

Elson Advocacy

December 10, 2024

BY RESS

Ms. Nancy Marconi

Registrar

Ontario Energy Board

2300 Yonge Street, Suite 2700, P.O. Box 2319

Toronto, Ontario M4P 1E4

Dear Ms. Marconi:

**Re: Proposed Amendments to the Distribution System Code
EB-2024-0092**

We are writing on behalf of Environmental Defence to provide comments on the proposed amendments to the distribution system code to facilitate the connection of housing developments and residential customers. Environmental defense asks the OEB to continue this important work after these code amendments have been implemented and to include a focus on reducing the cost of all-electric residential construction. Developers building all-electric developments are currently made to pay more than should be necessary in light of the savings that all-electric developments create for customers by way of avoided gas distribution costs. Mechanisms should be considered to cover the electricity infrastructure costs in these developments through surcharges or deferred charges that can be folded into mortgages at the time of sale. This focus on all-electric development is important seeing as this form of development is likely to increase in the future due to the energy transition, the decreasing cost of all-electric heat pumps, and customer concerns around the impacts of gas stoves and other gas equipment on indoor air quality.

Focus on all-electric developments

A special focus on reducing the cost of all-electric developments is important because those costs are currently too high, there are opportunities to lower them, and it is very likely that all-electric construction will expand in the future. It is extremely likely that all-electric development will continue to grow and may be spurred on by regulations relating to the decarbonization of buildings. Methane gas combustion generates roughly one-third of Ontario's carbon emissions, largely from gas equipment in homes. The most cost-effective way to mitigate those emissions is through electrification.¹ A recent study concluded that the most cost-effective pathway to decarbonize buildings would result in 96% reduction in gas use in Ontario by 2050.²

¹ Canadian Climate Institute, *Heat Exchange*, June 2024, p. 10 ([link](#)).

² Canadian Climate Institute, *Heat Exchange*, June 2024, p. 17 ([link](#)).

If gas use must decline, the most obvious and cost-effective starting point is in new construction. That explains why it we are likely to see increasing all-electric developments and why we may see an all-electric construction mandate in the future as we have seen in other jurisdictions like New York State and Quebec.³ Although it is not clear when all-electric construction will begin to dominate, the OEB should be planning now to ensure that residential connection costs can remain low.

A focus on all-electric development costs is also important for immediate purposes. As noted in the OEB's report to the Ministry, the electrical infrastructure costs for all-electric developments are considerably higher. This is a problem for (a) developers that are not located near gas pipelines and (b) developers seeking to build all-electric developments as a selling point for buyers based on environmental, cost, indoor air-quality, and comfort benefits. If there are ways to appropriately reduce electric infrastructure costs for these developers, they should be pursued.

A focus on decreasing the cost of electricity infrastructure for all-electric developments is important today and will be even more important in the future.

Opportunities to lower costs for all-electric developments

There are several opportunities to lower costs for all-electric developments. This includes consideration of surcharges, deferred charges, and additional efforts to encourage efficiencies in construction and design.

Surcharges

Although we understand that the OEB has declined to pursue electric connection cost surcharges for all developers, there are reasons to consider them in more detail for all-electric developments. In particular, it would benefit customers to allow connection costs in all-electric developments to be recouped through surcharges.

The all-in costs of connecting a home in an all-electric development is only higher if one ignores the additional gas infrastructure costs that are incurred for gas-heated developments. The average gas infrastructure cost is approximately \$4,500 per lot, which is roughly equal to additional electricity infrastructure costs for all-electric developments.⁴ In short, it is a wash. Furthermore, the PwC report prepared for the OEB notes that the cost of connecting all-electric developments is likely to decline due to economies of scale and improved design standards.⁵ Over time, the combined connection costs for all-electric development should be lower than the costs of gas-heated developments.

³ EB-2022-0200, Exhibit J8.3; Montreal, *Ban on combustion heating devices in new buildings* ([link](#)); *Encadrement du gaz naturel dans le secteur des bâtiments - Un plan pour atteindre 100 % d'énergies renouvelables à l'horizon 2040* ([link](#))

⁴ EB-2022-0200, Decision and Order, December 21, 2023, p. 34.

⁵ PwC, *Ontario Energy Board: Unit Cost Benchmarking – Communities, Subdivisions and Electrification*, June 13, 2024, p. 15.

Customers would benefit if they were to pay for the cost of electric infrastructure in all-electric development via surcharges up to the amount that they would be saving in avoided gas distribution costs. A typical residential gas customer pays approximately \$500 in gas distribution costs annually. Instead of paying gas distribution costs, customers in all-electric developments could pay that amount towards the electrical infrastructure. They would benefit because this would encourage developers to move forward with all-electric developments, which results in lower heating bills for customers today and avoids the cost to transition away from gas in the future.⁶ This would also result in fewer costs for Ontario's energy systems as a whole because it would be consistent with electrification as the most cost-effective decarbonization pathway.⁷

Although surcharges require additional work to administer, this can be done effectively and efficiently. For instance, Enbridge Gas does this in the context of its \$0.23/m³ surcharge for certain new connections. If Enbridge Gas can do it, so can electric utilities. Although we agree with the OEB that surcharges should not be allowed for all types of developments, it is worth exploring them in more detail for all-electric developments for the reasons outlined above.

Deferred costs

As an alternative to surcharges, the OEB could consider allowing deferred payment of connection costs, which would accrue upon sale of a certain portion of the homes in a new development. This would eliminate the burden on developers of carrying the electricity connection infrastructure costs for the duration of construction. It would also decrease the financing they require, which would be a major benefit. For the customer, the electric infrastructure costs would be repaid through their mortgage and therefore at a lower interest rate. This may have some benefits over a surcharge to the extent that it is more efficient for utilities to administer.

Explore efficiencies

Environmental Defence asks that the OEB explore mechanisms to encourage utilities to be more efficient and reduce costs for all-electric developments. The PwC report outlines several reasons to believe that the actual cost of all-electric development vary from the survey results and can be decreased further. For instance, the report noted as follows:

It is important to note that nearly two thirds of the LDCs consulted as part of this study cited a lack of extensive experience with fully electrified subdivisions, leading to a scarcity of estimates for these scenarios. This gap necessitates a cautious approach when interpreting the data.

PwC also found that costs could be lowered through economies of scale and design standards:

Economies of scale: *Feedback and observations from interviewing electricity distributors suggested that those with a broader scope and deeper electrification experience tend to exhibit lower cost disparities between fully electrified and gas-heated*

⁶ EB-2022-0200, Decision and Order, December 21, 2023, p. 38.

⁷ Canadian Climate Institute, *Heat Exchange*, June 2024, p. 10 ([link](#)).

loads, where larger entities may benefit from reduced costs due to their size and operational efficiencies. Additionally, the accumulated expertise from extensive electrification projects is a likely contributor toward greater cost-effectiveness due to process efficiencies and design standardizations.

Design Standards: *An electricity distributor's current design and standards, especially around materials affect how much they would be impacted by a full electrification. For example, electricity distributors that do not already use larger cables needed for greater electrification see a greater variance in their electrification costs between 'all electric' and conventional, gas-heated loads, relative to electricity distributors which are already building with this transition in mind.*

The OEB has an important role to play in ensuring that these economies of scale and design standard improvements are achieved. The OEB's mandate is to protect customers with respect to utility costs and performance because customers face a monopoly and have no choice of provider. This is equally true for customer connection costs. Although rates receive a great deal of scrutiny through rates cases, the same is not true for connection costs borne by developers. However, newly connecting customers also face a monopoly and essentially must pay whatever the utility charges them. Considering the PwC findings regarding the availability of efficiencies in all-electric construction and design, it is important that the OEB ensure that utilities find those efficiencies.

Conclusion

In light of the above, we ask that the OEB continue the work to lower the cost of development by focusing on all-electric development, including consideration of surcharges, deferred payment, and mechanisms to secure efficiencies where possible. This will benefit developers by lowering their costs and also benefit new homebuyers by increasing the chance that they will have lower energy bills and cleaner indoor air quality via heat pumps and other all-electric equipment.

Please do not hesitate to contact me if anything further is required.

Yours truly,



Kent Elson