

Upper Churchill: Can we wait until 2041?

Key Factors

In the debate surrounding the development of Muskrat Falls, it has been suggested that Newfoundland and Labrador has the option of refurbishing the Holyrood Thermal Generating Station and/or taking other stop gap measures until 2041 when the Upper Churchill power contract expires and energy from the Upper Churchill become available for domestic and export use. This option is not realistic for a variety of reasons:

Corporate structure of CFLCo

CFLCo is owned by Newfoundland and Labrador Hydro (NLH) and Hydro-Quebec (HQ) jointly, with NLH owning 65.8% of the common shares and HQ 34.2% of the common shares. In 2041, NLH will not have absolute authority over the corporate actions of CFLCo.

cannot assume that free or cheap power

It is not appropriate to simply assume that Newfoundland and Labrador will receive cheap or free power when the HQ Power Contract expires in 2041. It is entirely possible that the province will be required to purchase power from CFLCo at prevailing applicable market rates.

Reliance on Holyrood until 2041

It is doubtful that life extension efforts at Holyrood could continue to provide reliable power for an additional 30 plus years. At that time the first two units would be 70 years old.¹ → *still has to build transmission line to Island of New York*

- Deferring Muskrat Falls will mean increased reliance on oil and volatile prices for electricity as rates will be tied to fuel prices. (Note: See accompanying paper on electricity rates for a description of oil forecasts and other issues pertaining to fuel pricing).

- Deferring Muskrat Falls prevents the province from capitalizing on opportunities through export sales and/or industrial expansion in Labrador. → *no power for many companies*

For these reasons and others described below, it is not feasible to defer Muskrat Falls under the assumption that the province will have plenty of cheap or free power in 2041.

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Upper Churchill - Can we wait until 2041?

- P. 1 - Key Factors - suggestion that NL has option of refurbishing Holyrood or taking other short gap measures until 2041 when VC contract expires
- CFECs owned by NLH (65.8%) and HQ (34.2%) → in 2041 NLH will not have absolute authority over actions of CFECs
 - incorrect to assume that NL will receive cheap or free power → likely have to purchase power from CFECs at prevailing market rates
 - doubtful that Holyrood plan last rather 30 years
 - deferring MT means increased reliance on volatile oil prices
 - deferring MT prevents NL from capitalizing on export opportunities / energy in loc

- P. 2 - 1927 Power Purchase Decision
- P. 3 - Upper Churchill Development
- P. 4 - Legacy of NL Upper Churchill Contract
- 2010 HQ Annual Report - "1.03 B (\$82 million) → pays \$2.50/kWh
- NLH received \$76M

- P. 4 - Energy Plan - Quebec received \$19B NL \$1B
- P. 4 - Twin Falls Power Corp. (Twincos) → 225 MW for DOE and WEHCO Power
- WEHCO and DOE pay less than \$5 million

- P. 5 - Summary of Principal Legal Documents

- P. 6 - Dec - August 31, 2041
- P. 6 - Twincos contract expires at end of 2014 → "commercially reasonable" price

- P. 6-7 - Post - August 31, 2041 → significant change in electricity industry
- neither CFECs, power plant, or power "revert" or "return" to province
 - not an exact proxy to satisfy power demands in province
 - local demand of commercial, industrial and residential

(2)

- Every seems to expect that more ~~or less~~ ^{VC} power will be delivered of power
- impossible to predict 30 years from now that power price will be
- Province will realize significant benefits post 2041
- In 2012 require certainty that power obligations for be met → do not have that certainty with VC in 2041

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Churchill Falls as an alternative to Muskrat Falls

would require maintaining Holyrood until 2041 then Labrador - Inland Link

- ① Security of supply and reliability → 2041 uncertain / not so shareholder / Holyrood exists
- ② Cost to ratepayers → release or not and likelihood that Holyrood will have to be replaced
- ③ Environmental compliance → GHG emission regulation and replacement of Holyrood
- ④ Risk and uncertainty → ^{3 necessary criteria} not present in either Inland Link or ML

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Conclusion - ML will not get free power in 2041

- Maintaining Holyrood until 2041 of LIL more expensive than ML
- Next 2 quarters must be met by end of 2041
- Province least effort to take only stop-gap measures
- "Waiting for available Upper Churchill power in 2041 is not a practical, economical or sensible alternative to Muskrat Falls."

p. 11-14 - Annex A - Principal Legal Documents:

p. 11 - Water Lease

p. 11-12 - Power Contract b/w CFCO and INEL - May 12, 1969

p. 12 - 1998 Power Contract - 300 MW

p. 13 - GUA - November 1/98

p. 13 - Shareholders' Agreement - June 18/99

p. 13-14 - Water Management Agreement b/w CFCO and Nation - March 9/10