ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON EVIDENCE OF ONTARIO GEOTHERMAL ASSOCIATION

Ontario Energy Board Community Expansion Proceeding EB-2016-0004

Interrogatory # 1

Ref: Evidence of Ontario Geothermal Association, Page 12

The Ontario Geothermal Association (OGA) has provided estimated conversion costs to change homes using other sources of energy to geothermal.

- a) Please provide the applications that can use geothermal energy as an input.
- b) Can geothermal energy be used as a source for a variety of equipment as natural gas or is it limited to space heating and hot water tank?

Interrogatory # 2

Ref: Evidence of Ontario Geothermal Association, Page 12

OGA has noted that the aggregate average electrical consumption per household for HVAC would increase from 3,400 kWh/year to 4,450 kWh/year by switching all homes to geothermal.

- a) Is geothermal an appropriate alternative to communities that do not have reliable electric supply or limited electric supply?
- b) Is the OGA aware of any of the communities listed by Union Gas Limited or Enbridge Gas Distribution in their evidence that would require reinforcement of the electric grid if they were to pursue geothermal energy as an alternative in place of natural gas?

Interrogatory #3

Ref: Evidence of Ontario Geothermal Association, Page 24

The OGA has provided the lifecycle cost comparison for the top 4 Profitability Index (PI) projects and the Kincardine project from Union Gas' evidence in EB-2015-0179.

- a) Please provide the names of the communities referred to in the top 4 PI projects.
- b) Assuming that the 4 communities and Kincardine are converted to geothermal and the conversion rate is the same as that assumed by Union Gas, what would be the increase in electricity consumption as a result of conversion to geothermal?
- c) Can OGA confirm whether the electricity grid in Ontario would be able to provide the required electric load in these communities?

Interrogatory # 4

Ref: Evidence of Ontario Geothermal Association, Pages 25-27

OGA in its evidence has noted that based on its lifecycle cost analysis, geothermal systems are competitive with natural gas in the proposed communities, particularly when carbon costs are considered. In Union's application (EB-2015-0179), a number of municipalities that do not have access to natural gas supported Union's initiative of expanding into communities that do not have access to natural gas.

Please confirm whether any of the communities listed in Union's evidence (EB-2015-0179, Exhibit A, Tab 1, Appendix D) considered pursuing geothermal energy as an alternative to natural gas. Did any of the municipalities contact the OGA directly or members of the OGA to discuss such an initiative?

Interrogatory # 5

Ref: Evidence of Ontario Geothermal Association, Pages 28-29

The OGA has suggested that the Ontario Energy Board (OEB) should reach certain specific conclusions in the proceeding with respect to cost effectiveness and carbon emissions. The OGA has urged that the regulator must be concerned with whether the expansion is in the public interest and this requires reviewing whether there are other alternatives to natural gas expansion that would serve the public interest better.

- a) Should the OEB determine that natural gas is not the best alternative to expand into communities that do not have access to natural gas, what powers under the Act does the OEB have to facilitate the adoption of geothermal energy in communities that are not currently served by natural gas?
- b) If a municipality determines that it would consider geothermal energy as an alternative to other forms of energy, does it require any approval or permission from the OEB to pursue such an alternative?