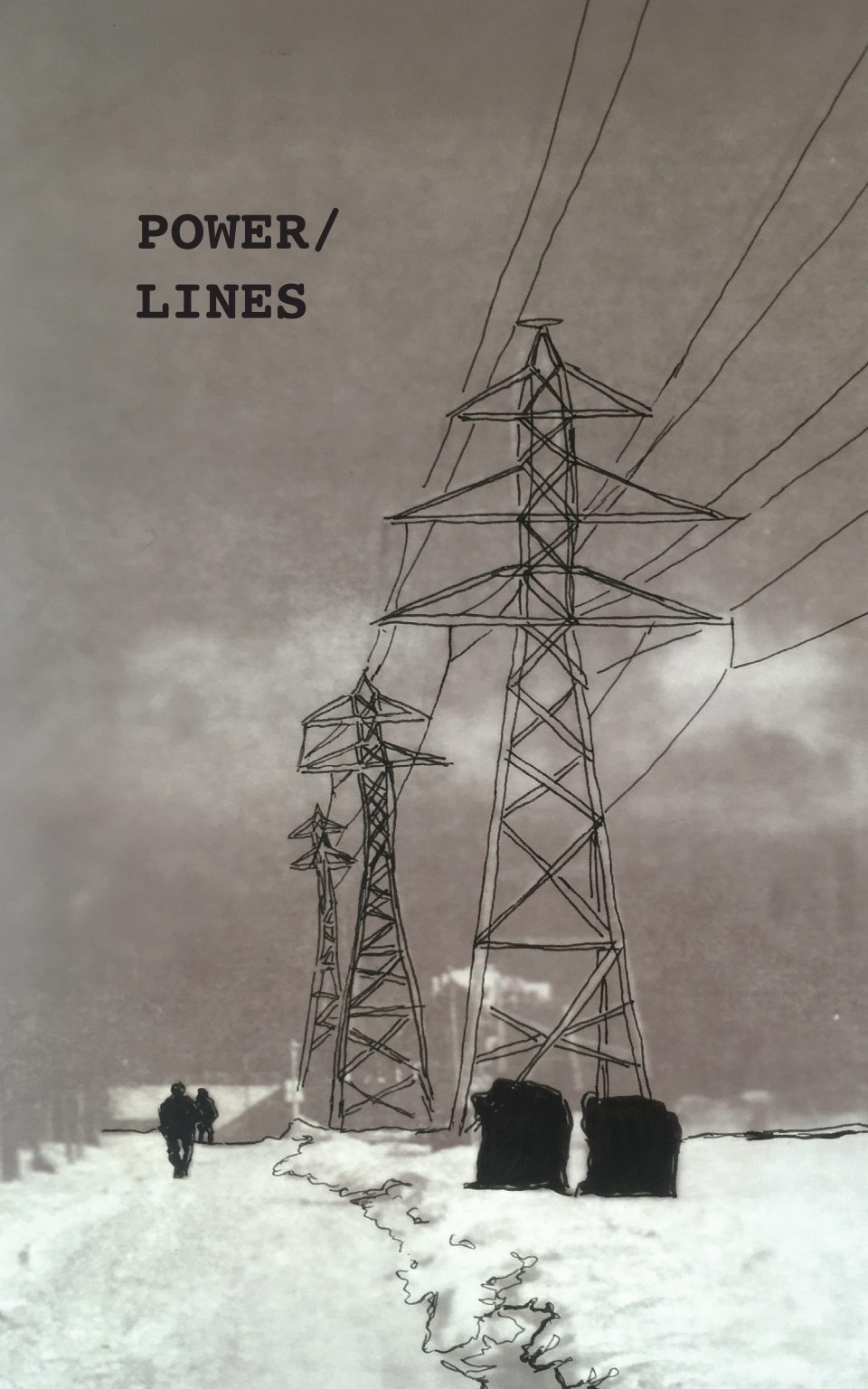


POWER/ LINES

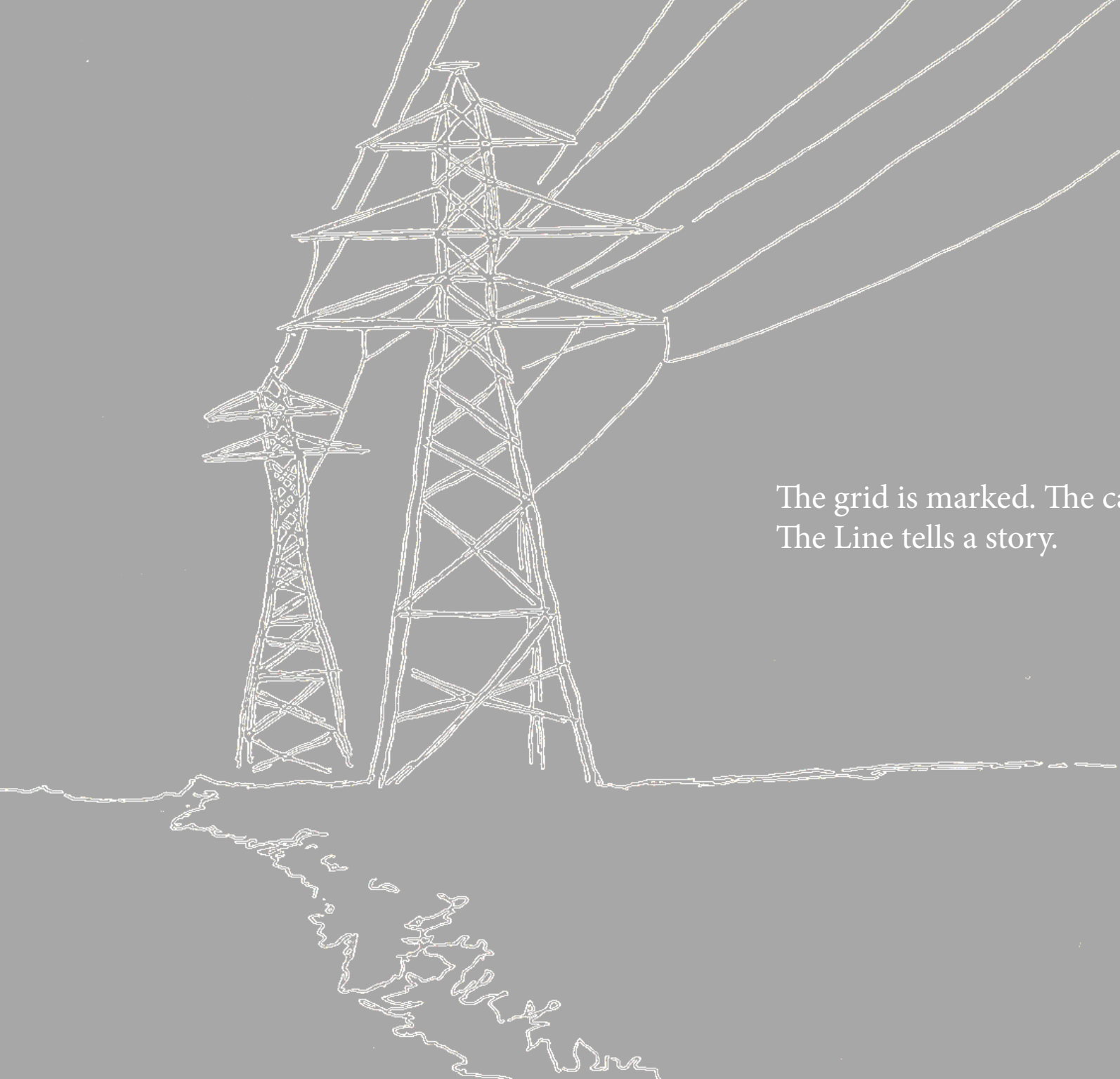


POWER/LINES

A research journey
in the wake of Hydro

A graphic essay

by
Isabela Huberman



The grid is marked. The cable crackles.
The Line tells a story.

A power line is

a link,
a connector.

It carries electricity from source to consumer, routing Power
from North to South.

Part of the everyday, transmission towers go unnoticed.
But their cables crisscross through every street, every
building, every home.

Signs of power embedded everywhere.

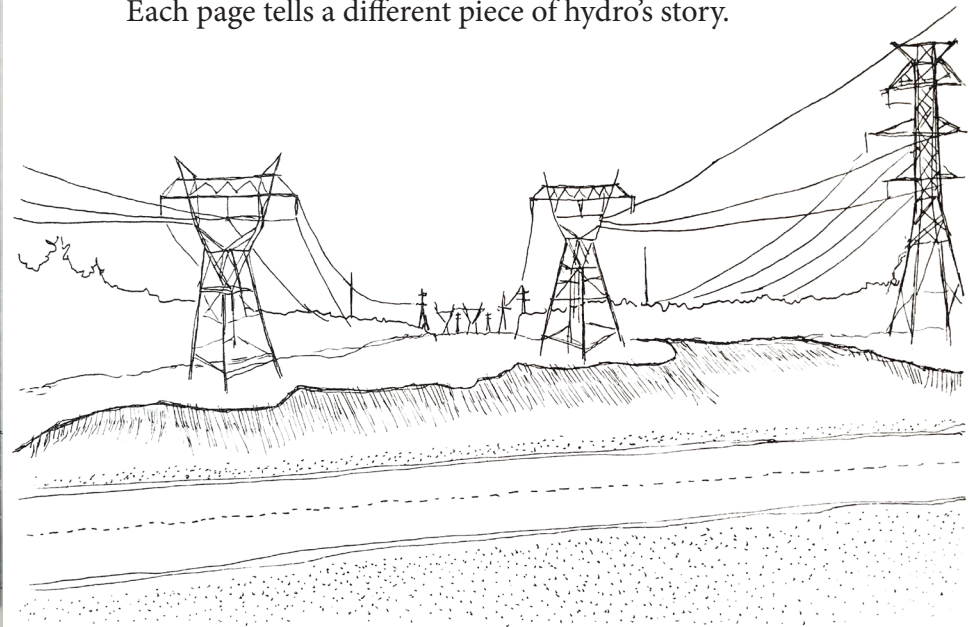


This graphic essay

traces a research journey that explores what is at stake when
hydroelectricity is made.

Interviews, websites, illustrations, testimony, environmental
impact assessments and key concepts string together to
reveal hydro as a system of power.

Each page tells a different piece of hydro's story.



I

“ In the work that I’ve done, I want to create a **hydro consciousness**. The goal is for people to know where their power comes from.

You’ve got power, where did it come from? ”



Ramona Neckoway

scholar, activist, member of hydro-impacted Ithinew community of Nisichawayasihk Cree Nation

“ If you were to tell my ancestors there would be a two-mile channel at Playgreen Lake, they probably would have laughed at you because it would just have been inconceivable, not only physically, but also, why would somebody want to do that? What would be the purpose of that? I think they would be heartbroken if they knew the state we were in.

I think about them often, when I’m on the land. I can feel them, honestly I can feel my ancestors when I’m out there.

I’ve heard my family talk about how beautiful the land was. It’s gone now, of course, because it’s been flooded not once, but twice.

It’s very sad, you know, that the beauty of the land was taken. Those falls, they’re not there anymore. They’re gone now as we speak, but you know... this is “green energy.”

And we have Aboriginal rights that are protected and enshrined in the Constitution. ”



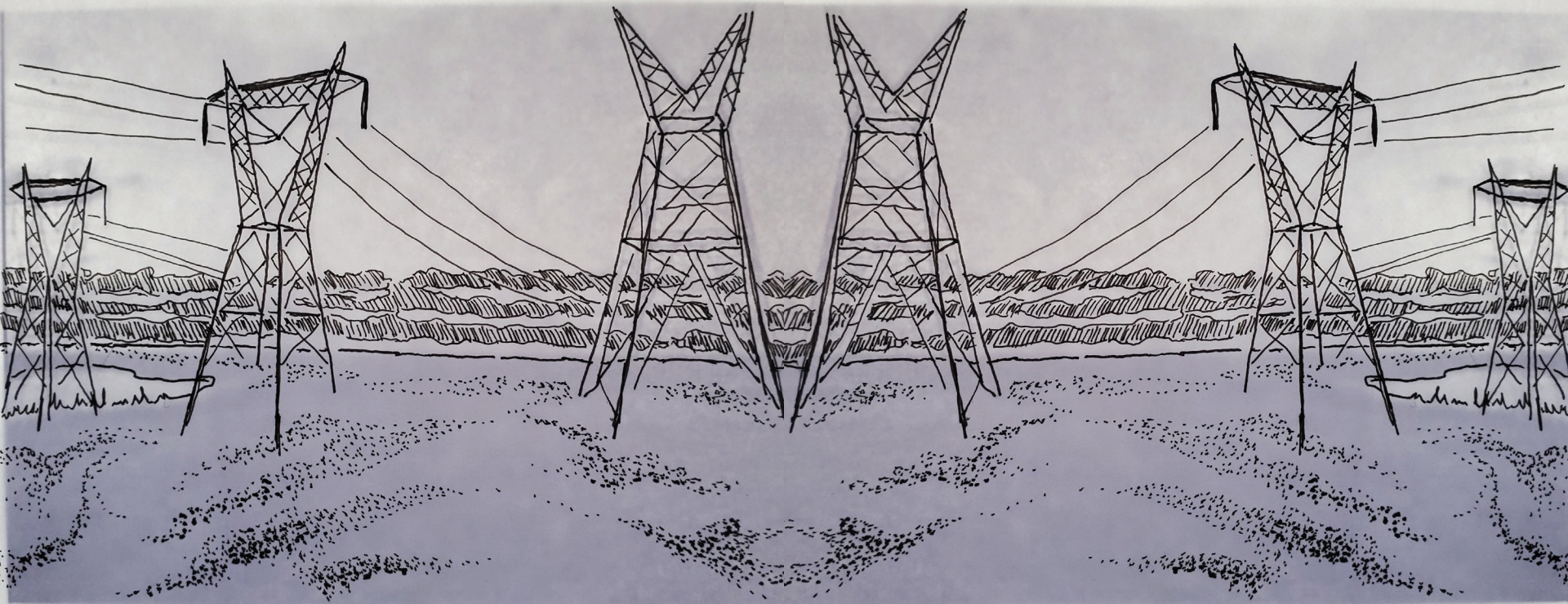
“ The consequences have been incredibly significant for Indigenous communities who find themselves along the pathways of hydro corridors. We haven’t acknowledged the extent of what we’re dealing with now in Manitoba. I talk about the history of hydro power, and the continuation of colonial legacies. The violence of displacement is real. Sometimes in the North, that violence is hard to pinpoint because it’s really subtle. And there are many different layers of the violence of hydropower in the North.

I’ve sought to think critically about how the story is told. A lot of greenwashing happens and there have been many silences in this history. Or it’s not been talked about at all. In any way. ”

The LOW CARBON WORLD of the FUTURE!

The screenshot shows the Manitoba Hydro website interface. At the top left is the Manitoba Hydro logo. To the right are links for 'Login' and 'Français', and a search bar. Below the logo is a navigation menu with links: 'ACCOUNTS & SERVICES', 'OUTAGES', 'SAFETY', 'CAREERS', 'YOUR HOME', 'YOUR BUSINESS', and 'ABOUT US'. A breadcrumb trail reads 'Articles \ Keeyask Generating Station produces first electricity for Manitoba grid'. The main content area is divided into two columns. The left column is titled 'ARTICLES' and lists: 'History', 'How our system works', 'In your community', 'Keeping you safe', 'News releases', 'Our environment', and 'Working for you'. The right column is titled 'NEWS RELEASE' and features a headline: 'Renewable hydropower from Keeyask adds to Manitoba's clean energy supply' with a sub-headline 'February 2021'. The text of the release reads: 'Power from Keeyask builds on Manitoba Hydro's enviable position in the low carbon world of the future,' said Jay Grewal, Manitoba Hydro's President & CEO. 'Nearly 98 per cent of our electricity is already generated using clean, renewable, and virtually carbon-free hydropower - a huge advantage for our province as North America moves to reduce carbon emissions. 'The energy from Keeyask will help preserve that advantage for decades to come, while also helping to keep electricity rates for Manitoba customers among the lowest on the continent.'

“Those lines crackle day and night, forever”



“I was four at the time, hunting with your great grandfather up what is known as moose-call. Near the dams they build. Near the darkness that gives them light. ”

“That day he and I were walking down this giant corridor with those steel giants holding up those wires full of power. White Power. Crackling above typically. ”

Caleb Behn (Eh-Cho Dene and Dunne-Za)
Saaghii Naachii/Peace River
Site C Dam, British Columbia, 2019

II

The white possessive:

A mode of rationalization... underpinned by an excessive desire to invest in reproducing and reaffirming the nation-state's ownership, control, and domination. As such, white possessive logics are operationalized within discourses to circulate sets of meanings about ownership of the nation, as part of commonsense knowledge, decision making, and socially produced conventions.

Aileen Moreton-Robinson



“Logics of white possession and the disavowal of Indigenous sovereignty are materially and discursively linked.”

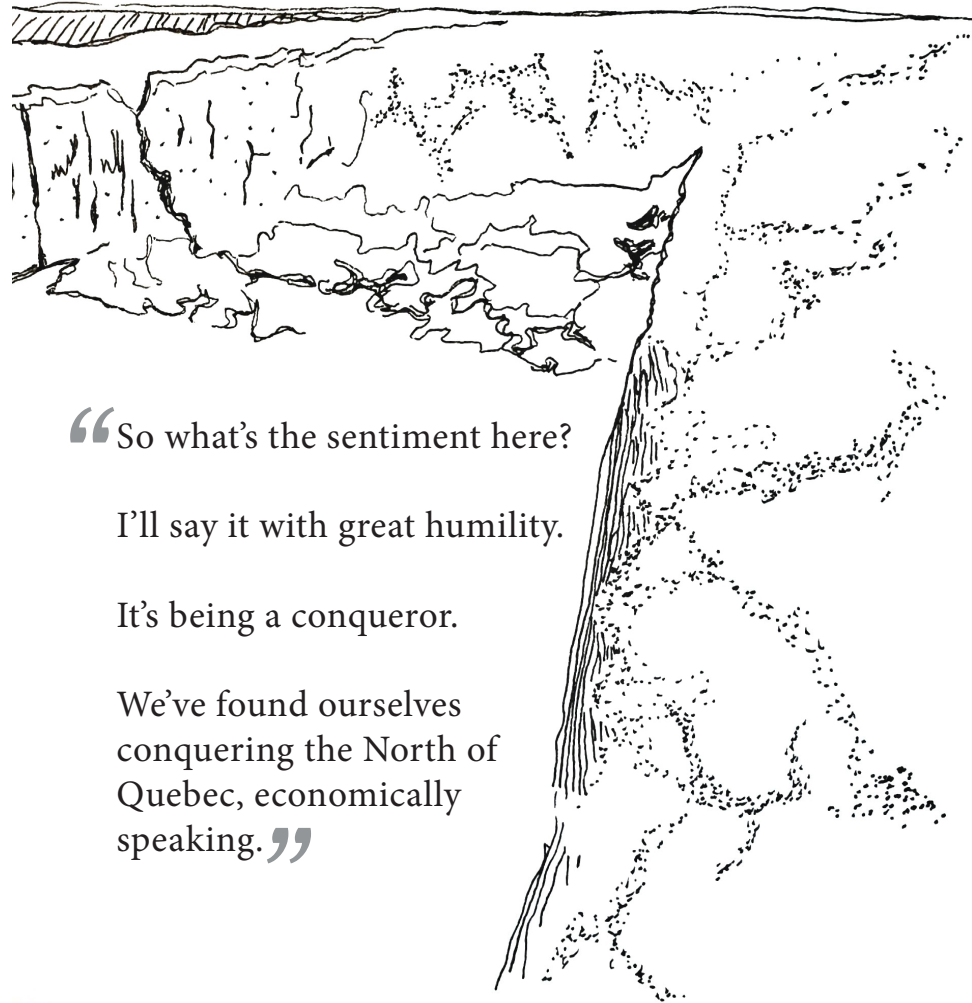
“ My political credo when I was elected was:
What can we do for the strength of Quebec? ”



Robert Bourassa, Quebec Premier
on the first phase of development in Eeyou Istchee/James Bay in
the 1970s
La Grande Complex, 8 dams

“ Several things, but we can develop its strategic
assets... this means its energy resources,
hydroelectricity.

Developing hydro, means **to conquer the North
of Quebec.** ”

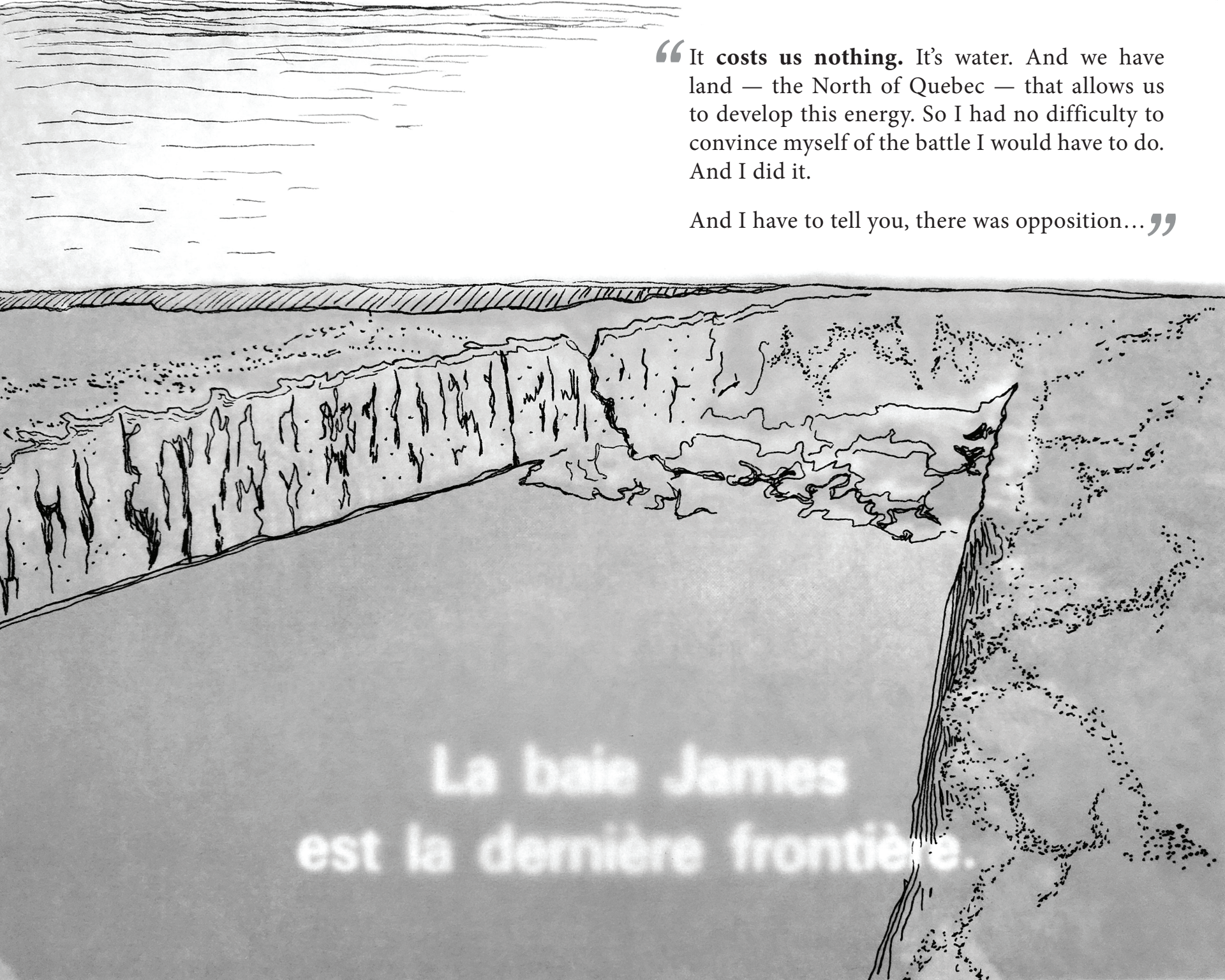


“ So what’s the sentiment here?

I’ll say it with great humility.

It’s being a conqueror.

We’ve found ourselves
conquering the North of
Quebec, economically
speaking. ”

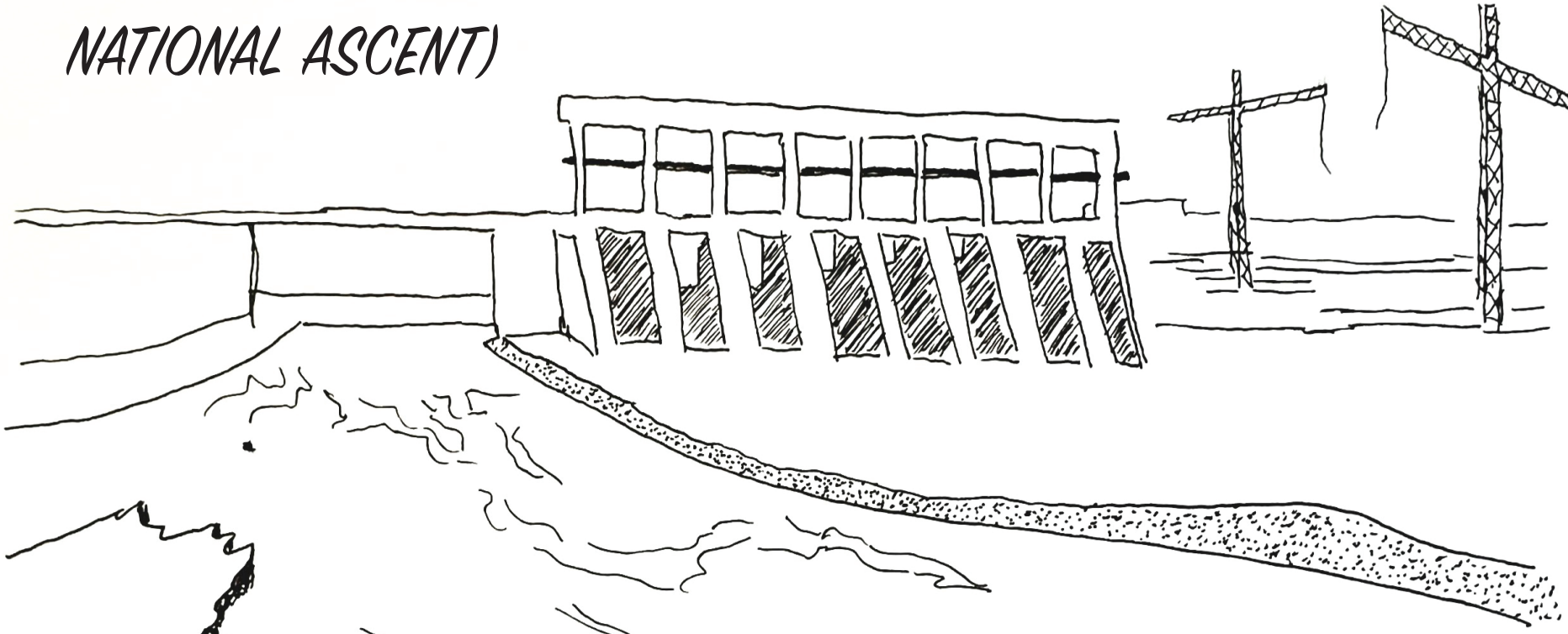


“It **costs us nothing**. It’s water. And we have land — the North of Quebec — that allows us to develop this energy. So I had no difficulty to convince myself of the battle I would have to do. And I did it.

And I have to tell you, there was opposition...”

La baie James
est la dernière frontière.

MEGADAM (ICON OF
NATIONAL ASCENT)



MONUMENTAL

MODERNITY

METAPHOR



Plan your trip

Attractions

Events

Lodging

Vacation Ideas

Things to do

Packages

Promotions

Regions

La Grande-1 Generating Station

Visit the website

Region: James Bay
Category: Hydroelectric Power Station
Municipality: Baie-James

Overview

IN THE HEART OF THE BOREAL FOREST

On the edge of the Canadian Shield, in the heart of the boreal forest, lies the last of the La Grande Complex facilities: La Grande-1. This run-of-river power plant, made of 640,000 m³ of concrete — enough to build a sidewalk from Montreal to Miami — will impress you with its drive shafts measuring over 2m in diameter. More than 6,000 workers helped build La Grande-1 generating station. You'll be amazed to see how well it blends in with the natural environment.

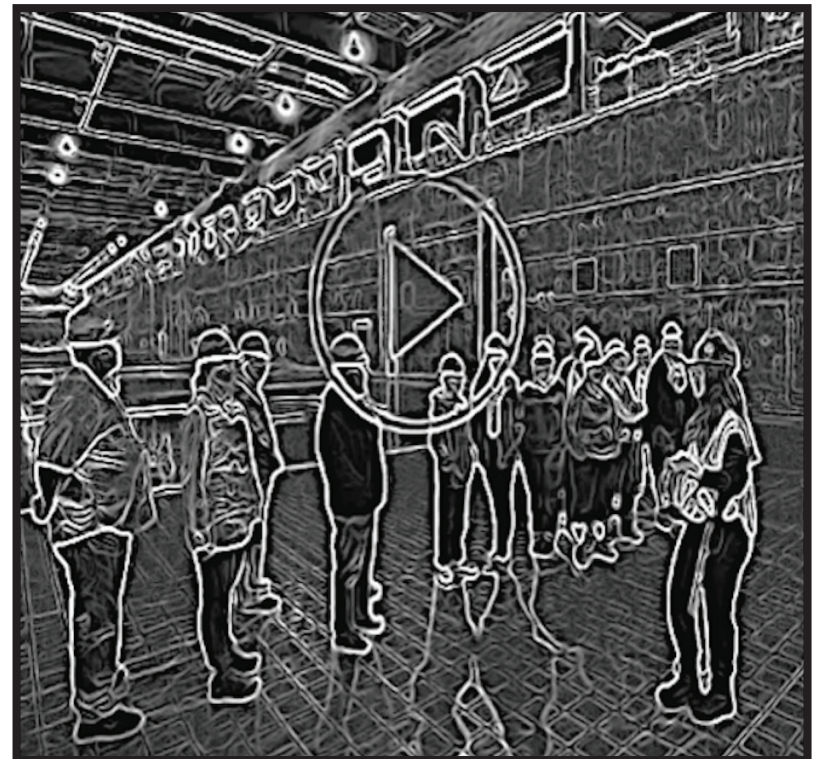
Imposing and majestic !

La Grande-1 Generating Station

From June to August
James Bay Road
Baie-James (QC), Canada
JOY 2A0

Info / Book

Call



III

Slow Violence:

Slow violence unfolds gradually, and out of sight, a violence of delayed destruction that is dispersed across time and space,

an attritional violence that is typically not viewed as violence at all.

Rob Nixon

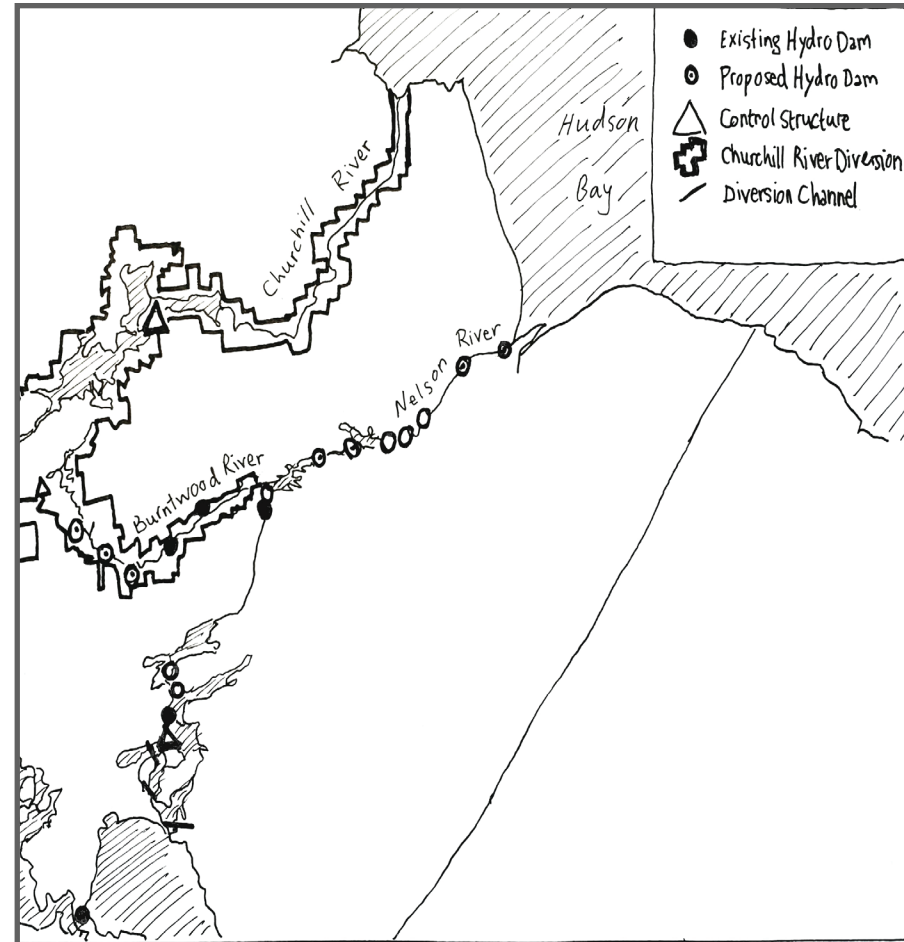


“Manitoba Hydro, a public utility, may very well end up creating a huge sterile area over a good part of the Northern sector of our province. A great graveyard that future generations of Manitobans will call

Hydro Land”



Statement of lawyer for South Indian Lake
Public hearing, Winnipeg, 1969
Churchill River Diversion

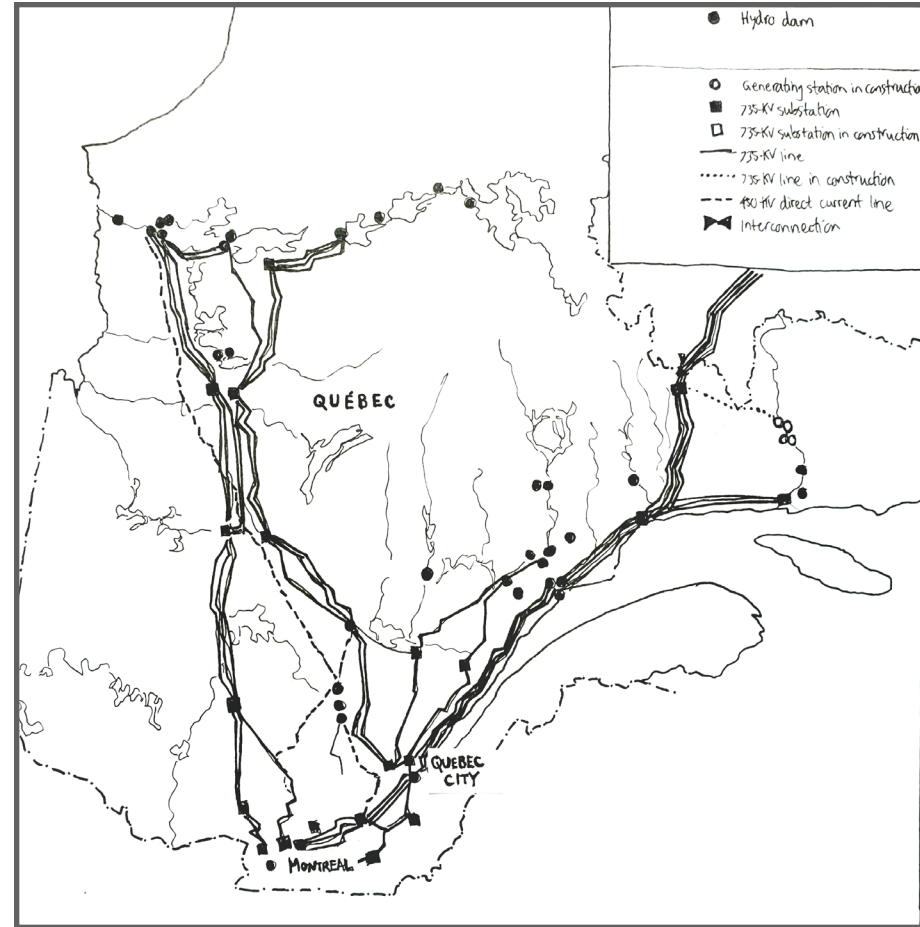


IV

Extractive zone:

The colonial paradigm, worldview, and technologies that mark out regions of high biodiversity in order to reduce life to capitalist resource conversion.

Macarena Gómez-Barris



1.2 Justification of the Project. The Romaine Complex project is included in Hydro-Québec's Strategic Plan 2006-2010, which was approved by order-in-council of the Québec government in 2007. Hydro-Québec Production will sell the output of the Romaine complex under market conditions, both in Québec and outside Québec, two growing markets. According to a development model typical of major hydroelectric projects carried out to date in Québec, Hydro-Québec Production's exports will increase in the years following the commissioning of the Romaine generating stations, and then decrease as Québec demand grows. Hydro-Québec Production is very active on electricity markets outside Québec (Ontario and the U.S. Northeast), which contributes to the company's profitability and to the efficiency of markets in general. These activities do not compromise Québec's security of supply, as Hydro-Québec regularly demonstrates to the Régie de l'énergie du Québec that it maintains a sufficient energy reserve to meet domestic market needs. In the context of export activities, the total revenue generated by the four Romaine generating stations is estimated at \$872 million for the year 2021 alone. Taking into account the projected revenues, capital costs and other costs and expenses related to the operation of the complex, the project is expected to generate a return on equity of 13.3%, an acceptable rate for Hydro-Québec. Hydro-Québec Distribution, the main distributor of electricity in Québec, forecasts growth of 14.6 TWh in the Québec market between 2007 and 2017, taking into account energy conservation objectives. The trend growth will therefore be around 1% per year by 2017. Furthermore, forecasts show that power needs will increase from 2009-2010 to 1,560 MW by 2016-2017. The Romaine complex could contribute to meeting these needs as soon as the first development is commissioned. The project will generate significant economic benefits for Québec and substantial revenues for the governments of Québec and Canada. The expenditures associated with the construction will reach approximately \$4.9 billion, including \$3.5 billion in Québec (\$1.3 billion on the North Shore). The potential for job creation or maintenance is estimated at 33,410 person-years, including 11,224 person-years related to construction. The participation rate of workers in the region in construction activities would be 60%. The project will generate approximately \$820 million in tax revenues. Finally, the project will increase Hydro-Québec's contribution to the Generations Fund, which is dedicated to reducing Québec's debt, the tax on public services and the dividends paid to the Québec government. **There is no reasonable alternative to the Romaine project.** Because of its limitations, wind energy cannot be considered, despite the advantages of its renewable nature and the absence of air emissions at the source. The low contribution of wind energy to the power balance due to its intermittent and random nature represents a major drawback, as it requires the maintenance of an energy reserve to ensure the reliability and stability of the electricity supply. Thermal power (gas or coal) is not a feasible solution either, since Hydro-Québec Production is basing its development on renewable energy. Similarly, the construction of new nuclear capacity cannot be envisaged in the foreseeable future, while solar and geothermal energy remain dependent on future technological advances and are not competitive with the Romaine complex project.

1.3 Sustainable development. Sustainable development aims to meet the needs of current generations without compromising the ability of future generations to meet their own needs. Hydro-Québec must therefore ensure that electricity, which is an essential commodity, will contribute to the quality of life and security of future generations, while preserving the quality of the environment. Hydro-Québec embraced the concept of sustainable development in 1989, following the work of the World Commission on Environment and Development (1988). Two policies, in particular, reflect this commitment, under the heading Our Environment and Our Social Role. In the first, Hydro-Québec is committed to using hydropower, other renewable energy sources and energy efficiency to meet its customers' needs. In addition, in accordance with the Sustainable Development Act adopted by the Québec government in April 2006, Hydro-Québec is preparing an action plan to integrate the principles of sustainable development at all levels and in all aspects of its activities. Hydro-Québec's hydroelectric projects are subject to three basic conditions: they must be profitable, environmentally acceptable and favorably received by the local communities concerned. This approach is consistent with the philosophy of the Ministère du Développement durable, de l'Environnement et des Parcs du Québec (MDDEP) and with the spirit of the Canadian Environmental Assessment Act. It is also in line with the MDDEP's Directive for the Romaine Complex project, whose objectives are to maintain environmental integrity, improve social equity and enhance economic efficiency. With regard to environmental integrity, the analysis of the impacts of the Romaine complex is based on an in-depth study of the study area. The environmental components likely to be affected by the project were generally the subject of at least two inventory campaigns. The data collected made it possible to develop appropriate mitigation and compensation measures as well as an environmental follow-up program with specific objectives for the components that will undergo significant changes or that are particularly sensitive.

Projet d'aménagement d'un complexe hydroélectrique sur la rivière Romaine

Rapport d'enquête et d'audience publique

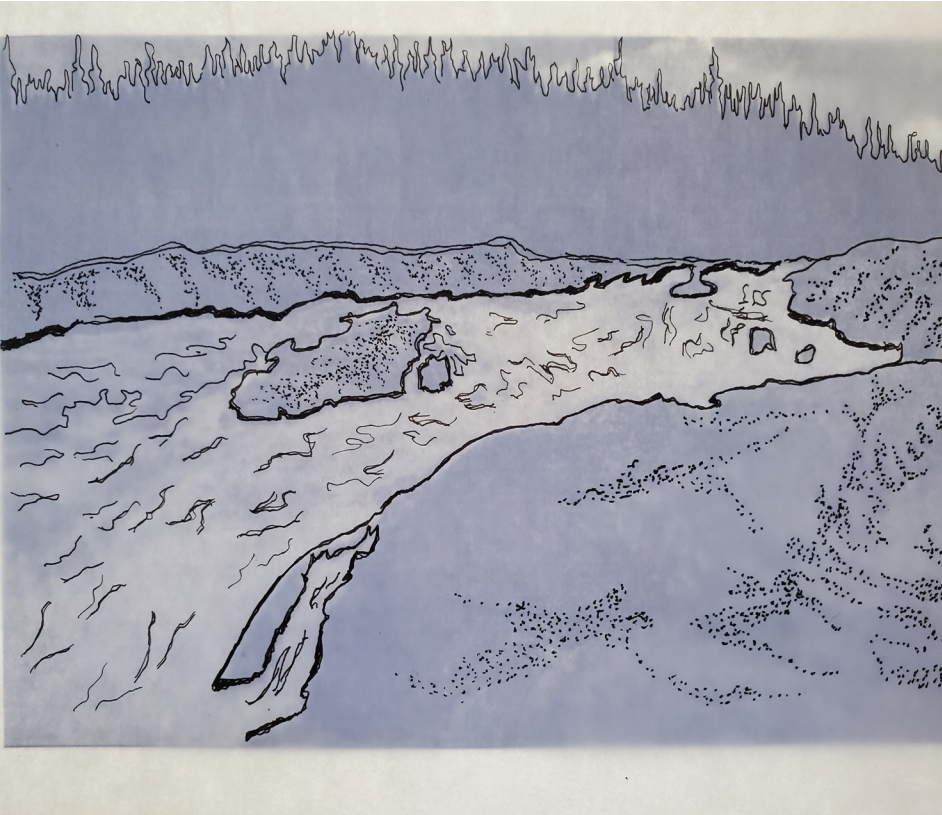
Février 2009



Recommendation - The commission of inquiry is of the opinion that the development of rivers for hydroelectric purposes on the North Shore should be accompanied by the protection, in the region, of a natural heritage qualitatively and quantitatively equivalent in terms of ecosystemic, landscape and recreational wealth.

Recommendation - Considering that the Romaine River, with its pristine waters, has undeniable valued qualities that contribute to the landscape and recreational heritage of the North Shore rivers, the commission of inquiry is of the opinion that, if the project is carried out, a North Shore river of similar size and offering similar aesthetic and recreational qualities should be protected according to the recognized criteria in the matter.

“We have never given up this land”



“We have continued to preserve it so that it can in turn nourish and heal the beings that live there.”

“We have long asked the government to respect their constitutional commitment to recognize our ancestral rights and our Aboriginal Title to this land. Today, through Hydro-Quebec, the government is attempting to exploit our territory in an aggressive manner and to coerce us to give up our rights in exchange for money and the illusion of co-management.

What will we do with this money if we no longer have a territory on which we can develop our own economy and culture? What will we do with the royalties received in exchange for this exploitation if our territory is reduced to our reserve where we are already so confined...? What employment-generating activities can we develop **if we no longer have land on which to conduct them?”**

Rita Mestokosho (Innu)

At Quebec public hearing on the environment, 2009

Unaman-Shipu/Romaine River

4 dams

V

Energy Intimacy:

In Indigenous philosophies, every community member necessarily has direct and personal relationships with the sources of their energy. The land is not seen as a reservoir of resources to be exploited but a source of gifts that humans must accept with gratitude. The reciprocity of the gift relationship results in a conception of energy fundamentally different from today's prevailing Western ideologies of energy extraction, commodification, and ownership.

Warren Cariou



INSPIRATION AND FURTHER LEARNING

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ACKNOWLEDGEMENTS

Many thanks to:

- Ramona Neckoway (for the interview and letting me draw you)
Warren Cariou (for longstanding support)
Lina Wu (aesthetic eye, software savant)
Joshua Eisen (for asking the tough questions)
and my first reader, Sally Cole (my mum)

This project was supported by a SSHRC Explore Grant and the University of Manitoba, 2022

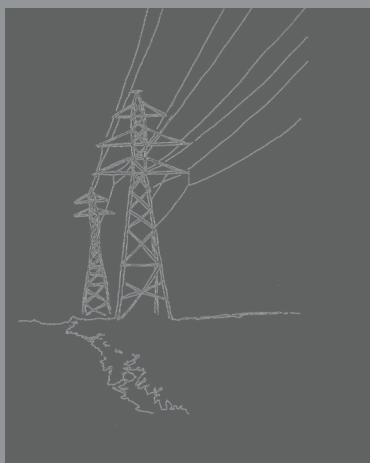


ABOUT

Raised in Montreal, Quebec, Isabella Huberman is a writer, translator and zine-maker. She holds a PhD in Francophone Indigenous literatures. She uses electricity and wonders where it comes from.

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Isabella Huberman 2022