

March 26, 2019

State of Maine
Public Utilities Commission
18 State House Station
Augusta, ME 04333

Submitted via Case Docket online

Re: Docket No. 2017-00232
Dear Commissioners,

I am writing to urge you to deny Central Maine Power's ("CMP") Petition for Certificate of Public Need and Convenience ("CPCN") for the New England Clean Energy Connect Project ("NECEC" or "the Project") and to reject the February 21, 2019 Stipulation ("Stipulation") put forth by CMP and others. NECEC and the parties to the Stipulation have failed to provide credible evidence to establish the public need as required by Maine law.

I support and incorporate by reference herein the reasons for rejecting the Project forth by the Natural Resources Council of Maine ("NRCM") and many hundreds, if not over a thousand, other interested parties. NRCM and many others have pointed out that CMP has not provided any credible evidence to support its claim that the Stipulation conditions will indeed contribute to carbon reductions in the Northeast. The alleged carbon reductions are the crux of NECEC's petition to the PUC. See, CPCN Petition, Vol. 1. I will do my best to not repeat those here. Instead, my comments focus on three topics:

Hydro-Quebec's ("HQ") hydroelectricity generation is dirty energy: Project will increase regional greenhouse gas emissions by between 1.8 and 2 million metric tons per year, use a transmission corridor over 1,000 miles long and there is no evidence the Stipulation will reduce or offset these emissions.

The Project fails to comply with Massachusetts and Maine climate change laws as the electricity is neither renewable nor incremental within the meaning of the applicable statutes and is an unlawful offset scheme.

The past and present, and ongoing negative social, economic and environmental impacts resulting from the HQ's hydroelectric generating facilities have not been adequately addressed by the Project proponents.

These three points are addressed in more detail below.

(1) HQ's hydroelectricity generation is dirty energy: The Project will increase regional greenhouse gas ("GHG") emissions by between 1.8 and 2 million metric tons per year, use a transmission corridor over 1,000 miles long and there is no evidence the Stipulation will reduce or offset these emissions.

HQ's hydroelectricity is dirty energy and should be treated like fossil fuels. There is little credible evidence in the record relevant to this topic and much of the evidence that would appear to be relevant to this topic is redacted or withheld as confidential. The PUC should require NECEC to fund an independent scientific advisory panel to conduct a life cycle analysis of the GHG emissions and impacts of the Project and require CMP and HQ to provide full transparency as to the GHG impacts of the Project.

In the absence of credible, publicly available data on the Project from the applicant and Project supporters, I have obtained a calculation of the likely GHG emissions for the Project using publicly available scientific data. Hydroelectric projects, especially those on the scale of HQ's, are recognized as potentially significant impacts on the world's carbon cycle and climate system. These are not accounted for in either state, federal or IPCC greenhouse gas inventories.¹

GHG emissions from HQ's electricity generation are caused by a range of activities that have studied by science for decades. Hydroelectricity's GHG emissions vary according to site-specific factors, including water and air temperature, season and time of day, vegetation and soil types in both the reservoir and the upstream watershed and watershed management practices. Significant research on the impacts of hydropower, including that of HQ, is ongoing. See, Exhibit 1 for a sample of articles on this topic. The PUC record appears to contain little up-to-date, objective science. NECEC and HQ's carefully selected information is at best conflicting and biased to minimize GHG emissions. For example, PUC Docket Exhibit 26 of NECEC, which appears to be NECEC's key document to supporting its claims about GHG emissions appears, conspicuously omits the groundbreaking 2016 report, *Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis 2* which makes the point that "dams and reservoirs contribute to global warming 25% more than previously estimated."

Below is a general overview of the sources of emissions from HQ's hydroelectricity to show that a site specific GHG accounting is required in order to

¹ Taylor Maavara, Ronny Lauerwald, Pierre Regnier, Phillipe Van Cappellen, *Global perturbation of organic carbon cycling by river damming*, Nature Communications, published May 17, 2017; Article about the study: "Dams are major driver of global environmental change" Science Daily, 2017, www.sciencedaily.com/releases/2017/05/170517090509.htm

² Bridget R. Deemer, John A. Harrison, Siyue Li, Jake J. Beaulieu, Tonya DelSontro, Nathan Barros, José F. Bezerra-Neto, Stephen M. Powers, Marco A. dos Santos, J. Arie Vonk, *BioScience*, Volume 66, Issue 11, 1 November 2016, Pages 949–964, <https://doi.org/10.1093/biosci/biw117>

determine the extent to which the Project contributes to climate change and whether the Stipulation conditions will offset these emissions-which would at best make the Project carbon neutral – not something that will help the existential climate crisis as claimed by Conservation Law Foundation, Acadia Center and others.

A. Overview of HQ's operations

HQ has installed capacity of 63 hydroelectric generating stations in Quebec. It also gets electricity from the Churchill Falls Generating Station in the Province of Newfoundland and Labrador, which sells hydroelectricity to HQ. See, **Exhibit 2**, Figures 1 and 2.

Some of HQ's stations have not yet begun operation. **Figure 1 on Exhibit 2** shows that as of 2014 three of the generating stations on the Romaine River were under construction. In addition, Nalcor Energy is building the Lower Churchill Falls generating station at Muskrat Falls 3, another potential source of electricity for HQ and NECEC. Nalcor is planning another generating station as part of the Lower Churchill Falls Project (the Gull Island generating station).

B. Overview of GHG sources from HQ's operations

- **Flooding lands to create reservoirs and emissions from ongoing operations**

GHG emissions attributable to HQ's electricity have resulted from and continue to result from its past, present and future creation of massive reservoir which requires deliberately flooding areas of land. This entails removing and destroying boreal forests, wetlands or peat lands to create the reservoirs, releasing GHGs and eliminating the future carbon sequestration capacity of the soils and trees that are eliminated.

The scale of the flooding and hence methane and CO2 emissions is demonstrated by the size of HQ's James Bay Project and Churchill Falls Project. James Bay is a series of dams on the La Grande River and neighboring waters diverted into the La Grand watershed. The James Bay Project covers an area the size of the state of New York and is one of the largest hydroelectric systems in the world. It has eight generating stations, including the Robert-Bourassa station See, **Exhibit 2, Figure 3**. Another source of HQ's electricity is the massive Churchill Falls Generating Station on the Churchill, or Grand, River in Labrador. This is the largest single source of hydropower in the world. A series of dykes diverts and impounds water to create the Smallwood Reservoir, which has an area of 2,520 square miles. It is the second-largest reservoir in the world in terms of surface area. The project was undertaken in the absence of any agreement with the aboriginal Innu community. The construction involved the flooding of over 1,900 square miles of their traditional hunting and trapping lands.

³ This project is the subject of an ongoing inquiry by the Provincial government due to mismanagement, waste and disregard of human rights.
<https://www.muskratfallsinquiry.ca/>

GHGs are emitting during the on going operation of HQ's generating stations. Raising and lowering water levels as dam reservoirs are filled and released increases the amount of methane rising to the surface and being emitted to the atmosphere. As water levels decline, the hydrostatic pressure on submerged soils also lowers and allows gas bubbles to escape. Sometimes the methane in these bubbles is absorbed by the water column and never reaches the surface other times it escapes into the air. Science in the last three years shows that hydroelectric facilities emit 25% more methane than previously estimated.

The net carbon footprint of a newly created boreal hydroelectric reservoir, *Teodoru et al., Global Biogeochemical Cycles*, Vol. 26, 2012, a study funded in part by HQ documents the GHG emitted by HQ's hydroelectricity generation. It concludes in part, for example, that hydroelectric reservoirs "will continue to emit carbon over the long-term at rates exceeding the carbon footprint of pre-flood landscapes...."

In 2016, scientists reported that methane accounts for 79 percent of carbon dioxide equivalent emissions from reservoirs which two other GHGs, carbon dioxide and nitrous oxide, contribute the rest. See, Demeer study, 2016 footnote 1 above.

- **Steel and concrete manufacturing**

A significant source of GHG emissions for HQ's electricity projects comes from steel and concrete manufacturing and construction activities associated with the dams, dykes, roads and other infrastructure. Site-specific emissions for HQ's electricity sources for the Project should be calculated by an independent panel of experts as part of a complete carbon accounting so that the full extent of emissions from these sources can be considered.

- **Impacts on carbon sequestration from trapping sediment and nutrients behind dams and impoundments**

HQ operations result in the diversion of water that would have otherwise flowed freely to the Gulf of St. Lawrence and the Gulf of Maine. The dams and impoundments trap riverine inputs of sediments and nutrients that would otherwise flow to the ocean, impacting the long term silica budget of the oceans and decreases the effectiveness of the biological system that sequesters CO₂ in deep waters.⁴

- **Transmission lines**

HQ's sprawling system of generating stations is on average about 1,000 miles from Boston. For example, HQ's largest generating station, Robert Bourassa is about 1,200 miles from Boston. Constructing and operating transmission lines, which clear cuts forests, requires the long term, permanent use of herbicides and fossil fuel driven heavy

⁴ *A preliminary review of the impact of dam reservoirs on carbon cycling*, Payla Parekh, Nov. 2004. www.internationalrivers.org/resources/a-preliminary-review-of-the-impact-of-dam-reservoirs-on-carbon-cycling-4063

equipment, as well as steel and concrete for transmission lines and equipment. These impacts should be fully considered in determining NECEC’s GHG emissions and climate change effects.

B. Estimate of GHG Emissions From the Project

The Project is intended to provide between 8.5 and 9.5 terawatt hours of electricity to Massachusetts. See, NECEC response to the Request for Proposal (RFP). ⁵ It is estimated that HQ’s hydroelectricity production (not including transmission) will emit between 1,853,000 and 2,049,000 metric tons of carbon dioxide equivalents (CO2e) per year. It is also estimated that the majority of these GHG are methane. See, Demeers study, cited in footnote 1. This is calculated as follows and has been verified by qualified professionals.

Table 1: Estimate of GHG emissions from the Project’s 8.5 to 9.4 TWh/year of HQ electricity

grams CO2e / kWh					
Construction/concrete	Lost carbon sink	Reservoir emissions	TOTAL CARBON DEBT	TWh/yr	kT CO2e/yr
18	100	100	218	8.5	1853
18	100	100	218	9.4	2049.2

NECEC claims that HQ’s electricity emits between 6 and 17 gCO2eq./kWh based on a Life Cycle Analysis (“LCA”), depending on whether the sources are reservoir or run of the river. See, **Exhibit 3, Figure 1**. This claim is not credible for many reasons. There does not appear to be another source in the record showing which of HQ’s 68 generating stations are run of the river and which are reservoir so the correct number cannot be assigned, a important factor in determining the GHG emissions. NECEC redacted most of the information on the GHG Emissions page of its RFP submittal, including footnote 14. In 2018, the International Hydropower Association (“IHA”) reported that hydropower’s GHG emissions from reservoirs are about 18.5 grams of CO2 equivalent per kilowatt hour, a number higher than NECEC’s but still incomplete. See, **Exhibit 3, Figure 2**. ⁶

⁵ NECEC 83D Response to Massachusetts RFP, page 3 (“A new 1090 MW interconnection will enable Hydro-Quebec to deliver a minimum of 8.5 TWh and up to 9.4 TWh...by using existing HQ Hydropower Resources....” Estimated calculations of GHG by the Project provided by North American Megadams Resistance Alliance (NAMRA), technical advisory team, March 2019.

⁶ May 24, 2018, *Study shows hydropower’s greenhouse gas footprint*, International hydropower Association, Figure 1: *Median life-cycle carbon equivalent intensity (gCO2-*

NECEC's LCA figure of between 6 and 17 is simply unreliable and contrary to current science. Even if the IHA figure of around 18.5 grams of carbon dioxide equivalent per kilowatt hour were used, the Project will cause emissions of between 153,000 and 169,000 metric tons per year.

HQ and IHA figures drastically underestimate reservoir emissions. Science shows that this number is at least 100 grams CO₂e / kWh (and probably more like 200 to 400 grams).⁷ HQ's claim in PUC Exhibit 26 that its emissions are "temporary" and that its studies show that emissions peak immediately after reservoir creation and decline to "natural lake levels within five to ten years" is similarly at odds with current science. Without showing the area of the reservoirs and the relationship to kilowatt hour generation, these numbers are senseless. For example, HQ's Eastmain region is very heavily dominated by peat lands, which will have GHG emissions that start higher and drop faster than the forested areas. Finally, Exhibit 26 has only a select handful of other reservoirs shown, but without reference to energy output.

C. Conflicting claims by NECEC and supporters of the Stipulation

NECEC makes outright misstatements claiming that the electricity to be transmitted over the CMP lines is "carbon free". NECEC's website states, "The New England Clean Energy Connect (NECEC) will deliver up to 1,200 megawatts of clean, reliable hydropower directly to Lewiston, Maine, making the project New England's largest source of carbon-free electricity through 2063 and beyond." (emphasis supplied) See, **Exhibit 3, Figure 3**. NECEC is explicitly telling the public that the hydropower electricity it will send to Massachusetts from Canada is "carbon-free electricity." This is untrue.

NECEC's website statement is contradicted by its own submittal to the Massachusetts Office of Energy and Environmental Resources (DOER) as part of its response to the RFP, shown in **Exhibit 3, Figure 1**. In that response, NECEC was required to disclose the Project's GHG emissions. See, NECEC's Section 83D Request for Proposal Application prepared by Hydro Renewable Energy Inc., a HQ affiliate. It addresses GHG emissions in "Section 12 of Appendix B to the RFP Emissions" page 87-88. See **Exhibit 3, Figure 1**. It contains this table showing that hydropower "run-of-the river" GHG emissions (carbon equivalents) are 6 grams per kilowatt-hour, based on continuous operation and 17 if it is reservoir electricity. In other words, it is not "carbon-free" but emits GHG. This plainly shows that NECEC's public claims of "carbon-free" claim are not credible. (We can further rely on the RFP response because the required Certification to the Commonwealth of Massachusetts for the RFP was signed by Thorn Dickinson of Central Maine Power for the NECEC on 7/27/2017, with a attesting that the "submitted information is true, accurate, and complete to the best of the undersigned's knowledge and belief" and that he "understands that a false statement or failure to disclose material information in the submitted proposal may be punishable as a criminal offense under applicable law.")

eq/kWh) (story discussing "GHG Reservoir (G-res) Tool" developed to more accurately estimate the GHG attributable to the creation of a hydropower reservoir.")

⁷ Sources available on request.

NECEC puts forth HQ's two-page promotional flyer as purported evidence that its hydroelectricity has low GHG emissions. See, Exhibit NECEC-26 in the PUC Docket. HQ's graph is based on carefully selected data that gives a false impression of the real picture. It contains a cherry-picked list of references ignores the wide range of scientific studies showing the full scope of the reasons why HQ's electricity is a climate disaster. A large volume of testimonial evidence and documents put forth by CMP is confidential and not available through the PUC docket so it is impossible to ascertain what other points NECEC has made about GHG emissions.

NECEC, Conservation Law Foundation ("CLF"), Acadia Center ("Acadia") and others that the Project will "contribute to carbon reductions in the Northeast" (CLF and Acadia 3/1/2019 Comments Concerning Stipulation) are unsupported and lack any credible basis in the record of these proceedings.

CLF documents GHG emissions from HQ in its own commissioned report, *Hydropower Greenhouse Gas Emissions, State of the Research*, by Synapse Energy Economics, Inc. in 2012. The report references HQ's Eastmain generating station (a source for the NECEC), stating "[f]or equal electric energy outputs, the Eastmain 1 data suggest that, in addition to any indirect emissions from facility construction, newly flooded boreal reservoirs may emit CO₂ at a rate close to 32 to 63% that of the least emitting natural gas plant." *Id.* at Page 10. As noted above, HQ's Romaine generating stations are coming on line in 2019, and hence could be considered "newly flooded boreal reservoirs" with CO₂ emissions at a rate close to 32 to 63% of a gas plant, according to CLF's data.⁸ This is one clear example of why over generalizations about HQ's emissions are unacceptable in the context of a Project that is intended to address the urgent need for GHG emission reductions. It may well be that the Romaine flooding is currently emitting a short-term pulse of methane, a GHG that is more potent than CO₂.

The PUC should not rely on CLF's claim in its 2/1/19 brief that the Project meets the PUC's standard for public need when it states, on page 16, that "It is clear from the evidence presented in this case that the NECEC will result in greenhouse gas emissions reductions in Maine, estimated at 264,000 metric tons annually." For this sweeping conclusion, CLF cites merely CMP's Petition at 50:4-7 and NECEC's Exhibit 5 at page 15 as references. Referring to those sources shows the following. All the first source says is "In fact, as set forth in the Daymark Report, the NECEC Project is estimated to reduce CO₂ emissions regionally by at least 3.1 million metric tons each year. Since Maine represents just over 8.5% of New England load, Maine's share of these annual reductions would be approximately 264,000 metric tons of reduced CO₂ emissions." Second, the Daymark report page 15 states, "The NECEC Project will contribute to the state's efforts to achieve those goals through the guaranteed delivery of **emission-free** energy." (emphasis supplied) NECEC-5 at 15. As explained above, HQ's electricity, by its own admission, is not emission-free. Moreover, there appears to be absolutely no link

⁸ The Romaine methane emissions are currently being studied. *Researchers measure carbon footprint of Canada hydroelectric dams*, 11/22/2018. phys.org/news/2018-11-carbon-footprint-canada-hydroelectric.html

between “emissions reductions” in Maine of 264,000 metric tons annually the delivery of so-called “emission-free energy” because that is not what is being delivered. The premise of the Daymark report, and in turn CLF’s assertion, is that HQ power is “emission-free energy.” This is disproven by the reports cited above as well as decades of scientific study about the GHG emissions from hydroelectricity and its contribution to climate change impacts. ⁹

The GHG emissions from HQ’s electricity and the illogical and unsubstantiated claims in the Stipulation and the CLF/Acadia brief should not be allowed to be obfuscated by the convoluted CPCN conditions and discussion of “transfer capacities at the Surowic-South and Maine-New Hampshire interfaces” for example and how this will all add up to “reducing the regions reliance on fossil fuel generation [and] will help mitigate the immediate and harmful impacts of climate change in Maine, New England and the world.” CLF Brief, 2/1/2019 at page 3. Customer credits, low-income customer benefits, rate relief, broadband, heat pumps, electric vehicles, host community benefits, education grants, decarbonization benefit planning – there is no documentation that these will actually result in lowering Maine’s GHG emissions and offset the GHG emissions from HQ. Replacing coal and oil with another dirty GHG emitting, climate damaging source of energy is going to worsen, not end the “existential threat” (CLF/Acadia Comments on Stipulation) from climate change

In summary, on one hand, NECEC is allowed to promote the Project as “carbon-free” while neither CLF nor Acadia or anyone else attempts to credibly account for the GHG emissions that they admit are released from over 63 of HQ’s hydroelectric generating facilities. To get a credible estimate of the GHG emissions from HQ’s electricity generation, NECEC should be required to identify exactly which stations the electricity will come from, and identify the life cycle emissions of each. It makes no sense to issue a certificate of public need for a irreversible transmission line and all its consequences which is intended to reduce GHG emissions when there is no proof that this intended goal will be met.

2. The Project fails to comply with Massachusetts and Maine climate change laws as the electricity is neither renewable nor incremental within the meaning of the applicable statutes and is an unlawful offset scheme.

- **Fails to comply with renewable energy laws**

CLF agrees that the HQ electricity does not meet the definition of renewable under the Maine RPS law. CLF Brief to PUC, Feb. 1, 2019, pages 15-16. (“However,

⁹ Once again, it is impossible to review NECEC’s GHG claims because much of the testimony and accompanying exhibits are confidential and withheld from the public. See, for example, PUC-Docket Item 201, July 13, 2018: CMP Rebuttal Testimony of Daymark (two documents withheld as Confidential).

because the definition of “renewable capacity resource” in 35-A M.R.S. § 3210(2)(B-3) and the definition of “renewable resource” in 35-A M.R.S. §3210(C) both exclude sources of electrical generation whose total power production capacity exceeds 100 MW, the hydropower to be delivered over the NECEC should not be considered as “renewable” for purposes of promoting “state renewable energy goals under M.R.S. § 3132(6).”)

Nor does it qualify as Class 1 renewable under the Massachusetts RPS law. Under Massachusetts law, a Class I renewable energy generating source is,

“one that began commercial operation after December 31, 1997, or represents the net increase from incremental new generating capacity after December 31, 1997 at an existing facility, where the facility generates electricity using any of the following: ... (6) energy generated by new hydroelectric facilities, or incremental new energy from increased capacity or efficiency improvements at existing hydroelectric facilities; provided, however, that (i) each such new facility or increased capacity or efficiency at each such existing facility must meet appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed as determined by the department in consultation with relevant state and federal agencies having oversight and jurisdiction over hydropower facilities; (ii) only energy from new facilities having a capacity up to 25 megawatts or attributable to improvements that incrementally increase capacity or efficiency by up to 25 megawatts at an existing hydroelectric facility shall qualify; and (iii) no such facility shall involve pumped storage of water or construction of any new dam or water diversion structure constructed later than January 1, 1998. (emphasis supplied)

HQ’s electricity does not meet any of these standards. Nor is it firm service hydroelectricity as required by the Energy Diversity act of 2016.

- **Unverifiable offsets of emissions**

The Stipulation can be viewed as an attempt to offset HQ’s GHG emissions across the border in Canada with the benefits package in Maine. Offsets are not provided for under the Massachusetts RPS, the Green Communities Act, the Global Warming Solutions Act, or the Energy Diversity Act of 2016. The CMP scheme is contrary to the spirit and intent of the laws of Massachusetts and Maine. What the climate needs is immediate GHG reductions, not a promise of offsets sometime in the future—offsets that do not even appear to have any carbon accounting attached to them.

Offsets are viewed as lacking credibility, including the offsets provided under the U.N.’s Clean Development Mechanism. NRCM and others cite essentially the same reasons that the CDM have failed in their opposition to the Stipulation. CLF’s and Acadia Center’s Comments Concerning Stipulation, 3/1/2019 states that the “NECEC will reduce overall regional greenhouse gas emissions by replacing oil-and gas-fired electric generation in Maine and New England with low-carbon hydroelectric generation.

“ Page 1-2 (emphasis supplied) This is essentially attempting to offset one dirty energy source with another. Thus, offsetting is at best a zero-sum game: while it might be carbon-neutral in the best case scenario -- the offsets are actually implemented here, and if so, if they return the promised GHG reductions in the future. Yet, here there is no greenhouse gas accounting of the emissions associated with the Project in order to even determine what must be offset by the Stipulation conditions. To be considered even remotely credible, NECED must prove that the Stipulation makes the Project at least carbon neutral.

Another reason offsets are disfavored is that they are often associated with severe negative impacts on local communities – which is the case here. There has been no consideration of the negative impacts in Canada of HQ’s massive megaprojects. It is well-documented that HQ has violated human rights with its hydropower development projects for decades and these violations are ongoing. Its massive megaprojects disrupt both the environment and the livelihoods of entire communities in Canada.

It is not acceptable to ignore these impacts in order to claim that HQ’s power is “clean and green”. Comments are being submitted to the PUC by the Grand Riverkeeper and Labrador Land Protectors PUC show the impacts on their community of HQ’s Churchill Falls megadam and the proposed Lower Churchill Falls Project proposed by Nalcor in Labrador and Newfoundland. NECEC should not be allowed to offset these negative impacts with heat pumps or other unverifiable benefits in Maine. Massachusetts’ so called clean-energy comes at the cost of poisoning people in Canada with methylmercury (see, 2016 Harvard study)¹⁰ and destroying massive rivers and displacing indigenous people and their ways of life. Not all of the communities and people affected gave their free, prior informed consent to have their lands taken and their way of life destroyed. This is well documented. Finally, it is virtually impossible to verify the benefits of offsetting emissions and NECEC’s Project is one clear example of that.

(3) The past and present, ongoing negative social, economic and environmental impacts resulting from the HQ’s hydroelectric generating facilities have not been adequately addressed by the Project proponents.

The record appears to be devoid of any reference to the impacts of HQ’s electricity generating megaprojects in Canada. The scientific documentation of these

¹⁰ Mercury is naturally present in river bottom soils. Megadam reservoirs cause the mercury to change into poisonous methyl mercury, a central nervous system toxin that bio-accumulates through the food chain. Contamination can persist in some species for thirty to fifty years. Communities living along rivers often need wild caught foods for survival. Once the methyl mercury enters the food chain they must abandon that food source or risk mercury poisoning. See, Harvard University study of dozens Canadian dams found that 99% of them expose aboriginal people to unacceptable levels of Methyl mercury. www.seas.harvard.edu/news/2016/11/human-health-risks-from-hydroelectric-projects; www.makemuskratright.org

impacts is extensive and ongoing. See, e.g., Exhibit 4, Alliance Romaine Brief in Opposition to the Romaine River Hydro-Electric Mega Project, November 27, 2008.

For example, development of the James Bay Project led to an acrimonious conflict with the 5,000 Crees and 4,000 Inuit of Northern Quebec over land rights, lifestyle and environmental issues. In February 2002, the government and the Grand Council of the Crees signed the Peace of the Braves and the Boumhounan Agreement, establishing a new relationship between Quebec and the Crees and agreeing on environmental rules for the construction of three new power stations built between 2003 and 2011 — the Eastmain-1, Eastmain-1-A and Sarcelle generating stations — and the diversion of the Rupert River. Two of these main diverted rivers are the Caniapiscau River and the Eastmain River into which the James Bay Project submerged about 11,000 km of boreal forest

HQ should be required to thoroughly explain why these impacts are justifiable and why it warrants consideration for a CPNC in Maine.

In closing, as a resident of New England, member of the Sierra Club Maine Chapter a taxpayer in two New England states, and a life-long conservationist and environmental advocate I urge you to reject this speculative, destructive project.

It is more likely than not that the NECEC will make climate change worse. I do not believe that the Project proponents can show by credible evidence that this project will help reduce climate change; in fact, the evidence shows this project will hasten it. In addition, the negative, long lasting environmental and social justice issues resulting from the destruction of communities and rivers, land grabs, and poisoning of food supplies in itself warrants rejection of this project.

Thank you for the opportunity to comment.

Sincerely yours,



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