Éric Martel
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May 20, 2019

Governor Janet Mills
1 State House Station
Augusta, ME 04333

Senate President Troy Jackson
3 State House Station
Augusta, ME 04333

Speaker of the House Sara Gideon
2 State House Station
Augusta, ME 04333

Senate Minority Leader Dana Dow
2 State House Station
Augusta, ME 04333

House Minority Leader Kathleen Dillingham
2 State House Station
Augusta, ME 04333

Re: Hydro-Québec vision and supply outlook

Dear Governor Mills, President Jackson, Speaker Gideon, Senator Dow, and Representative Dillingham:

I'm writing to provide additional information regarding Hydro-Québec's available and projected energy supply. I thought this information would be useful as discussion about the New England Clean Energy Connect (NECEC) project continues in Maine. Hydro-Québec's buildout of new hydropower capacity and continuous upgrades and efficiency improvements to existing capacity are integral components of its vision for a low carbon future for the Northeast. A strong contribution to lower emissions in our surrounding markets through clean energy exports is fundamental to this vision.

Hydro-Québec buildout and preparedness for new clean energy needs

Hydro-Québec has been expanding its generating capacity over the past 15 years. Thirteen powerhouses have been added, providing approximately 5,000 megawatts of new hydropower. This construction phase will be complete in 2021 with the commissioning of the fourth and last unit of the Romaine complex on Québec's North Shore. With these additions, Hydro-Québec's network now consists of over 37,000 MW of hydropower capacity. Development of large hydropower facilities is extremely complex and requires extraordinary advance planning and investment. Accomplishment of a buildout of this magnitude is remarkable.

With a 15 year planning and construction cycle, Hydro-Québec took actions many years ago to be prepared to contribute to the clean energy transition that is now underway in the Northeast. Numerous upgrades and refurbishments of existing facilities, with the objective of increasing equipment performance, and directing efforts and science into pursuing these gains on an ongoing basis, as we have done for decades, is also underway. .

We are now in a position to appropriately respond to solicitations such as those initiated in New England in recent years. Our projections show that we have sufficient energy to maintain existing export levels, serve all of the commitments of the Massachusetts contracts -- and do more. Our team has recently shared this information with members of the Maine Legislature and other Maine stakeholders.

Reservoir levels and new transmission

Québec reservoirs currently stand at exceptional levels. We expect to end 2019 with over 144 terawatt hours of stored energy, surpassing previous records. According to independent research, precipitation in Québec's northern regions, where the majority of our reservoirs are located, is expected to increase 14 percent by 2050 as a result of climate change.

More water in Québec means the possibility of higher exports, and more displacement of fossil fuels in New England and other markets. But more transmission capacity to export markets is necessary to make use of this water resource. In 2017 and 2018, Hydro-Québec was forced to release or "spill" significant quantities of water, effectively wasting clean energy that could otherwise be lowering emissions only because transmission was not available to deliver it to export markets. With NECEC in service, this water will no longer be wasted: it will be delivered as clean energy into New England to reduce emissions.

Maintaining growth and building tomorrow

Growth is a key component of our strategic plan. This includes increasing our electricity exports to all of our markets. We expect our hydropower development and enhancement and energy efficiency cycle will continue if our hydropower is valued by external markets. The addition of new energy generation projects in Québec is currently under evaluation. These could be wind farms – a 2016 study estimates that Québec could accommodate up to 15,500 MW of wind by 2025[1], and there would still be untapped capacity beyond that – or if there is a need for it, another hydropower facility could also be built.

Furthermore, we currently have in our scheduling queue over 950 MW of projects within existing facilities that would increase our generation capacity, particularly during the coldest winter months, and give us more flexibility throughout the year.

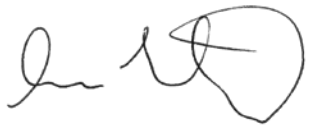
Network expansion is only one element of our strategy. Hydro-Québec's distribution division has been actively working to implement efficiency measures with its customers through a series of programs and incentives, in particular through new automated systems that better control home energy use. In recent years, demand-side efficiency measures have freed up close to 9 terawatt hours of energy, and there is much more potential for energy savings in the future.

[1] Canadian Wind Energy Association, "Pan-Canadian Wind Integration Study". https://canwea.ca/wp-content/uploads/2016/10/pcwis-quebec-summary-web.pdf, consulted on May 16, 2019.

Hydro-Québec's vision is to be part of the solution to the energy transition of the Northeast. As a large-scale energy supplier, and a long-standing partner in the Northeast, Hydro-Québec can provide a direct path to clean, reliable and affordable electricity.

I look forward to working with Maine's elected officials and stakeholders to advance a clean energy future in Maine and the region.

Sincerely yours,



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