

IN THE MATTER OF:

the *Ontario Energy Board Act, 1998*, S.O., c.15 (Sched. B):

AND IN THE MATTER OF:

Applications by Centre Wellington Hydro, Veridian Connections Inc., EnWin Powerlines Ltd., Erie Thames Powerlines Corp., Chatham-Kent Hydro Inc., Essex Powerlines Corp., Cooperative Hydro Embrun Inc. and Hydro One Networks Inc. pursuant to subsection 74(1) of the *Ontario Energy Board Act, 1998* to amend Schedule 1 of their Transitional Distribution Licences.

THE BENEFITS OF COMPETITION IN THE ELECTRICAL DISTRIBUTION SECTOR

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**Filed September 26, 2003
On behalf of
Wirebury Connections Inc.**

1 **Q1. What is the purpose of your report?**

2 I have been asked by Wirebury Connections Inc. to assist in the preparation of responses
3 to interrogatories dealing with the impact of competition on Ontario's Electricity Distribution
4 sector which necessitated my reviewing and commenting on the report of KEMA-Quantec
5 (recently filed as part of Hydro One's evidence in the Combined Distribution Service Area
6 Amendments Proceeding) and providing my views on the extent to which competition in
7 the distribution sector would enhance economic efficiency.

8 **Q2. In your view, does the report of KEMA-Quantec provide a complete assessment of**
9 **whether competition is appropriate in the distribution sector?**

10 No, it does not.

11 The report of KEMA-Quantec addresses the question of competition in the distribution
12 sector only at a very general level. In essence, it addresses the question of whether the
13 distribution sector can be fully competitive without assessing the potential benefits, as well
14 as the risks, of introducing some elements of competition into the distribution sector.

15 In my view, a complete analysis of the ways in which competitive forces could be
16 harnessed in the distribution sector to deliver benefits to consumers requires drawing a
17 clear distinction between (i) allowing competition for existing customers and (ii) allowing
18 competition for new customers at unserved and underserved locations.

19 I concur with the analysis and conclusions of KEMA-Quantec in the context of existing
20 customers. The distribution function is naturally monopolistic in that it would be both
21 economically inefficient and unsustainable to allow more than one distributor to offer
22 service to a customer or group of customers using duplicative facilities. As a
23 consequence, allowing customers to choose an alternate distributor, where doing so would
24 strand some portion of the distribution network of the incumbent distributor without
25 compensation, would not be efficient.¹

26 In the context of unserved and underserved locations, however, I do not concur with the
27 view set out in the KEMA-Quantec report that system planning and related issues create a
28 serious impediment to introducing efficient competition.

¹ This is not to say that full retail distribution competition is impossible. The CRTC avoided the problem of redundant local wires when it introduced local competition by mandating unbundling and competitor access at regulated rates to the local loops of the incumbent telephone companies.

1 Where I differ with the KEMA-Quantec report is that it focuses on maintaining rigid
2 monopoly franchises as the key to achieving economic efficiency. In my view, it is more
3 appropriate to focus directly on ensuring that duplication of facilities is avoided. My
4 approach permits the lowest-cost, best-value alternative to be adopted for connecting
5 customers and improving service. The KEMA-Quantec approach, which is reflected in the
6 evidence of Hydro One Networks, does not.

7 In developing policies for the distribution sector that are based on the premise that
8 competition, where it is feasible, is preferable to monopoly regulation, it is not difficult to
9 develop economically efficient policies that allow distributors to compete for the right to
10 connect unserved and underserved customers.

11 There seems to be little doubt that the premise underlying the *Energy Competition Act,*
12 *1998* and the subsequent electricity market restructuring is that competition is preferable to
13 monopoly. From a policy perspective it would therefore be consistent with the overall
14 thrust of energy policy in Ontario to rely on competition, where it is feasible, to enhance
15 efficiency in the distribution sector.

16 ***Q3. Please explain what you mean by an unserved location.***

17 Broadly speaking, I use the term “unserved location” to refer to any location where the
18 distribution facilities necessary to accommodate current or expected electrical loads are
19 not currently in place. Examples of unserved locations would be:

- 20 • **New residential, commercial or industrial developments:** A geographic area
21 being developed may lie within the licensed service area or along the lines of an
22 incumbent distributor, but if the customer density or load is being radically changed
23 (e.g., from rural to urban) or a new load is being served off existing lines, it may be
24 necessary to expand or replace existing distribution facilities. Put simply, the
25 planned development cannot be served by the existing facilities, hence it is
26 unserved. By this definition, a location may be unserved whether or not the
27 upstream distribution facilities are adequate to serve the new load. This situation is
28 often referred to as “green field” development.
- 29 • **Redeveloped industrial or commercial site:** When an area is redeveloped in a
30 manner, or to an extent, that the existing distribution facilities within the area must be
31 extensively replaced, it can be said that the new customer is not served by the

1 existing distribution facilities. The situation is often referred to as a “brown field”
2 development.

3 ***Q4. Please explain what you mean by an underserved location.***

4 An underserved location is one in which a customer prefers a form of service that is not
5 available from its existing distributor. For example:

- 6 • Residents in a high-rise development where the building is bulk metered but the
7 residents prefer to be individually metered so that they can benefit from individual
8 conservation efforts, such as reducing their air conditioning load by setting their
9 thermostat higher.
- 10 • Distribution customers that want different metering technology than that available
11 from their incumbent distributor, such as interval meters that would enable them to
12 choose an energy supplier that offers a rate structure that recognizes the value of
13 individual conservation efforts such as shifting load to off-peak hours (e.g., by doing
14 laundry later at night).

15 ***Q5. You indicated that the reason for developing policies that allow competition for the
16 right to connect unserved and underserved locations is the premise that competition,
17 where feasible, is preferable to monopoly regulation. Please outline the efficiency
18 and other benefits of allowing competition for the right to connect unserved and
19 underserved locations.***

20 Consistent with standard economic principles, efficiency considerations can be separated
21 into three types of efficiency: technical (or operational), allocational and dynamic.

22 **Technical efficiency** relates to the level of costs that are incurred to produce a given level
23 of output at a point in time. Put simply, the goal of technical efficiency would be realized if
24 the cost of electricity distribution is minimized for a given level of service, reliability and
25 other characteristics of distribution that affect the value of electricity to consumers.

26 Technical efficiency is achieved if:

- 27 • the required distribution assets are acquired at minimum cost,
- 28 • the cost of capital is minimized,
- 29 • operating and maintenance (O&M) costs are minimized, and
- 30 • the tradeoffs among the cost categories are optimized.

1 Effective competition enhances technical efficiency primarily because it provides greater
2 discipline than regulatory oversight in ensuring that the lowest cost producer builds and
3 operates distribution assets. This benefit of competition is the reason that many
4 purchasers of all types of goods and services rely on competitive bids. In the real world,
5 different suppliers have different costs, and will accept different mark-ups, in any particular
6 bidding situation. Not only does competition enable low-cost suppliers to become the
7 supplier of choice, it also disciplines all suppliers to increase their efforts to reduce costs
8 and mark-ups, thereby lowering the overall cost of service to customers.

9 **Allocational efficiency** is achieved when the allocation of resources within society is
10 efficient. The primary factors that determines allocational efficiency is the presence in the
11 market of correct price signals – that is, prices that reflect marginal costs – and the ability
12 of consumers to respond to those price signals. In fully competitive markets, effective
13 competition tends to drives prices toward marginal cost. Markets in which prices are
14 administered, whether for “supply management” reasons (e.g., certain agricultural
15 products) or to address a market failure such as natural monopoly, tend to be
16 characterized by prices that deviate significantly from marginal cost.

17 Given that rates for distribution service in Ontario will continue to be set by regulation, the
18 introduction of competition for the right to connect new distribution assets is unlikely to
19 have a significant effect on allocational efficiency, except to the extent that improving
20 technical efficiency enables regulated rates to be set closer to the allocationally efficient
21 prices.

22 Competition to serve new developments should also have indirect benefits for allocational
23 efficiency in the economy in that developers will have more flexibility to choose distribution
24 services that more closely align with the value criteria of their target markets.

25 **Dynamic efficiency** reflects the extent to which costs are minimized through time. In part,
26 dynamic efficiency is achieved through appropriate system planning, which can optimize
27 the timing and the increments of system expansion and upgrades. Dynamic efficiency is
28 also affected by technical innovation, pricing strategies and other actions that increase
29 efficiency over time. Any investment that is economic in the long run, and outperforms the
30 alternatives, will enhance dynamic efficiency. Such investments can take many forms,
31 including:

- 1 • investments that reduces future operating costs, such as the introduction of an
2 automated dispatch system;
- 3 • investments that enables distribution assets to be utilized more efficiently, such as
4 the introduction of interval meters that facilitate time-of-use rates and billing and
5 thereby reward customers for using power more efficiently by shifting demand from
6 peak to off-peak periods and to conserve more aggressively in periods of relative
7 supply shortage; and
- 8 • investments in targeted DSM initiatives that permit system upgrades to be delayed.

9 The efficiency benefits of competition are likely to be greatest in the area of dynamic
10 efficiency. It is widely recognized that monopolists tend to be among the least innovative
11 producers in the economy, regardless of the form of regulation. In part, this behaviour
12 reflects the reality that innovation is particularly risky in a price regulated environment.
13 Where the rewards of success are likely to be borne by ratepayers, while the costs of
14 failure are borne by shareholders, management has little incentive to be innovative, even if
15 the risk of failure is low.

16 There is also a regulatory bias that focuses the attention of management on costs rather
17 than on customer value. In a competitive market, firms succeed by delivering value to
18 customers efficiently. Increasing value for customers can be very different than providing
19 traditional services in a technically efficient way. For example, a distributor that utilizes
20 technologically sophisticated meters that permit innovative rate structures may incur higher
21 costs per customers (all other things being equal), and charge higher kW-h rates for
22 distribution service, while at the same time enabling customers to lower their average
23 monthly bills by shifting consumption to off-peak periods and conserving electricity in high
24 commodity cost periods. The tendency of regulation to focus on cost can discourage such
25 value and efficiency enhancing expenditures. Competition could help offset this bias.

26 Another often-cited benefit of competition is customer choice. While I am personally
27 sceptical about the value customers place on merely having choice, the kinds of distinctive
28 service offerings that are typically available in truly competitive markets unquestionably
29 enhance customer value by enabling customers to better meet their individual needs,
30 tastes and preferences. For example, if developers are able to choose among competing
31 distributors with different market strategies (e.g., standard meters versus interval meters),
32 it would not be surprising if competing developers that are building new homes in the same

1 area choose different distributors for their own developments. Part of the competition
2 among developers takes the form of appealing to different family lifestyles and values. One
3 developer might cater to families that are prepared to incur a bit of inconvenience (or invest
4 in more expensive appliances) by offering homes that are equipped with interval meters,
5 appliances with timers for off-peak use, etc. These are often referred to as “smart” homes.
6 Another developer might cater to households that are less concerned about environmental
7 and energy efficiency issues and are more sensitive to the initial cost of the house.

8 Similarly, in a market where different distributors serve neighbouring markets, it is likely
9 that distributors will develop different brand images. A distributor that has a better
10 reputation for customer service will be more likely to be selected to provide distribution
11 service by business customers and developers who themselves have a business strategy
12 of building and maintaining a reputation for superior quality and service.

13 **Q6. The report of KEMA-Quantec identifies a number of problems that will, in its view,**
14 **arise “[i]f the franchise area is not clearly defined and dedicated to a single utility”.**
15 **Why do you not accept that these concerns justify restricting competition in the**
16 **distribution sector?**

17 The report of KEMA-Quantec discusses nine problems that they claim will result if the
18 existing monopoly franchise areas are not considered to be sacrosanct.

19 As a general response to these concerns, it is worth noting that the existing license
20 boundaries are, essentially, historical artifacts. They are the result primarily of a myriad of
21 decisions made through the decades prior to the policy of moving to a more competitive
22 electricity marketplace. While there is general agreement that it is in the public interest to
23 ensure that an “area”, once served, is operated and regulated as a monopoly, I am not
24 aware of any convincing evidence that demonstrates that there is either a maximum or
25 minimum size of area that can be served efficiently. More importantly, there would be no
26 incentive or opportunity for a distributor to win the right to connect locations in an area that
27 is too small to serve economically, if the rules for granting that right are designed to ensure
28 that the distributor with the lowest incremental costs is the one that provides service.

29 My views on each of the problems raised by the report of KEMA-Quantec follow. It may be
30 noted that the KEMA-Quantec does not address the issue of differences among
31 distributors in terms of the customer value they offer their customers. For the sake of
32 analytic clarity, my comments on the KEMA-Quantec also focus on the narrow goal of

1 minimizing cost. This approach does not imply that minimizing the incremental cost of
2 connecting unserved and underserved locations is the sole consideration in determining
3 the option that is in the public interest. As is recognized above, an equally important
4 efficiency consideration is the differences among distributors in terms of the value they
5 offer to their customers.

- 6 1. **Average costs for all customers within the service area will tend to be higher.** This
7 assertion relies on an inappropriate definition of the relevant “area”. As the sponsor of
8 the KEMA-Quantec report, Hydro One Networks, itself recognizes², the impacts on “the
9 broader pool of customers served by distribution utilities” should be the dominant
10 consideration, not the impact on one sub-set of customers.

11 The point KEMA-Quantec makes is that if some new customers within an existing
12 franchise area are served by a distributor other than the incumbent, the incumbent will
13 have fewer customers over which to spread its fixed costs. This observation is true but
14 irrelevant from the public interest and efficiency perspectives.

15 If the incremental costs incurred by the non-incumbent are less than the costs that would
16 be incurred by the incumbent, then the total distribution costs for all distribution
17 customers will be lower if the non-incumbent provides the new connection. Furthermore,
18 the average costs for the combined service area will be minimized if the distributor with
19 the lowest incremental cost for connecting a location provides service.

20 More generally, if each new customer, or newly served area, is served on a monopoly
21 basis by the distributor that is able to do so at the lowest incremental cost, the overall
22 distribution costs that will have to be recovered from Ontario consumers will be lower
23 than if existing franchise boundaries are considered to be sacrosanct.

- 24 2. **Load forecasts become more uncertain.** While some forms of distribution competition
25 will increase forecasting uncertainty, I fail to see how this will impact significantly on cost
26 or economic efficiency.

27 First, there will be no impact on the load forecast for the incumbent’s facilities if the non-
28 incumbent distributor utilizes the incumbent’s upstream assets. For example, if an
29 embedded distributor installs the facilities for a new residential development and

² Prefiled Evidence of Hydro One Networks in Response to Procedural Order No. 1, filed August 7, 2002, page1, lines 17-21.

1 connects those facilities to the incumbent distributor's network, there will be no impact
2 on the load served by the distributor.

3 The issue only arises in cases where the embedded distributor utilizes the upstream
4 facilities of another distributor. This situation may happen where a development is
5 located on the fringe of two distributors.

6 Second, uncertainty is an inherent feature of system planning. The timing of capital
7 investments always reflects the timing of load growth. Many factors cause actual load
8 growth to deviate from expected load growth; hence, it is prudent for any distributor to
9 take into account this uncertainty and expand facilities only when the need for additional
10 capacity is imminent.

11 While competition for the right to connect new customers could lead to slower demand
12 growth for incumbents that are not competitive with other distributors, it is that very
13 process that provides the discipline that makes competitive markets efficient. Economic
14 efficiency will increase if distributors with higher incremental costs to connect new
15 customers experience slower load growth and more efficient distributors enjoy increase
16 load growth.

17 Third, there is no inherently optimal growth rate for a distribution utility. Certainly, it may
18 be the case that there is a minimum efficient scale of distributor that allows fixed costs to
19 be spread over a large enough customer base for the distributor to be an efficient stand-
20 alone entity. However, if a distributor is below the minimum efficient scale, the
21 appropriate policy response is not to protect the distributor's monopoly, even where
22 another distributor can connect customers at lower cost. The appropriate response
23 would be to force the under-sized distributors into mergers, or shared services
24 arrangements, so that they achieve the minimum efficient scale. For most operational
25 functions, the efficient scale can be achieved in many ways other than through growth
26 within a defined and sacrosanct licensed service area.

27 Again, if the total costs of the Ontario distribution system are minimized, reduced growth
28 rates for some incumbent distributors will not be contrary to the public interest.

- 29 3. **Existing investments are stranded.** As the KEMA-Quantec report clearly states, this
30 problem arises when "some customers depart to be served by another system."
31 However, allowing competition for the right to connect unserved and underserved
32 customers does not imply that non-incumbent distributors would be permitted to convert

1 customers from the incumbent's distribution network to their own facilities, leaving the
2 facilities of the incumbent stranded. This problem does not arise unless full competition
3 is permitted in the distribution sector. I am not recommending the implementation of
4 competition that includes switching of existing customers; hence, the stranded of assets
5 is not an issue.³

- 6 4. **Cream skimming would develop.** This problem would only arise if incumbent
7 distributors have an obligation to connect customers that are non-compensatory.
8 However, the current legislative and regulatory regime provides for customer
9 contributions where it would be uneconomic to add customers without a contribution to
10 the capital cost. As long as the customer contribution policies of the Board ensure that
11 all customer additions are compensatory, distributors will not be required to add new
12 customers that must be subsidized by existing customers (i.e., raise the incumbent's
13 average costs). Furthermore, because the existing regulatory regime ensures that all
14 prudently incurred costs may be recovered through customer contributions, if they will
15 not be recovered in rates, all potential customers will be "cream" in the eyes of all
16 distributors. The lowest cost provider will be able to offer new customers the most
17 attractive pricing package, where this pricing package includes the rates for distribution
18 service plus the customer contribution.⁴

19 The KEMA-Quantec report suggests that, "a death spiral would result – absent
20 regulatory intervention to levelize the playing field". This observation is not relevant to
21 the current policy discussion because the existing rate-setting and customer contribution
22 regimes specifically level the playing field by ensuring that in most circumstances all
23 customers will be compensatory, regardless of which distributor serves them. As a
24 result, the only distributor that faces the risk of a death spiral is one that has
25 comparatively high incremental costs for connecting new customers. Furthermore, as
26 long as it is the incremental cost that determines competitive advantage, a distributor

³ It may be noted, however, that policies could be adopted that would permit full retail competition in the distribution sector. For full retail competition to be efficient, however, it would be necessary to adopt an approach similar to the CRTC's approach to local competition. That is, there would have to be unbundling of distribution wire, which in the case of electricity distribution where wires are a common facility, would imply open wholesale access at a regulated rate to the distribution networks of incumbents.

⁴ A flawed mechanism for determining customer contributions could give rise to anomalies that would cause some customers to be more profitable to serve than others. If the problem is severe enough to be an incentive for cream skimming, the appropriate response would be to correct the mechanism for determining customer contributions, rather than simply prohibiting competition.

1 that has a high cost-to-serve customer base will not be at a disadvantage in seeking to
2 connect new customers. The higher rates will be offset by a lower customer contribution
3 requirement.

4 The only circumstance in which an efficient distributor would be at risk of losing potential
5 customers to competitors with higher incremental costs is where a customer contribution
6 is not required. The risk arises because the regulatory regime used to establish rates
7 and customer contributions masks the true price signals when the contribution
8 calculation produces a negative number. However, this situation can be readily
9 addressed by using the customer contribution test to determine the distributor that has
10 the lowest incremental costs for connecting customers, even when no contribution is
11 required.⁵

12 5. **Redundant networks would develop.** A regime that awards the right to connect
13 customers that are unserved or underserved to the distributor that will incur the lowest
14 incremental cost to do so would rarely, if ever, result in redundant network assets. The
15 only case in which redundant assets would arise is where the incremental cost of serving
16 the customer with redundant assets is less than the incremental cost to the incumbent of
17 providing service. Unless the incumbent distributor is extraordinarily inefficient, or
18 requires a significant facilities upgrade to serve a small incremental load, redundancy
19 would not occur. In any exceptional cases redundancy would be efficient. As noted
20 above, relying on the distributor that can connect customers at the lowest incremental
21 cost will minimize the cost of distribution across service areas and the Province.

22 6. **Rates to remaining customers would have to rise.** This assertion is a restatement of
23 item 1, above. Rates are higher because average costs are higher. As pointed out
24 above, provided that the right to connect goes to the distributor with the lowest
25 incremental connection costs, rates overall will be lower than if a customer must rely on
26 a higher cost incumbent for the connection. With respect to economic efficiency, it is the
27 overall cost and rate level across Ontario that is relevant, not the impact on the rates of a
28 single distributor that loses potential customers because it is not cost (or service)
29 competitive.

⁵ This situation is addressed by the rules proposed in Q8, below.

1 7. **Society loses.** This assertion is another restatement of the claim that costs will be
2 higher if competition is permitted. However, society does not lose if overall societal
3 costs are lower, which will be the case if the lowest incremental-cost distributor is the
4 one that is granted the right to connect unserved and underserved customers.

5 8. **Obligation to serve issues become muddled.** Allowing embedded distributors to
6 operate within existing franchise areas will not change the reality that each distributor's
7 service areas will have clearly defined boundaries. It will not be difficult to determine the
8 distributor, or distributors, that are able to serve a customer economically. Even if
9 distributors' service areas should become highly fragmented, it would not be difficult to
10 maintain a database of addresses served by each distributor that could be accessed by
11 the customer service departments of all distributors.

12 What is more important is that potential customers (developers, current or future
13 occupants of unserved and underserved locations, etc.) should have ready access to
14 information on the non-incumbent distributors that are interested in providing service in
15 their area, as well as the incumbent distributor that has an obligation to connect or make
16 an offer to connect.

17 9. **Basic tasks would become more complex and costly.** It is undoubtedly the case that
18 when a market moves from a single-supplier environment to a multiple-supplier
19 environment certain tasks that require coordination become more complex. That was
20 true when competition was introduced by the CRTC for long distance telephone service
21 and later for local service. Nevertheless, competitors have been able to interconnect
22 their telecommunications networks efficiently, with some assistance from the regulator to
23 "encourage" the incumbents not to impede competition. Reasonable solutions to this
24 "problem" are not beyond the capacity of the electricity distribution industry to develop.
25 While there may be some costs involved in introducing competition, it would be contrary
26 to the principles underlying economic efficiency to assume that the administrative issues
27 dominate the efficiency benefits of competition.

28 Similarly, there is no doubt that the introduction of competition into the supply sector of
29 the Ontario electricity industry created the need for systems to manage the complexity of
30 settlements, balancing supply and demand, etc. The concern raised by KEMA-Quantec
31 seems to me to be rather insignificant relative to the administrative implications of
32 opening the electricity commodity market to competition.

1 **Q7. You agree with KEMA-Quantec that it is appropriate to operate distribution assets on**
2 **a monopoly basis. Why do you favour introducing competition for the right to**
3 **connect unserved and underserved customers?**

4 The Ontario electricity market is part way through a transition to a more competitive
5 market. A great deal has been invested in opening the door to allowing competitive market
6 forces to discipline participants in the market to aggressively seek ways to operate more
7 efficiently, to be innovative in creating customer value, and ultimately to realize the goal of
8 a workably competitive market. The commitment to competition has not been reversed
9 and, at this point, is probably irreversible. It would be a mistake to diminish the potential
10 benefits of competition by imposing unnecessary restrictions on the ability of market
11 participants to compete.

12 There is no doubt that it would be neither efficient nor sustainable to encourage the
13 development of redundant distribution networks. However, as far as I am aware, nobody is
14 advocating a distribution market with multiple networks running past every home and
15 business so that customers can choose their distributor.

16 What is being advocated is that distributors should be permitted to compete for the right to
17 connect customers at unserved and underserved locations. The distributor that wins the
18 right to connect any customer or group of customers would, however, provide service as a
19 regulated monopoly subject to the regulatory authority of the Ontario Energy Board.

20 It is in the public interest to allow a distributor that offers superior customer value at
21 competitive prices to connect unserved and underserved locations to the distribution
22 network. Superior customer value may take the form of either a lower incremental
23 connection cost, enhanced services (e.g., interval meters), or some combination of the
24 two. Relying on the distributor that offers the best value to customers will maximize the
25 value of distribution service to Ontario consumers. Competition for the right to connect
26 unserved and underserved locations is the most promising approach to achieving this
27 result.

28 Competition also will force all distributors to make a greater effort to both operate more
29 efficiently and to enhance customer value by offering customers the services and
30 innovations that they want. In the absence of competition for customer connections in the
31 distribution sector, incumbents that fall behind the industry standard in terms of service,
32 innovation or efficiency will not be penalized. Households and business that locate in their

1 historical service area will be obligated to take whatever the incumbent distributor offers.
2 On the other hand, with competition, the Ontario distribution sector will become more akin
3 to other markets. Underperforming distributors will suffer reduced growth until they
4 improve their operations. If they do not, they will become takeover targets for new owners
5 that can revitalize their operations.

6 This is not to say that introducing competition into an industry where rates are regulated is
7 a simple task. It will be necessary to establish a process for selecting a distributor that
8 ensures that the distributor that maximizes customer value has the advantage in winning
9 that right. It will also be necessary to do so by means of a process that is not burdensome.
10 The goal of the Board should not be to protect the monopoly of the incumbents. The goal
11 should be to facilitate a workably competitive environment that balances the goal of
12 enhancing competitive discipline to the greatest extent feasible against the goal of avoiding
13 burdensome administrative and regulatory processes.

14 ***Q8. What rules would be required to ensure that competition among distributors results***
15 ***in the most efficient outcome for the Ontario distribution system as a whole?***

16 In a fully competitive market, the primary determinant of the distributor that would connect
17 unserved and underserved locations would be the customers' preference. Of course, as
18 discussed above, electric distribution will not be fully competitive for the foreseeable future.
19 Once a distributor connects a location that is unserved or underserved, it will become
20 "served" and will therefore become uncontestable in the market. Rates that the distributor
21 may charge will be those approved by the Ontario Energy Board based on its standard
22 principles for allowing distributors to recover their reasonably incurred costs. In addition,
23 the customer contributions that licensed distributors charge must accord with the
24 methodology established by the Distribution System Code.

25 The principles that have been adopted for determining distribution rates and customer
26 contributions are appropriate in most circumstances for ensuring that the public interest will
27 be served if customers are able to choose the distributor that will connect unserved and
28 underserved locations. The only requirement is a workably competitive market.

29 Under the Distribution System Code, distributors may charge a customer contribution that
30 ensures that each customer, or area, being connected is compensatory. That is the case
31 because the customer contribution is designed to be sufficient to recover any expected
32 shortfall in the present value of the project, taking into account forecast revenues and

1 forecast incremental costs. As a consequence, the distributor that is able to offer the
2 customer the service package (i.e., the electricity rate, the customer contribution and the
3 service option) that has the greatest customer value will, by definition, have a competitive
4 edge in attracting customers. A regime that ensures that the distributor that offers the best
5 customer value is able to connect customers will maximize both the overall value to
6 distribution customers in Ontario and the economic efficiency of the Ontario distribution
7 sector.

8 Of course, where distributors may differentiate themselves on the basis of service as well
9 as cost, some customers may not choose the lowest cost distributor. This is a normal
10 occurrence in competitive markets.⁶ Consumers make decisions on the basis of many
11 factors that affect the value of a product or service to them. Whether or not they choose
12 the lowest cost option, the presumption in competitive markets is that customers choose
13 the option that provides the best value to them. Hence, it can be expected that some
14 consumers will choose a distributor that has higher-cost services, reflecting higher
15 incremental costs borne by the distributor, because, for example, that distributor will be
16 installing more expensive interval meters that permit time-of-use billing. This choice would
17 be both economically efficient and in the public interest.

18 In fact, the benefit of allowing this kind of competitive choice may extend beyond the direct
19 benefit of the individual choice of distributor for connecting unserved and underserved
20 locations. The availability of competitive offerings for new customers is likely to discipline
21 all distributors to be more responsive to the desires of their monopoly customer than they
22 might otherwise be.

23 As noted above, there is one circumstance in which the existing regulatory structure may
24 mask the true cost of competing connection options. Where a customer contribution is not
25 required the normal competitive market price signal disappears since the contribution
26 requirement cannot be less than zero. In this situation, customers can be expected to
27 choose the distributor that has the lowest distribution rates, although the services offered
28 will also be considered. However, it is possible that the distributor with lower rates has
29 higher incremental costs for connecting the location.

⁶ While it is possible that some customers may make poor decisions, this is not normally accepted as a justification for a regulatory authority to make the decision for them. This aspect of consumer protection is addressed through general consumer protection legislation that deals with truth in advertising and other consumer information issues.

1 To address this situation it would be reasonable for the OEB to institute a simple
2 administrative process that would be used to review situations where two or more
3 distributors are competing to connect customers and they do not require a customer
4 contribution.⁷ In my view, the following process would be both effective and efficient, partly
5 because it would rarely be required but would provide a safeguard against the rare
6 situations where the appropriate price signals are masked by the regulatory regime.

- 7 • In the event that (i) a distributor other than the incumbent is seeking to connect a
8 location that is unserved or underserved (i.e., approval for embedded distribution is
9 being sought by a non-incumbent distributor), and (ii) both the incumbent and non-
10 incumbent distributor can connect the customer without a customer contribution, then
11 either distributor may request the Board to review the competing proposals on the
12 basis of the economic test that is used for determining customer contributions.
- 13 • Given that there are no customer contributions required, the test should produce
14 negative numbers for each distributor. The distributor with the largest negative
15 number would be the distributor with lower incremental cost, all other things being
16 equal. Or, more simply, the Board could simply compare the incremental costs that
17 are used by each distributor in determining that a customer contribution is not
18 required.
- 19 • The distributors should be entitled to propose adjustments to the figures used in the
20 customer contribution calculation to reflect differences in the proposed distribution
21 service that would be provided to customers (e.g., interval meters versus non-interval
22 meters) to ensure that an apples-to-apples comparison is being made.
- 23 • The OEB would make a decision based on its determination as to which distributor's
24 proposal is in the public interest.

⁷ Theoretically, the misleading price signals could also cause uneconomic decisions in cases where a distributor with high rates does not have to charge a customer contribution and a competing distributor with lower rates does have to charge a customer contribution for the connection to be economic. While it is theoretically possible for the distributor that does not have to charge a customer contribution to be disadvantaged, the practical market benefit of not requiring a customer contribution, combined with the practical reality that such situations will be very rare, makes it appropriate, in my view, to ignore this situation in developing rules for distribution competition that are not unnecessarily complex.

1 **Q9. Please summarize the conclusions that can be drawn from your analysis of the**
2 **opportunities to introduce efficient competition into the distribution sector.**

3 My conclusions can be summarized as follows.

- 4 1. Competition for the right to connect locations that are unserved or underserved would
5 be in the public interest.
- 6 2. In most cases, the regulated rates and the amount of the customer contribution will
7 accurately reflect the incremental costs of competing distributors. In a competitive
8 market, customers are in the best position to assess the trade-off between and the cost
9 and service characteristics offered by competing distributors; hence, the customers'
10 choice of distributor should be respected.
- 11 3. In the circumstances where the price signals provided by regulated rates and the
12 customer contribution may mask the true underlying costs (i.e., when no customer
13 contribution is required), the OEB could make an administration decision as to whether
14 the customer's choice of distributor is in the public interest by applying a test that takes
15 into account the incremental cost of the competing distributors that would be used for
16 determining the customer contribution, and the difference in customer value of the
17 services offered by the competing distributors.