



May 11, 2016

Vermont Public Service Board  
112 State Street, 4<sup>th</sup> Floor  
Montpelier, VT 05620

Re: Docket No. 8550 - Establishment of a Renewable Energy Standard (RES)

Dear Public Service Board Members:

HQUS requests that the Public Service Board consider these comments in its proceeding to establish a Renewable Energy Standard (RES). Specifically, HQUS responds to the April 8<sup>th</sup> filing of Renewable Energy Vermont (REV) with respect to the treatment of Hydro-Québec attributes.

REV's comments suggest that there is no process for ensuring that Hydro-Québec attributes are eligible for the RES -- and that Vermont utilities rely solely on an Attestation from Hydro-Québec to qualify the attributes transferred under the contract. This is incorrect. Hydro-Québec follows world class standards to ensure all data is accurate and verified.

Provided below is a description of the data development, review and approval process. Each year, Hydro-Québec commissions an independent organization to undertake a detailed examination of its sources of electricity generation, internal production and purchases from external markets, as well as the associated atmospheric emissions.

This examination is undertaken by a GHG verification body (the Bureau de normalisation du Québec) accredited under the requirements of International Standards Organisation ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition*<sup>1</sup> In addition, Hydro-Québec requires that this body, which is an independent organization, be accredited by a recognized member of the International Accreditation Forum (IAF) and hold a valid license granted by Account Ability AA1000 CIC<sup>2</sup>.

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<sup>1</sup> [http://www.iso.org/iso/catalogue\\_detail?csnumber=60168](http://www.iso.org/iso/catalogue_detail?csnumber=60168)

<sup>2</sup> AccountAbility is a global organization whose AA1000 series are principles-based standards designed to help organizations become more accountable, responsible and sustainable:  
<http://www.accountability.org/standards/aa1000-governance/aa1000-cic.html>

The result of this examination is an independent audited statement confirming the exact mix of electricity resources from Hydro Quebec Production.

Hydro-Québec provides this data each year to its customers in the form of an *Electricity Generations and Air Emissions* fact sheet, which I have attached for your information. The fact sheet is in support of a signed Attestation confirming quantities transferred, their hydroelectric composition, and certifying that the attributes have not been counted towards any other programs, goals or represented as part of energy used or sold elsewhere.

Hydro-Québec also makes public the Hydro-Québec system mix, which can include purchases of electricity from sources other than Hydro-Québec Production's hydropower generation fleet. In this way, details for both mixes are presented in a transparent way and it is clear that Hydro-Québec attributes provided to internal Québec customers cannot be sold to customers in external markets.

Finally, Hydro-Québec uses this same process and methodology to comply with Quebec's cap and trade which is part of Western Climate Initiative which is an economy wide framework for carbon reduction.

If you have further questions regarding this information, please contact me at (860)-241-4020

Thank you,

A handwritten signature in black ink, appearing to read 'Stephen C. Molodetz', written over a light blue horizontal line.

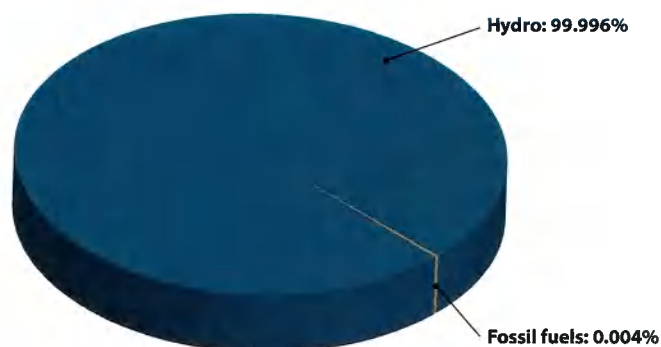
Stephen C. Molodetz  
Vice President- Business Development

## HYDRO-QUÉBEC PRODUCTION

# Electricity Generation and Air Emissions

### HYDRO-QUÉBEC PRODUCTION GENERATION

Breakdown based on energy generated by Hydro-Québec Production (excluding energy purchased by Hydro-Québec Production as well as energy generated and purchased by Hydro-Québec Distribution): 12-month period ended December 31, 2014.



### AIR EMISSIONS

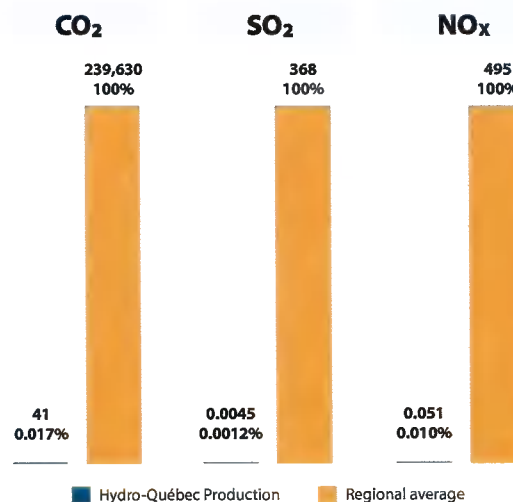
Corresponding to the generation described above.

- **CO<sub>2</sub>** (carbon dioxide): primary contributing gas to global warming.
- **SO<sub>2</sub>** (sulfur dioxide): major precursor of acid rain and fine particulate matter.
- **NO<sub>x</sub>** (nitrogen oxides): major precursors of ground-level ozone and acid rain.

For more detailed information on the environmental impact of electricity generation, refer to Hydro-Québec's *Sustainability Report – 2014*.

### COMPARISON OF HYDRO-QUÉBEC PRODUCTION'S AIR EMISSIONS WITH THE REGIONAL AVERAGE\*

Emission factors: metric tonnes/TWh



\*Regional average for electric utilities in the six New England States and the State of New York (2010), Ontario (2013) and New Brunswick (2013-2014). Data sources: Emissions & Generation Resource Integrated Database (eGRID 9<sup>th</sup> edition), version 1.0, February 2014, U.S. EPA; 2013 Sustainable Development Report, Ontario Power Generation; New Brunswick Power Corporation 2012/13 Annual Report. CO<sub>2</sub> emission factors come from Québec's legislation *Règlement sur la déclaration obligatoire de certaines émissions de contaminants dans l'atmosphère*.

Data reviewed by the Bureau de normalisation du Québec. The conclusions of the review can be found in Hydro-Québec's Sustainability Report – 2014.