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Kirsten Walli
Board Secretary
2300 Yonge Street, Suite 2700
Toronto, ON
M4P 1E4

Dear Ms. Walli:

Re: EB-2016-0004 – Generic Proceeding on Natural Gas Expansion

We are counsel to Anwaatin Inc. (**Anwaatin**) in the above-mentioned proceeding. Please find attached the responses from Anwaatin to the interrogatories received from Ontario Energy Board Staff (**Board Staff**).

Should you have further questions on this matter, please do not hesitate to contact me.

Yours very truly,

Lisa (Elisabeth) DeMarco

Encl.:

ANWAATIN RESPONSE TO BOARD STAFF INTERROGATORY #1

Interrogatory: 1

Reference: Evidence of Anwaatin Inc., p. 2

Question: Anwaatin Inc.'s evidence discusses the International Energy Agency's four criteria for "energy access". In Anwaatin Inc.'s view, does electricity service in Ontario currently provide energy access as defined by the International Energy Agency's definition?

Response: Electricity service in Ontario does not currently provide energy access as defined by the International Energy Agency's definition. The International Energy Agency describes energy access as including:

- household access to a minimum level of electricity
- household access to safer and more sustainable (i.e., minimum harmful effects on health and the environment as possible) cooking and heating fuels and equipment
- access to modern energy that enables productive economic activity (e.g., mechanical power for business and industry)
- access to modern energy for public services (e.g., for health facilities, schools and community infrastructure)

And here are the conditions faced by many First Nation households:

- 10% of First Nation on-reserve households in Canada have no electricity or existing electrical problems¹
- 31% of First Nation households overall have unsatisfactory heating systems and 37% in mid and northern reserves²
- First Nation communities are more likely to report living in overcrowded or substandard housing. Both of these may be risk factors for asthma and related allergies in these populations, and respiratory infections are more likely to occur when children live in dusty, damp and *poorly heated* substandard

¹ Assembly of First Nations, 2013. Fact Sheet – First Nations Housing on Reserve. Online: <<http://www.afn.ca/uploads/files/housing/factsheet-housing.pdf>>.

² Ibid.

housing and more likely to pass these infections on when living in overcrowded conditions; widespread use of indoor wood stoves for home heating lead to poor indoor air quality, exacerbating existing asthma and allergy symptoms³

³ Asthma Society of Canada, 2009. A Shared Vision: Ensuring quality of life for adults and children with asthma and allergies in First Nations and Inuit Communities in Canada. http://www.asthma.ca/adults/Shared_Vision_English.pdf.

ANWAATIN RESPONSE TO BOARD STAFF INTERROGATORY #2

Interrogatory: 2

Reference: Evidence of Anwaatin Inc., p. 3

Question: Anwaatin Inc.'s evidence states that households amongst the First Nations represented by Anwaatin Inc. in this proceeding typically pay between \$1000-\$1500 per month for home heating costs. The evidence further states that similar homes on First Nations with access to natural gas pay \$100 or less per month on home heating. Please provide the source for these figures. Are these annualized costs, or are they for the heating season(s) only?

Response: Accurate data on First Nation home heating costs is not easily available. While the IESO has funded many Aboriginal Community Energy Plans, not all communities may have collected data on electricity and/or heating costs, and the resulting Plans are not publicly available from the IESO. According to a report by Aboriginal Affairs and Northern Development Canada (AANDC) and Natural Resources Canada (NRCAN):

“It is difficult to assess the current electricity production and uses for remote communities. These communities are scattered over vast regions comprising seven provinces and three territories and while regional bodies in charge of a group of communities might have good knowledge about a particular aspect of energy uses in these communities, this information is not readily shared and is often difficult to collate in a common format.”⁴

At best we have anecdotal information and a small number of published reports and grey literature:

⁴ AANDC and NRCAN, 2011. Status of Remote/Off-Grid Communities in Canada.
https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/2013-118_en.pdf.

- Published articles quoting reliable sources suggest that due to poor building standards, poor insulation and reliance on electrical baseboard heating or electric furnaces, First Nation residents in the north have December to February electrical bills ranging as high as \$700 to \$900 per month,⁵ usually supplemented with wood which can cost about \$300 per cord for dry hardwood, with a cord of wood lasting 2 to 4 weeks. This equates to monthly home heating costs of \$700 to \$1,500 per month from December to February
- Based on a draft Aboriginal Community Energy Plan being prepared by Aroland First Nation, which has heating approaches similar to many First Nations across the north, many homes have wood/electric furnaces or wood stoves, but rely mainly on expensive electric heat due to concerns with indoor air quality from use of smoke generating softwood and difficulty accessing more expensive dry hardwood
- Aroland First Nation is a representative “road connected” First Nation and has a draft Aboriginal Community Energy Plan report⁶ with data on household energy expenditures:
 - For the three-month winter heating period December 2014 to February 2015 the average electricity bill for households was \$428.77 per month (typically houses are raised bungalows)
 - Electricity bills ranged from \$152.67 to \$1,498.24 per month for houses
 - In many cases, households have difficulty paying winter electricity bills – late payment charges and accruing bills for several months are common
 - In addition to electricity, many Aroland First Nation households also pay monthly for wood and/or heating oil. In some cases, wood costs can be more than \$400 per month and heating oil costs can be as much as \$600 per month
- As an example of the cost challenges, one home in Aroland First Nation during December 2014 to February 2015 was

⁵ Labine, Jeff, 2015. First step to addressing energy issues on First Nations. Timmins Daily Press. <http://www.timminspress.com/2015/01/23/first-step-to-addressing-energy-issues-on-first-nations>; Faye, Donna, First Nations want connections to Ontario grid. Northern Ontario Business. <http://www.northernontariobusiness.com/Industry-News/aboriginal-businesses/First-Nations-want-connections-to-Ontario-grid.aspx>.

⁶ Aroland First Nation Aboriginal Community Energy Plan Report (draft), 2016. Shared Value Solutions. Unpublished report.

paying between \$200-\$399 per month for electricity, \$400 per month for firewood and \$200-\$349 per month for heating oil. The combined annual income for this family is \$40,000. That means that this family could be using up to 34% of their monthly income on electricity and heating alone during the coldest months

ANWAATIN RESPONSE TO BOARD STAFF INTERROGATORY #3

Interrogatory: 3

Reference: Evidence of Anwaatin Inc., p. 4

Question: Anwaatin Inc.'s evidence states: “[i]t is important to the First Nations supporting this application, and other First Nations across Ontario, that this hearing focus on the specific needs of First Nation communities in Ontario that do not have access to natural gas [...]”

Please describe the specific needs of First Nation communities that do not have access to natural gas. How are they different from other communities that are not currently served by natural gas?

Response: Answering this question requires acknowledging the fact that levels of poverty among First Nation households are very high and measures of community wellbeing are generally much different than for other communities. The following are statements from a Fact Sheet on the “Quality of Life of First Nations” produced by the Assembly of First Nations:

- One in four children in First Nation communities live in poverty. That’s almost double the national average
- Suicide rates among First Nation youth are five to seven times higher than other young non-Aboriginal Canadians
- The life expectancy of First Nation citizens is five to seven years less than other non-Aboriginal Canadians and infant mortality rates are 1.5 times higher among First Nations
- Tuberculosis rates among First Nation citizens living on-reserve are 31 times the national average
- A First Nation youth is more likely to end up in jail than to graduate high school
- First Nation children, on average, receive 22% less funding for child welfare services than other Canadian children

- First Nation people living on-reserve have the lowest labour force participation rate (52%) of any Aboriginal group, compared to 67% for non-Aboriginal Canadians
- First Nation citizens face much higher rates of chronic and communicable diseases and are exposed to greater health risks because of poor housing, higher unemployment, contaminated water and limited access to healthy foods
- Approximately 44% of the existing housing stock needs major repairs and another 15% require outright replacement
- Of the 88,485 houses on-reserve, 5,486 are without sewage services
- Mould contaminates almost half of all First Nation households
- One in five First Nations is diabetic – that's three to five times the national average
- First Nations are experiencing a housing crisis with approximately 85,000 housing units required across Canada. In many cases multiple families live in one and two bedroom homes

For First Nations households living in poverty, energy costs represent a large percentage of monthly expenditures. In 2006, the average household income for First Nations living on-reserve was \$15,958, compared to \$36,000 (before taxes) for non-Aboriginal Canadians. When household heating costs from December through February are high, First Nations households end up paying a much larger percentage of household income for heat than for non-Aboriginal Canadians. Access to low cost, clean energy heating sources is of critical importance to the health and wellbeing of First Nation communities.

ANWAATIN RESPONSE TO BOARD STAFF INTERROGATORY #4

Interrogatory: 4

Reference: Evidence of Anwaatin Inc., pp. 5-9

Question: Anwaatin Inc.'s evidence proposes a comprehensive Universal Service Fund (Fund) which would collect money from existing natural gas customers and use it to fund expansion to communities that are not currently served by natural gas.

- a) It appears that Anwaatin Inc.'s proposal is that every community in Ontario would be eligible for whatever funding is necessary to bring natural gas service to that community. Is that in fact what Anwaatin Inc. is proposing?
- b) Does Anwaatin propose a specific rate for the Fund? Would the revenues for the Fund be collected through a volumetric rate or a monthly fixed charge and would there be a maximum amount payable by a customer on an annual basis?
- c) Has Anwaatin Inc. conducted any analysis to determine the costs to existing natural gas consumers if its proposal for a Fund is adopted by the OEB? Should the OEB take into account the impacts on existing natural gas customers when considering the appropriateness of the proposed Fund?

Response:

- a) No. Anwaatin does not propose that every community in Ontario would be eligible for whatever funding is necessary to bring natural gas to that community. The objective of a Universal Service Fund approach is to enable natural gas distributors to bring potentially loss-making or marginal community service projects into a normal commercial rate of return after a one-time capital subsidy has been received to bridge the

distributor's financing gap. The subsidy is a once-only allocation (which may be disbursed against project milestones), but is not open to renegotiation or long term continuation. Targeted areas and communities must have the realistic potential for the natural gas distributor to achieve a normal rate of return after receiving the subsidy. The OEB may need to consider ongoing support in the case of remote communities with no road access, additional capital subsidies to cover the cost of larger storage systems where transportation relies on all-season roads, or await the results of plans and funding programs for the construction of all-season roads to remote First Nations.

In evidence also provided to MoCreebec for this hearing, Anwaatin suggests two approaches for a Universal Service Fund. First, a simple, fast and efficient approach is for incumbent operators with many customers to establish an internal Universal Service Fund in their service areas, and maximize economies of scale to reduce charges to existing customers who would ultimately support subsidies to unserved communities. The incumbent's ratepayers would pay an OEB approved surcharge that the operator would transparently apply as a "smart subsidy" to targeted unserved areas. The subsidy would require the incumbent operator to prove that there is capital investment gap and prove that this gap represents an unfair burden. Second, in areas beyond the service areas of incumbent operators, the OEB may choose to allow incumbent operators the opportunity to expand the service areas to enable them to extend an internal Universal Service Fund and provide service quickly, or may choose to establish a competitive process where incumbents and new entrants can compete for a "smart subsidy" to serve a targeted community or region. The OEB could begin to determine the most efficient approach by asking incumbent operators to determine areas near their current service areas where they would be willing and able to operate an internal Universal Service Fund to take advantage of economies of scale and efficiencies, with specific community targets.

Areas that remain unserved may either have the potential to be in a "smart subsidy zone" and be commercially viable through a "smart

subsidy”, or may be in a zone where there is a “true access gap” and beyond commercial viability even with a “smart subsidy” (see Figure 1). Areas that remain unserved by incumbent operators in a “smart subsidy zone” could be opened to a competitive process where a competitively tendered subsidy process awards “smart subsidy” funds to reward the most efficient operator that meets quality of service objectives and requires the lowest subsidy. Areas in a “true access gap” zone are areas that are beyond commercial viability even where initial smart subsidies are given.⁷ This could be the case for remote First Nation communities that are not connected by all-season roads or by all-season access to water borne bulk shipping carriers. Given that provincial, federal and First Nation plans are moving forward to build several new all-season roads in Ontario, the number of remote, “true access gap” communities will be narrowing.⁸

Operators serving “true access gap” areas or communities would need additional capital costs for storage facilities and on-going operational financial support to provide service. Alternatively, the cost of service for “true access gap” areas may remain un-economic until all-season transportation services become available.

⁷ Ibid.

⁸⁸ For example, Mushkegowuk Council has completed an All Season Road Pre-feasibility Study and identified both a coastal road route that would connect with Moosenee, Moose Factory and the Ontario Northland railway terminus, and four candidate routes for an inland all season road to connect to the Ontario highway system at either points near Constance Lake First Nation and Calstock/Hearst or near Fraserdale/Smooth Rock Falls, enabling Attawapiskat, Kashechewan and Fort Albany First Nations to have all season access to transportation services (http://www.mushkegowuk.com/?page_id=3577). As well, Webequie First Nation in partnership with the First Nations of Eabametoong, Neskantaga and Nibinamik, are completing a regional community service corridor study to connect the remote First Nations to the Ontario highway system (<http://www.cbc.ca/news/canada/thunder-bay/ring-of-fire-road-proposal-to-get-785-000-government-study-1.2977552>)

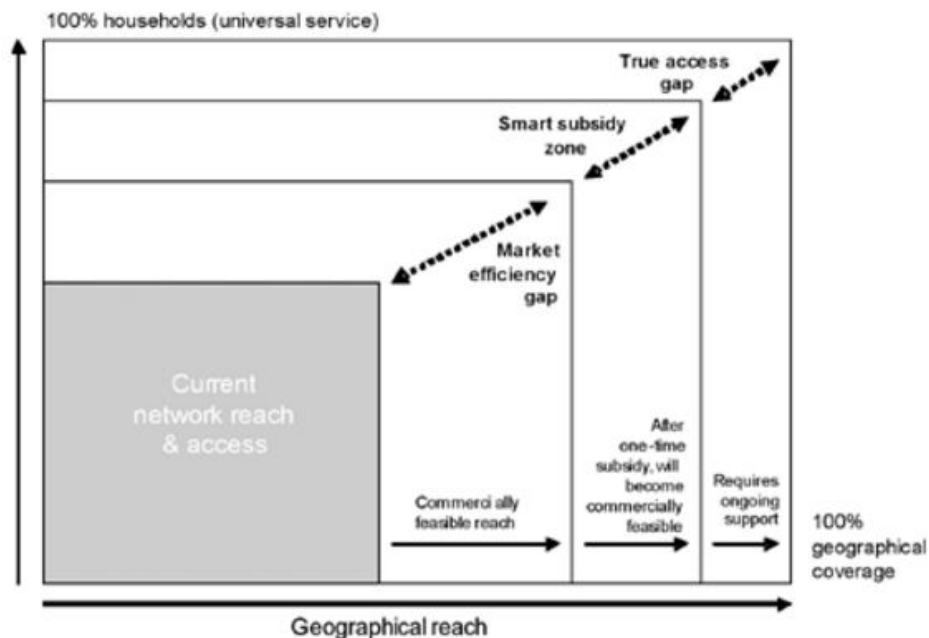


Figure 1: Universal Service Gap Areas. Source: "Telecommunications & Information services for the Poor. Towards a Strategy for Universal Access", by J. NavasSabater, A. Dymond, N. Juntunen, 2002.

- b) Anwaatin does not propose a specific rate for a Universal Service Fund. Anwaatin hopes the OEB would determine a specific charge or rate based on the filings of regulated natural gas.
- c) Anwaatin has not conducted an analysis to determine the costs to existing natural gas consumers if a Universal Service Fund approach is adopted by the OEB. Anwaatin does not have the resources to determine the costs and assumes that the OEB does have these resources. The OEB should take into account the impacts on existing natural gas customers when considering the appropriateness of the proposed Fund.

ANWAATIN RESPONSE TO BOARD STAFF INTERROGATORY #5

Interrogatory: 5

Reference: Evidence of Anwaatin Inc., p. 8

Question: Anwaatin states that the intent of EBO 188 is to facilitate the expansion of natural gas service while holding other customers harmless from the cost of new connections. The alternative of a Universal Service Fund approach to awarding gas expansion/connections fits with the intent of EBO 188. Please explain how the Universal Service Fund approach to awarding gas expansion/connections fits with the intent of EBO 188.

Response: EBO 188 describes the economic test that should be used to evaluate a proposed expansion of a gas distributor's distribution system to ensure that these undue rate increases for existing customers do not occur. The key principle behind the test is that total portfolio of expansion projects should not lead to a rise in the rates of existing customers over the long term. This allows a distributor to propose an expansion portfolio that blends projects with customers that are less costly to serve with those that are costlier. A Universal Service Fund approach with "smart subsidies" of a one-time nature, and short-term surcharges to existing customers is in keeping with the intent of EBO 188.