

ENWAVE INTERROGATORY #5

INTERROGATORY

Issue 1.2: Should the new business activity – Geothermal Energy Service Program – be considered as part of the utility’s regulated business?

The evidence states that the geothermal market has experienced “low market penetration and less than desirable levels of customer satisfaction with this technology” (B-1-1, p.23).

- i. Please confirm that geothermal is one technology for heating and cooling which competes with a number of other technologies, including air sourced heat pumps, solar heating, and other types of waste heat recovery systems which may be district based (“Competing Technologies)
- ii. Please provide all materials that is relied upon to support the statement that the geothermal market has experienced “low market penetration and less than desirable levels of customer satisfaction with this technology”
- iii. Please advise whether Enbridge has the same opinion with respect to Competing Technologies and provide all materials that Enbridge relies upon to support that opinion.
- iv. Please provide evidence on low market penetration and, in particular, whether there is excess capacity among service providers. Please respond with reference to both geothermal and Competing Technologies.
- v. Please provide any information, including internal studies, that addresses how Enbridge’s rate-payer funded participation in this market will increase market penetration. Please respond with reference to both geothermal and Competing Technologies.
- vi. Please provide all materials that Enbridge has with respect to the state of competition in the market and how this proposal is likely to impact competition. Please respond with reference to both geothermal and Competing Technologies.
- vii. Please confirm that the market for geothermal services would be less competitive if commercial providers are unable to compete with Enbridge’s rate-payer funded market offering and therefore will have to exit the market. Please respond with reference to both geothermal and Competing Technologies.

- viii. Please advise whether Enbridge intends to participate in the geothermal market or the market for Competing Technologies through an unregulated affiliate.
- ix. Please advise whether Enbridge or an affiliate has participated in an RFP or similar competitive processes for the provision of geothermal or other energy solutions using Competing Technologies.
- x. Please advise how the Board can ensure that its proposal will not provide a competitive advantage to Enbridge or an unregulated affiliate through increased understanding/knowledge/experience or procurement advantage/leverage when participating in larger energy procurement processes that may include geothermal as a part of a solution other than for single family homes/loops?
- xi. Please confirm that this scenario would be worse for customers of geothermal services. Please respond with reference to both geothermal and Competing Technologies.
- xii. Please advise how Enbridge's rate-funded option would increase customer satisfaction with geothermal technology. Please respond with reference to both geothermal and Competing Technologies.
- xiii. The evidence states that the "Program is initially targeted to single family homes (both new and retrofit). In the future, the Program may be expanded to multi-residential and commercial markets." (B-1-1,p. 28).
- xiv. Please confirm that, if Enbridge did seek to enter into the multi-residential and commercial markets for geothermal services, it would have to seek specific Board approval for same.
- xv. Please advise whether Enbridge is aware of geothermal solutions being pursued at a scale larger than single residential loops for single family home marketplace homes through district heating with, for example, community energy loops.
- xvi. Please advise how, if the Board approves Enbridge's proposal, it can ensure that, Enbridge is not given a pricing or network advantage that disadvantages competing district heating alternatives.

RESPONSE

Enbridge's Geothermal Energy Services Program proposal clearly sets out the scope of approvals requested in this case. Enbridge's evidence, as well as many of the interrogatory responses being provided, set out the benefits that can be achieved from the proposal, and the reasons why it is an appropriate abatement program. Enbridge is not seeking any monopoly status or exclusive franchise for the provision of geothermal energy systems or geothermal energy loops. The industry association (OGA) is generally supportive of Enbridge's proposal.

In the event that Enbridge seeks in the future to extend its regulated Geothermal Energy Services offering to other market sectors (beyond the low-density residential sector) it will seek approval from the Board to the extent required to establish new or different service fees to these types of customers.

Enbridge is not seeking approvals to undertake any activities that might be described as "Competing Technologies" through the regulated utility. That would require a separate application.

As a non-utility or affiliate activity, Enbridge may offer geothermal energy services to customers who are not potential gas customers. Enbridge will meet all requirements set out in the Affiliates Relationship Code where applicable.

The details about activities that Enbridge may pursue as a non-utility or affiliate activity in relation to what is described as "Competing Technologies" are not relevant in this proceeding.

Enbridge is aware that other parties (including Enwave) may pursue community energy loops as a future line of business. Enbridge's view is that it would be appropriate for such services to be regulated, since consumers are faced with only one viable provider of heating and water heating, effectively becoming captive customers of that service provider over a long period of time. The Company is aware that in British Columbia the BCUC regulates the provision of energy from community energy systems. The Board or another regulator can provide appropriate customer protection. The Company acknowledges that this may require updates to the legislative and regulatory framework similar to those recently made to Section 78 of the Ontario Energy Board Act requiring the Board to approve the of rates applicable to sub-metered electricity. This could be an appropriate topic for the Board's Modernization Panel.

Under the Geothermal Energy Services Program, customers will pay cost-based fees over the life of the geothermal loops and will purchase their own heat pump systems. Customers can take advantage of available government funding. The same approach

can be used for community geothermal systems. The project proponent can charge cost-based fees, and the customers can take advantage of any available government funding. A main difference, however, is that Geothermal Energy Services Program customers will benefit from the consumer protection afforded by Board oversight, while (under current circumstances) there is no equivalent protection for customers of a community geothermal system.