

Expanded Policy

CLEAN ENERGY IMPORTS

Policy summary: Canada has substantial hydro-electric resources, which have very low emissions, and are available at relatively low cost and with no need for renewable energy subsidies (see Renewable Portfolio Standard, above). The amount of Canadian hydro has risen to 8.5 percent of New England’s electric consumption, but transmission lines that deliver this resource to southern New England are at full capacity, preventing any additional Canadian hydro from getting to our market. One effort to tap more of this resource is the Northern Pass transmission line being developed by two Massachusetts utilities, NSTAR and Northeast Utilities, in partnership with Hydro Quebec (HQ) and with the support of the Patrick-Murray administration. When this power line is completed, at HQ’s expense, it will bring to New England enough inexpensive clean power to serve up to 15 percent of Massachusetts’ present electricity demand. Additional transmission lines may also be possible.

Clean energy economy impacts:⁴² The project represents an infrastructure investment in the region by Hydro Quebec estimated at \$1.1 billion. It will create hundreds of jobs related to clearing and site work, harvesting, construction and materials, including electrical, professional, and technical services. While the vast majority of these jobs will be in New Hampshire and Quebec, it is likely to have spillover effects in Massachusetts.

Economy-wide GHG emissions reduced in 2020	5.1 million metric tons; 5.4%
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Rationale: Canadian hydro resources are extensive and have low operating costs. The transmission lines necessary to bring more Canadian hydropower to load centers in southern New England do not have to be financed by ratepayers apart from the price of delivered electricity, which will be sold in the competitive market.

Policy design: This policy involves working with the Massachusetts utilities to help overcome any hurdles.

GHG impact: The Northern Pass transmission line alone would provide 1,200 MW of clean electricity, enough to power nearly 1 million homes. This would result in up to 5 million tons of emissions reduction in the Commonwealth, depending on how much of the power is utilized in Massachusetts versus other states.

Other benefits: Like other electric sector policies, by incentivizing the reduced operation of fossil fuel plants, these additional low-emissions electricity imports would help reduce criteria and hazardous pollutants in the air (NOx, SO₂, mercury, and fine particulate matter). These reductions will have public health and environmental benefits. In addition, additional hydro imports will significantly improve the region’s fuel diversity, improving energy security and price stability.

Cost: There are no additional costs to this effort to ratepayers or taxpayers. The power is expected to be sold in the market. In fact, as a “price-taker” in the market, it is possible that it would lower the wholesale electricity price and therefore reduce costs for business and residential

⁴² www.northernpass.us/transmission_project_impact.pdf

consumers. According to Northeast Utilities, a comprehensive analysis by Charles River Associates (CRA) shows that, even with conservative assumptions, the Northern Pass line will reduce energy prices in the wholesale market, potentially saving New England customers \$200 million to \$300 million in annual energy costs.

Experience in other states: Massachusetts and other Northeast states already have transmission lines to Canada and have imported hydro power for years. In fact, additional hydro power imports have been a significant contributor to a cleaner New England electricity grid in the last five years.

Legal authority: DPU and DOER have already begun working with utilities and ISO-New England on increasing such imports.

Uncertainty: Transmission lines involve federal, state and local permitting, and often raise siting concerns, with potential delays from legal action.