

STAFF INTERROGATORY #3

INTERROGATORY

Issue 1 – New Business Activities

Topic: Geothermal Energy Service (GES) Program

Ref: Exhibit B / Tab 1 / Schedule 1 / p. 21-22 #61 and #62, p. 23 #65 and p. 70 #70

Preamble:

Enbridge Gas indicates that geothermal systems have been available in Ontario for a number of years.

Enbridge Gas states it will see complementary investments between customers, Enbridge Gas and GreenON Funding. The provincial government's GreenON Fund's website¹ provides a list of contractors for the procurement and installation of geothermal energy systems.

Based on OGA's website², the association represents geothermal energy system designers, drillers, installers, equipment manufacturers and distributors to advance Ontario's geothermal heating and cooling industry. This website lists suppliers and contractors.

Based on HRAI's website³, the association also directs customers to its HRAI Contractor Locator that will find a qualified HRAI Contractor Member in your area.

Questions:

- a) Given GreenON, the OGA and HRAI, please confirm that there are suppliers and contractors in Ontario that will supply and install geothermal energy systems in residential homes.
 - i) Please explain why a company that supplies geothermal energy systems could not ensure that the appropriate equipment is procured and installed for a customer?
 - ii) Please explain why selling and installing geothermal loops should be considered a regulated utility business (i.e., a core utility business)?

¹ <https://www.greenon.ca/programs/greenon-rebates-ground-source-heat-pumps>

² <http://www.ontariogeothermal.ca>

³ <http://www.hrai.ca>

- iii) Please explain why providing support to customers related to ground-source heat pumps should be considered a core utility business?
 - iv) Please explain why Enbridge Gas has decided not to offer this service through an affiliate?
- b) Please explain whether Enbridge Gas believes that the geothermal energy industry is a competitive industry in Ontario?
 - c) Please explain under what section of the *OEB Act*, 1988 gives Enbridge Gas the authority to set service fees for its GES Program.
 - d) If this Program is deemed a regulated service, how will Enbridge Gas ensure the OEB that it will not use its regulated utility assets to enhance its position in the competitive geothermal energy market. Please explain.
 - e) Please identify and discuss other regulators that have approved a similar GES Program where this Program is part of the natural gas distributor's regulated business.

RESPONSE

- a) Confirmed
 - i) While it is the case that companies installing geothermal energy systems could ensure that appropriate equipment is installed and procured, that has not always been the case. The installation processes and the performance of installed systems have been inconsistent. In part, this may be because a geothermal system does not contain dangerous substance and thus does not require third party quality assurance from regulatory bodies such as TSSA. This has resulted in inconsistent approaches by some contractors and lack of standardized quality assurance process. As explained in the prefiled evidence, Enbridge expects that its participation in the market, which will include appropriate procurement and installation standards, will help ensure quality geothermal systems for its customers.
 - ii) Please see Company's response to Energy Probe Interrogatory #2 filed at I.1.EGDI.EP.2.
 - iii) Please see Company's response to Energy Probe Interrogatory #2 filed at I.1.EGDI.EP.2.
 - iv) The proposed Geothermal Energy Services Program is an abatement initiative, intended to reduce the Company's compliance obligation from

what it would be in the event that the geothermal customers instead chose to be gas customers. This makes it an appropriate activity to undertake through the regulated utility.

- b) Enbridge believes there is a competitive industry for geothermal system contractors in Ontario. Enbridge will not impact that competitive industry, because it will be using those qualified contractors for its geothermal loop installations and because customers will be buying the heat pump systems from those contractors. Enbridge only proposes to own and operate the underground geothermal loop portion. This will not affect market competition. Please also see the Company's response to ENWAVE Interrogatory #5 (vii) filed at I.1.EGDI.ENWAVE.5.
- c) Please see Company's response to Energy Probe Interrogatory #2 filed at I.1.EGDI.EP.2.
- d) Please see Exhibit B, Tab 1, Schedule 1, paragraph 62.

The OEB has developed several tools ensure minimization of cross subsidization

- a. EBO 188 – Feasibility guidelines create framework for assessing cross subsidies
- b. Affiliate Relationship Code – Guides cost allocation and resource use between regulated and unregulated activities
- c. GDAR – Co-existence of utility offerings with competitive offerings

Enbridge's proposed program is designed to avoid any potential cross subsidies by existing rate payers.

- e) Various regulators in other jurisdictions have approved models in response to a rapidly changing energy sector and to align to climate change goals.

PanTerra Energy have received a Public Utilities Commission (PUC) registration in Colorado. This PUC designation is the first step in allowing PanTerra to apply for a permit to act as a sole utility, leasing and selling direct access to a geothermal loop field without additional third-party involvement. PanTerra designs, builds and installs what many believe to be the next wave in eco-friendly and cost-effective improvements for homes, businesses and municipalities.

<http://panterra-energy.com/panterra-in-the-news-ghp-firm-is-puc-registered/>

British Columbia Utility Commission

- Approval of Alternative Energy Systems which includes behind the meter community systems and thermal energy systems including geothermal.

http://www.bcuc.com/Documents/Guidelines/2015/DOC_42213_TES-Guidelines.pdf

New York – Reforming the Energy Vision (REV)

- Utilities are able to earn returns tied to meeting system demands with alternative methods, such as using customer-sited solar and demand management instead of new central station capacity.
- REV Demonstration Projects
- New York’s electric utilities and leading technology companies are working together to develop new business models to enable greater adoption of the new clean energy solutions that customers want.

<https://rev.ny.gov/>

California Public Utility Commission

- California has approved utility owned on customer site Distributed Energy Resource Services (DERS).

[A.14-08-007 DERS PD- Revision 4 \(Redline\)](#)