



Natural Resources Council of Maine

3 Wade Street • Augusta, Maine 04330 • (207) 622-3101 • Fax: (207) 622-4343 • www.nrcm.org

Dear Maine legislator,

We are writing to provide important information about Central Maine Power's (CMP) proposed high-voltage transmission line across western Maine. On behalf of our more than 20,000 members and supporters, the Natural Resources Council of Maine (NRCM) has put substantial time and resources into examining this proposal, including as an active intervenor in the year-long review at the Public Utilities Commission (PUC). We have concluded that the proposed project would not reduce climate-changing pollution but would jeopardize renewable energy development in Maine and significantly harm the North Woods.

CMP is pursuing permits from the Department of Environmental Protection (DEP) and the PUC for its massive transmission line. The project would clear a 53-mile, 150-foot-wide corridor through the North Woods. It would supply electricity from Hydro-Quebec (HQ) to Massachusetts. This power line, euphemistically called the New England Clean Energy Connect (NECEC), would bisect the largest contiguous temperate forest in North America and perhaps the world.¹ The fragmenting effects of the transmission line would reverberate far beyond the line's permanent scar through the North Woods, altering animal migration routes and harming plants and animals that require deep woods habitat.

Towns throughout the corridor area, such as Caratunk, The Forks, West Forks, Jackman, Alna, and Embden, have declared their opposition or rescinded their previous support for the power line as the negative impacts and lack of benefits from the project become clearer. CMP now tells the PUC it may seek permission to overrule local zoning authority to force the project forward. The Sportsman's Alliance of Maine also rescinded its support for the project, based on overwhelming concern from its members.

Although CMP proposed NECEC as a response to a Massachusetts program to decrease greenhouse gas emissions, our review indicates there will be ***no reduction in greenhouse gas emissions*** associated with this project at all. The State of New Hampshire wisely rejected a similar proposal to run a transmission corridor from Quebec to Massachusetts through New Hampshire (called "Northern Pass"), concluding that there was no evidence that Northern Pass would have any greenhouse gas benefits. Specifically, in its decision document at the end of years of hearings and study, New Hampshire's Site Evaluation Committee stated:

As to the savings associated with a decrease in carbon emissions, we agree with Counsel for the Public that no actual greenhouse gas emission reductions would be realized if no new source of hydropower is introduced and the power delivered by the Project to New England is simply diverted from Ontario or New York. The record is unclear as to whether the hydropower is new or will be diverted from another region.²

¹ Janet McMahon. 2016. Diversity, Continuity, Resilience—The Ecological Values of the Western Maine Mountains. Maine Mountain Collaborative. P. 1.

² New Hampshire Site Evaluation Committee. 2018. Decision and Order Denying Application for Certificate of Site and Facility. March 30. P. 161. Accessed at https://www.nhsec.nh.gov/projects/2015-06/orders-notices/2015-06-2018-03-30_order_deny_app_cert_site_facility.pdf

In the case of NECEC, the record is clear that HQ will build no new hydropower facilities for generating electricity to send to Massachusetts. HQ specifically stated the following in its application for a contract with the Massachusetts Department of Public Utilities:

This Proposal offers a viable, low cost Clean Energy Generation delivery project with limited risk, because (i) there is no construction risk related to the generation resources which are already in service... Because no new hydroelectric generation projects will be required, there will be no incremental environmental impacts from hydroelectric generation as a result of this Proposal.³

Because HQ has stated that they will build no new generation specifically for NECEC, HQ will have to shift sales of energy to Massachusetts from other customers. Massachusetts ratepayers and Maine's North Woods would pay the price for this HQ electricity shell game.

We have repeatedly asked CMP, both in person and through the PUC hearing process, for proof that NECEC would have climate benefits but have been met with obfuscation. CMP frequently cites projected reductions in CO₂ emissions in New England as evidence of benefits, but this statistic is meaningless without also understanding how the project would affect emissions from the energy sources that other jurisdictions would have to use to replace energy they lose to Massachusetts. New Brunswick, for example, generates 15% of its power from coal.⁴ CMP and Hydro-Quebec have refused to provide specific information about whether this coal generation would increase as a result of NECEC. Maine (and Massachusetts) would make a terrible mistake if they approved permit applications for NECEC only to later learn that the project resulted in an increase in carbon emissions.

During the long process at the PUC, CMP has claimed it is unable to publicly release critical documents pertaining to environmental and ratepayer impacts because of a confidentiality agreement between HQ and CMP. And because HQ is not a party to the PUC proceeding, it has never testified under oath about any of the information CMP presents on its behalf.

The DEP has decided to prohibit discussion of whether or not the project has greenhouse gas reduction benefits during the formal Site Law permit public hearings. We have asked DEP to reconsider this decision, but if DEP rejects our appeal, there will be no public discussion of whether these benefits are real or just fabricated to sell a lucrative project for CMP.

Finally, CMP wants Maine people to believe they really care about stopping global warming, but they have fought almost every effort to improve the business climate for renewable energy in Maine. They sabotaged sensible solar energy policy for the state and helped chase away the Norwegian company Statoil from investing in Maine's offshore wind industry. Suddenly, and implausibly, CMP claims to be a champion for decarbonizing the electric grid. NRCM is ready to work with CMP or any other party to pursue sensible policies that reduce carbon pollution, such as transportation electrification, but this project does not meet that test.

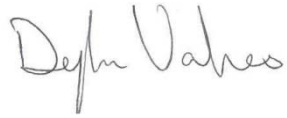
CMP's NECEC is one of the largest industrial projects Maine has considered in recent years. If approved, it would have significant and long-lasting negative impacts on Maine's renewable energy industry and the North Woods. We urge the Legislature to act in its oversight role on behalf of the Maine public and

³ HRE Section 83D Request for Proposal Application Form. Pp. 4, 56. www.nrcm.org/wp-content/uploads/2019/01/HRERequestforProposal.pdf

⁴ See <https://www.nrcan.gc.ca/energy/facts/electricity/20068#L3>

require CMP to produce verifiable evidence to support their claims that the project would provide positive climate benefits. No such evidence has been publicly presented, and we believe the facts will show that the opposite is true. This project is a bad deal for Maine people, bad for Maine's renewable energy sector, and bad for the climate.

We look forward to talking to you about this issue in the coming weeks.

A handwritten signature in black ink that reads "Dylan Voorhees". The signature is written in a cursive style with a large, prominent 'D'.

Dylan Voorhees, Energy Project Director

A handwritten signature in black ink that reads "Nick Bennett". The signature is written in a cursive style with a large, prominent 'N'.

Nick Bennett, Staff Scientist



View from Summit #5, which CMP transmission line would cross. Photo by Todd Towle.

CMP Line Is A Bad Deal for Maine

TOP 4 REASONS THE CMP TRANSMISSION LINE IS A BAD DEAL FOR MAINE

1. Won't reduce climate-changing pollution, and may actually increase it.
2. Cuts 53 miles of new transmission lines through undeveloped forests in Maine's North Woods, harming brook trout, deer, other wildlife, and the tourism economy.
3. Jeopardizes the construction of new in-state renewable energy projects and clean energy jobs.
4. Generates billions of dollars of profit for Central Maine Power and Hydro-Quebec while offering very little to Maine people and businesses.

CMP Line Is Bad for Our Climate

- **CMP's transmission line would do nothing to reduce climate-changing pollution because it will result in no new renewable energy being created.**
- **The proposed project is not about climate. It's about making CMP more money. It's a shell game to sell existing hydropower to Massachusetts because they've agreed to pay more for it.**
- **Maine needs investments in renewable energy projects with real environmental benefits, not a massive and harmful transmission corridor that lines CMP's pockets.**

To reduce harmful climate pollution, we need to generate more new renewable power. Hydro-Quebec and CMP stated in their application that **no new generation capacity will be built as part of this transmission project**. Instead, the line through Maine would take electricity Hydro-Quebec now sends to customers in places like New York and Ontario and redirect it to Massachusetts. Customers in these regions would then need to purchase electricity from other, dirtier sources, likely fossil-fuel power plants. This means there would be potentially no overall reduction in air and climate pollution from NECEC.

It is even possible the project could *increase* carbon pollution. For example, Hydro-Quebec could buy cheap energy from fossil fuels to send to its current customers, and then sell its existing hydropower at a higher price to Massachusetts. This “buy low, sell high” business model would allow the company to create a façade of providing clean energy, when in fact it is engaging in greenwashing dirty electricity.

CMP and Hydro-Quebec have also made grossly misleading claims that they need the new transmission line for “wasted power” in the form of water spilling over their dams. This is not true.¹ Hydro-Quebec lacks sufficient hydropower turbines in its existing dams to create more power, and it's not building any new ones for this project. The reality is that Hydro-Quebec has enough capacity to export all the power it produces—it just wants to make more money by selling it to Massachusetts.

¹ See, for example, EASI Power LLC. 2016. Analysis of Greenhouse Gas Emissions Impacts: New Class I resource vs. Existing Large Hydro. Pp. 1, 5. Accessed at granitestatepowerlink.com/wp-content/uploads/2017/10/ESAI-GSPL-CO2-Analysis-9-13-17-FINAL.pdf.

Large-scale Destruction and Disruption in Maine's North Woods

CMP's transmission line would permanently damage undeveloped forests in Maine's North Woods, harming wildlife and causing destruction that reverberates beyond the gash created by the power line.

CMP's proposed project would cut 53 miles of new transmission line corridor, as wide as the New Jersey Turnpike, for new power lines through undeveloped parts of Maine's North Woods. The damage would fragment the largest contiguous temperate forest in North America and perhaps the world.² It would also disrupt animal migration routes and the ability of the forest to respond to climate change.

"An overwhelming percentage of our members are opposed to the NECEC corridor...Therefore, we hereby rescind our support of this project."

—Sportsman's Alliance of Maine

This destruction would clear trees and plants through 263 wetlands, across 115 streams, and near remote Beattie Pond. It would disrupt 12 areas that provide critical protection for inland waterfowl and wading birds. According to Maine's Department of Inland Fisheries and Wildlife, CMP's transmission line would also harm Maine's deer herd by blocking access to deer winter shelter and feeding areas. It could also completely block the ability of deer to move through these areas to find food or escape predators when snow is deep.³



Maine Heritage Brook Trout Waters would be harmed by this project.

Harms the King of Maine Sport Fish: Brook Trout

CMP's transmission line would cut right through the heart of Maine's brook trout habitat, including areas where public agencies and private citizens have spent many millions of dollars and thousands of working hours to protect the brook trout.

CMP has refused to provide protection for brook trout that state agencies have requested. CMP's proposed transmission line would cross 724 lakes, ponds, and wetlands. Roads associated with the project would cross 184 streams.⁴

The Maine Department of Inland Fisheries and Wildlife has stated that CMP must provide 100-foot vegetated buffers for all streams in order to protect brook trout.

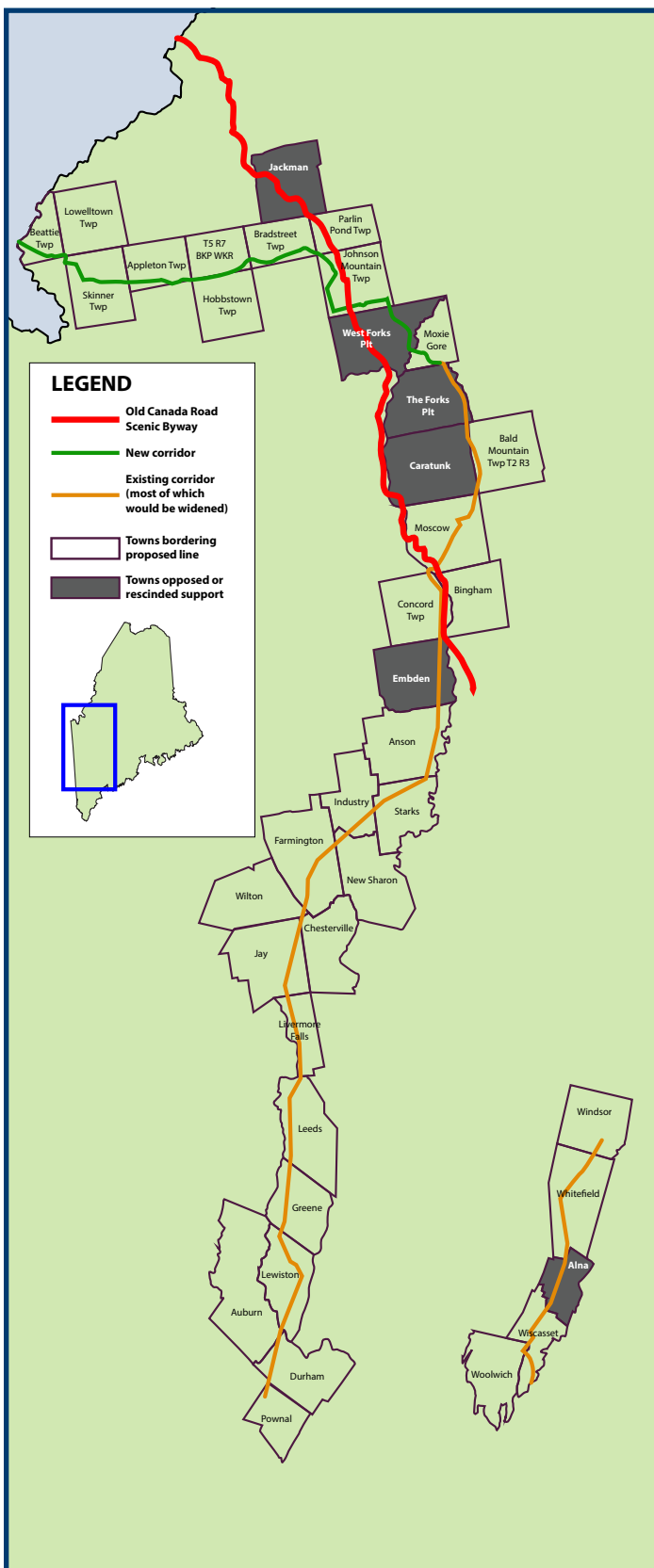
Brook trout use both permanent and intermittent seasonal streams for habitat, and they need trees and plants along the streams to keep the water cool. Despite the clear evidence that these buffers work, CMP continues to refuse to provide 100-foot vegetated buffers for all streams as part of their project.

² Janet McMahon. 2016. Diversity, Continuity, Resilience—The Ecological Values of the Western Maine Mountains. Maine Mountain Collaborative. P. 1. Accessed at mainemountaincollaborative.org/wp-content/uploads/2017/03/Ecological-Values-of-the-Western-Maine-Mountains.pdf

³ MDIFW. 2017. Information Request - Quebec-Maine Interconnect Project. June 5. Pp. 4-5. Accessed on page 63 of pdf file at www.maine.gov/dep/ftp/projects/necec/applications/SiteLocation/Site%20Law%20Application_Final_9.27.17%20-%20Chapter%207-%20Wildlife%20and%20Fisheries.pdf

⁴ Jeff Reardon, Trout Unlimited. 2018. Petition for leave to intervene in NECEC DEP permitting process. Pp. 2-3. Accessed at: www.maine.gov/dep/ftp/projects/necec/intervenor-requests/2018-07-19%20NECEC,%20TU%20Intervention.pdf

A growing number of towns and plantations in the region have rescinded their support or come out in opposition: Caratunk, West Forks, The Forks, Alna, Jackman, Dennistown, Embden



DAVID PRESTON

North spur of Moxie Bald Mountain looking west toward Moxie Pond.

“If Mainers don’t unite to oppose this project, these unique places and special experiences will be a memory.”

—Todd Towle, Kingfisher River Guides, Kingfield, ME

Impacts on the Scenic Character of the Region and the Tourism Economy

The proposed line would be visible from the Old Canada Road National Scenic Byway in many places. The region’s tourism economy is dependent on visitors who come to see the beautiful undeveloped forest, not power lines and a 53-mile gash through the forest.



Jeopardizes New Renewable Energy Projects in Maine

CMP's transmission line will cost Maine new clean energy jobs by making it harder for local renewable energy projects to move forward.

Hydro-Quebec's hydropower could clog up Maine's power grid, preventing local renewable energy projects from exporting their electricity. This would make it harder for in-state wind and solar projects to move forward, sacrificing our ability to provide clean, renewable power to all Maine people and communities.⁵

For example, expert testimony before the Public Utilities Commission has shown that the Maine Aqua Ventus offshore wind project would provide many more jobs and economic benefits per dollar spent than CMP's transmission line.

"The valuation benefit from CMP's additional transmission lines does not even compare to a large solar project in Caratunk. Caratunk is against the NECEC project because it jeopardizes future renewable energy opportunities that provide for a huge tax benefit to all landowners and significantly increase the Caratunk valuation."

—Town of Caratunk Selectboard

⁵ Tanya L. Bodell. 2018. Prepared direct testimony to the PUC, Docket Number 2017-00232. P. 10 of 41. April 30. www.nrcm.org/wp-content/uploads/2019/01/bodelltestimony.pdf

For more information, contact Sophie Janeway, Climate and Clean Energy Outreach Coordinator, (207) 430-0142 or sophie@nrcm.org



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OPINION

CMP power line won't help the planet, and certainly not Maine

CARATUNK — In 2017, Massachusetts initiated a large-scale procurement process for clean energy to meet their aggressive environmental goals. The only problem was they decided to use somebody else's backyard. And now we find ourselves in the midst of the most controversial energy debate in recent memory.

Massachusetts tapped Maine as the cheapest place to install their extension cord from Quebec after New Hampshire rejected a similar proposal. Central Maine Power was undoubtedly thrilled, but their proposal to construct 100-foot steel towers along a brand-new power line corridor as wide as the New Jersey Turnpike through western Maine generated a firestorm of controversy.

This goes far beyond plain old not-in-my-backyard syndrome. CMP's thousands of critics have presented an avalanche of facts about why New England Clean Energy Connect is a bad idea. It's not NIMBY-ism when residents of

ABOUT THE AUTHOR

Sandra Howard of Caratunk is a Registered Maine Guide and a Say NO to NECEC member.

entire communities vote to oppose a for-profit development project. Or when respected advocates like the Sportsman's Alliance of Maine rescind initial support once their members grasp the full impacts.

CMP claims that the environmental and other impacts of a huge new power line are justified because NECEC is the answer to global warming. The evidence at the Public Utilities Commission strongly suggests it's not-so-clean energy. That's why none of the region's environmental advocacy groups has voiced support. There are many better ways to address climate change. It doesn't make sense to address one environmental problem with something that would cause many others.

Then there's the all-important

question: Will NECEC benefit Maine ratepayers? The PUC has to decide whether NECEC deserves a certificate of public convenience and necessity. But NECEC is designed to meet an out-of-state need. It's a purely for-profit investment by CMP. Hydro-Quebec likes it because they use profits from exports to keep rates low in Canada.

CMP tried to buy support by promising \$22 million in mitigation. But then they cut that to as little as \$5 million, and they plan to give \$50 million to low-income Massachusetts ratepayers with nothing for needy Maine families.

CMP initially assumed they could cut corners with a less-expensive aerial crossing over the Kennebec River gorge. That didn't go over well with people whose livelihoods depend on providing their guests with a remote wilderness river experience. After withering criticism, CMP agreed to bury the line for 1,000 feet or so. Competing Vermont and New

Hampshire projects would be mostly or entirely underground.

At the PUC hearings, CMP executives testified under oath that they will resort to eminent domain if they have to. What happens if the Department of Environmental Protection requires them to re-route around a sensitive environmental resource on to property they don't own? No problem — CMP will simply take the land from any unwilling landowner. But NECEC isn't needed to keep the lights on. It's an elective transmission upgrade — a project that would benefit corporate shareholders, not ratepayers.

CMP also testified that if any of the towns along the route refuse to grant land-use and zoning permits, they will simply ask the PUC to exempt them from those requirements. Why should an elective project like NECEC get special treatment compared with any other homeowner or business that might need a permit?

Thousands of people across

Maine oppose NECEC because there is no demonstrated environmental benefit that would offset the impacts to our unique natural resources and our tourism economy. And the economic benefits are illusory, with no permanent jobs, no guarantee Mainers will be hired for temporary construction jobs and the use of inflated tax estimates to try to buy local support.

There will be no benefit whatsoever to Maine ratepayers because it's not being developed to serve Maine. This is all happening at the same time the PUC has opened a formal inquiry into other aspects of CMP's ability to manage its customer responsibilities.

NECEC's opponents are not against economic development or clean energy. We support our arguments with well-documented facts. Massachusetts, not us, is the NIMBY here. They don't want it in their backyard, and they apparently think we're a cheap date.

— Special to the Press Herald

Hydro-Quebec offers misleading claims about climate impact

Hydro-Quebec's claim that – as paraphrased by Portland Press Herald Staff Writer Edward D. Murphy – the electricity they would send south is “produced with none of the carbon emissions blamed for global warming” is dead wrong, directly contradicted by scientific research sponsored by Hydro-Quebec itself. I care deeply about aggressively addressing climate change, and I agree with the Press Herald Editorial Board (Our View, Dec. 9) that the most important question in evaluating the proposed transmission line to Massachusetts is whether it will reduce total greenhouse-gas emissions.

But to answer this question correctly, we must use the best available science. The Press Herald should avoid passing along Hydro-Quebec's misinformation. Either the utility officials who claim their power is carbon-free are ignorant of the science published by their colleagues, or they are ignoring this established science in their attempt to sell power.

ABOUT THE AUTHOR

Bradford H. Hager is an MIT earth sciences professor and a part-time resident of Mercer.

International Hydropower Association data show that Hydro-Quebec electricity is just about as dirty as hydropower gets. Why? When Hydro-Quebec dams rivers on northern Quebec's relatively flat terrain, it floods vast areas of forests and wetlands under shallow water. The amount of power Hydro-Quebec produces per acre flooded is among the lowest of any hydropower in the world. The trees, bogs and soils Hydro-Quebec floods have been storing carbon since the last Ice Age. When flooded, this stored carbon decomposes, releasing CO₂ and methane. To make things worse, drowned trees are gone forever and cannot grow back to remove CO₂ in the future.

Here's an example of their own best available science that Hydro-Quebec did not provide to the Press Herald: About a decade

ago, Hydro-Quebec built dams to divert the Rupert River to the Eastmain hydro facility, flooding 175 square miles of virgin forest and wetlands. As a result, the first year after flooding, as much CO₂ was released as would have been released by a coal-fired power plant generating the same amount of electricity!

Fortunately, the release of CO₂ slows with time. Unfortunately, it never becomes insignificant. After five years, the total emissions from these Hydro-Quebec dams and natural gas power plants are about equal; after 10 years, the total release from hydro is “only” two-thirds that of natural gas. Extrapolating for a century, Quebec's hydro is about half as dirty as gas – something of an improvement, but in no way “carbon free.”

How can we make the best of this situation? To reduce total regional emissions, Hydro-Quebec should export its somewhat-dirty hydropower to neighboring New Brunswick, displacing the much dirtier power produced there

from burning coal while Maine and Massachusetts pursue truly carbon-free sources. That would result in a meaningful decrease in overall greenhouse-gas emissions.

Hydro-Quebec knows that their hydropower causes significant greenhouse-gas release. Yet, when marketing their project, they omit this information. This should make us skeptical about their other claims.

Hydro-Quebec's assertion that it has “wasted” enough water to provide 10 terawatt hours of electricity because it lacks transmission capacity is not backed by documentation. In contrast, a 2017 study of Hydro-Quebec's export capacity found that the limiting factor for total energy output is generation, not transmission capacity. This makes sense – why would Hydro-Quebec pay the high cost of building dams and installing generators and not also provide adequate transmission capability?

Like any hydropower operation, Hydro-Quebec must deal with large variations in rainfall. It is

expensive to build enough generation to handle peak flows, and then let the generators stand idle during years that are either dry or have normal rainfall. During unusually wet times, the water is “wasted” because it is more economical to spill water occasionally than to waste generation capacity most of the time. While it may be true that enough water to generate 10 terawatt hours of electricity has been spilled during times of unusually high water, that in no way shows that the rate and timing of this spillage could have been used to fulfill a contract for a more steady supply of power.

We can't trust Hydro-Quebec publicists to represent correctly the scientific research that their company supported about their own carbon emissions. The Press Herald and the Maine Public Utilities Commission should not accept what Hydro-Quebec says about “clean” energy and spillage without requiring and thoughtfully reviewing documentation.

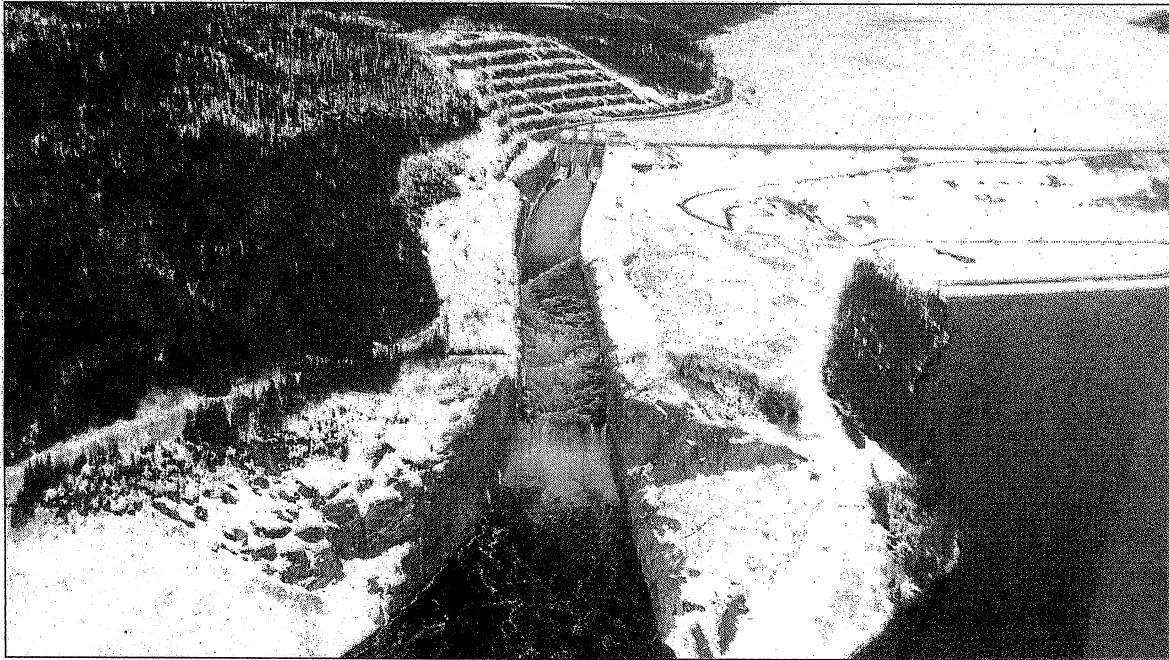
— Special to the Press Herald

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COURTESY OF HYDRO-QUEBEC

Water is released down a spillway at Hydro-Quebec's Peribonka generating facility last April. The Canadian hydroelectric utility is poised to make billions of dollars from a proposed \$1 billion transmission line across much of western Maine.

As Maine debates 145-mile electric line, energy giant with billions at stake is absent

Attorneys for CMP have been sparring with opponents over the line's potential impact

BY JOSH KEEFE
BDN STAFF

As Maine regulators are deciding whether to approve the construction of a \$1 billion transmission line across much of western Maine, the Canadian hydroelectric utility poised to make billions of dollars from the project has been absent from the process.

This has left both opponents and supporters of the line arguing about how much available energy the utility has to send through a completed line, and whether that energy will help fulfill the mission of the project: fighting climate change.

And while the utility has avoided making its case before regulators, which requires submitting to cross-examination

and discovery, it has engaged in a public relations campaign to try and win support from the region's newspapers.

Government-owned Hydro-Quebec controls dams and reservoirs generating hydroelectricity throughout its namesake province. It recently signed agreements to sell electricity across the proposed line, named the New England Clean Energy Connect, to Massachusetts as part of the state's effort to reduce its dependence on fossil fuels, including natural gas.

At the Maine Public Utilities Commission, attorneys for Central Maine Power Co., which would build and maintain the line, have been sparring with the opposition over the line's potential impact on Maine and its electricity consumers. Leading the opposition is a coalition of natural gas electricity generators that stand to lose business should the line be built, as well as the Natural Resources Council

of Maine, an environmental group.

That unusual alliance of environmental and business groups wants Hydro-Quebec to answer questions about its hydroelectric system, which they argue can't deliver the amount of electricity promised to Massachusetts without diverting energy from other regions.

In that scenario, critics say the line would not produce the reduction in greenhouse gas emissions that CMP and Hydro-Quebec have made a central part of their pitch for the project. Instead, other markets currently buying energy from Hydro-Quebec, such as New York, Ontario and New Brunswick, would see hydroelectricity imports decrease and have to rely on other sources of energy, including coal or oil, to make up the difference. If that happened, the total amount of clean energy in the world would remain the same.

See *Energy*, Page A2

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