Fiscal Pulse

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Newfoundland and Labrador

… The First Stage of the Lower Churchill Hydro-Electricity Project

Nalcor, Newfoundland and Labrador's energy corporation, and **Emera**, a Nova Scotia-based energy and services company owning Nova Scotia Power, announced in November 2010 an agreement for a thirty-five year arrangement for the development of Muskrat Falls generating station (824 MW) in central Labrador, as well as a 1,100 km High Voltage Direct Current Labrador-Island Transmission Link and a 180 km sub-sea Maritime Transmission Link between the Island of Newfoundland and Cape Breton, Nova Scotia.

- **This arrangement marks a new level of regional power co-operation**. Of the annual 4.9 TWh of power expected from the Muskrat Falls facility when it commences production in 2017, 40% will meet NL's own power demands, 20% is allocated to Nova Scotia for 35 years and the remaining 40% can be sold to the rest of Atlantic Canada or the New England States or retained in Labrador to supply its additional industrial development.

- **For Newfoundland and Labrador, the business case for proceeding with the Muskrat Falls generating station** is not based on power sales outside the province. Instead it represents the low-cost solution for NL to meet the peak capacity power deficit anticipated in 2015 and the overall power deficit by 2019. Power from the Muskrat Falls station will allow the 500 MW oil-fired Holyrood thermal station, in service since 1969, to be closed, creating a provincial power system 98% carbon free. If the Muskrat Falls project unexpectedly does not proceed, the government is committed to making significant emissions-reductions investments during the refurbishing of Holyrood.

- **Fuel costs for Holyrood** have been trending higher since 1999 from less than C$30 per megawatt hour to roughly C$135 by 2011. Currently, Newfoundland and Labrador's residential power rates are lower than many other regions in Canada, but NL's government estimates that NL's power rates will climb 37% from 2011 to 2016 as escalating power demand forces a heavier reliance on Holyrood. The cost of Muskrat Falls and the Labrador-Island Transmission Link will only be included in the power rates when the project is completed and operating. The net cost of incorporating this amortized cost into power rates while removing Holyrood is expected to leave power rates in 2017 virtually unchanged from 2016. Thereafter, power rates with the first stage of the Lower Churchill project are expected to stabilize after 2016, with annual increases less than 1% as NL curtails its exposure to the volatile and rising trajectory of global oil prices.

- **The Churchill River in Labrador**, with the 5,428 MW Upper Churchill Falls generating station operating since 1971, still has about 35% of its generating capacity available for the Lower Churchill Generation Project. The contract with Hydro-Québec for most of the power from the existing Upper Churchill Falls station is up for automatic renewal for a further 25 years in 2016. The renewal would be based upon the originally negotiated price of $2 per megawatt hour, a mere fraction of the wholesale and retail power prices presently prevailing across Canada.

- **The Lower Churchill project will consist of two installations**: Gull Island (2,250 MW) and Muskrat Falls. By proceeding in two stages, with the first phase the smaller generating station, Newfoundland and Labrador reduces its risk. To date, Newfoundland and Labrador's efforts to obtain transmission rights through Quebec to gain additional access to the U.S. north-eastern and mid-Atlantic States markets have not been successful.

- **Nalcor will manage and execute** the design, engineering, construction and commissioning of the Muskrat Falls generating station and the Labrador-Island Link. Emera's investment in the Labrador-Island Link will be capped at 49% and it will be held in a Newfoundland and Labrador public utility. Nalcor will be provided similar investment opportunities in future Emera infrastructure. Nalcor will provide Emera with

approximately one terawatt hour of power per year, to be known as the 'Nova Scotia Block' for a 35-year term with a potential option to purchase additional power. Emera will own the greenhouse gas credits associated with this block of power which they cannot sell and Nalcor Energy will own the remaining emission credits from the project.

- **If Emera wishes to extend the agreement beyond 35 years**, Nalcor must negotiate in good faith. At the termination of the delivery of the Nova Scotia Block, ownership of the Maritime Link will revert back to Nalcor Energy for $1. If an agreement on an extension cannot be reached, Nalcor may sell the Nova Scotia block after 35 years to third parties.

- **Nalcor and Emera will jointly manage and execute the design**, engineering, construction and commissioning of the Maritime Link. Both parties will now collaborate on an environmental assessment submission for the Maritime Link. Nalcor will own all transmission rights on the Labrador-Island Link. Emera will be granted transmission rights on the Maritime Link sufficient to deliver the Nova Scotia Block, with all the remaining Maritime Link transmission rights held by Nalcor. Both parties can seek to expand the Maritime Link together or separately if the other decides not to participate.

- **Emera will provide Nalcor with transmission rights** from Cape Breton to the Nova Scotia/New Brunswick border up to Nalcor's capacity on the Maritime Link, and Nalcor will pay the Nova Scotia transmission tariff. Nalcor will be allowed to use Emera's transmission rights to transmit power through New Brunswick with Nalcor paying the associated transmission tariff. If these rights cannot be acquired or extended, Emera will purchase the power Nalcor would have sold through New Brunswick. Alternatively, at Nalcor's option, Emera will provide Nalcor with the opportunity to acquire or use 300 MW of firm transmission if the proposed Nova Scotia-New Brunswick transmission line is constructed.

- **The *Benefits Strategy*** for this project stipulates that Labrador's Innu population will receive first consideration for jobs, followed by other Labrador residents and then other NL residents. The engineering and design work will be done primarily in St. John's. By mid-decade, without policy adjustments, the simultaneous construction of the Lower Churchill project and Hebron, the fourth offshore oil field, is expected to result in significant shortages in some types of killed labour.

- **During 2011, the Nalcor/Emera arrangement** is expected to be converted into formal legal agreements, financing will be finalized, project approvals will be sought and the pre-front-end engineering work will be completed. Construction employment for the project is expected to escalate in 2013, substantial spin-off activity is anticipated for the Atlantic region and the project is expected to produce and distribute power by 2017.

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