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Manitoba Hydro

The Long View

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Manitoba Hydro – The Long View

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Introduction

In fall 2018 the Manitoba government announced it had hired former BC premier Gordon Campbell to head a $2.5 million inquiry into Manitoba Hydro's more recent projects: specifically, Keeyask Generating Station and the Bipole III transmission line.[1] The question that needed answering was whether or not the projects were "based on sound economics."[2] At issue specifically was "whether the projects were built long before domestic demand required them, and on overly optimistic projections of export prices." The announcement came on the heels of a previous inquiry by the same government into the same projects. The Boston Consulting Group (BCG) report came to an overall conclusion that the government was keen to publicize: that Keeyask and Bipole III should not have gone ahead and that the previous NDP government had been less than prudent in allowing them to proceed.[3] It concluded, however, that both projects were too far along to be cancelled. Closer examination of that report will show that BCG conceded some important points in favour of the Keeyask project that have not been highlighted, and that it failed to adequately include environmental and social considerations in its analysis, particularly around Bipole III.

The intense concentration on just a few of the many moving parts of Manitoba Hydro (MH) can give us a distorted picture. We may learn from such reports about cost overruns and debt, but if that's all we see, we miss important contextual elements found in a more complete view. In the case of MH, the picture is so big, involving both past and future considerations, that it's hard to put it in focus.

MH is a mammoth corporation operating in an arcane world of continental exports, imports, spot pricing, future pricing and domestic and foreign demands. It competes with other forms of energy — like fracked gas, wind, solar and coal-fired plants — that come and go at ever faster rates.

The importance and complexity of the corporation make it ripe for controversy — controversy that is an integral part of politics in this province. The utility has been painted as a jewel in Manitoba's crown corporations — a publically owned gem which provides reliable, affordable energy. It has also been portrayed as an inefficient government monopoly which, by virtue of it being publically, not privately owned, is susceptible to questionable manipulation by government.[4]

Manitoba Hydro has also long been involved in a complicated and painful relationship with First

Nation and Métis communities.[5] No comprehensive report could ignore the damage that has been done to entire communities, or pretend that making amends will be easy or even fully completed. In an age of reconciliation, forging a healthier relationship with Indigenous people should be any government's most pressing issue. In Manitoba, MH must be at the forefront of this effort.

Other considerations include the volatile times in which we live in. Climate change, species extinction, new sources of fossil fuels such as fracking, the rapidly decreasing cost of wind and solar power and economic and political uncertainty affect hydro development in complex ways that need to be carefully analysed. This report will begin that long conversation.

It will first offer an overview of MH's operations, its role as a crown corporation, and financial performance. It will then discuss how and why the decision was made to proceed with Keeyask and Bipole III, and respond to the criticisms of these decisions. Extensive citation of a plethora of media articles will demonstrate the high-profile nature and tone of the debate, and consider the slow, painful evolution of relations with Indigenous communities. It will then examine some of the past political debate, showing that what we're witnessing today is a continuation of how parties use Hydro to position themselves in the public sphere.

Finally, given the propensity to partially and/or fully privatize crown corporations in Canada (BC Hydro; Ontario's Hydro One; Manitoba Telephone Services; Alberta Liquor Commission — for example) it is not unreasonable to ask if much of the bad publicity Manitoba Hydro is facing is meant to build an argument in favour of privatization. It is certainly a strategy we have seen before,[6] and if it's being contemplated, it has to be called out so that the public can respond.

The Engine that Keeps the Province Going

Manitoba Hydro (MH) is arguably the most important corporation in the province. It is one of Canada's largest integrated electricity/natural gas distribution utilities, and it trades electricity in wholesale markets in the US and Canada. According to its 2017–18 annual report,[7] it provides electricity to more than 580,000 customers and employs close to 6,000 workers (1,026 of whom are Indigenous). MH jobs are good jobs, whether they be in administration, financing, engineering, human resources, IT, legal or asset maintenance and repair. The utility offers decent wages, benefits and permanent employment that allows employees throughout the province to raise a family and support the local economy.

It is of great concern that this workforce is being reduced. In April, 2019 the Pallister government delivered mandate letters to all Manitoba's crown corporations instructing them to reduce staff.[8] MH has been told to reduce its management workforce an additional 15 per cent, and its regular staff an additional 8 per cent from earlier cuts, including the loss of 900 positions in 2017.[9] The corporation's Bruce Owens stated "We believe that further staff reductions would significantly increase the risk of public and employee safety, of system reliability, and as well our ability to provide reasonable levels of service to our customers."[10]

MH has 16 generating stations located throughout the province. Two of them are thermal generating (in Brandon and Selkirk) and the others are hydro generated.

The following table on page four lists the utility's in-service hydro generating stations, their capacity and their location.

The Keeyask Generating Station is slated to come into service in 2020, and will increase capacity by 695 megawatts (MW). This system of generating stations allow MH to provide reliable electricity and customer service to its residential and business customers at comparably lower rates than other jurisdictions, as demonstrated by the following charts from a Hydro Quebec 2018 study.[12]

The same advantage can be seen for larger, industrial users.[13]

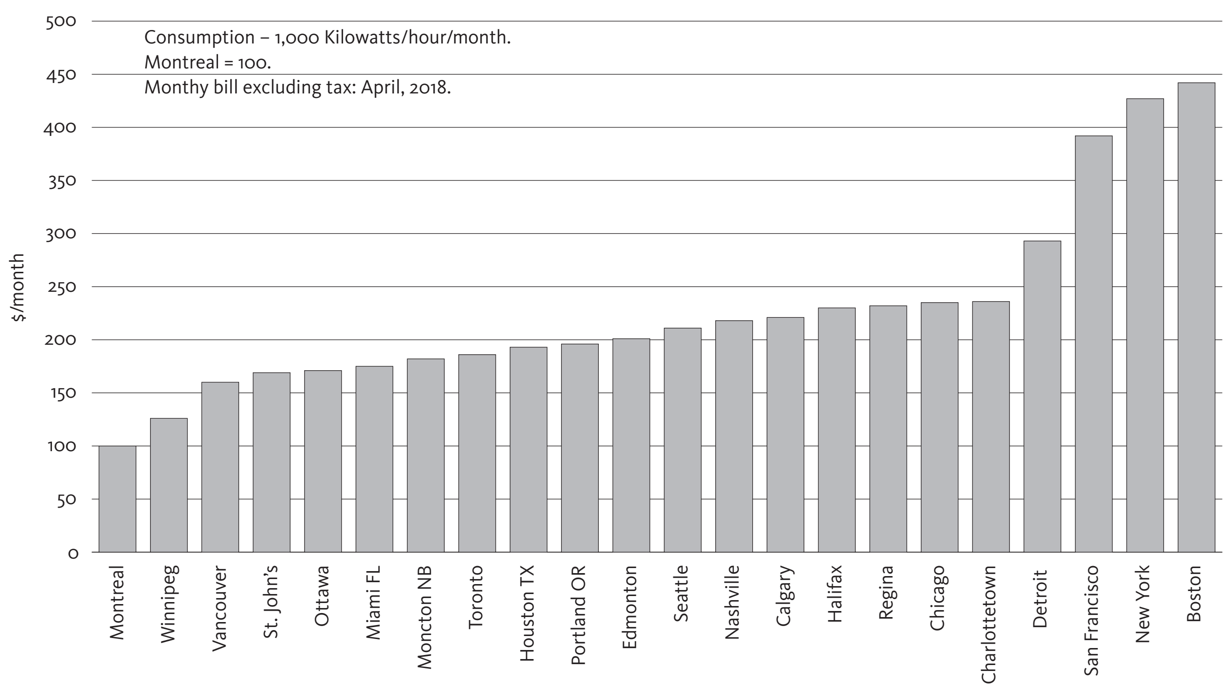
It should be noted that while Montreal has a lower rate than Winnipeg, all Manitoba communities pay the same rate per kilowatt hour. Outside Montreal, Quebecers pay higher rates than Manitobans.

Public ownership of large utilities in the form of crown corporations is common in Canada, and they have served the public well. Governments,

TABLE 1 **Manitoba In-service Hydro Generating Stations as of 2018**[11]

Generating Station	Date completed	Vicinity	Generating Capacity (megawatts)
Grand Rapids	1968	The Pas/Saskatchewan River	479 MW
Great Falls	1928	Lac du Bonnet/Winnipeg River	129MW
Jenpeg	1979	Thompson/Nelson River	115MW
Kelsey	1961	Thompson/Nelson River	286MW
Kettle	1974	Lower Nelson River/York Factory	1,220MW
Laurie River I and II	1952/1958	Lynn Lake	10MW
Limestone	1992	Churchill/Nelson River	1,350MW
Long Spruce	1979	York Factory/Nelson River	980MW
McArthur Falls	1955	Winnipeg/Winnipeg River	56MW
Pine Falls	1952	Traverse Bay/Winnipeg River	84MW
Pointe du Bois	1926	Lac du Bonnet/Winnipeg River	75MW
Seven Sisters	1952	Winnipeg/Winnipeg River	165MW
Slave Falls	1948	Lac du Bonnet/Winnipeg River	68MW
Wuskwatim	2012	NCN/Thompson/Burntwood River	211MW

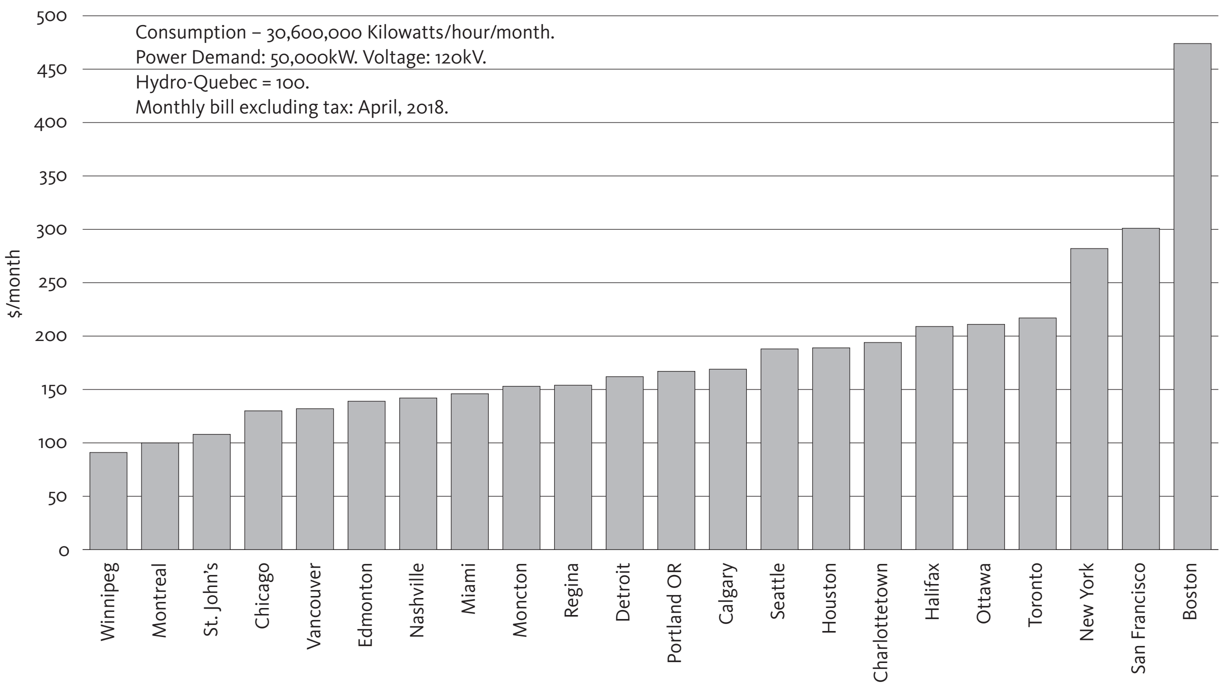
FIGURE 1 **Comparative Index of Residential Electricity Prices**



SOURCE: Hydro Quebec

including Manitoba's, have used hydro-electric resources as an instrument of economic development. Not only has public ownership allowed governments to act as risk takers, ensuring that large rural areas are served, it has allowed them to attract and develop electric-intensive indus-

FIGURE 2 **Comparative Index of Electricity Prices. Large-power Customers.**



SOURCE: Hydro Quebec

tries like metal refining. Certainly no private corporation would have had the resources to build and maintain the infrastructure owned by MH.[14] Furthermore, a private corporation would not want to provide electricity to small, remote communities at the same price as it does for Winnipeg. A private entity would want higher overall rates for their return on investment and would not want the responsibility of serving remote communities the way that MH does.

As a provincial crown corporation, MH is responsible to the government of Manitoba and Manitobans. A board, appointed by order of the Lieutenant Governor in Council, oversees MH'S affairs and ensures government control. There is also legislative oversight by way of *The Manitoba Hydro Act*, providing oversight of capital borrowing, the requirement that cabinet must approve extra-provincial electricity sales and provincial licensing requirements for certain activities. Various activities of the corporation require appearances at legislative committees.[15] MH is also governed by *The Crown Corporation Governance and Accountability Act*.[16]

Retail electricity rates are overseen by The Manitoba Public Utilities Board (PUB) — in accordance with *The Manitoba Public Utilities Act*. MH activities are also monitored by the Clean Environment Commission and Manitoba Conservation.

Canadian public-owned electric utilities have engaged in leading edge research and development, especially in long-distance transmission. MH and Hydro Quebec are world leaders in high voltage transmission technology, with Manitoba leading the way in DC transmission and Quebec in AC.[17]

Crown corporations have an added advantage: they contribute revenue to government coffers.

MH Finances

According to the MH 2017/18 annual report,[18] the utility paid $126 million in water rentals and $130 million in capital and other taxes to the province. Most of the utility's revenue from electricity comes from domestic sales, in the amount of $1.494 billion. Extra-provincial sales for the same period were $437 million. Sales of natural gas totalled $346 million.[19]

The utility's retained earnings have steadily increased from $2.076 billion in 2009 to $2.936 billion as of March 31, 2018.[20] The indicator that has attracted so much attention over the past few years has been its debt/equity ratio which has declined from 27 per cent in 2010 to 15 per cent in 2018 (this issue is dealt with later in this report). The reason for the decline is the large, debt-financed, capital investment in two major projects: Keeyask Generating Station and Bipole III. It is these investments that are attracting the ire of the ruling Conservatives and which have received so much media attention.

Keeyask Generating Station and Bipole III: A Short History

The Keeyask Generation project consists of a 695 MW hydroelectric generating station. It is located on the Nelson River, near Gull Rapids. Planning started in the 1990s when it was deemed necessary to provide more power for export to the US market, and meet projected increases in domestic demand. In order to increase transmission capacity and reliability, the Bipole III project was also approved.

It was projected that Keeyask would cost $6.5 billion[21] and Bipole III $3.28 billion.[22]

Large capital projects of this nature are not approved on a whim, regardless of which party is in power. They must be approved by the Public Utilities Board (PUB), an "independent, quasi-judicial administrative tribunal that has broad oversight and supervisory powers over public utilities and designated monopolies, as set out in statute."[23]

The PUB holds public hearings on important issues, including rate increases and project approvals. Interested parties, such as the Canadian Consumer Association and the Green Action Centre can participate as intervenors. Hydro's financial staff prepares a 20-year financial forecast which is updated every year and made public through the PUB. This report is also reviewed by international bond-rating agencies. The PUB also examined the project plans through a Needs For and Alternatives To (NFAT) review which considered a variety of options and concluded that Keeyask and Bipole III made the most sense.

It was well known throughout the PUB process that spending on these projects would cause MH's debt to increase, and a sometimes heated debate took place before, during and after the hearings.[24] Earlier on the main focus of protest from the then-opposition Conservatives, which did get support from affected land owners, was the routing of Bipole III down the west side of Lake Manitoba instead of the shorter and less expensive east side of Lake Winnipeg.[25] Initial consultations in east-side communities found widespread opposition to the suggestion of a bipole being located there.

Once in power, the Conservatives continued questioning the routing of Bipole III and added the decision to build Keeyask to the debate. At issue was whether or not there was sufficient demand to increase the amount of power generated, if there was a need to improve reliability, if too much debt was incurred and if the routing of Bipole III was changeable. Although criticism was aimed at the NDP government, it was the

PUB that conducted the public hearings, heard expert testimony and ultimately made the recommendation to proceed with Keeyask.

Keeyask Generating System and the Need For and Alternatives To Hearings and Report – 2014

The PUB conducted Needs for and Alternatives to (NFAT) hearings to examine 12 possible plans developed by MH for capital expansion. The expert panel was to determine if the corporation had made the best choice and to impose any changes it saw necessary. As in regular PUB meetings, MH had to pay for the cost of both its own submission and the costs of the five intervenors. Intervenor costs covered include legal and professional consultant fees, which can be as high as $285/hour,[26] and accordingly added up to a significant amount.

MH had put forward a preferred plan for Keeyask which included the following:

- The 695 MW Keeyask Project ($6.5 billion): in-service date of 2019
- The 1,485 MW Conawapa Project ($10.7 billion): in-service date of 2026
- North-South transmission Upgrade ($500 million): in-service date coinciding with Conawapa
- The 750 MW US Transmission Interconnection project to Minnesota ($1 billion).[27]

MH's preferred plan was based on the following export contracts it had recently signed or was in the process of negotiating:

- A 125 MW system power sale agreement with Northern States Power (2021–2025)
- A 100 MW system power sale agreement with Wisconsin Public Service (2021–2027)
- A 250 MW system power sale system agreement with Minnesota Power (2020–2035)
- A 308 MW system power sale agreement with Wisconsin Public Service (2027–2036).[28]

The NFAT granted intervener status to five organizations, being the Manitoba Métis Federation, Manitoba Keewatinowi Okimakanak Inc., the Green Action Centre, the Manitoba Industrial Power Users Group and the Consumers' Association of Canada (Manitoba). Independent expert consultants were appointed to examine MH's Preferred Development Plan, eight of whom provided evidence at the hearing. The panel heard 43 days of evidence.[29]

The panel's key recommendations were that:

- The Conawapa Project and the North-South Transmission upgrade be terminated
- The Keeyask Project proceed with an in-service date of 2019
- The 750 MW US transmission interconnection project proceed
- The Demand Side Management (DSM) responsibilities be removed from MH and a new arm's length entity be established to handle DSM programs
- The government not approve further generation and transmission projects without a comprehensive and regularly occurring integrated resource planning process.[30]

The NFAT panel also recognized the existing export arrangements the corporation has with the Midcontinent Independent System Operator (MISO). MH exports electricity at prevailing spot-market prices that change according to demand. Up to 60 per cent of the utility's export revenue rely on these opportunity sales.[31]

It also agreed that there was a need to increase the supply of electricity. The panel found MH's 20-year load forecast to be reasonable, although the 1,700 GW of new pipeline load needed for the Energy East pipeline did not materialize as predicted, demonstrating just how volatile fossil-fuel projects are becoming. The panel was not as convinced by the utility's long-term load forecast, noting the difficulty in predicting future demand because of how rapidly technology is changing.[32]

Demand Side Management

The other factor the panel considered was the role of MH's Demand Side Management program (DSM). Its Power Smart Plan allowed customers to reduce their consumption of energy to the point that they could lower their MH bill even as rates increased.[33] MH had been directed to implement a DSM program in order to reduce consumption and conserve energy.

The panel found that MH was in conflict as a seller of electricity and as a promoter of energy efficiency and that for this reason, recommended carving the DSM out of MH. The Pallister government took that recommendation to heart when it set up a new crown corporation called Efficiency Manitoba[34] to handle DSM.

The panel's recommendation to separate the DSM program from MH is not without criticism. Citing conflict of interest makes more sense when dealing with a private, for-profit corporation. A crown corporation is not a profit-maximizing entity; its mandate is to best serve the public. *The Energy Savings Act* directed MH to design its DSM three-year plan in consultation with the Government of Manitoba.[35] *The Energy Efficiency Act* considers the need to conserve energy for the good of the environment and incorporates sustainable development principles. A publically-minded corporation like MH, supported by legislation such as *The Energy Savings Act*, is certainly capable of balancing energy conservation with the sale of electricity. Indeed in an age of climate change, it should be its primary concern.[36]

The partnership with Aki Energy shows what MH's DSM program can do. In collaboration with the Indigenous owned social enterprise, Aki Energy, MH implemented a sophisticated program for the installation of geo-thermal heating on First Nation communities. It has been very successful in reducing energy consumption and hydro bills on several Reserves as well as increasing employment. The communities access MH's Pay As You Save (PAYS) Financing program, allowing families to finance the upfront cost of geothermal equipment and installation. MH then recovers the cost through an on-bill charge on the customer's account — over 20 years. Aki Energy works with MH to guarantee that energy bill savings are greater than the financing charge, so that First Nation customers see energy savings right away.[37]

Aki Energy trains First Nation geothermal installers who do all the installations in the communities. The role of the Band and Council in these communities (Peguis First Nation and Fisher River Cree Nation) is important. Not only do they provide financial backing for the families by guaranteeing their bill payments, but in the case of Fisher River it has expanded geo-thermal beyond residential use. Those First Nations that have their own construction companies use Aki Energy to train their employees so they can do the work.[38]

A video on the Aki Energy website explains how MH's DSM program helped First Nation communities in Manitoba play a leading role in job creation, energy savings for First Nation families and transitioning to geo-thermal, biomass and solar energy.[39] It includes the voices of community members from the Chief, to workers, business owners and homeowners.

MH collaborated with three other social enterprises to provide training and work to multibarriered workers living in Winnipeg and Brandon (BEEP — Brandon Energy Efficiency Program; BUILD — Building Urban Industry for Local Development; and MGR — Manitoba Green Retrofit, now Purpose Construction). Trainees tend to be Indigenous youth who have not had the opportunity to learn a trade or work. Some have been gang-involved and are hoping to turn their lives around. Once again MH's PAYS program allowed workers to install insulation, energy efficient windows and energy efficient upgrades.[40]

The 750 MW US Transmission Interconnection

In order to meet MH's export obligations, it has to increase its capacity to transmit power to the US. The Manitoba Minnesota Transmission Project, a $1 billion project, will connect with the US grid in Duluth, Minnesota. This project faced its own challenges brought on by the current government's refusal to recognize an agreement MH made with the Manitoba Métis Federation.[41] This issue will be further considered in the upcoming section "A New Way of Doing Business."

In sum, the 2014 NFAT report was an in-depth, arm's length, transparent exercise that found the Keeyask Generating Station to be an economically sound project. Its conclusions were based on the strength of the export contracts in place and the utility's projections for future demand.

The inclusion of First Nations partners was also an important part of the utility's plans.

First Nations Partners[42]

The Keeyask project is the result of a partnership between five partners: a general partner, being a numbered company wholly owned by MH, and four limited partners. The limited partners are: MH and three limited partnerships representing the Keeyask Cree Nations (KCN), being Tataskweyak Cree Nation (TCN); War Lake First Nation (WLFN); York Factory Cree Nation (YFCN); and Fox Lake Cree Nation (FLCN). All four First Nations held community ratification votes prior to signing on to the project.

All limited partners invested in the project have limited rights regarding the management and operation of the project, as well as limited liability for the partnership's debts. The general partner is responsible for the management, operation and debts of the partnership. MH owns at least 75 per cent of the equity in the partnership and KCN has the right to own up to 25 per cent.

The partners began working on the project in the early 1990s, and the KCN played a major role in its design. For example, because of concerns raised by TCN, MH opted for a plan that involved less flooding and therefore, less power production. Aboriginal traditional knowledge, including the Cree worldview, was included in the planning of the project.

More about MH partnerships with First Nations can be found in the section "A New Way of Doing Business" later in this report.

Bipole III

Bipole III is a large MH project which will improve reliability in Manitoba's electric grid and increase MH's export capacity. It adds 2,000 MWs from the Keeyask Generation System.[43] Scheduled to come into service this summer, work was completed on schedule. According to MH:

> Building the HVDC transmission project was a massive undertaking involving the installation of over 3,000 steel towers and 20 specialized converter transformers. At the project's peak, it was one of the 20 largest construction projects in North America.[44]

Why Build Bipole III?

Approximately 75 per cent of the energy generated in Manitoba flows to Dorsey Station in southern Manitoba through Bipoles I and II, which run side by side though a corridor in the Interlake. Having the two transmission lines so close to each other means that wild fires or extreme weather events (the possibility of which is ever increasing with climate change), increase the probability that both lines could be affected, knocking out power to southern communities, including Winnipeg.[45]

The possibility of a major power disruption was considered in a NFAT report prepared by MH. A worst-case scenario was described:

> The potential effects of such an event present a risk that is unacceptable to Manitoba customers, particularly in the very cold months

> when the loss of power for extended periods could have serious effects on health, safety and security. The loss of Dorsey Station for up to three years could have a disastrous impact to the province and its economy.
>
> The extensive rotating blackouts would leave affected neighbourhoods without power for extended stretches of time on a daily basis meaning that day to day requirements such as lighting, refrigeration, heating/cooling would be unavailable on a rotating schedule. Similarly, businesses would also be without power to operate their facilities forcing them to close during such outages, and causing business disruptions.[46]

The possibility of disruption was driven home with a September 5, 1996 wind downburst which caused the failure of 19 Bipole I and II transmission towers. Luckily the damage was two km north of Dorsey Station, just enough distance to prevent damage to the Dorsey-Forbes 500 kV interconnection.[47]

Bipole III, which runs down the west side of the province, provides a crucial backup in the event of problems with Bipoles I and II, dramatically reducing the risk that the worst-case scenario occur.

Bipole III also ensures an adequate supply of power to meet the corporation's current export obligations — and more. Exports made up 23 per cent of MH's electric revenues between 2009–18, helping to keep domestic rates low.[48] This percentage will only increase as the contracts come on line with US customers, and the new contract recently signed with Saskatchewan coming into effect in 2021.[49]

Approval Process for Bipole III

The project was subject to a rigorous approval and planning process. Just choosing the route involved substantial consultation with First Nations, property owners and other members of the public. At issue was the Doer government's decision to run the route down the west side of Manitoba, rather that the shorter and less populated east side of Lake Winnipeg. Despite the greater cost which was initially estimated at $690 million and came in around $900 million,[50] the west side was chosen after extensive consultations were conducted with stakeholders on both routes. Also of importance were the considerations of export customers in the US, who were taking stock of First Nation concerns as well as environmental issues.

Environmental concerns were becoming much more important in shaping the decisions of companies and jurisdictions that purchase energy.[51] The US environmental group Fresh Energy, that wanted to increase local renewable capacity, used the grievances of those First Nations involved in the Northern Flood Agreement — in particular Pimicikamak (formerly Cross Lake) — as evidence that Minnesota should not purchase energy from MH.[52] In 2007, their lobbying resulted in the passing of an omnibus and energy bill in the Minnesota legislature, requiring MH to give yearly reports on social and environmental indicators for those First Nation communities that are signatories to the Northern Flood Agreement (see later section: *A New Way of Doing Business* for more on the NFA). The legislation was subsequently reversed, but only after intense lobbying by the Manitoba Government.[53] This experience led to legitimate concerns that routing Bipole III down the east side, where the majority of First Nation communities were opposed, would result in long delays and greater expense.[54]

The concerns of US customers were not just around the relationship MH had with First Nations; they were, and are, also interested in purchasing cleaner, renewable energy to help them transition to a carbon free system.[55]

At the same time, protection of the east side boreal forest was becoming an important local environmental issue, and Canadian and international environmental groups were putting pressure on the government not to go down the east side.[56] Although both routes contained environmentally important areas, the east side boreal forest is relatively untouched and there were valid arguments for keeping it that way. According to the Canadian Boreal Initiative; "taken together, the carbon and intactness values of Manitoba's Boreal are some of the richest in the world, *especially* in northern Manitoba and *along the east side of Lake Winnipeg*" (our italics).[57] Protection of the habitat of the woodland caribou and other wildlife also figured prominently in the decision to build on the west side.

The Doer government of the day also recognized that preservation of the boreal forest in eastern Manitoba would encourage travellers to visit this part of the province and create economic benefits for local people and their communities. In light of these considerations, five First Nations and the Manitoba and Ontario governments submitted a joint request to the federal government, asking them to apply to have 4.3 million hectares of virgin Boreal forest in this region declared a UNESCO World Heritage site.[58]

That World Heritage Site designation was granted in July, 2018 to the area called Pimachiowin Aki.[59] There was reason to believe that the designation would not have come through had Bipole III been routed down the east side.[60]

Further considerations into the route selection included a MH Site Selection and Environmental Assessment (SSEA). This process involved mapping "biophysical, socio-economic, technical and reliability criteria within the broad study area" that was identified in the first of 4 rounds of public consultations.[61] Development of Bipole III required a Class 3 license under *The Environment Act*. The environmental assessment included a set of community/public consultations and identification of possible impacts which were included in an Environmental Impact Statement.[62]

MH and the government held extensive consultations with Indigenous peoples on the east side of Lake Winnipeg to get feedback on preferences regarding measures to improve their economic future in the region.[63] In 2009, *The East Side Traditional Lands Planning and Special Protected Areas Act* set the parameters for the development of the east side. The purpose of the legislation was:

(a) to enable First Nations and aboriginal communities on the east side of Lake Winnipeg to engage in land use and resource management planning for designated areas of Crown land that they have traditionally used; and

(b) to provide designated areas of Crown land on the east side of Lake Winnipeg with special protection from development and other activities that might occur on that land.[64]

The majority of communities said that they favoured the construction of all-weather roads, largely using the existing winter road routes with multiple new bridges, linking the various communities, and the promotion of ecotourism — a spinoff of the World Heritage Site — to create economic and employment opportunities over the longer term.[65]

The east side/west side debate was long and contentious. Neither route was going to be conflict-free: settler land owners and First Nation and Métis communities on the west side were also affected. The decision to go down the longer, more expensive west side was based on a mix of complex issues ranging from First Nation concerns, environmental stewardship, and financial implications that were further complicated by international considerations. At the end of day, the more pristine east side boreal forest was protected while respecting the rights of the majority of First Nations who live there. All the communities along the chosen route were financially compensated.

A Response to the Critics of Keeyask and Bipole III

By the time the Conservatives were elected in 2016, the Bipole III debate had faded, although the Premier did have one last stab at it, possibly to appease those who were adamantly opposed to the west-side route.[66] As late as June, 2016, Premier Pallister warned the Canadian delegation to the World Heritage Committee that it was still possible that Bipole III could be routed down the east side and a Bipole IV, if ever built, could also take that route.[67] If the Committee received that message, it obviously did not take it too seriously as the designation was approved two years later. It was highly unlikely at this point that the route for Bipole III could have been changed: $1.8 billion had already been spent on the west side.[68]

Keeyask construction was also well under way, but the newly elected Pallister government still thought it necessary to investigate how both projects were approved and examine the consequences of undertaking such large scale projects. As well as commissioning a high-priced report from the Boston Consulting Group, MH's newly appointed board chair Sandy Riley — who later would suddenly quit the board along with all but Progressive Conservative MLA Cliff Graydon — was proving to be a loud critic of MH's debt, and was arguing for a large infusion of equity to shore up the utility's finances.[69]

In the interest of improving MH's finances, the new provincial government cut 900 positions, all in the spirit of calling "all hands on deck" as Premier Pallister framed it. The loss of so many decent positions in a small economy like Manitoba's was significant.[70]

It was the BCG report that would become the bulwark of the government's campaign to discredit the decisions made by the previous NDP government, with Premier Pallister going so far as to claim that Keeyask had not gone through a proper approval process.[71] It wasn't clear if he meant that the PUB process had been skirted or tampered with, or if he felt the Board hadn't done a proper job. The BCG concluded that somehow, despite the extensive process described above, the PUB had not adequately assessed the risks associated with building Keeyask and that the long, detailed and multi-stakeholder process to approve Bipole III didn't count. Specifically it found:[72]

- "Financial modelling that did not fully reflect the specific project risks (e.g. construction execution, market prices, domestic demand)

- Discount rates that favored high capital projects over lower upfront cost projects
- The magnitude of the overall level of debt that both Hydro and the Province of Manitoba would ultimately be exposed to. This is especially true given the concurrent build of Bipole III, which is required for reliability purposes".

Each of these points will be discussed below.

Specific Project Risks

Cost Over-runs

Bent Flyvbjerg of Oxford University analysed mega infrastructure projects in his 2014 report "What You Should Know About Megaprojects, and Why: An Overview."[73] Although the study is critical of most large infrastructure projects, according to Flyvbjerg when mega projects are properly designed, they can create and sustain employment, improve competitiveness by lowering producer costs, benefit consumers with better products and/or service, and make environmental improvements by replacing environmentally unsound structure with infrastructure that is sound.[74] Certainly the above benefits have been realized by Manitoba's settler community from past hydro development, and we are far from being able to say that the same benefits will not be realized over time from Keeyask.

The issue of cost over-runs for mega-projects is also considered in Flyvbjerg's report in which he notes that "Megaprojects are inherently risky due to long planning horizons and complex interfaces."[75] He finds that nine out of ten projects have cost over-runs, with over-runs of up to 50 per cent in real terms not unusual.[76]

There have been cost over-runs for both Keeyask and Bipole III, with the estimates rising and falling as construction progressed. The 2014 NFAT estimate for Keeyask was $6.5 billion. In 2016, MH raised the estimate to $8.7 billion, an estimate it confirmed it will meet.[77] This puts the project's costs some $2.2 billion over the 2014 estimate. If we convert the comparison to real dollars, the original estimate comes in at $7.06 billion in 2019 dollars, making the overrun $1.6 billion in real terms, or 25 per cent. Current projections have the project coming into service in 2020, one year later than the original plan.[78] Delays and cost increases were caused by unexpected conditions with the bedrock.[79] The new in-service date compares favourably with Flyvbjerg's finding that the average delay for dam construction is 45 per cent.[80]

Bipole III's total cost was $4.7 billion,[81] up $1.4 billion from the 2011 estimate of $3.3 billion. Converting the 2011 estimate to 2018 dollars (when the project was completed) puts it at $3.65 billion, bringing the real cost over-run down to $1.05 billion — or 29 per cent.

Certainly MH's should always endeavour to stick to project estimates, but these overruns are not as egregious as reported.[82] The over-run for Bipole III is higher in percentage terms, but it needs to be compared to the cost over-runs which would have been incurred if it had been routed down the east side — as the BCG concluded it should, despite credible concerns that local First Nation and environmentalists never would have allowed the project to get off the ground. Their report did consider the hypothetical costs of shifting to the east side in 2016, putting them between $12 and $18 billion by 2022. Their calculations included the cost of loss of export revenue and damaged relationships with US partners and First Nations,[83] but they did not contemplate the value of keeping the east side boreal forest intact, or of the UNESCO World Heritage Site.

Market Prices

To a large degree the validity of the BCG conclusions depends on future revenues flowing from export and domestic demand. At the time of the report, it found export prices had deteriorated and domestic demand was in flux.[84] Changes to the global energy sector are occurring so fast that it is difficult to establish lasting projections of prices for hydro power. No one knows what the energy sector will look like five, ten or twenty years from now, so trying to establish a trend from a particular moment in time is tricky, no matter how sophisticated the computer modelling being used.

Accordingly the PUB, when questioning MH's future demand forecast, argued that future demand depended on what technology was adopted: something it felt was more volatile than MH acknowledged.[85] It is still too soon to know, but if some technology develops in such a way as to reduce demand for hydro power, there is no reason why MH and the provincial government have to passively accept this situation.

A recent Ipsos survey found that 53 per cent of Canadians are planning on buying an electric vehicle in the next five years,[86] and more and more municipalities are opting for electric buses, a trend Winnipeg's own New Flyer Industries is exploiting as far away as New York City.[87] Regardless of how these and other new technologies, such as wind and solar, evolve, there will be more and more demand for hydro power in an increasingly carbon constrained world. That demand will potentially manifest in the electrification of transportation locally, nationally and internationally and, as other Canadian provinces move to cleaner energy, in a strengthening of the east-west electric grid. The Canadian Energy Research Institute (CERI) recommended using energy imported from Manitoba for use in the oilsands sector.[88]

As previously noted, Saskatchewan and Manitoba have already secured a contract for electricity sales and line extension, and the federal government recently gave $1.6 million to a project feasibility project in Nunavut. The plan, if approved, is to connect five Nunavut communities to MH's hydroelectric and fibre-optic networks. The connection would start in Gillam and run north to the Kivalliq region in Nunavut.[89]

Favouring High Capital Cost Projects Over Lower Upfront Cost Projects

This criticism is in reference to Hydro's preferred development plan which beat out other options including gas-fired turbines that had a shorter amortization period. But MH's submission to the NFAT included varied and detailed modeling of thermal gas, and the NFAT panel of experts found that:

> The Panel does not believe that thermal gas generation provides a reasonable alternative, especially when considered against the future potential of solar and wind power. The Panel is very concerned about the environmental implications of gas generation as a baseload resource, especially with respect to Simple Cycle Gas Turbines that do not achieve the same efficiency as Combined Cycle Gas Turbines.
>
> While future integrated resource planning will have to consider all resource options, the adverse environmental effects of gas generation will have to be thoroughly considered.[90]

Clearly the NFAT panel put more weight on the environment than the BCG did, a tendency we saw with their avoidance of the topic when evaluating the routing of Bipole III.

The Magnitude of the Overall Level of Debt of Hydro and the Province

This criticism in particular has been amplified by the Premier, his cabinet members, ex-board chair Riley, and widely reported on by media. For example, a 2018 media report explains that Premier Pallister wants to investigate why MH is so much in debt.[91] Rather than hiring expensive consultants to explain why, he could have reviewed the PUB's NFAT report which predicted increasing levels of debt to finance capital-intensive projects:

> The debt-to-equity ratio is a long-term target, which serves as a financial guideline only, not an annual requirement. In 2013 it stood at

> 75/25. Manitoba Hydro expects a significant deterioration in this ratio over the next 20 years to about 90/10 in the 2020s as debt levels increase because of Bipole III and the Preferred Development Plan.[92]

The PUB was fully aware that MH's debt/equity ratio would fall as low as 9 per cent, and that its development plan included "applying even annual rate increases over an 18-year period to achieve a debt-to-equity ratio of 75/25 by 2031/32".[93] The ratio is currently at 15 per cent, and is anticipated to decrease until revenues from Keeyask come on line, combined with planned rate increases, allowing the ratio to recover. Even the BCG acknowledged that "single digit equity ratios were not highlighted as significant risk when project approved."[94] The question now is why this became such an issue when the Conservatives took power.

Local economist and ex-Hydro board member Dr. John Loxley has noted that given the size of the capital projects, the growth in MH's debt was expected, that the debt financing was raised in the normal manner, and that all these details were well known long before the Conservatives were elected:

> "There is no magic number for the debt-equity ratio for a Crown corporation with a 100 per cent debt guarantee from the province. Hydro experienced single-digit equity-to-debt ratios between 1970 and 1995 without the sky falling in. The ratio will correct itself by the early 2030s on the basis of demand growth and the planned rate increases, without additional rate increases".[95]

Furthermore, as highlighted in the NFAT report, once Keeyask is completed Hydro will be paying the province higher payments by way of water rental, capital tax and debt guarantee fees. They could reach as high as $516 million by the early 2030s, double what they totalled in 2014.[96] The panel also recommended that these new revenues could be used to offset the impact of rate increases on low-income customers.[97]

The annual rate increases have also become an issue, with MH now requesting much higher-than-usual increases, presumably in response to the government's anxiety over debt levels. MH has requested a 7.9 per cent increase on more than one occasion.[98] Various intervenors have argued at PUB hearings that a 7.9 per cent increase was not warranted.

At the 2017 PUB hearings, when a 3.36 per cent increase was granted rather than 7.9 per cent as requested, MH's president, Kelvin Shepherd, argued that the rate was required to fund ongoing operations, replenish equity and ensure MH's debt was self-sustaining. The Public Interest Law Centre's Byron Williams argued against such a steep rate increase and stated that the decision for the lower increase "… sends a message that Hydro could not back up with evidence its claims of an imminent financial emergency".[99]

In 2018, MH insisted that a 7.9 per cent increase "could not be wrong", based on fears of interest rate increases which would, if they materialized, dramatically affect its finances.[100] Once again the PUB disagreed, premising its decision with the following:

> While the focus of Manitoba Hydro may be on the financial risks faced by the Utility, the Board's role is broader. As noted above, to set rates in the public interest, the Board considers not only the financial health of Manitoba Hydro. Rather, the Board must balance the financial health of Manitoba Hydro with the interests of ratepayers.[101]

The PUB granted MH a 3.6 per cent rate increase. It came to this decision after it heard:

> 31 days of oral evidence, including four Manitoba Hydro witness panels, nine Intervener-retained expert witness panels, five Independent Expert Consultant witness panels, a ratepayer panel sponsored by the Consumers Coalition, Manitoba Hydro's oral rebuttal evidence, and three oral public presentation

> sessions along with three written public presentations. [102]

The Board heard no expert evidence outside of MH's to suggest that the utility's debt is causing the province to have to pay higher interest rates for its debt borrowing. It also did not accept the argument that rate increases needed to be higher so MH could retire its debt in accordance with its proposed debt management plan, finding that it imposed a non-justifiable short-term cost on ratepayers.[103] The Board also argued that the higher rate increase was not warranted given that MH will continue to reduce its costs and maximize export revenues.[104]

The Board also made recommendations around bill affordability, recognizing that even though Manitoba has amongst the lowest rates in North America, many low-income customers are still energy poor. The Board recommended that the government bring in a comprehensive bill affordability program. It argued that the government was best positioned to implement such a program, given that it already has a comprehensive social program infrastructure in place.[105]

It also recommended that MH establish a First Nations On-Reserve Residential class. This class would not face a rate increase for 2018/19.[106] This recommendation will be further discussed in "A New Way of Doing Business" later in this report.

In 2019, MH made a case for a 3.5 per cent rate increase, which the PUB brought down to 2.5 per cent. Once again, the PUB cited affordability issues and was not convinced that a higher increase was warranted:

> The Board finds that Manitoba Hydro does not require an increase to its revenues in 2019/20 fiscal year. All revenues from the 2.5% rate increase are to be placed in a deferral account for major capital projects currently under construction. The deferral account will partially mitigate future rate increases required when new major capital projects are in-service, consistent with the principles of rate stability and predictability. This increase will contribute additional revenues to Manitoba Hydro in 2019/20 and in future years.[107]

Year after year the PUB, after hearing substantive opinions from a variety of expert witnesses, has ruled in favour of lower rate increases that allow MH to service its debt while expanding its infrastructure. In other words, the warnings of the past MH board chair, BCG and the Premier about MH's debt are found wanting by the PUB. This would suggest that the debt levels are not out of line with what was planned and approved by the PUB and the bond-rating agencies that reviewed Hydro's preferred development plan long before the Conservatives were elected.

Despite the Pallister government's portrayal of Keeyask and Bipole III as serious mistakes,[108] even its own consulting firm, BCG, found that:

> To the credit of Hydro, several aspects of the planning and decision process were conducted well. For example, the construction of Keeyask is an extremely complicated endeavor from technical, operational, and commercial perspectives. That the project was successfully designed and agreed to by multiple parties, stakeholders, and contract holders is a significant achievement that should not be overlooked in assessment of the project. Moreover, the fact that multiple highly favorable US export term contracts were negotiated prior to initiation demonstrates the attempts by project leadership to mitigate at least a portion of the financial and export risk associated with the project [Exhibit 20]. Further, Hydro conducted several analyses regarding potential risks to the project, including low water flows and changes to gas and CO_2 prices [Exhibit 21]. Although the ultimate acceptance of some of the risks identified is questionable, in particular with relation to acceptance of low equity ratios in future years, it is clear Hydro and the Province attempted to weigh several important risks related to the project.[109]

BCG also notes that MH had single-digit debt ratios between 1970–95[110] but that the province's lower debt/GDP ratio during that period made MH's debt more sustainable. This point is only defensible if one accepts that Manitoba's debt is currently unduly high. At the time BCG was making this argument, Manitoba's debt/GDP ratio was at a reasonable level, around 34 per cent,[111] and has declined since then. The PUB also confirmed that it heard no expert evidence to substantiate the claim that the province was being adversely affected by MH's debt level.[112]

Examination of the expert witness testimony at the PUB NFAT hearings shows just how complex the analyses are for projects of this nature. It would be unusual *not* to have a difference of opinions on any number of variables, especially once future projections have to be made on pricing, costs, demand, technology and variations in weather. PUB hearings, whether for project approvals or rate increases, do provide MH with valuable feedback it should consider in order to improve its performance on a variety of metrics. One report, for example, provided data and advice on asset management that could be helpful.[113]

Nonetheless, try as we may to point to a particular metric (such as the price of large solar photovoltaics or fracked gas, or the debt/equity ratio) at a particular point in time as proof that the adopted plan was the right — or wrong — one, we cannot know with certainty what the full legacy of Keeyask will be. We can, however, point with cautious optimism to the changing relationship with First Nation communities.

A New Way of Doing Business

First Nation — Manitoba Hydro Relations

Manitoba Hydro has been at the forefront of bringing First Nations into partnership with large hydro development. Completed in 2012, the Wuskwatim Generating Station is owned by the Wuskwatim Power Limited Partnership (WPLP). Nisichawayasihk Cree Nation (NCN) and Manitoba Hydro are partners in the WPLP. This was the first partnership in Canada between a First Nation and an energy utility for the development a major hydroelectric generating station. NCN held a community ratification vote before approving the project, and was involved in the planning and construction of the station — which at the insistence of the community, ended up being significantly smaller and less damaging to the environment. It is involved with the project's ongoing environmental monitoring activities and invested in ownership of the generation station.[114]

NCN has been able to benefit from development agreements with Manitoba Hydro and flood compensation funds from the Northern Flood Agreement. It has developed an effective job training facility at its The Atoskiwin Training and Employment Centre (ATEC) Inc. Housed in a state-of-the-art building in NCN (built as a training centre by Hydro when work was being done on the Wuskwatim Dam), ATEC provides specialized training to NCN residents, many of whom have dropped out of school and/or have never held a job. The model used by ATEC has many of the features determined to be important for Indigenous jobseekers and employers who wish to hire them. It includes an extensive intake process to determine trainees' education and employment interests, education levels and upgrading needs, as well as other social and cultural needs. One of its most innovative programs trains NCN youth to build much-needed housing in NCN and puts them to work so they can earn their Red Seal accreditation.[115]

NCN used MH compensation to purchase the Mystery Lake Hotel in Thompson and hires NCN members to work there. They use interest earned on the trust funds to support a variety of social programs including a Country Food Program so NCN youth can learn traditional ways of harvesting food to distribute to the needy.[116]

There are criticisms about how the Wuskwatim project unfolded, but NCN's band leaders rigorously defended the community's decision to take on part ownership of Wuskwatim, arguing that it was exercising its sovereignty in doing so.[117] The NCN experience shows a healthier relationship between MH and a First Nation community is possible. The question is how to replicate the sorts of successes in NCN in the KCN communities, and how to ramp up the benefits so that the communities benefit in a lasting way. A new way of doing business will not be easy: there is a tremendous amount of work left to repair the relationship between MH and First Nations in Manitoba.

Training and Hiring

MH is now using development as a means to train and employ First Nations workers. The remote location of First Nation communities combined with the legacy of colonization (which has resulted in poorer educational and health outcomes for many Indigenous people), means many of these workers have not had a connection with the labour market. One way MH has included First Nation workers is through the use of Project Labour Agreements (PLAS).

Progressive Conservative Premier Duff Roblin introduced PLAS when the Red River Floodway was built in the 1960s. Roblin understood that PLAS leveled the playing field for all contractors working on large projects, and ensured that workers were treated and paid fairly, whether they were unionized or not. PLAS have been used successfully by MH to ensure that First Nations workers have access to jobs and training on public infrastructure projects, including on dam and Bipole III construction.[118]

The Pallister government has wrongly categorized PLAS as forced unionization and introduced Bill 28 to discontinue their use. It claims that PLAS automatically increase costs despite the example of the Red River Floodway expansion project which used a PLA and came in $38M under cost.[119] Not only do PLAS serve the purpose envisioned by Premier Roblin by increasing productivity, safety and work and construction standards, they also helped many First Nation workers have access to jobs that would have been out of reach without them. It is unfortunate that MH will lose this valuable labour-market tool as the government conforms to the will of some of the construction sector.[120]

Negotiated agreements with First Nation partners, along with PLAS, allowed MH to make some progress in hiring Indigenous workers for the Keeyask project, as demonstrated by the following table:

In some partner communities, significant numbers of workers were able to find employment. For example, 2,113 workers from Tataskweyak Cree Nation, 658 from York Factory and 547 from Fox Lake were employed on the project between 2012 and December, 2018.[121] There was a commitment from MH to train and hire northerners in the trades, support and services and staff and in supervisory positions, but all successful trainees were hired for the trades and service positions; none was hired for supervisory/managerial positions.[122]

Although the Keeyask project made progress in hiring Indigenous workers, improvement was and is sorely needed. MH has not always followed best practices with training and employment, and many communities are disappointed workers did not get better, long-term employment. Had MH integrated lessons from past northern Manitoba projects, it could have improved outcomes for Indigenous workers hired to work on Wuskwatim and Keeyask.

The Limestone Training and Employment Agency (LTEA) and Hydro Northern Training and Employment Initiative (HNTEI) were NDP government initiatives that integrated targeted training and hiring for First Nations workers, while addressing infrastructure and economic development. Dr. Shauna MacKinnon has analysed both programs in the context of Wuskwatim and Keeyask.[123]

The LTEA left an important legacy of programs such as the Engineering ACCESS program at the University of Manitoba, ACCESS North-The Pas which offered water treatment and other trades programs, and ACCESS North-Thompson which

TABLE 2 **Total Project Hires – January 2012 to December 2018**

	Total Hires	Percentage of Total Hires
Total Project Hires	18,019	n/a
Indigenous	7,520	42 per cent
Manitobans	12,324	68 per cent
Partner Communities	3,576	20 per cent

SOURCE: https://keeyask.com/the-project/employment/employment-statistics/total-hires-by-trade/

provided educational and training opportunities to northern students. These programs, which still exist today, were deemed an important way to compensate for the temporary nature of the construction jobs offered through the Limestone training program.[124] Despite these successes, the LTEA was criticised for not meeting its mandate.

The LTEA was accused of miscommunicating the expectations of how many and what kind of jobs would be available to northerners, the mandate of the LTEA and the process it would follow. These issues were blamed on the lack of involvement of Northerners in the development and design of the program, an issue that was somewhat improved with Wuskwatim and Keeyask, two projects that incorporated the Hydro Northern Training and Employment Initiative (HNTEI).[125]

The HNTEI ran from 2001 until 2010, and was funded by the federal and provincial governments along with MH. The initiative was managed by the Manitoba Métis Federation and the Wuskwatim & Keeyask Training Consortium (WKTC), made up of northern First Nations. The goal of the consortium was to train more than 1,000 individuals from five Cree Nations and other Indigenous people and to secure 794 jobs on the two generating station projects. As of 2010, there were over 2,600 participants trained in various capacities and almost 1,400 of them found work post-training, although it is not clear what kind of work they found.[126]

MacKinnon concludes that both the LTEA and HNTEI increased community participation and employment, but some of the same mistakes made in these programs were repeated with Wuskwatim and Keeyask. For example, despite past experiences, the corporation miscalculated how much time and education was necessary to train the northern workforce for the positions that opened up.[127] This oversight meant that Northerners were not able to realize as many long-term benefits as they should have, further fueling the cynicism so many feel about hydro development in Manitoba.

Northern Flood Agreement

The environmental and social damage inflicted on First Nation communities from hydro development has led to extreme distrust of both the government and MH.[128] The 1977 Northern Flood Agreement (NFA) between the Province of Manitoba and NCN, Norway House, Cross Lake, Split Lake and York Factory recognized the damage done to these communities, and offered compensation in the form of new lands, financial payment and inclusion in future resource development and environmental management.[129]

There are still outstanding grievances that the agreement did not resolve including the exclusion of Métis and off-reserve Indigenous people from compensation.[130] Pimicikamak (formerly Cross Lake), has not signed the NFA implementation agreement in protest for the way the NFA has been implemented.[131] No doubt the agreement has informed and precipitated MH's more inclusive way of doing business, but much distrust remains.

Recent reports from Fox Lake Cree Nation about the abuses that community endured in the 1960s highlight the urgent need to forge a new relationship. Of great concern are the reports of sexual exploitation and abuse the community's girls and women were subjected to from MH workers.

As reported by Melissa Martin, somehow the community not only survived the abuse, it has managed to force change. According to the Fox Lake community members interviewed by Martin:[132]

> "The community had long told Hydro about the social impacts of development there; those lessons, Cole says, helped shape some features of the Keeyask and Keewatinohk developments that were designed to mitigate not just the environmental impacts, but the social ones too."
>
> "One of the lessons of working with the community of Fox Lake, which they brought to the forefront in the mid- to- late- 90s through discussion with Manitoba Hydro, was the real impact that an influx of workers can have on a population, and what that looks like and what that feels like if you're the community experiencing it."
>
> "I do think Hydro has changed quite significantly in terms of its willingness to address those issues."
>
> "'You've got to make sure that we are participants, because this is our homeland," Kirkness says.
>
> "We've got to understand how it's going to benefit us as First Nations people, and how's it's going to benefit other First Nations in the area. They can't just come and do what they want and leave. The time for that is gone."'

The Calls for Justice from the Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls include specific recommendations for Manitoba Hydro, including a public inquiry into the sexual violence and racism reported in northern Manitoba. There is also a call for more provisions in impact-benefit agreements to ensure the safety of Indigenous women, girls and 2SLGBTQQIA people.[133]

Finally, even today, more than 70 years after Fox Lake was promised a reserve the community has received only a tiny fraction of the land it is owed. The community was excluded from the NFA largely because it had so little of its own land at the time of signing in 1977.

Bipole III and First Nations

The process for determining the Bipole III routing and the subsequent success in getting the east side designated as a UNESCO World Heritage Site will hopefully begin to build trust with the four First Nation communities who are signatories. This designation is noteworthy because of the importance placed on cultural values:

> Pimachiowin Aki, which is Anishinaabemowin (Ojibwe) for "the land that gives life," is Canada's first mixed World Heritage property. Blending both natural and cultural heritage values, this large intact boreal forest ecosystem under Indigenous stewardship, is an exceptional example of the indivisibility of the natural environment and the cultural identity and traditions of Indigenous peoples.[134]

Much criticism has been directed at the extra cost to run Bipole III down the west side, but critics rarely acknowledge the importance of the east side to both the environment and the Indigenous people who live there. As climate change intensifies, and more people understand the urgent need for a new relationship with First Nations, future generations will surely judge this decision in a more favourable light.

First Nations On-Reserve Residential Customer Class

Another attempt to make amends with First Nation communities is the PUB's direction to MH to establish a First Nations On-Reserve Residential customer class which will not see a rate increase for 2018/19. The PUB agreed with the testimony from the Assembly of Manitoba Chiefs and the Social Planning Council of Winnipeg that that electricity bills place a too heavy burden on First Nation communities. Many northern communities do not have access to natural gas for heating, and winter heating bills can be very high. The panel recognized that this factor, combined with high rates of poverty and poor housing on many reserves makes energy poverty an acute problem.[135]

Despite recognizing the burden energy costs put on northern communities, MH is appealing this PUB decision. It once again referred to the possibility of interest rate increases and/or drought as risks it had to prepare for, an argument the PUB did not agree with.[136]

Finally, there are four remote First Nations located in the 'Diesel Zone' — so called because it is off MH's grid. Sayisi First Nation, Shamattawa First Nation, Barren Lands First Nation and Northlands Denesuline First Nation rely on expensive and heavily polluting diesel generators to meet their energy needs.[137] These small communities are isolated and it is not economically feasible to run expensive hydro lines to them, especially given the small amount of electricity that would be consumed.[138] To date the provincial and federal governments have not agreed on the best way to replace the diesel generators.

First Nation communities have paid a far-too-heavy cost for hydro development in Manitoba, and received little in return. Loss of traditional lands and way of life, pollution and the racist treatment of community members over decades is now exacerbated by First Nations not being able to afford the electricity generated by the dams built on their land. The PUB clearly saw the injustice in making these communities pay for MH's newly-found risk aversion.

The zero per cent rate increase does not rectify energy poverty, but it is a step forward. The Panel notes that this move is consistent with the principle of reconciliation, as defined in *The Path to Reconciliation Act*,[139] legislation MH needs to take to heart.

The Manitoba-Minnesota power line and the Manitoba Métis Federation

Finally, the still evolving case of the completion of the Manitoba-Minnesota power line has thrown a wrench into the completion of MH's US connection in Duluth, Minnesota. Obtaining federal approval was the last step to finishing the power line, but that approval had been put on hold.

At issue is a disagreement between the provincial government and the Manitoba Métis Federation (MMF) that prevented the Canadian government from granting approval. The federal government has a constitutional duty to consult with Indigenous communities, and had it approved the project before the MMF and the province settle their dispute, the MMF said it would take the federal government to court, thereby ensuring a lengthier and more costly delay.[140]

Premier Pallister took a strong stand against the $67 million payment — spread over 50 years — MH agreed to pay the MMF. The payment was for the MMF allowing the transmission line to be built on their land, or any future domestic transmission lines under 250 kilometres in length, for up to 50 years. The payment would "fully and finally address and satisfy all concerns of the Métis with respect to existing transmission projects as well as identified projects," such as the Manitoba-Minnesota line and Bipole III.[141]

Pallister reiterated his position in a meeting with the Prime Minister on May 29, 2019, saying that "real reconciliation does not mean buying acquiescence from people; it means listening".[142] MMF President David Chartrand has strongly disagreed that the payment was 'hush money', as the Premier has called it. The lawyer for the MMF calls the deal an impact and benefits agreement, which he claims are common in Canada. MH's ex-board chair, Riley who, along with eight other members, quit the board at the same time as the controversy erupted, said that "The agreement with the Manitoba Metis Federation was carefully vetted by the board. It met our legal obligations, encompassed a multiplicity of projects, covered a 50-year period, and was structured to ensure the money went to the people who should benefit from it."[143]

On June 14, the federal government approved the transmission line. The green light followed the National Energy Board's recommendation that the project be approved based on 28 conditions. Hydro must ensure that at least 20 per cent of construction contracts include First Nation suppliers, subcontractors, workers and trainees. Despite the recommendations, several First Nations plan on opposing the decision in court. The MMF, on the other hand, agrees with the move and the recommendations, although it is still pursuing legal action against the province for cancelling the impact and benefits agreement.[144]

It is clear is that political manoeuvering around hydro issues has not diminished, especially now that newly empowered First Nation and Métis communities are taking a strong stand to protect their rights and seek redress for past pain and suffering.

Manitoba Hydro and Party Politics — Coming Full Circle

It is not surprising that Keeyask and Bipole III get so much attention. Not only are they important to Manitoba's economy and standard of living, they provide an irresistible platform on which to score political points. Whether it be the NDP or Conservatives showcasing their version of regional development or criticising the decisions made, MH is a political football in continual play. A brief look at the great hydro debate of the late 1970s which culminated in the 1979 Tritschler Report demonstrates this point.

The Tritschler Report

The Tritschler report was commissioned by the Conservative government of Sterling Lyon in 1977. Retired chief justice George Tritschler was tasked with examining the economy and efficiency of MH's decisions around the Churchill River Diversion (CRD) and Lake Winnipeg Regulation (LWR).[145]

Similarities with the Tritschler Report and the terms of reference for both the BCG and the more recent inquiry proposed by the Conservatives are remarkable. At issue in the Tritschler report were; cost overruns; declining demand for electricity in the 1970s which led to an excess in supply of power; and, the size of MH's debt.[146] Like the BCG report, Tritschler concluded that MH had proceeded too quickly with its development plan and that it should have explored alternative plans including a thermo-generating facility. It also concluded that MH should have secured import/export contracts with Saskatchewan and the US.[147]

Both the Conservatives and the NDP were proponents of the Nelson River Hydroelectric Project — which was also supported by the federal government — but there were differences in opinion as to how the CRD and LWR should unfold. In the late 1960s, the ruling Conservatives supported MH's decision to postpone inquiries into LWR and to go with a higher-level CRD plan that would flood 100,000 acres of boreal forest and uproot the entire First Nation community of South Indian Lake. This decision proved very unpopular with the public.[148] Critics accused the Conservatives and MH of not caring about Indigenous people's rights or wellbeing. There were also concerns about the lack of research into the long-term environmental effects of the higher-level option.[149]

In 1969 the heated controversy culminated in Premier Weir's sudden election call, and his government's defeat by Ed Schreyer's NDP, which formed a minority government. The NDP, armed with an interim report by David Cass-Beggs — who would himself prove to be a highly controversial figure — changed the high-level CRD plan and approved the regulation of water levels of Lake Winnipeg. This change in plan became highly contentious for both technical and financial reasons.[150]

The CRD project went two years over schedule and cost overruns for it along with LWR, the Kettle Generations Station and the Long Spruce Generating Station were considerable. MH rate increases to ameliorate MH's debt were as high as 29 per cent in 1976.[151] These developments proved unpopular and in 1977 the NDP was defeated by Lyon's Conservatives, who quickly commissioned the Tritschler Report.

The commission's mandate was to find an explanation for MH's larger debt (similar to the levels we're seeing today). The Conservatives were finding it convenient to connect the dots between MH's economic situation and what they termed as NDP mismanagement, in order to promote their own political agenda.[152] But similar to the BCG report, the commission did not include social and environmental issues, and did not compare these impacts across the variety of development plans put forward.[153]

The value of looking at the controversy around the Nelson River Hydroelectric Project is that we can rise above the politics and see with hindsight the net costs and benefits of the development. The extensive damage to First Nations communities from this development resulted in the Northern Flood Agreement, explained earlier in this report. What is not always emphasized is just how much non-Indigenous Manitobans benefited. The low rates, reliable service and technical sophistication most Manitobans benefit from today are the legacy of this massive investment.

Even before the Tritschler commission was finished, MH's fortunes were improving. Sales were up, including exports, revenues increased 35 per cent in 1978/79 and it made a $45.7 million profit.[154] The fortuitous turn of events allowed the Conservatives to take credit for the project, despite having criticized the NDP's choice in development plans. So pleased were the Conservatives with the results of the development, that during the inauguration of the Long Spruce Generating Station in 1979, Sterling Lyon declared before a crowd that included foreign dignitaries: '"the next step is to move on with further construction" and to secure "extra provincial power sales and exchanges that will enable us to carry on."'[155]

The adage that history repeats itself applies to some aspects of these two chapters in MH's story. In both cases there was disagreement as to how to move forward, with the NDP choosing the more expensive, but environmentally less damaging option;[156] there were cost and time overruns stemming from geo-technical complications; and MH debt became the topic of Conservative and public discontent. In both cases inquiries and reports were commissioned even as the projects came into service and exports grew.

But there were differences too. With Wuskwatim, Keeyask and Bipole III, the NDP-led government engaged in intensive consultations with First Nation communities and brought them on as partners. They also ensured that they had signed export contracts in place before seeking PUB approval. The approval process itself had been substantially tightened, ensuring as much as possible that any plans were vetted by outside experts. Despite taking these steps, the controversy continues.

Given the importance of hydro development and the impact it has on Indigenous and non-Indigenous Manitobans alike, political drama is clearly unavoidable. The fact that information about development is transparent and debated in the public sphere is a positive aspect of having the utility publically owned and regulated by the PUB. Political partisanship aside, one could argue that having political parties challenging each other over such an important player in

Manitoba's economy is an example of democracy in action. That being the case, there is an issue that was not in play in the 1970s which needs to be seriously considered today: privatization.

Privatization

Is Privatization Really a Possibility?

The prospect of privatization was not on anyone's radar when the last great hydro debate was taking place. Since then there has been a decided change in public policy, with proponents of free market principles and small government making deep inroads into public discourse. Starting in the 1970s, deregulation of the electric utility sector began taking effect in the US and had spread to Alberta by the 1990s. Deregulation debates were also taking place in Ontario and BC.[157] Both Ontario and BC have flirted with various sorts of private involvement in their public utilities, with questionable results.

It was ex-Premier Gordon Campbell who oversaw BC Hydro's foray into the private sector, and his hiring by the Manitoba government to lead the inquiry into Keeyask and Bipole III raised concerns for that reason. Under Campbell's leadership, the BC Liberal government devised a new energy policy that de-coupled the four major components of BC Hydro: administration and customer service, distribution, generation and transmission, with the intent to privatize some of them. The for-profit company Accenture took over BC Hydro's major service activities, including customer services, information technology, financial services, human resources, and procurements — fully one third of the company's workforce. There was concern about the lack of public oversight, making it impossible to confirm whether or not Accenture would make good on its promise to save BC Hydro $250 million over ten years.[158]

The B.C. government ended its relationship with Accenture in April 2018, returning the outsourced work to the crown corporation. A B.C. Hydro spokesperson said last year that Accenture had "saved the utility $250 million while providing world class call centre service," but an official from MoveUP, a union representing employees of both B.C. Hydro and Accenture, disputed that claim, saying the projected savings had never materialized.[159]

A similar strategy was used in Manitoba when the Conservative government of Gary Filmon, despite promises that it would not privatize MTS, began the process in 1994. It sold off its coaxial cable system, even though an Ernst and Young report found that owning the system gave MTS a strategic advantage and that selling it would be detrimental to MTS's future.[160]

Then Filmon's government made a deal for $47 million with an American company to run MTS's telemarketing services. Next it carved MTS into four separate divisions, all the while claiming that the restructuring had nothing to do with privatization. Next it commissioned three separate reports from brokerage firms who would eventually profit handsomely from privatization. On May 2, 1996, Filmon's government announced it would privatize MTS, despite the groundswell of public protest.[161]

Even though the hydro-electricity sector is different from the telecommunication sector, both examples are crown corporations, and there is a template for privatizing crowns that follows this pattern:

- Tell the public that there is a major problem with the crown
- Hire private-sector consultants to confirm and cement the narrative that the problem is one of too much government interference
- Separate divisions of the crown, ostensibly to make it run more efficiently
- Begin to sell off the divisions to the private sector

The recent formation of a new crown corporation — Efficiency Manitoba — to handle MH's demand side management follows the PUB's recommendation to do so. It also separates DSM activities into a separate entity from MH, potentially removing it from the protection of *The Manitoba Hydro Amendment Act* which stipulates that any move by the government to privatize MH must be put to a public referendum.[162]

Finally, privatization is already on the provincial menu, with recent servings being the sale of the provincial tree nursery, sale of an airport at The Pas — along with provincial water bombers, the awarding of provincial medical air services, and instructions by the government for Manitoba Liquor and Lotteries to consider allowing more private liquor sales. None of these initiatives was part of the Conservative's 2016 election commitments, leaving some to wonder if MH is next.

What's Wrong With Privatization?

According to Simon Fraser University Professor John Calvert, under Campbell's leadership BC Hydro opened up its crown land and water rights to private interests, resulting in a "massive give away of public assets", and that "[t]he dramatic rate increase that BC Hydro customers face is because of support for private power".[163]

It would be naïve to think that privatizing MH would be done in such a way as to trigger a referendum. If it happens, it will be covertly, perhaps along the lines of how BC Hydro sold off assets to private companies:

> The beneficiaries of Gordon Campbell's private power agenda would like this to be forgotten. They would prefer us to believe that the dramatic increases in electricity rates are the result of inherent inefficiencies of public enterprises such as BC Hydro rather than the government's deliberate support of a private power agenda. If there is one lesson from this experience it should be that privatization has a price—a price that should not be forgotten and that should inform future debates when private interests (and governments beholden to them) promote such agendas.[164]

Could the same thing happen in Manitoba? That's a question Manitobans have to keep asking.

Conclusion

MH has a long history of development and innovation, combined with political controversy and, in the case of First Nation communities, outright exploitation and abuse. But, as this report demonstrates, it would be wrong to suggest that the utility is not changing, or that it has not learnt from past mistakes.

It would also be a mistake to judge the corporation on narrow economic parameters alone, such as debt levels or the price of fracked gas, at a particular point of time. Such information is of course useful, and can help guide decision making, but a longer, deeper perspective is needed to get an accurate picture of the utility and its net contribution to the province.

We are fortunate that this utility is a crown corporation so that government can have a say in how it is run. We have to be careful not to confuse government involvement with government interference. It is not a private corporation, to be judged by the narrow performance indicators shareholders employ. If we are to pass judgement, it should be on how well it serves Manitobans.

Manitoba's settler community has benefited tremendously from past decisions to develop Manitoba's hydro resources, and it will remain dependent on hydro for its future wellbeing. Although that future is filled with uncertainty, the one game changer that is inevitable is a societal move away from fossil fuels.

A province having public control of an exportable source of renewable energy has to be seen as a tremendous advantage, one that should be seized regardless of which government is in power. Indeed the federal Conservative party recognizes Manitoba's potential and is promoting inter-provincial hydro power sales.[165] The potential to electrify its transportation sector and to lead the country in fighting climate change is great. Manitobans need government leadership on this pressing issue.

What Manitobans don't need is another great hydro debate. Just as the province benefited from past development, we will, with the fullness of time, benefit from Keeyask and Bipole III. Were there mistakes made? Yes. But there was also progress: improving relationships with First Nations; less environmental damage and more community consultation; more upfront export contracts; improved reliability; and more job creation through partnerships with social enterprises and First Nation enterprises.

The damage to Manitoba's Indigenous communities is profound, but so is the potential for the province to use MH as an agent for reconciliation. With leadership, patience and respect, MH's lasting legacy could be that it helped to chart a new prosperous course for northern and Indigenous communities, and offered viable alternatives to our fossil fuel economy.

That will be a legacy no private consulting firm or bond rating agency will capture.

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