

MEETING NOTE

NAME OF MUNICIPALITY/ORGANIZATION: Eastern Ontario Wardens' Caucus (EOWC)

DATE/TIME OF MEETING: Monday, January 30th, 2017 (2:15 p.m. – 3:00 p.m.)

LOCATION OF MEETING: Yorkville West Room, Sheraton Toronto, 4th Floor

ATTENDEES: Minister of Energy
Glenn Thibeault

Eastern Ontario Warden's Caucus
Peter Emon, Chair EOWC

AGENDA:

1. High Electricity Costs
2. Marmora Pumped Storage
3. Natural Gas Expansion

NOTES ON AGENDA ITEMS:

1. High Electricity Costs

- Concerns about electricity costs for business and residents

Suggested Response:

- Our government continues to ensure a clean, reliable and affordable electricity system for all Ontarians.
- Prices are increasing because our energy system is being transformed – we are making needed investments to modernize the system. We chose to replace coal-fired generation with cleaner sources of energy, which benefit our environment and the health of Ontarians.
- Ontario is taking action to reduce electricity bills for families. We're doing this because we know that families need help with the cost of everyday living.

- **Conservation is the cleanest and most cost-effective energy resource, offering homeowners and business a way to manage their energy bills while reducing the need for the province to build new generation, transmission and distribution infrastructure.**
- **I would be happy to tell you more about any specific programs of interest that are place to help Ontario families and businesses with their electricity bills.**

Background:

Residential Electricity Prices

- Ontario is taking action to reduce electricity bills for families, farms and businesses. We have introduced new measures that will take effect January 1, 2017, including:
 - Rebating an amount equal to the provincial portion of the HST to reduce eligible residential, small business and farm electricity bills by 8% (\$130 annually); and
 - Providing eligible rural ratepayers with additional relief, decreasing total electricity bills by an average of \$540 a year or \$45 each month, when combined with the 8% rebate.
- The 8% rebate and RRRP increase would be in addition to the existing programs that provide support to Ontario families in paying their bills:
 - The Ontario Energy and Property Tax Credit saves qualifying individuals up to \$1,008 per year, with a maximum of \$1,148 per year for qualifying seniors.
 - The Low-Income Energy Assistance Program provides emergency financial support of up to \$600 for families and individuals having trouble paying their bills.

Click [here](#) for additional background regarding High Electricity Costs.

2. Marmora Pumped Storage Project

- Northland Power has a proposed pumped storage project in a former mine located in Marmora. For a number of years, supporters of the project from the community have been in contact with ENERGY querying why the project has not received provincial support.

Suggested Response:

- **Energy storage technologies have the potential to revolutionize the electricity system, increase its efficiency, lower costs and increase reliability for the consumers.**
- **While the province is in a strong supply situation at this time, the government, together with the IESO, will continue to assess the merits of the project.**
- **To support the province's efforts to better understand the integration of energy storage into Ontario's electricity system and market, the IESO recently procured 50 MW of energy storage technologies.**
- **We welcome the involvement of private sector developers such as Northland Power in Ontario's electricity system. Pending appropriate regulatory approvals, Northland Power is free to construct and operate their proposed Marmora facility and buy and sell power on Ontario's existing wholesale electricity market.**
- **Going forward Ontario electricity consumers can expect to benefit from IESO's transition to a market-based approach to procuring resources through the implementation of an Ontario capacity auction.**

Background:

- The proposed 400 megawatt (MW) Marmora facility would use an existing mine pit for a lower reservoir and a purpose-built upper reservoir using waste rock as a dike. The plant would be able to generate at full capacity for about 5 hours. The upper reservoir could be refilled in approximately 6 hours by pumping at full capacity.
- The IESO has procured 50 MW of energy storage capacity in two phases:
 - In the first phase, IESO selected storage technologies from five companies, for a total of 33.54 MW, to provide ancillary services to support increased reliability and efficiency of the grid.
 - The second phase of the procurement was focused on two specific aspects of energy storage: its capacity value – the ability to be available to store energy and provide it back when called upon – and its arbitrage value – the ability to store energy during lower priced periods and inject it back into the electricity system when prices rise, and the value of energy increases. The IESO offered 10-year contracts to five companies for nine separate energy storage projects totalling 16.75 MW.
 - Note: The proposed 400 MW Marmora project was too large to be eligible for either phase of the procurement.

- Click [here](#) for additional background regarding Item 3.

4. Natural Gas Expansion

- Ongoing interest in the government providing support for the expansion of natural gas service to Ontario residents and industries in underserved communities.

[NOTE TO DMO: MOI is currently revisiting its position on the rollout of the Natural Gas Access Loan program which was scheduled for fall 2016. It is now considering replacing it with a natural gas grant program. Hence, this note on Natural Gas Expansion will require revision prior to ROMA.]

Suggested Response:

- **The Government is working to develop a financial assistance program to address natural gas expansion. The Ministry of Infrastructure is responsible for establishing the program and the Ministry of Energy is providing support.**
- **Natural gas expansion in Ontario is overseen by the Ontario Energy Board (OEB) and managed by the private sector natural gas distribution companies.**
- **On November 17, 2016 the OEB issued its Decision that ensures the regulatory environment is ready to help underserved communities connect to natural gas.**
- **We are interested in hearing about the challenges faced by your community in trying to get access to natural gas and suggestions you may have to help facilitate access in your community.**

Background:

- In recent budgets, the 2013 LTEP, and announcements, the Ontario government has committed to pursue options to expand natural gas infrastructure to service more communities in rural and northern communities.
- The Ministry of Infrastructure is the ministry responsible for establishing any funding programs, and the Ministry of Energy will provide support.
- Municipalities/regions wishing to acquire natural gas service should work with natural gas distributors whose territory they fall under (or possibly another existing utility or new market entrant) to assess costs and opportunities to bring natural gas to the area.

- When evaluating opportunities for natural gas expansion, distributors need to address the cost of building the necessary infrastructure to connect a municipality. The distributors also need to determine if it is commercially viable to service the specific community.
- In addition, major natural gas expansion projects need to be reviewed and approved by the OEB before construction can begin. However, smaller projects below specified thresholds can proceed without a formal OEB approval to construct.

Eastern Ontario Wardens' Caucus

The EOWC is a group of eleven Eastern Ontario Counties and two single-tier municipalities, working in conjunction with the provincial and federal governments to promoting its region and focus on its priorities. The population in counties and upper-tier municipalities within the EOWC is just over 700,000.



MEDIA SCAN:

- Reporting noted that the EOWC has never taken a position either for or against the Energy East pipeline project.
- Local communities / farmers are urging the government to help the rural economy and residents by pushing for natural gas expansion.
- The Ontario Federation of Agriculture (OFA) has teamed up with the Western Ontario Wardens' Caucus and Eastern Ontario Wardens Caucus to lobby for pipeline expansion that would make natural gas available to at least 60 per cent of rural Ontario.

APPENDIX:

1. High Electricity Costs – Background:

Energy Conservation Programs

- Ontario has a suite of conservation and energy efficiency programs in place that help homes and business consumers (including municipal, commercial and industrial customers) manage rising energy prices through services and financial incentives for the installation of energy saving measures, or by using energy wisely.
- These programs are available through the Independent Electricity System Operator (IESO), local distribution companies (LDCs) and natural gas utilities.

Ontario Electricity Support Program

- The Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements.
- OESP monthly credits range from \$30 to \$50. A household receiving the lowest OESP credit would receive \$360/ year off their bills, or \$430/ year when combined with the removal of the DRC.

Commercial and Industrial Electricity Prices

- Indicative industrial electricity prices in Ontario are close to the United States average as reported by the U.S. Energy Information Administration.
- Measures in place to mitigate industrial electricity prices include:
 - Industrial Conservation Initiative (ICI);
 - Industrial Accelerator Program (IAP)
 - SaveONenergy for Business Program; and
 - Demand Response.

ICI Expansion

- The Industrial Conservation Initiative (ICI) allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours. Reducing demand during peak hours benefits companies financially and benefits the electricity system by deferring the need for new peaking generation.
- To give more businesses the incentive to participate in the ICI, we have lowered the threshold to 1 MW and removed sector restrictions so that more consumers can benefit.

- Newly eligible consumers will be able to opt-in to the ICI program at their discretion. These consumers will see the impact beginning in July 2017.

The Low-Income Energy Assistance Program

- The Low-Income Energy Assistance Program (LEAP) is a comprehensive province-wide strategy designed to help qualifying low-income consumers. The program includes:
 - Emergency financial assistance: A one-time grant towards your electricity or natural gas bill if you are temporarily unable to make ends meet in an emergency situation.
 - Special rules: Utilities have to follow special rules when dealing with customers with limited finances; for example, waiving security deposits, allowing longer payment times and more.
 - Conservation programs: Administered through local distributors to help qualified Ontario homeowners, tenants and social housing providers improve energy efficiency.
- The government has recently introduced The Burden Reduction Act (Bill 27) which would, if passed, provide the OEB with authority to establish additional rules regarding when and how utilities can disconnect customers from electricity and gas.
- Other assistance for low-income energy consumers is provided through the Ontario Energy and Property Tax Credit (OEPTC).

Conservation Programs for Residential, Business and Industrial Customers

- Examples of residential programs include:
 - The saveONenergy Heating and Cooling Initiative provides rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.
 - saveONenergy Coupons are available in-store for one month in the spring and fall and can be downloaded year-round to use at participating retailers to help Ontarians save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.
 - The saveONenergy Home Assistance Program was developed to help income-eligible homeowners and tenants manage their energy use and costs by offering detailed in-home energy assessments and installing

energy-saving measures at no cost. Enbridge Gas and Union Gas also offer eligible low-income households a home energy assessment and insulation and draft proofing measures at no cost.

- New pilot programs for the residential sector are also being rolled-out to support innovative electricity conservation projects. For example, in October 2015, Hydro One launched Heat Pump Advantage pilot program to help customers with electric space or water heating to take advantage of new heat pump technologies. Hydro One paid 50% of costs for an industry-leading air source heat pump and up to \$800 towards costs of a heat pump water heater.
 - Financial incentives are also available for energy audits and energy efficient technologies like furnaces, water heaters, and insulation upgrades in the home – up to \$2,100 through the Enbridge Home Energy Conservation Program and \$5,000 through Union’s Home Reno Rebate. Enbridge also provides a rebate to customers who have purchased a new adaptive (smart) thermostat. The Province is investing \$100 million from the Green Investment Fund to make this program available across the province to homes that heat with natural gas, oil, propane and wood.
 - Union Gas also offers financial incentives to homeowners who upgrade to a 95% or greater efficiency rating furnace when the existing furnace reached end of life.
- For business customers, examples include:
 - The Save on Energy Retrofit Program provides various incentives for as much as 50 per cent of project costs for updating old or inefficient equipment, including lighting, motors, unitary AC or packaged rooftop units, variable frequency drives, and compressed air systems. Advanced funding is available for assisted and social housing buildings.
 - Save on Energy Small Business Lighting provides incentives of up to \$2,000 for new energy efficient lighting.
 - Save on Energy Audit Funding of up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.
 - Save on Energy Process and Systems provides up to \$50,000 for engineering studies and up to 70% of capital costs for energy efficiency upgrades.

- Save on Energy New Home Construction is designed to encourage home builders and renovators to construct energy-efficient homes, and includes incentives for installation of energy-efficient measures.
- IESO's Save on Energy TRAINING & SUPPORT initiatives help provide access to the most up-to-date training, such as in building commissioning, certified measurement and verification, and how to be an energy manager.
- Natural gas conservation programs for business are supported by the Demand Side Management Framework, funded out of natural gas rates, and delivered by Ontario's two largest natural gas utilities, Enbridge Gas Distribution and Union Gas. For example:
 - Under the Fixed Incentive Offer, Enbridge and Union provide financial incentives for a set list of natural gas reducing measures (e.g. furnaces, water heaters, ovens etc.), typically with pre-determined incentive amounts and estimated savings.
 - Under their custom incentive offers, Enbridge and Union provide financial incentives for customized natural gas reduction projects.
 - The *RunSmart* and *RunItRight* programs help to enhance and optimize existing building systems and operations to find energy efficiencies.
- For industrial customers:
 - The Industrial Accelerator Program (IAP) assists eligible transmission-connected companies to fast track capital investment in major energy conservation projects. The program provides financial incentives to encourage investment in innovative process changes and equipment retrofits to reduce electricity consumption on the provincial system and to help companies become more competitive by positively impacting their bottom line. Transmission-connected customers with distribution-connected sites can also elect to have these administered through the IAP.
 - The Process and Systems Upgrade Initiative (PSUI) is an industrial conservation program available to distribution-connected industrial and commercial customers. The program helps organizations with complex systems and processes identify, implement, and validate energy efficiency projects from start to finish.
 - The IESO holds annual Demand Response auctions which provide availability and utilization payments to successful participants that commit to reducing their consumption when called upon to do so, such as during periods of peak demand.

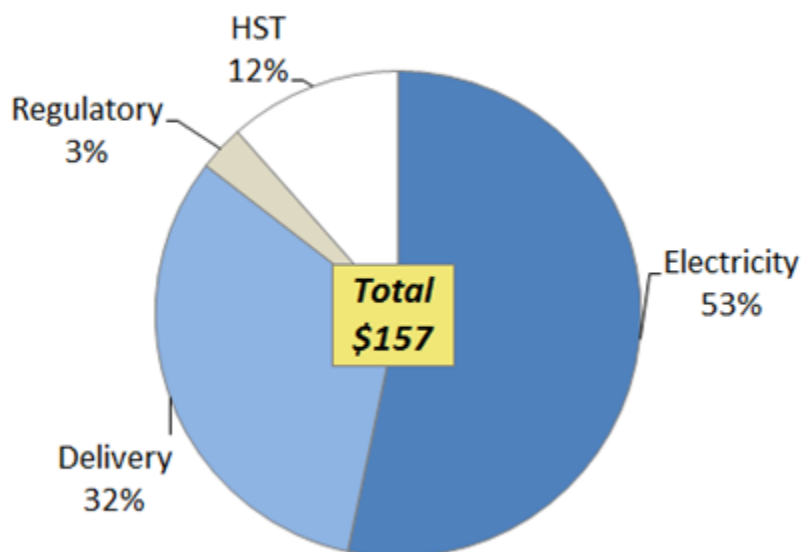
- The Union Gas Large Volume Direct Access Program energy efficiency program provides financial incentives to be used for studies, new equipment, operation & maintenance, metering, and new technology demonstrations.
- Enbridge provides its industrial customers with a dedicated Energy Solutions Consultant (ESC) who will work with customers to develop a solution that meets their unique energy, budget and cost savings objectives. Over the past three years alone, Enbridge ESCs have helped customers save:
 - o 110,000,000 m3 of natural gas
 - o 20,000,000 KWh of electricity
 - o 800,000 m3 of water

Bill 144, Budget Measures Act 2015:

- Finance's amendment in Bill 144, Budget Measures Act 2015, sets a fixed date for removing the Debt Retirement Charge (DRC) for commercial, industrial and other non-residential electricity users on April 1, 2018, nine months earlier than previously estimated.
- Ending the DRC on a legislated fixed date provides certainty to commercial, industrial and other users to help them plan their investments more effectively.

Typical Residential Monthly Bill

November 1, 2016 RPP TOU prices, 750 kWh



Source: Ministry of Energy calculations based on Toronto Hydro rate order

Figure 1: 2016 Residential Pricing Comparison

2016 Residential Electricity Prices (Canadian ¢/kWh)											
Jurisdiction		Cost	Jurisdiction		Cost	Jurisdiction		Cost			
1	Quebec	7.34	17	Nebraska	13.63	33	Nevada	15.22	49	Maine	18.36
2	Manitoba	8.68	18	Utah	13.71	34	Saskatchewan	15.32	50	Maryland	18.39
3	British Columbia	9.92	19	Oklahoma	13.99	35	Virginia	15.36	51	Wisconsin	18.50
4	Alberta	11.11	20	Wyoming	14.07	36	Arizona	15.82	52	Ontario	18.98
5	Louisiana	11.74	21	Mississippi	14.09	37	California	15.87	53	Michigan	19.14
6	Washington	11.94	22	Montana	14.12	38	Alabama	15.90	54	New Jersey	19.87
7	Newfoundland	12.48	23	Florida	14.17	39	U.S. Average	15.91	55	New York	22.26
8	Idaho	12.63	24	Georgia	14.28	40	Minnesota	16.15	56	Vermont	22.43
9	Canadian Average	12.84	25	Texas	14.44	41	Nova Scotia	16.24	57	New Hampshire	23.90
10	Arkansas	12.85	26	West Virginia	14.45	42	Ohio	16.33	58	Rhode Island	24.87
11	Tennessee	13.08	27	New Mexico	14.52	43	South Carolina	16.35	59	Massachusetts	26.42
12	New Brunswick	13.19	28	South Dakota	14.58	44	Illinois	16.37	60	Alaska	26.52
13	Missouri	13.26	29	Iowa	14.99	45	PEI	16.84	61	Connecticut	27.07
14	Kentucky	13.26	30	North Carolina	15.00	46	Kansas	17.22	62	Hawaii	34.47
15	Oregon	13.44	31	Colorado	15.08	47	Delaware	17.79			
16	North Dakota	13.47	32	Indiana	15.16	48	Pennsylvania	18.27			

Note: Estimates may differ from actual costs to a consumer based on location, connection, and operational characteristics. Prices exclude taxes and participation in any applicable jurisdictional benefit programs.

The Ontario residential price is based on the residential bill in the Q2 2016 Ontario Energy Report.

All other Canadian prices are from the Hydro Quebec Rate Comparison for rates effective April 1, 2016 for select local distribution companies servicing specific cities. Where Hydro Quebec reports prices for two cities in a province (e.g. Calgary and Edmonton), an average of the two is used, in provinces where only one city is reported (e.g. Vancouver in BC, Montreal in QC), that one price is used to represent the province for indicative comparison purposes.

American jurisdictions reflect April 2016 data from the US Energy Information Administration's survey of approximately 500 of the largest electric utilities. The price reflects the average revenue reported by the electric utility from electricity sold to the residential sector. The value represents an estimated average retail price, but does not necessarily reflect the price charged to an individual consumer. Prices are converted at an exchange rate of 1 USD = 1.28 CAD.

Existing Price Mitigation Measures

- The Ontario Energy and Property Tax Credit (OEPTC) provides low- to moderate-income Ontarians, including seniors, who own or rent a home with help paying both their energy costs and property tax.
 - Qualifying individuals can receive up to \$1,008 in tax relief annually, and seniors can receive up to \$1,148 annually.
- The Low-Income Energy Assistance Program (LEAP) offers emergency financial assistance as on-bill assistance up to \$600 annually, special customer service rules, and energy conservation programs to qualifying electricity and natural gas consumers.
- The saveONenergy Home Assistance Program was developed to help income-eligible consumers manage their energy costs by providing home energy efficiency assessments and energy savings measures at no cost.
 - Eligible participants can receive energy efficient appliances like refrigerators and window air-conditioners. Eligible participants in electricity heated homes can also receive a programmable thermostat, weatherstripping services and insulation services.
- The Ontario Electricity Support Program (OESP), developed and implemented by the Ontario Energy Board (OEB) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The OESP started January 1, 2016, when the OCEB ended.
 - The OESP provides a fixed monthly credit directly on eligible customers' bills, the amount of which will be based on a consumer's household income and household size. This allows the program to provide the greatest benefit to low-income consumers in need of assistance.
- To help ease pressure on residential ratepayers, the government removed the cost of the Debt Retirement Charge (DRC) from residential electricity bills as of January 1, 2016:
 - Eliminating the DRC saves a typical residential electricity ratepayer \$5.25 per month, before taxes.

2. Marmora Pumped Storage – Background:

- Pumped storage facilities typically operate by pumping water from a lower reservoir during hours of low prices and then releasing water through turbines from an upper reservoir during periods of higher prices.
- Once a pumped storage facility is built, generation is economic at times when the payment for generating exceeds the cost of pumping.
 - Typically pumped storage facilities are in the range of 70%-80% efficient. This means that for every MWh of electricity used for pumping, a plant can later generate 0.7-0.8 MWh.
 - As such, on-peak prices must typically exceed off-peak prices by 25%-43% in order for generation to be economic.