Newfoundlanders and Labradorians, as well as First Nations peoples. We use well-being in a general sense to include not only economic well-being but also other domains such as environmental, cultural and community issues. It is understood that any initial action plan must be amended when it becomes a

final, binding contract with other parties and governments. It is also understood that the amendment process will result from negotiated bargaining.

The framework for any AP must deviate from what may be the ideal, since it must recognize the realities which exist. Regarding the Churchill River, the generation facilities are located in remote areas, far from the final points of consumption. Added to this is the fact that the transmission of the generated electricity will often pass through territories subject to the laws and rules of other jurisdictions. It may also be the case that the production facilities are not fully under the province's control. This is certainly the case with CF(L)Co, as discussed earlier in our series.

This discussion paper doesn't push for one specific development plan or suggest taking immediate action. Instead, its purpose is to expand how Newfoundlanders and Labradorians consider their options for developing the Churchill Falls resource, especially as 2041 approaches. The paper examines different approaches to valuing water, structuring agreements, and planning infrastructure, aiming to provide the public with a clearer foundation for open discussion and informed debate. Ultimately, it wants readers to see the available choices, the trade-offs each entails, and why it's important to think long-term before making any final decisions.

This discussion paper argues that before Newfoundland and Labrador commits to any binding agreement on the future development of the Churchill River—whether under the current MOU or a revised version—it should first articulate its own clear, proactive action plan. The purpose of a Churchill River Action Plan to 2041 is not to replace negotiations, but to establish the province's objectives, principles, and alternatives in advance, with particular emphasis on how the value of water is priced, how risks are allocated, and how long-term public well-being is affected. By focusing on water as the core economic resource, rather than treating infrastructure projects as the starting

point, the Action Plan would clarify what outcomes matter most to Newfoundlanders and Labradorians, identify credible alternative development pathways (including post-2041 options), and ensure that any future agreements are evaluated against a transparent, publicly understood framework rather than negotiated reactively in response to proposals from others.

Before discussing each goal, a brief history of the Churchill River and hydroelectric development may help readers understand how the goals relate.

A Short Historical Perspective

It was Albert Low of the Dominion (Canada) Geological Survey who recognized Churchill Falls'[4] potential for electricity production in 1894. Subsequent assessment confirmed this potential. The constraints on realizing the potential were the remoteness of the Falls and the engineering technology needed to transmit the generated electricity to final consumers. These constraints were overcome in the 1950's with the development of iron mines with their processing and distribution facilities. Specifically, the Quebec North Shore and Labrador Railway permitted the materials and equipment needed to build a generating station to be brought closer to the site at a cost-effective rate.

During this period of increased industrialization in Canada, political will arose to promote and invest in the Churchill Falls generating station. On the Newfoundland side, Premier Joey Smallwood encouraged and subsidized foreign investment through BRINCO to accelerate industrialization in Newfoundland and Labrador. Smallwood believed that such industrialization would improve the economic well-being of the population by creating well-paying jobs and helping people move away from subsistence family fishing industries, which were in decline.

[4] At this time the falls was called the "Grand Falls" on the Hamilton River.

In 1958, BRINCO established a subsidiary, Churchill Falls (Labrador) Corporation, to develop the Falls' hydroelectric capacity. One of the owners of CF(L)Co was Shawinigan Water and Power Company. This company was nationalized by Quebec in 1963, and its assets, including its shareholding in CF(L)Co, were incorporated into Hydro-Québec. BRINCO encountered financial difficulties in the late 1960s. The paper by Dr. Jim Feehan details these difficulties and the role Hydro-Québec played in helping BRINCO secure financing through a long-term contract and enabling CF(L)Co to access markets in Quebec and beyond via its transmission lines. Because the power generated at Churchill Falls was sold to Quebec, which controlled the transmission line and the price until 2041, CF(L)Co essentially functioned as a Hydro-Québec hydroelectric plant providing inexpensive power to Quebec, while utilizing a natural resource in Labrador. CF(L)Co's objectives aligned with those of Hydro-Québec, and there was no competitive wholesale electricity market; instead, a regulated transfer price operated within Hydro-Québec from the generation division to the distribution division. In 1974, Newfoundland's Premier, Frank Moores, nationalized the private segment of CF(L)Co so that this portion became a Crown corporation and a provincial asset. In this new role, negotiations were conducted directly between governments. The Government of Newfoundland and Labrador was able to and did represent itself in court. This transfer of ownership to the Province is very significant for developing an Action Plan. Before nationalization, the private segment of CF(L)Co focused on private interests, which are generally understood to serve shareholders' interests by generating profit. With nationalization, the governance objective shifts from profit maximization to enhancing the well-being of the people of Newfoundland and Labrador. As we have discussed previously, and as Mark Carney compellingly argues in his book Value(s), any proposed plan must be viewed through a societal lens, rather than solely a business perspective, as appears to be the case in the analytical framework of the December MOU.

At this point, we will focus on finding value in current and potentially future hydroelectric production on the Churchill River. Achieving “Fair Value” from the electricity produced at Churchill Falls seemed to be the primary goal in the MOU for the Government of Newfoundland and Labrador. Frank Moores also believed that nationalizing Churchill Falls would allow Newfoundland and Labrador to work towards achieving a fair value for its electricity.

Finding Value

Following an earlier video in our series, we can view the production of electricity as a supply chain. It begins with water in a reservoir, which flows into an intake and down a penstock to the turbines. Actual production involves physical capital assets such as the dam, penstocks, turbines, and generators. The process also includes personnel to operate the generating station, along with purchased materials and services. This production process is highly capital-intensive. The output, including the water supply, is electricity. The amount of electricity generated in one hour is measured in megawatts. It's easy to imagine that the inputs, especially those related to capital and labour, incur costs. In commercial terms, these costs are covered by selling the electricity, usually quoted in dollars per megawatt. Discussions about the price of electricity at Churchill Falls are expressed in cents per kilowatt. I have distinguished water from the actual production, since at Churchill Falls and other hydroelectric plants, water is owned by the government, while the production itself may be owned privately, publicly, or through a combination. CF(L)Co is owned by two Crown corporations, namely Newfoundland and Labrador Hydro and Hydro-Québec. CF(L)Co pays both an annual water royalty and a water rental fee to the Government of Newfoundland and Labrador. The royalty is set at $0.50 per horsepower-year generated, which amounts to approximately $2.6 million. The water rental is calculated as 8% of consolidated net profits before income taxes. For the year ending December 31, 2024, the total combined fees were $8.79 million or about .025¢/kWh in

2023. Hydro-Québec is required to pay both a contractual rate and a statutory rate—each adjusted annually and based on electricity produced, measured in dollars per megawatt-hour ($/MWh). A rough non-verifiable estimate of the water royalty rates in Quebec is about .5¢/kWh[5] for 2026. In Ontario, the water royalty rate is 9.5% of gross revenue.

MOU's Finding Value Through CF(L)Co's Output Price

Newfoundland and Labrador Hydro has told me it plans to "modernize" the water rental rate, likely following the Quebec model, which is based on the quantity of electricity produced.

In the MOU, determining the value of the electricity produced seems, at this point, to be based solely on the price at which it is sold to Quebec at the generating station. The current price is 0.2¢/kWh for most of the power, but an additional price applies during the winter months under the Guaranteed Winter Availability Contract. An ATIPPA request has been submitted to Newfoundland and Labrador Hydro to ascertain what this implies for production. Under the MOU proposal, future prices for existing power would be increased, set annually, and not vary during the winter months.

My concerns about deriving value for electricity from the above proposal are that the benefits flow to both Newfoundland and Labrador Hydro and Hydro-Québec rather than directly to the Government of Newfoundland and Labrador. Since CF(L)Co currently makes a profit, Hydro-Québec could simply remit any dividends to itself. In my view, the proposal is somewhat misleading regarding the advantages for Newfoundland and Labrador. A genuine concern is that Hydro-Québec and Quebec regard Churchill Falls as a vital part of their hydroelectric generating station portfolio. Hydro-Québec's aim is to supply

[5] This royalty rate is almost 20 times greater than Newfoundland and Labrador's rate and 2.5 times greater than the base rate Quebec pays CF(L)Co. It would be about 3.8 times the effective rate that Hydro-Quebec pays for Churchill Falls power.

electricity as cheaply as possible into its system. This stance is understandable for a public utility. As mentioned elsewhere, Quebec does not have a wholesale electricity market. Instead, there is a regulated transfer price within Hydro-Québec. I shall return to setting a price for electricity generated at Churchill Falls when dealing with the proposed upgrade of the Churchill Falls infrastructure, which involves replacing the 11 existing turbines. To be clear, finding value at Churchill Falls is through a route Newfoundland and Labrador is exploring: "modernizing"[6] water rental rates. It is understood that any increase in water rental rates would be passed on by CF(L)Co.

Value Via Water Rental Rates:

As A Percentage of Gross Revenues

This method pays royalties as compensation for the value of the water. It does not account for the fact that some generating stations are more efficient than others and would therefore earn higher natural resource rents. It implicitly compensates the Government of Ontario as water prices fluctuate. For example, if Ontario's electricity exports to the USA increase—as is typical—the price would also rise, leading to higher gross revenue and water rental rates. The challenge in applying this formula to Churchill Falls or any other Churchill River facilities under the MOU is that a specific escalation formula has not been defined. Any formula based on transfer prices from Hydro-Québec is rejected.

Based on implicit water resource rents

[6] Thie language.

The water royalty system proposed in our Towards an Action Plan 2041 is a hybrid model. The following principles were kept in mind:

- The payment had to be made directly to the Government of Newfoundland and Labrador[7].

- The value of water would be determined using the economic concepts of Ricardian rents and opportunity costs. Accordingly, the wholesale price of electricity would be linked to open competitive markets rather than closed, regulated transfer prices.

- The rents will reflect seasonal fluctuations in market prices. It is expected that the average annual electricity prices will rise over time, likely at a rate exceeding inflation.

- The rent would be tied to the amount of electricity produced during the month[8].

- The entire potential water rent will not be captured by Newfoundland and Labrador, since the final outcome is determined through a bargaining process.

- Any determination of the appropriate rate structure would be undertaken under the lead of the Government of Newfoundland and Labrador and not by Newfoundland and Labrador Hydro, which would take a subsidiary role.

[7] Similar to Quebec

[8] Given current computer capabilities whether it is based on a monthly or hourly basis makes little difference. We have noted that prices can change hourly in response to demand.

- The basic rent structure would be reviewed every five years. As is currently the custom, a long-term contract would be about 15 years for existing infrastructure.

The following is a simple example; in reality, it would be more complex. The average price Hydro-Québec paid for electricity from New York State and Vermont in December, in Canadian dollars, was about $160/MWh. This was nearly the same price Newfoundland and Labrador charged to the NE-ISO for its electricity. The water rent is basically the wholesale price minus transmission costs, and, under a longer-term contract, it also excludes generating costs.

- $160MWh – $5/MWh (Transmission Cost -Firm Delivery) = $155/MWh
- $ 155/MWh – 2$ (Average Cost/MWh) =$153/MWh
- $153/MWh x .658[9]
- $100.67/ MWh or 10.7¢/kWh. The price CF(L)Co would charge Hydro-Québec would be 10.7¢/kWh[10].

The reference to the competitive wholesale market in the USA might seem a bit odd since Quebec trades electricity with Ontario and New Brunswick. In fact, Quebec now exports more electricity to New Brunswick than it does to the United States. The issue is that the terms of trade between New Brunswick Power and Hydro-Québec under several contracts are not publicly available. This secrecy appears unusual given that both entities are Crown corporations.

[9] The arbitrary discount rate to Hydro-Quebec based upon the relative ownership in CF(L)Co. This discount would only last until 2041.

[10] This price is 10.7¢/kWh plus the current price per kWh of .2¢. The price is higher than most Quebec households are paying in December but still below 16¢/kWh that Hydro-Québec paid for imported electricity. Hydro-Québec also noted that they exported power to New England last winter for about 20¢/kWh. Basically, if Hydro-Québec exports the power Newfoundland and Labrador split the potential water rents with Quebec!

A concern during the construction of Churchill Falls was that access to markets outside Quebec was limited because Hydro-Québec owned the transmission lines. As Jason Churchill noted in his submission to the Muskrat Falls Commission, this situation changed when the United States Federal Energy Regulatory Commission (FERC) enacted the Energy Policy Act, and "FERC Order 2000 11. “All transmission users should receive access under rates, terms and conditions comparable to those the transmitting utility applies to itself to serve its own customers.’” As a result, power from the Churchill River, which now uses the Quebec transmission corridor, has the same access to markets in the USA as Hydro-Québec. The USA removed the restrictions, giving all parties greater access to American markets, since access to electricity hubs in the USA would require Canadian utilities to use US transmission lines. Quebec also benefited from these changes by improving its ability to export into American markets.

We will assume that access to American markets would not be restricted by any electricity agreements between Quebec and Newfoundland and Labrador, in which any additional capacity available to Newfoundland and Labrador Hydro, but not needed by it, is not offered to Quebec, as by way of the right of first refusal, since this would obviously limit access to more profitable alternative opportunities.

To clarify, the proposed method will raise the cost of electricity generated by the existing Churchill Falls power plant since CF(L)Co water royalties are currently a cost of production. Our proposed Action Plan applies only until the end of 2041. Any subsequent Action Plan related to existing power beyond that period would need to incorporate lessons learned during the lead-up to it.

Other Considerations in Determining Value

The focus above has been on the MOU's perspective, in which the Action Plan assumes power flows through Quebec. Hydro-Quebec's Action Plan takes a broader, more proactive approach rather than just reacting. It has recently finalized a power exchange agreement with Ontario. Additionally, it is actively working with New Brunswick, Maine, Vermont, and New York State. The best way to ensure fair value for our electricity is to develop and promote competitive markets. To this end, the Government of Newfoundland and Labrador must consider new transmission lines connecting Churchill Falls to Gull Island and Muskrat Falls with a view to connecting the Upper Churchill to the Atlantic Canadian grid.

Regarding this issue, Action Plan-2041 aligns with Prime Minister Mark Carney's call for an East-West Grid. Such a grid is urgently needed, especially for Prince Edward Island and Nova Scotia. Hydroelectric power is also essential for clean energy and national energy security. Although a comprehensive national plan is not yet in place, some discussions have likely already taken place.

Modernizing Water Royalties Using the MOU Approach

As mentioned, Newfoundland and Labrador Hydro—and, probably, Hydro-Québec—see a need to update the way water royalties are paid to the Government of Newfoundland and Labrador. However, achieving this may pose challenges. The process appears to add value to operations at Churchill Falls and to the provincial government by allowing CF(L)Co to increase export prices to Quebec. Since other input costs are already determined and total electricity output equals total costs, the worth of the water is essentially what's left over. By setting the price of electricity first, you can then calculate the water royalty. In the proposal outlined in this paper, the Government of Newfoundland and Labrador would establish a monthly water royalty rate based on market

competition, and CF(L)Co would treat this as an external input cost. In essence, the current memorandum of understanding seems to be "putting the cart before the horse" when it comes to updating resource royalties.

Security of Supply

MOU: Extending 2041 Contract

The December 2024 MOU aims to improve the security of supply from 2042 to 2075 by projecting prices for existing power during this period. Action Plan-2041 would consider extending by 15 years with a review. The extension would depend on changes to water-royalty rates within a year, subject to five-year review cycles, and rely on developments related to the national grid plan.

MOU: New Infrastructure Projects

The December 2024 MOU proposes four new infrastructure projects. These projects were discussed in a previous commentary. They are:

1. An "**upgrade**" to the existing Churchill Falls generating station by replacing the 11 turbines over 11 years.

This would increase the plant's capacity by 550 MWh. It would have a load factor[11] of 22.83%, suggesting that not all turbines might always be running, depending on demand[12]. Typically, utilization rates increase in

[11] The load factor tells us the average capital utilization rate over the year.
[12] An explanation from the engineers at Newfoundland and Labrador Hydro would be helpful.

the colder winter months[13] and in the morning around breakfast, and in the evening around dinner.

We should keep in mind that any increase in the amount and timing of the electricity produced would affect the proposed water royalties. Under the proposed water royalty rate, this project would generate about $95 million per year if operated during the winter months.

The MOU suggests using the projected existing power prices to cover the costs of this infrastructure project. In principle, this is common practice, since new capital assets involve adjusted user costs of capital from an economist's perspective. The user cost also includes a typical industry rate of return, risk, and engineering depreciation rates. The selling price of electricity from the plant would need to reflect the adjusted, higher user cost of capital.

2. An expansion of the Churchill Falls generating station

The proposed expansion will cost $4.6 billion and produce 0.4 TWh annually, with an average utilization rate of just over 4%. Clearly, the utilities have conducted thorough research, and it seems designed for peak winter loads and to target the export market to the USA, helping Hydro-Québec fulfill its legal contract commitments.

As in the case above, if this expansion is undertaken, the proposed price from CF(L)Co would be adjusted to include all costs associated with it, such as the new user cost of capital and water royalties. Financing would be provided by CF(L)Co in a manner consistent with Hydro-Québec's current practices. If the Government of Newfoundland and Labrador believes that such borrowing might influence its borrowing costs, some water royalties could be allocated to a "heritage fund." Unlike Quebec's

[13] I have noted from the Newfoundland and Labrador Hydro website that at some times Churchill Falls operates above its rated capacity.

Heritage Fund, a separate account would be used to reduce the Government's debt.

3. The Gull Island Generating Station

The idea of a separate generating station at Gull Island on the Lower Churchill River has been around for a long time, as it has the potential to produce significant amounts of clean energy. The current proposal has an hourly generating capacity of 2250 megawatts and is expected to generate about 12 terawatt-hours annually.

Dr. Wade Locke has pointed out in his assessment of the MOU that there is insufficient information within the document to evaluate the project from a business perspective. There is also not enough information to assess it from a societal cost-benefit perspective. It is unfortunate that Hydro-Québec and Newfoundland and Labrador Hydro, as well as their respective governments, have not released their initial evaluations, which no doubt exist.

Should Gull Island be considered a stand-alone project for our Action Plan? Clearly, the generating plant has potential. However, two major concerns arise. First, the project would be undertaken jointly with Hydro-Québec, which has competing goals. Quebec aims to secure a supply of large amounts of clean energy at the lowest possible cost. Newfoundland and Labrador, on the other hand, would likely invest if it could earn a reasonable return on its capital and sell its water at fair value. As noted, the fair value of water is achievable only with unimpeded access to competitive wholesale electricity markets. Such access would include being part of a truly national grid connecting the Churchill Falls and Gull Island Generating Stations to Newfoundland and other Atlantic provinces. It would also require that any power Newfoundland and Labrador Hydro receives under a joint venture can be directed to markets that best serve its social interests. This is the same condition Hydro-

Québec has for the power it produces within its own province, despite being the sole owner.

The second obstacle is the borrowing Newfoundland and Labrador Hydro would face if it undertook this project alone, estimated at $24.9 million, or if it did so jointly with another party, such as Hydro-Québec. The Gull Island project includes a transmission line. The MOU specifies a price of $3.6 billion for Newfoundland and Labrador Hydro to connect the generating station to the Quebec grid.

Issues Associated with the Joint Ownership of Churchill River Operations

The MOU suggests that Hydro-Québec acquire a 40% ownership stake in the company structure related to Gull Island. Videos 2A and 2B point out potential issues with joint ownership of these two public utilities because of their conflicting goals. We believe Hydro-Québec considers Churchill Falls as part of its hydroelectric assets, given its significant equity stake and the fact that over 90% of the electricity is exported to Quebec.

The goal of Quebec is to produce electricity from its Churchill operations in CF(L)Co at the lowest cost possible and pass the savings to its parent, Hydro-Québec. These costs include water royalties paid to Newfoundland and Labrador. When electricity is used locally, Hydro-Québec, in pursuit of its societal aims, can provide very affordable power to households and industry. If there's surplus power beyond domestic needs, Hydro-Québec can sell it on competitive markets. This allows Hydro-Québec to earn water rents from Churchill Falls and pass savings to consumers through lower prices. This is a rational move for Hydro-Québec.

For Newfoundland and Labrador Hydro, the 1969 Hydro-Québec/BRINCO contract remains a burden. The idea of encouraging BRINCO to invest in Labrador, particularly through its subsidiary CF(L)Co, was to support industrial growth in Labrador and generate a profit. The 1969 contract limited CF(L)Co's profit potential but allowed completion of development and prevented bankruptcy. The nationalization of BRINCO in 1974 by the Government of Newfoundland and Labrador was hoped to increase the value of Churchill Falls to the province through government-to-government negotiations. Any increase in Newfoundland and Labrador's value decreased Quebec's societal value. The point is that this conflict in objectives is internal to CF(L)Co and to another jointly owned company associated with Gull Island. Any Action Plan will have to recognize and deal with this internal conflict of objectives. Is the ideal solution to have Newfoundland and Labrador Hydro the sole owner of Gull Island?

Other Considerations for Action Plan-2041

1. Environmental

As noted in other commentaries, a more recent environmental study should occur, given recent climate changes in Quebec and Newfoundland and Labrador.

2. Indigenous Culture and Economy

Typically, hydroelectric projects in the northern parts of the country can impact fishing, hunting, and trapping. Regarding the Gull Island project, the Innu hold the Tshash Petapen Agreement-in-Principle (2011) with Canada and Newfoundland and Labrador, which secures certain rights and interests. The Innu have acknowledged the damage to their culture and language caused by past developments.

3. Employment

The sales information in the former Government of Newfoundland and Labrador's Fact Sheet indicates an average of 3,000 direct jobs during the development phase of the projects. The MOU does not specify which occupations will be affected or the length of employment. It is also important to determine where the workers currently reside. Concrete plans for hydroelectric development should clarify this. In a cost-benefit analysis, the benefit to an employed individual is the boost to well-being, such as higher wages. Although wages may increase, many tradespeople might not want to work on these projects because the guaranteed work duration is shorter than their current jobs. If a worker is already employed by a company and is assigned to these infrastructure projects, there would generally be no increase in well-being. Such employment details appear to be included in the proponents' sales pitch. Benefits to businesses and non-profit organizations are also significant, as are missed opportunities, such as lower royalties for jobs.

4. Well-being

Our approach has emphasized societal well-being. In this context, since the provincial government is the likely direct beneficiary, the public would also be interested in how it might use the money it receives. Quebec provides a good example of how potential resource rents from hydroelectric production led to significantly lower household electricity costs. The direct water royalties from hydroelectric operations are allocated to a Heritage Fund to help reduce the provincial debt burden. Lastly, some rents are used to offer businesses low electricity prices to support industrial development.

Towards Action Plan-2041's Approach Versus the December MOU

Our Action Plan seeks to secure value from the Churchill River resource by using implicit water rentals, referencing competitive wholesale electricity markets. The plan shifts management of the resource—and how its value is determined—back to the Government of Newfoundland and Labrador. As a result, CF(L)Co must treat the monthly adjusted royalty as an external cost and modify the cost of exported electricity accordingly. In contrast, the MOU determines value based on the annual price charged for electricity, which rises with general inflation and does not account for real price fluctuations caused by shifts in supply and demand. Although alternative mechanisms for raising electricity prices are mentioned, no details are provided. It's important to note that Quebec's wholesale market is the primary domestic consumer of electricity from Churchill Falls and from proposed projects. This market uses regulated transfer prices to redistribute resource rents to households. Given that CF(L)Co is co-owned by Newfoundland and Labrador Hydro and Hydro-Québec, any increase in value under the MOU is shared with the buyer and isn't an independent transaction.

The word "towards" in the title Towards Action Plan-2041 has been chosen to indicate that further thought must be given to hydroelectric developments on the Churchill River. For example, the ideas of developing generating stations at Gull Island and Muskrat Falls have existed for over half a century.

The need to connect with the Canadian and US electrical grids has grown increasingly important, particularly for Quebec, as its energy supply faces pressure from climate change and rising technological demand. The MOU highlights this, aligning with federal calls for a national electric grid and supporting Labrador connections in Action Plan-2041. Like Hydro-Québec and the Carney government, Quebec focuses on proactive "planification," whereas our approach tends to be reactive.

Action plans must be realistic. The main obstacle to implementing the infrastructure projects outlined in Towards Action Plan-2041 is the size of the provincial debt and the guarantees it provides to municipalities and Crown corporations. The MOU acknowledges this by proposing a $4.8 billion payment to the Government of Newfoundland and Labrador to support its equity commitments related to the new generating projects. The MOU highlights forecasted price increases for existing CF(L)Co assets to ease the Newfoundland and Labrador government's debt burden. Towards Action Plan-2041 believes that significant increases in cash from higher water royalties will help reduce the province's debt issues but recommends adopting a cash-flow strategy where money enters the provincial treasury before incurring more debt.

The December MOU recognizes that any agreement between Quebec and Newfoundland and Labrador aimed at increasing generating capacity on the Churchill River must involve raising the fair value of existing electricity from Churchill Falls. This condition has been part of the discussion for nearly fifty years. The MOU achieves this indirectly by increasing the price CF(L)Co. receives. Since Hydro-Québec owns 34.2% of CF(L)Co, this effectively lowers the amount the parent company pays by that percentage. Towards Action Plan-2041 (TAP-2041) adopts an economic approach similar to Hydro-Québec's, using water royalties to directly fund the provincial treasury. However, the MOU does not mention water royalties. The proposed electricity prices in the MOU appear to lack a clear economic basis. The projected price increases seem to overlook current electricity market realities, including the domestic household market. The idea of linking prices to other markets is vague, and it conveniently refers to the Quebec wholesale electricity market, which is actually an internal, regulated transfer price set by Hydro-Québec.

TAP-2041 uses 2041 as a cutoff date. Once again, we follow Hydro-Québec's lead with its Action Plan 2035. We note that Hydro-Québec's longer-term

commitments do not appear to extend beyond 20 years. In our commentary elsewhere on the MOU's projected prices, we observe the challenges of forecasting electricity prices in the current environment, even in the short term. TAP-2041 recognizes this and calls for reviews every five years. It should be noted that the MOU, by extending prices to 2075, is essentially attempting to secure supply from Churchill Falls for another 50 years, beyond the 1969 Contract, which ends in 2041. This may be the main way Hydro-Québec guarantees security of supply, rather than through expanding Churchill Falls. It is interesting that no timelines or prices are attached to either the Gull Island project or the Churchill Falls expansion project. Presumably, these parameters are known to the two public utilities.

The final point to note is that Schedule E details new allocations to Newfoundland and Labrador for the existing Churchill Falls plant from 2025 to 2075. While these increased allocations could be used to promote industrialization, if they are not used for that purpose, the Government, through Newfoundland and Labrador Hydro, should have the freedom to determine how the surplus power is utilised. The importance of extending the grid eastward grows increasingly. This approach should also permit the Government to immediately begin discussions with the United States government and companies.

Our Action Plan-2041 requires further discussion and development. The December MOU initiates talks between Quebec and Newfoundland and Labrador at a time when Quebec desperately needs more electricity, not only for domestic use but also to fulfill its highly profitable external commitments. Perhaps the fact that both parties involved in the MOU have been negotiating toward a final agreement explains the lack of essential information needed before any rational economic or social decision can be made. It is possible that Newfoundland and Labrador Hydro views itself as a business negotiating a commercial contract with Hydro-Québec. However, our perspective is that Newfoundland and Labrador Hydro is a public utility under the direction of the

Government of Newfoundland and Labrador. Its role is to contribute to the well-being of the population within its jurisdiction.

Some Final Thoughts on the Action Plan-2041 and the MOU.

In response to the MOU, Dr. Wade Locke and I agree. An agreement between Quebec and Newfoundland and Labrador could be **potentially** transformative. As Dr. Locke points out in his Assessment: "There is not sufficient information in the MOU to thoroughly evaluate all, or any, of the proposed new developments." [14] My further analysis has been particularly critical of the MOU's ability to reach fair value through its proposed pricing structure.

Towards Action Plan-2041 aims to explore alternatives to the MOU, which, in my view, help unlock the potential of using the existing power generated at Churchill Falls, along with any new developments on the Churchill River, to enhance the well-being of Newfoundlanders and Labradorians while acknowledging national responsibilities.

The Action Plan should foster discussion and present alternatives. I am confident that with further thought, improved options can be developed. To unlock the potential of the Churchill River, our government must be proactive rather than merely reactive. We need the government to be innovative in exploring new opportunities by actively engaging with the Federal Government, other provinces, and our traditional trading partners in the United States. When done properly, trade and development can lead to fair and shared benefits for well-being.

[14] Page 21 of his Assessment which is available on this site.