

MEETING NOTE

NAME OF MUNICIPALITY/ORGANIZATION: Town of Cochrane

DATE/TIME OF MEETING: Monday, January 30th, 2017 (12:00 p.m. – 12:15 p.m.)

LOCATION OF MEETING: Davenport Room, Sheraton Toronto, 4th Floor

ATTENDEES: **Minister of Energy**
Glenn Thibeault

Town of Cochrane
Peter Politis, Mayor
Claude Bourassa, Councillor
Darryl Owens, Councillor
JP Ouellette, CAO

LAST MEETING: **November 21, 2016 with Minister in Toronto**

AGENDA:

1. Cochrane Power Biomass contract
2. High Electricity Costs

NOTES ON AGENDA ITEM:

1. Cochrane Power Biomass contract

- Given that the Northland Power-owned former Non-Utility Generator (NUG) Cochrane Power is no longer in operation, the Town of Cochrane is interested in exploring alternative options for the facility and its former biomass suppliers Tembec and Rockshield.
- On November 21, 2016, Mayor Politis and representatives for Rockshield and Tembec met with the Ministry of Energy, Ministry of the Environment and Climate Change (MOECC) and Ministry of Natural Resources and Forestry (MNRF) to discuss options related to Cochrane Power supplying Tembec and Rockshield with electricity generated from biomass.

Suggested Response:

- I appreciate the importance of the biomass sector to the Cochrane area.
- I would be interested to hear about the outcomes of your recent meeting with your Local Distribution Company (LDC) and representatives of local industry regarding the potential future use of the 11 megawatt (MW) Cochrane Power former biomass facility to supply electricity to local industrial electricity consumers.
- As you know we are beginning to develop Ontario's next Long-Term Energy Plan (LTEP).
- The next LTEP will be guided by a number of strategic themes including greenhouse gas reductions, innovation, grid modernization, conservation and energy efficiency, renewable energy, distributed energy and continued focus on energy affordability for homes and businesses.
- We are working closely with agencies and stakeholders during LTEP consultations and development – we welcome the input of the Town of Cochrane in this process.

Background:

- The Town of Cochrane is interested in exploring behind-the-meter generation (BMG) options for the 11 MW Cochrane Power biomass facility to supply electricity to Tembec and Rockshield. Note: Tembec and Rockshield would supply the biomass fuel to the Cochrane Power biomass facility.
- There are no provincial procurement programs available to the Cochrane Power plant but it may be possible for the facility to supply electricity to Tembec/Rockshield as a behind-the-meter generator (BMG).
- If Tembec/Rockshield were to have their load(s) met through BMG generation at the former Cochrane Power NUG, they could avoid certain costs paid by electricity customers connected to the grid. **Note:** Further analysis would be necessary if a proposal is forthcoming from Northland Power or Tembec/Rockshield.
- Moving forward, a broader assessment of options for both renewable and natural gas BMG in Ontario could be included in the development of LTEP 2017.
- On December 14, 2016, the Town of Cochrane met with Cochrane Power, Northern Ontario Wires (Town of Cochrane-owned LDC), Rockshield and Tembec.

- Click [here](#) for additional background regarding Item 1.

2. 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.
 - The Northern Ontario Energy Credit helps families and individuals in Northern Ontario by providing tax credits for low- to middle-income families and individuals living in northern Ontario. The maximum annual credit for a single person is \$146, and for a family (including single parents), is \$224.

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

Town of Cochrane

The Town of Cochrane is located in Northern Ontario, northeast of Timmins, and south of Moosonee. As of 2011, Cochrane has a population of 5,340 that is made up of approximately half anglophone and half francophone residents.



MEDIA SCAN:

- The Cochrane Times-Post reported on a think-tank session held in Toronto on November 21st between Cochrane Power, the Town of Cochrane and several provincial ministries – including the Ministry of Energy. At the meeting, a new model was proposed that would see Cochrane Power supply the district instead of the provincial grid. The proposed District Energy Model would be the first of its kind in Ontario if it were to move forward. A follow-up meeting was set for December 14, 2016.
- In November, the Cochrane Times-Post reported a court ruling has forced the Ontario Electricity Financial Corporation to pay out \$179 million to a handful of power producers due to a miscalculation in a power purchase agreement five years ago. The companies receiving the retroactive payments include the Iroquois Falls Power Corporation, the Cochrane Power Corporation, and a handful of others.
- Ontario Energy Board representatives visited Cochrane in November to discuss Northern Ontario Wires Inc.'s (NOW Inc.) application to increase distribution rates by \$5.62 per month.

APPENDIX:

1. Cochrane Power Biomass Project – Background:

BMG at the Cochrane Power facility

- On November 21, 2016, Mayor Politis and representatives of Tembec and Rockshield expressed interest in exploring the option of Cochrane Power supplying electricity on a BMG basis (i.e., not via the electricity grid) to Tembec and Rockshield.
- Such a project may require the construction of private transmission lines between the Cochrane facility and Tembec/Rockshield. The cost of such transmission lines would be borne by Northland or Tembec/Rockshield.
- If Tembec and/or Rockshield wished to build a transmission line directly to the Cochrane biomass facility, they would need to comply with the Ontario Energy Board's Transmission System Code (TSC).

The TSC sets out the minimum standards that an electricity transmitter must meet in designing, constructing, managing and operating its transmission system.

Tembec and/or Rockshield would be subject to tests which may be applicable such as connection and system impact assessments, standards outlined by the Electrical Safety Authority and adherence to existing legislation for transmitters as outlined in the Ontario Energy Board Act and the Electricity Act.

- This option would not be eligible for BMG funding through the Process System and Upgrades Initiative (PSUI) or the Industrial Accelerator Program (IAP).

PSUI/IAP program rules require that proposed BMG projects not have existing or previous electricity generation contracts with the IESO, the Ontario Electricity Financial Corporation (OEFC) or other government agencies. Up until 2015, the Cochrane Generating station was under contract with the OEFC.

Moreover, program rules require that funding be used for the setup of an on-site BMG project (i.e., not for the construction of transmission infrastructure and the electricity from the project would not be consumed on-site (i.e., on the site of the Cochrane biomass facility).

Economic Constraints affecting Cochrane Power

- Cochrane Power is located in the Northeast transmission area and IESO's analysis for LRP II indicates that this area currently experiences transmission congestion and would have been closed to any proposals under LRP II, either for new projects or existing facilities.
- Reduction in local electricity demand in the Northeast as well as the development of hydroelectric and other renewables over the last 10 years has led to the area being congested.
- Contracting any additional generation in a constrained area results in the additional generator and/or other existing generators being curtailed off during periods of congestion, creating economic inefficiencies in the electricity market and increasing costs to ratepayers.
- This transmission-constrained situation is not expected to change in the short-term since it would require new significant load growth in the Northeast or major new transmission lines.
- It is not clear how the congestion situation in the northeast would impact the viability for a potential BMG project, as this would depend on factors such as the connection configuration, connection/system impact assessments, and/or whether the project would try to access funding through an IESO administered funding program.

Northland Power's Cochrane Power Generating Station

- Northland Power's Cochrane Power generating facility (27 MW natural gas, 11 MW biomass) was commissioned in 1990 and sold electricity to the Ontario grid as a "Non-Utility Generator" (or NUG) under a contract with the former Ontario Hydro. Following the restructuring of Ontario Hydro in 1998, NUG contracts were assigned to the Ontario Electricity Financial Corporation (OEFC).
- Northland Power's NUG contract with the OEFC was extended from the original contract expiry date of January 12, 2015 to May 12, 2015, to allow time for Northland Power and other stakeholders to assess alternative options – other than a new NUG contract – for the facility.
- The Cochrane Power facility was shut down in 2015, though Northland Power indicates that comprehensive maintenance agreements with the original equipment manufacturer are in place.
- Cochrane Power supplied heat to the Tim Horton Event Centre in Cochrane, was the Town of Cochrane's largest water customer, and was purported to have supported hundreds of well-paying local jobs (direct and indirect).

- While in operation Cochrane Power used wood chips to generate electricity, which were sourced from the waste material of local mills, such as Tembec's Cochrane facility and the Rockshield Engineered Wood Products factory. Tembec and Rockshield note they now face increased costs associated with transporting this wood waste a longer distance for disposal.

2. High Electricity Costs – Background:

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);
 - Northern Industrial Electricity Rate Program (NIERP);

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.

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.

Northern Industrial Electricity Rate Program

- Participants in the Northern Industrial Electricity Rate Program (NIERP) receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by over 20% through the program.
- In 2015, the Ontario government announced the commitment to an ongoing NIERP beyond March 2016.

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

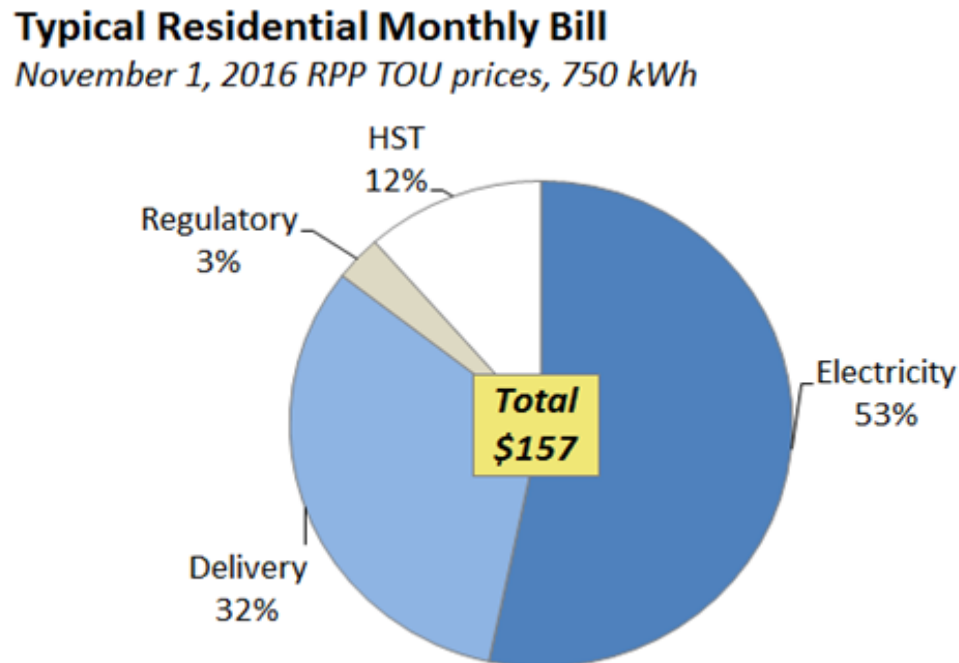
to reducing their consumption when called upon to do so, such as during periods of peak demand.

- 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:
 - 110,000,000 m3 of natural gas
 - 20,000,000 KWh of electricity
 - 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.

Figure 1: Typical Residential Bill



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

Figure 2: 2016 Residential Pricing Comparison

2016 Residential Electricity Prices (Canadian ¢/kWh)							
Jurisdiction	Cost	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 Northern Ontario Energy Credit (NOEC) provides assistance to low- to moderate income individuals and families living in northern Ontario who can be exposed to higher energy costs due to more severe winters and heavier reliance on more expensive home heating fuels.

Qualifying individuals can receive up to \$146 annually and families (including single parents) can receive up to \$224 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, weather-stripping 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 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.