

Things That I Know That Are True

As I wrap up my 21 year career as IPPSA's Executive Director, I've reflected on what our members have accomplished; and it its inspiring:

- Since the market opened 20+ years ago, generators have invested over \$23 billion in 10,000+ MWs of new supply. That incremental supply is two times all of the installed generation capacity of Saskatchewan.
- Alberta has grown to become the third largest power market in Canada, but with ~15% of the country's population. Our economy is a national powerhouse, producing a GDP of \$300 billion from a population of 4.4 million people. This success has been predicated on reliable power supply and sufficient wires to carry it.
- There are 40 generators competing to serve Alberta's power consumers in the wholesale market and 30 retailers offering choice to residential customers.
- Alberta has created a centre of excellence in power production. Alberta headquartered generators know how to build and operate efficient supply and are welcomed in five other Canadian provinces (B.C., Saskatchewan, Ontario, Quebec and New Brunswick), 17 U.S. states (Alabama, Arizona, Colorado, Illinois, Kansas, Maine, Minnesota, Missouri, New Hampshire, New Mexico, North Carolina, North Dakota, Pennsylvania, Washington State, Wisconsin, Wyoming, and Texas), along with Australia.
- Alberta remains the easiest jurisdiction to add renewable energy in Canada thanks to its open market and strong solar and wind regime. Given its strides to decarbonize, Alberta's power sector is forecast to reduce GHGs 61% from 2005 levels by 2030¹.

Contrast Alberta's history with what I've seen in regulated markets across Canada over the past twenty years.

In other provinces, central planning decisions have led to incredibly expensive mega-projects or massively convoluted and expensive policy interference. Muskrat Falls cost Newfoundland and Labrador \$13 billion for 824 MWs. This project was also the recipient of \$5.2 billion federal government bail-out². Manitoba Hydro's Keeyask generation cost \$8.7 billion for 695 MW³. SaskPower's Boundary Dam Unit 3 cost \$1.5 billion for 110 MW⁴. And BC Hydro's Site C hydro-electric dam is estimated to cost \$16 billion for 1100 MW⁵. In Alberta, ~ \$23 billion from competitive generators built 10,000 MWs.

And then there's Ontario and its cycle of programs and bandaids that have burdened ratepayers there for decades to come. Ontario's history of power market interference has resulted in the requirement to create its omnibus "Global Adjustment Payment". Global Adjustment equaled ~¢7/kWh in 2021 alone⁶. A full list of programs whose costs are rolled into the Global Adjustment is included as an endnote to this article¹.

As an attempt to offset the cost of these programs, Ontario has recently created tax-payer borne subsidies and tax credit plans. The Financial Accountability Office of Ontario's 2022 report states, "Over the 20-

¹ Alberta Electric System Operator, 2021 Long Term Outlook

² www.globeandmail.com/opinion/editorials/article-muskrat-falls-is-newfoundlands-biggest-financial-disaster-justin/

³ www.cbc.ca/news/canada/manitoba/manitoba-hydro-independent/review-1.5929148

⁴ www.power-technology.com/projects/sask-power-boundary-dam/

⁵ www.jwnenergy.com/article/2021/3/1/british-columbias-site-c-dam-to-cost-16-billion-de/

⁶ www.IESO.ca/Power-Data/Price-Overview/Global-Adjustment

year period from 2020-21 to 2039-40, the FAO estimates that the nine programs will cost the Province a total of **\$118.1 billion**.⁷ This is tax payer money that cannot go to healthcare, education or other important government programs. It's money that's being spent in response to poor electricity policy.

None of this consumer burden exists in Alberta.

Yes, issues like wires costs in Alberta remain. But even then, Alberta's annual \$2 billion in transmission revenue requirement needs some context. Importantly, no other province has a load like Alberta does. Not only does Alberta's power consumption have highest load factor in North America, requiring reliable supply 24/7, but load in Alberta is far flung. Alberta's oil and gas industry operates in the far northern reaches of the province. Well heads need to connect to gathering and processing facilities, then to upgraders and refineries in central Alberta, and then be exported out at far the south west, south and south east borders of the province courtesy of pipelines and their compressor stations. No other province in Canada has an industrial load of the scale and geographic dispersion as Alberta's. \$2 billion in transmission wires helps enable Alberta's annual \$300 billion GDP. This context is important.

Yes, wholesale market prices have also been elevated in recent months. No question. This is largely due to rising natural gas prices, rising demand and rising operating costs from the goal of converting coal generation to gas. However, thanks to competition and choice, industrial consumers and commercial consumers and even universities can produce power on site and sell into the market to earn those market prices. In addition, residential consumers are shielded from wholesale prices by the choice offered by competitive retailers. The ~ ¢8-9/KWh residential contracts being offered by Alberta's competitive retailers are cheaper than today's wholesale prices.

Our market has not been perfect, and there are big challenges coming on the path to decarbonize, but, competition works.

This I know to be true.



Evan Bahry

Executive Director

ENDNOTES: ¹ Composition of Ontario's Global Adjustment Payment

Wind

- Includes projects under Renewable Energy Supply, Renewable Energy Standard Offer Program, and the Feed-in-Tariff program

Biomass, Landfill and Byproduct

- Includes projects under Renewable Energy Supply, Renewable Energy Standard Offer Program, Feed-in-Tariff, converted OPG Atikokan facility, and NUG contracts with the IESO

Hydro

⁷ www.fao-on.org

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- Facilities with agreements through Renewable Energy Supply Program, Renewable Energy Standard Offer Program, Hydroelectric Contract Initiative, Hydroelectric Standard Offer Program, and the Feed-in-Tariff programs, as well as OPG's facilities that fall under the Hydroelectric Energy Supply Agreement

Nuclear

- Bruce Power nuclear

Natural Gas

- Natural gas facilities including OPG's Lennox (dual fuel)

Solar

- Includes projects under Renewable Energy Supply, Renewable Energy Standard Offer Program, and Feed-in-Tariff program.

Other Programs - IEI and Storage

- Industrial Electricity Incentive (IEI) Program: An incentive for eligible consumers in Ontario to increase industrial production. Eligible activities include building a new, or expanding, a facility that falls within a specific NAICS Canada 2012 sector
- Storage: Includes facilities operating under the Phase II energy storage program

Funds and Financing

- Includes programs supporting community groups in the design and delivery of renewable energy initiatives and also includes contract penalties received from generators

Conservation

- Conservation programs including Save on Energy and Grid Innovation Fund (formerly Conservation Fund)

Ontario Power Generation – Regulated Nuclear and Hydro

- Regulated rates for OPG's nuclear and remaining hydro generation as set by Ontario Energy Board

Ontario Electricity Financial Corporation – Non-Utility Generation

- Contracts administered by Ontario Electricity Financial Corporation with existing generation facilities