## ONTARIO ENERGY BOARD

#### GENERIC PROCEEDING ON NATURAL GAS EXPANSION IN COMMUNITIES THAT ARE NOT SERVED

#### INTERROGATORY RESPONSES OF THE NORTHWESTERN ONTARIO ASSOCIATED CHAMBER OF COMMERCE, THE NORTHWESTERN ONTARIO MUNICIPAL ASSOCIATION AND COMMON VOICE NORTHWEST (THE "NOACC COALITION")

# **EXHIBIT S10**

## TO ENVIRONMENTAL DEFENCE (ED)

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## THE NORTHWESTERN ONTARIO ASSOCIATED CHAMBER OF COMMERCE, THE NORTHWESTERN ONTARIO MUNICIPAL ASSOCIATION AND COMMON VOICE NORTHWEST (THE "NOACC COALITION") RESPONSES TO INTERROGATORIES OF INDUSTRIAL GAS USERS ASSOCIATION (IGUA)

## **INTERROGATORY #1**

#### Ref: NOACC, NOMA and CVNW evidence

Does NOACC, NOMA and CVNW agree that existing gas consumers should be required to subsidize expansions of Ontario's natural gas distribution system only if all of the following criteria are met:

- (a) The expansion will lead to a net reduction in Ontario's greenhouse gas emissions [e.g., this could occur if the new customers' previous energy source (e.g., heating oil) had higher greenhouse gas emissions];
- (b) Expanding the gas system is the most cost-effective, feasible option to achieve the greenhouse gas emission reductions [i.e., do not expand the gas distribution system using existing customer subsidies if the emission reductions could be achieved at a lower cost by energy efficiency or renewable energy investments (e.g., home energy retrofits, heat pumps)]; and
- (c) The subsidy is necessary to make the project happen [e.g., do not require existing customers to subsidize and expansion of the gas system if the cost could be recovered from the new customers via a surcharge on their gas rates]?

If "no", please fully justify your response. Please specifically address each of the three criteria in your response. Note that the above criteria would not be to the exclusion of other criteria required for community expansion.

#### **RESPONSE**

(a) It is the position of the NOACC Coalition that there will be a net reduction in Ontario's Greenhouse gas emissions as residential, commercial and industrial users of heating fuel are able to convert to natural gas. For example, the Municipality of Red Lake, which includes Balmertown and Cochenour, saw natural gas service introduced recently to 856 homes, 83 commercial customers and 2 Ontario Energy Board Generic Community Expansion Filed: 2016-04-22 EB-2016-0004 S10.NOACC.ED.1 Page 2 of 4

industries. It is projected that an additional 400 homes and businesses will be converted over the next few years. The Economic Development Officer for Red Lake reported that "fuel oil was the prominent fuel in Red Lake." Other fuel sources included electricity and propane. Electrical customers are subject to regular outages due to the inadequate transmission infrastructure currently in place (radial line service.)

For a number of the communities and portions of communities in (b) the Northwest without natural gas service, the installation of large scale piped natural gas is the most efficient way to bring down green house gas emissions in a large scale manner. The other options, while valid but not as sufficient in energy production, can be implemented in the more scattered portions of the Northwest, are unlikely to be selected by individual consumers unless there are significant government subsidies to make the options affordable. Our calculations<sup>1</sup> indicate that fuel oil costs in the vicinity of \$34.32 per Million btu (Greenstone price)<sup>2</sup>, electricity at \$64.48 per Mbtu<sup>3</sup>, and electricity for a geothermal heat pump rated at \$21.93 per Mbtu<sup>4</sup> while Natural Gas is at \$2.35 per Mbtu<sup>5</sup>. Fuel oil is 14 times more expensive and electricity is 27 times more expensive than natural gas to generate the same amount of heat in an area of the province where long periods of minus 20 or lower temperatures occur. The electricity for geothermal heat pump is rated at 9 times more expensive than natural gas. Conversion to natural gas will provide a significant economic stimulus in an area of the province

<sup>3</sup> **Electricity** was calculated at \$.22 per Kwh (price paid by Marathon for March 2016) at 3,412 BTU value and using baseboard heaters. The result was \$64.48 per Mbtu.

<sup>4</sup> **Electricity for a Geothermal Heat Pump** at \$.22 per kwh results in \$21.93 per Mbtu.

<sup>&</sup>lt;sup>1</sup> the following two web sites were used to assist in determining the comparison: <u>http://www.buildinggreen.com/calc/fuel\_cost.cfm; http://www.onlineconversion.com/volume.htm</u>

<sup>&</sup>lt;sup>2</sup> **Fuel Oil #2** was calculated at \$3.25 per gallon with a BTU value of 138,690 using an Energy Star furnace with 83% efficiency. The result was \$34.32 per Mbtu: CALCULATION 1 gallon [US, liquid] = 3.785 411 784 liter. The price of fuel oil in Greenstone was \$.96.11 (inc Fuel Tax) per litre =\$3.638 per US Gallon.

<sup>&</sup>lt;sup>5</sup> **Natural Gas** was priced at .080004 per M<sup>3</sup> Using the building green web site the unit of ccf which is the US Centrum Cubic Feet measure where 1 ccf is equal to 100 Cu Ft. That was converted to 2.8316846592 Cubic Metre. The end result is \$2.35 per Mbtu.

that has been devastated by the collapse of the forest industry over an above the benefits from the installation of natural gas service.

Unfortunately, the few funding programs currently available to individual home owners for energy efficiency retrofits are limited in their scope and the total budget available. Few people in the Northwest have taken advantage of the available programs in large part because the cost of their existing heating fuel reduces their ability to save for the required retrofits. Remaining on fuel oil, even in an environmentally friendly home will not eliminate the risk of a degradation of the natural environment due to leaks and spills.

The cost of living in the small Northwestern Ontario communities is very high and part of the reason for this is the high cost of heating with fuel oil or electricity.

It is important to note that the Northwest does not have sufficient electrical power to meet the growing industrial needs of the region. Shifting home heating from electrical to natural gas will free up some of the electrical load that can then be made available to new mines and a resurgent forest industry. For example, connecting Red Lake to the Natural Gas system has/will shift 30 MW of consumption from electricity to natural gas in order to ensure that some of the new electrical load can be accommodated with the existing inadequate transmission system.

(c) The distances between communities and First Nations in Northwestern Ontario are significant and as a result the cost of bringing natural gas to these communities is well beyond the ability of the residents, businesses, institutions and the few remaining industries to fund. Northwestern Ontario has not recovered from the decimation of the forest industry. The majority of communities lost their main forest industry employer and with it a major part of their property tax base. The population of many of these communities has declined. The way to connect these communities in the same way that most of the communities in Ontario are connected is through a capital subsidy based on a levy on each of the existing natural gas consumers in the province as well as the new consumers connected through this process. For example, the Municipality of Neebing, which has been advised by Union Gas that it would cost \$76.5 million to provide natural gas service to 249 of its residents (with the possibility of 150 additional customers),

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operates with a total annual budget of \$3.7 million with revenues of \$3.9 million (2014). Based on the current approved (Ontario Energy Board) formula, the cost that the 249 customers would be required to share equates to over \$307,000.00 per property owner (excluding the 150 potential customers). Even if those potential customers came "on board", the cost per owner would be \$191,804.00. Neither the municipality nor the potential individual customers are in a position to finance the expansion.

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