Efficiency Manitoba
2020/23 EFFICIENCY PLAN
To the Public Utilities Board

A Good Start, But More Required for Profitable Use of Energy in Manitoba

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For the Manitoba Energy Council

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Who is the Manitoba Energy Council?

An organization dedicated to providing independent, apolitical, volunteer and professional advice and feedback for the sustained development of energy in Manitoba

It evolved from the Bipole III Coalition to contribute to the ultimate benefit of every Manitoban

https://manitobaenergycouncil.ca/

The Purpose of this Presentation:

It is to demonstrate that proposed benefits to Manitoba Hydro through the saved energy Efficiency Manitoba proposes in the 2020/23 Efficiency Plan Submission will not be realized to the extent estimated

Well done Efficiency Manitoba



Manitoba Hydro Will Be Adversely Impacted More Than EM Indicates

Based on PUB Order No. 15/18 of May 1, 2018, Keeyask will not be needed until 2040

This places Manitoba Hydro into a surplus of electric energy many years into the future - exacerbated by US export contracts terminating in 2025

Manitoba Hydro Will Be Adversely Impacted More Than EM Indicates

The electric energy saved through adherence to the EM 3 yr. Plan must be exported. With Manitoba's load reduced and oversupply of generation with Keeyask coming on line, this saved energy must be sold out of province but lower than 8 cents/kwh

Manitoba Hydro's Return From EM Surplus Electricity Largely From US

MISO Minnesota daily average hourly peak price for opportunity sales in 2019 was 3.05 Canadian cents/kwh In 2010 it was 3.23 cents/kwh

Obtained from NRGSTREAM - North American Energy Daily. Average annual US → CAD exchange rates applied for each of 2010 and 2019

The Adverse Impact of Low Priced **Electricity Exports**

There is little chance US export prices will increase in the foreseeable future

Electric energy in MISO is generated at falling prices contributing to Hydro's unprofitability - with rates increasing above cost of living increases



Informational Forum

October 2019

Prices

Average

\$24.61/MWh Real-Time LMP

27% decrease compared to September 2018

Drivers

Strong supply growth led to lower gas prices

MISO's reliability, markets and operational functions performed well – with lowered prices – dropping Manitoba Hydro export revenues to MISO (Note: \$US24.61/MWh = 3.27 Cdn

(Note: \$US24.61/MWh = 3.27 Cdn cents/kwh – average for all MISO)

What Will Manitoba Hydro Receive From EM's Saving of 379 GWh?

The electric energy for export at 86% energy considering transmission losses:

At 3.05 cents/kwh, additional export revenue is \$9,940,000 for 1 year

The expectation in EM's plan is this energy at 8 cents should bring Hydro \$27,300,000 in that 1 year – unjustly overestimated

Manitoba Hydro's Increased Losses

- The 3 to 4 cents/kwh Hydro will receive exporting surplus electric energy from the EM 3 yr. Plan, is much less than the 8 cents/kwh used
- Hydro loses and this loss adds to their massive debt as the "can is kicked down the road"

To Be Identified in Regulation:

Efficiency Manitoba may also carry out demand side management initiatives with respect to electric demand, potable water, and fossil fuels in the transportation sector in Manitoba should those prescribed duties be identified within Regulation

Why are Export Prices of Electricity Falling in MISO?

- 1. Fracked gas is one reason
- 2. The falling costs of wind and solar generation increasing competition
- 3. Wide area transmission planning, construction and market to balance variability of wind generation

How Can the Manitoba Economy Grow Without Use of Electricity?

The PUB report to the Minister must recognize the need to encourage increasing the provincial economy

The conflict this is for Efficiency Manitoba must be resolved by Regulation

How Can the Manitoba Economy Grow Without Use of Electricity?

In the minutes of meeting 5 of EEAG, August 20, 2019, GAC stated: "There is positive business case for MB Hydro and provincial treasury to accelerate electrification."

ACTION: EM to provide more information on "what agency will deliver what?"

Where Electricity is Needed to Support Economic Growth:

- 1. We make buses and farm implements so, why not EV assembly like BC & QC?
- 2. Hydrogen products including fuel and fertilizers –for export through Churchill
- 3. Server farms and similar energy users
- 4. Cut the red-tape and install EV chargers (EDF installing 75,000 in Europe by 2022)

Where Electricity is Needed to Support Economic Growth

- 5. Produce electric school buses since diesel fumes adversely affect health (school bus exhausts are at waist level of school children) and electric school buses will reduce health costs
- 6. Develop sustainable lithium mining in eastern and northern Manitoba and manufacture batteries

Conclusion

PUB to recommend for the next Regulation to:

Require Efficiency Manitoba to undertake initiatives with respect to electric demand, potable water, and fossil fuels in the transportation sector in Manitoba



Thank You