

HYDRO ONE NETWORKS INC.
REPLY ARGUMENT

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A Hearing was held by the Ontario Energy Board on May 14, 2003, in order to determine whether the proposed Bloomfield Business Park (“Business Park”) connection was indeed urgent, such that a decision on the matter should be rendered by the Board in advance of the combined hearing scheduled for the fall of 2003. The Hearing also focussed on proposals for ultimate supply of the Business Park, and on possible interim supply solutions. Following the oral Hearing on May 14th, it was agreed that Argument would take the form of written submissions.

Networks is best able to supply the Business Park, which is in Networks’ distribution territory. Networks can supply ten megawatts on an interim or permanent basis within the customer’s desired time-frame, and at a lower cost than Chatham-Kent Hydro. Networks further submits that the Applicant has not satisfied the onus to demonstrate that the final decision in this matter has to be made prior to the main Hearing. Networks can implement an interim solution in the meantime, and can work with the Municipality to satisfy its needs. The Board could then go on to determine the merits of the Application after it has determined the principles upon which these applications should be determined.

As the Board is aware, the Applicant (“Chatham-Kent Hydro”) proposed a new interim ten megawatt solution in cross-examination at the Hearing. Given this circumstance, Hydro One Networks’ (“Networks”) witnesses were able only to comment in passing on the solution, but have now had the opportunity to study the proposal. Networks’ Argument will therefore comment on, and suggest a revision to this interim ten megawatt supply option. Networks believes its modifications to this proposal would allow the Business Park to be connected in a manner that would enable the Board to minimize the impact of its interim decision and leave the determination of the relevant principles which apply to this type of Application to the main Hearing.

1 Should the Board be of the view that it would be appropriate to make a final decision at
2 this time, Networks submits that the amendment application should be denied. The
3 proposal for an amendment to the licence territory should be denied because it is not in
4 the public interest to grant the amendment. The proposed Business Park is not even
5 contiguous to Chatham-Kent service territory, but is located several kilometers outside
6 the territory of Chatham-Kent Hydro. Chatham-Kent Hydro has no assets in the area, so
7 that it would be building a line to an area where it could not serve other customers.

8
9 If the expected load of 10 megawatts does not materialize, the assets built by Chatham-
10 Kent Hydro will be at best underutilized, and at worst, they will be stranded. Moreover, if
11 the Chatham-Kent Application is approved, Network's assets will also be under-utilized,
12 even if the load does materialize.

13
14 At the end of the day, the only real reason that the Applicant has advanced for the
15 amendment is customer preference – the Municipality wishes to have its utility provide
16 the service. The Board will be considering the weight that should be accorded to
17 customer preference in the main hearing and should avoid ruling on that basis now, if at
18 all possible. Networks' Argument proposes an interim solution which will supply the
19 Business Park with ten megawatts, and which will not prejudice the final outcome of the
20 amendment Application.

21
22 The Networks Argument will address the permanent dual feeder supply option, a
23 proposed ten megawatt interim solution, and issues relating to rates, reliability, required
24 approvals and issues related to communication between the Parties.

25 Networks' Option at 10 MW with dual feeders for permanent supply

26
27 At the Hearing the customer, the Municipality of Chatham-Kent, made clear for the first
28 time to Networks that it wished to be supplied by dual feeders. This timing was
29 unfortunate, as discussed below, as it appears that Chatham-Kent Hydro was not similarly
30 disadvantaged. However, now that it understands that the Customer wants a dual supply,

1 Networks is able to propose an immediate dual supply option for the permanent supply to
2 the customer as presented in Undertaking D.3.2. The Networks proposal offers the lowest
3 cost connection for the customer, and a higher design reliability than that offered by
4 Chatham-Kent Hydro.

5

6 The Municipality of Chatham-Kent has indicated that its criteria for electric service for
7 the Business Park are connection costs, system reliability, connection time and service
8 response time. (TR 652,653,689) Networks submits that it is able to better the offer of
9 Chatham-Kent Hydro on all of these criteria.

10

11 Since the customer's preference is 10 MW from dual circuit feeders, Networks is the
12 most practicable solution for the customer because the firm connection cost of \$760,000
13 is almost \$240,000 less than Chatham-Kent Hydro's proposal of \$998,000. Networks'
14 fixed prices are \$360,000 for the first feeder and \$400,000 for the second feeder, for a
15 total of \$760,000. Chatham-Kent Hydro prices are \$773,000 for the first feeder and
16 \$998,000 for both feeders (on the same pole line).

17

18 In addition, the Networks' configuration of dual feeder supply is technically and
19 operationally superior to Chatham-Kent Hydro's proposal because the feeders do not
20 share the same pole line. Thus, in a situation where the service of one feeder is knocked
21 out by a car accident, a lightning strike, or interference from animals, the second feeder
22 would not be exposed to the same outage because it follows a different route.

23

24 While both Networks and Chatham-Kent Hydro can convert the backup nature of one of
25 the two feeders into an additional 10 MW of supply, Networks capital costs for doing so
26 are lower than those of Chatham-Kent Hydro (both have single contingency at 20MW).

27

28 Networks can connect the Business Park within 8 weeks from a signed customer
29 agreement, which is the same time frame as offered by Chatham-Kent Hydro. Contrary to
30 the assertions of Chatham-Kent Hydro, Networks does have a local presence, in fact its

1 operations centre is actually closer to the Business Park than is Chatham-Kent's
2 operations centre.

3
4 It should be noted that Chatham-Kent Hydro purported to lower its costs in the Argument
5 submitted May 23, 2003 by removing certain costs related to protection and control
6 equipment. For the record, it should be noted that the Networks quotes (Undertaking
7 response D.3.2) already included the appropriate protection and control equipment which
8 will be installed by Networks to provide the necessary level of reliability to the Business
9 Park. Therefore, Networks' costs remain substantially lower.

10
11 In summary, Networks offers a lower cost connection for the customer's requirements
12 than does Chatham-Kent Hydro by approximately 25%, and greater reliability from
13 having the feeders on different pole lines (than Chatham-Kent Hydro's single pole line
14 proposal). Networks can also provide the same construction time schedule for connection
15 of the Business Park as Chatham-Kent Hydro.

16
17 Interim Ten Megawatt solution

18
19 During Cross examination by Board Counsel, the Applicant offered an interim ten
20 megawatt solution to the Municipality. (TR 1354-1381). This solution would offer ten
21 megawatts of supply to the Park up the Bloomfield Road, using one feeder. Networks
22 witnesses heard this proposal for the first time in the hearing room. Networks wishes to
23 propose a variation on the Chatham-Kent Hydro interim solution for ten megawatts at
24 this time, in an effort to be helpful to the Board in making its decision, and despite the
25 anticipated criticism by the Applicant and the Municipality. The interim solution
26 proposed by Networks has the advantage of not requiring the Board to make a licence
27 Amendment.

28
29 The interim solution proposed by Networks is modeled on the Chatham-Kent Hydro
30 proposal. Since the line is located in Networks' service territory, Networks' proposal
31 would be for it to build the line up the Bloomfield Road. This solution would not require

1 a licence amendment. The single circuit supply to be constructed up Bloomfield Road
2 would simply be connected from Chatham-Kent Hydro's feeder. The single circuit would
3 be built with standards which would allow the provision of a second circuit, as described
4 by Chatham-Kent Hydro in its original proposal at exhibit A3.1 (Tab 3, schedule A, page
5 7 of 9).

6
7 The circuit would be connected to Chatham-Kent's supply point, on an interim basis,
8 until the Board makes its final decision after the combined hearing. Either LDC could use
9 this feeder as a component of their final design in supplying the customer with two feeder
10 supply, so it would not be stranded.

11
12 Either LDC could complete construction of facilities to provide the second circuit for
13 reliability purposes as per its permanent proposals, after the Board's final decision was
14 rendered. Networks would do this by extending its feeder from the Chatham-Kent Hydro
15 connection point to its M1 connection point, as proposed in its permanent solution.
16 Networks would construct across the eighth line to the M18 in order to complete the two
17 feeder supply. Chatham-Kent Hydro would need to add another circuit to the 27.6 kV line
18 built to the customer up Bloomfield Road.

19
20 Networks would be able to settle with Chatham-Kent Hydro by virtue of interval
21 metering installed at the customer premises.

22
23 This proposal would not burden either LDC, or the customer. Both permanent proposals
24 contemplated construction of these very facilities as part of the staging of construction in
25 exactly this fashion. The later extension to the facilities would not affect the customer but
26 would provide the customer with its two feeder requirement.

27
28 The cost for the interim ten megawatt solution proposed by Networks is \$360,000 which
29 is part of Networks' \$400,000 to reach the M1 on a permanent basis.

1 Interim One megawatt solution

2

3 The Board will recall that Networks is also able to offer an immediate one megawatt of
4 power. This amount of capacity would allow for the necessary construction power,
5 signage, streetlighting and some initial customer load. This option may be preferable to
6 the Board, as fewer facilities would be constructed prior to the Board's reaching its final
7 decision.

8

9 Networks and Chatham-Kent Hydro Rate Comparisons

10

11 The customer has cited rates as one of its reasons for choosing Chatham-Kent Hydro as a
12 provider over Networks. Indeed, Chatham-Kent Hydro's profile of customers for rate
13 comparison purposes, which forms the basis for the preference, presents a portrayal of
14 Chatham-Kent Hydro rates that incorrectly suggests large rate savings for all customers
15 in all scenarios. In actual fact, results of rate comparisons between Networks and
16 Chatham-Kent Hydro vary widely depending upon the assumed profile of the customers
17 being modeled.

18

19 A case in point is illustrated in the table below, which is presented as a correction of
20 Chatham-Kent Hydro's D.3.1. Undertaking response. (This table is an excerpt of the full
21 correction of the D.3.1 Undertaking response presented in the tables at Appendix A). The
22 Undertaking response is corrected to reflect the appropriate Networks rates, as the
23 Undertaking as submitted used rates which are no longer in effect. The table below
24 provides a remodeling of "Rate Scenario One", as originally presented in Chatham-Kent
25 Hydro's evidence (Application, Tab 4, slides 4-6). The table compares Chatham-Kent
26 Hydro's and Networks' current rates for commercial customers, both those that wish to
27 accept the 'standard supply' and those that wish to participate in the commodity market.
28 Both scenarios are likely to be of interest to customers in the Bloomfield Business Park.

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Correction to Chatham-Kent Hydro Undertaking Submission D.3.1.**Chatham-Kent Hydro's Rate Comparison with Networks**

(NB: Distribution Charges Only – Not Representative of Full Customer Bill)

Chatham-Kent Hydro's and Networks' Rates - One 700 kW/month customer:

Commodity Pricing	Weighted Average Spot Market price		Spot Market Price	
	Chatham-Kent GS >50kW (1)	Networks G3 (2)	Chatham-Kent TOU (3)	Networks T-Class (4)
LDC				
Monthly Service Charge	\$ 152.96	\$ 41.94	\$ 4,588.58	\$ 238.46
Volumetric Rate (per kW)	\$ 0.96	\$ 8.32	\$ 1.42	\$ 6.88
Service Charge - Annual	\$ 1,835.52	\$ 503.28	\$ 55,062.96	\$ 2,861.52
Volumetric Charge - Annual	\$ 8,064.00	\$ 69,888.00	\$ 11,928.00	\$ 57,792.00
Total	\$ 9,899.52	\$ 70,391.28	\$ 66,990.96	\$ 60,653.52
Networks' Difference from C-KH		\$ 60,491.76		\$ (6,337.44)

Chatham-Kent Hydro's and Networks' Rates - One 3,000 kW/month Customer:

Monthly Service Charge	\$ 152.96	\$ 41.94	\$ 4,588.58	\$ 238.46
Volumetric Rate (per kW)	\$ 0.96	\$ 8.32	\$ 1.42	\$ 6.88
Service Charge - Annual	\$ 1,835.52	\$ 503.28	\$ 55,062.96	\$ 2,861.52
Volumetric Charge - Annual	\$ 34,560.00	\$ 299,520.00	\$ 51,120.00	\$ 247,680.00
Total	\$ 36,395.52	\$ 300,023.28	\$ 106,182.96	\$ 250,541.52
Networks' Difference from C-KH		\$ 263,627.76		\$ 144,358.56

(1) Chatham-Kent Hydro's Current General Service > 50 kW

(2) Networks' Current General Service Three-Phase Rates.

(3) Chatham-Kent Hydro's Current General Service Time of Use Rates.

(4) Networks' Current T-Class Rates.

2

3 This table provides an illustration of the wide variances in customer bill impacts
4 depending on the size and type of customer connected, not just the LDC providing the
5 connection. Indeed, there is a wide disparity in Chatham-Kent's own rates, further
6 illustrating the transitional nature of rates. Most notably, given that it corrects the
7 Undertaking response, the table indicates that there are cases where transitional rates
8 result in Networks' rates being lower than Chatham-Kent Hydro's rates in some cases.

9

10 This correction to the D.3.1 Undertaking response also illustrates, as presented in Mr.
11 Stevens's evidence, that the transitional nature of rates does not provide any compelling
12 evidence for choosing one service provider over another (TR 1691-1702). A direct
13 comparison of rates, as has been provided by Chatham-Kent in its evidence and its
14 Undertaking response, is made even more tenuous by the fact that Networks rates are
15 "postage stamp" across the province and do not at this time reflect regional
16 differentiation, but are instead averaged. Moreover, since the weight to be placed on rates

1 in licence amendment applications is an issue to be determined by the Board at the main
2 hearing, Networks' submission is that rates should be given little weight in the current
3 circumstances.

4
5 The additional difficulty in accepting Chatham-Kent Hydro's rate analysis as useful to
6 this Hearing is that it attributes certain savings for a 10-year horizon for its new
7 customers collectively, and has done so most recently in its D.3.1. Undertaking response.
8 Chatham-Kent Hydro does so, however, without the certainty that would otherwise be
9 required on three important and critical variables. First, it does not have certainty on the
10 number of customers, but instead relies on estimates. Second, it does not have certainty
11 on the type of customers it will get in the Business Park, but instead relies on projection.
12 And third, it does not have certainty on rates, given the knowledge that the Board
13 requires cost of service studies for the next rate orders in 2006. Networks' initial response
14 to the Application outlined the potential presence of cross-subsidies as a result of the
15 simplified unbundling process used in the first-generation PBR (performance-based
16 regulation). (Exhibit B3.6 Sections 3.20-3.26, 4.14-14.18, and Table 3).

17
18 Networks notes, for the record, that Chatham-Kent Hydro continues to suggest in its
19 D.3.1. Undertaking response (notes to tables on pp. 2 and 3), as it did in cross-
20 examination (TR 1205-1210 and 1476-1523), first, that its existing General Service Time
21 of Use rate is "grandfathered" for existing customers and, second, that all new customers
22 that would otherwise fit this category would now fit its General Service > 50kW rates.
23 Networks' notes that this characterization belies a number of facts. Firstly, Chatham-Kent
24 Hydro's web posted rates specifically state that the General Service > 50kW is for
25 ""Weighted Average hourly Spot Market"" customers, and thus not available for
26 commodity market participants as Chatham-Kent Hydro contents. Moreover, the web
27 posted rates outline the General Service "Time of Use" rate, without a "grandfathering"
28 qualification. Networks notes that these web posted rates have the same characterization
29 in the Chatham-Kent Hydro rate order from the Board – RP2002-0081/EB2002-0090).

1 Networks notes that Chatham-Kent Hydro has provided no evidence of approved
2 company policies that the General Service Time of Use rate is no longer available (TR
3 1501-1502) or that the General Service > 50kW is the applicable rate for all new
4 customers. Indeed, Networks' contention is that the General Service Time of Use rate
5 appears to be the only rate option for commercial customers (other than 'Large Users') if
6 they want access to market prices (either spot market or negotiated with retailers for
7 hedging purposes). For the type of customers the Municipality maintains it is courting for
8 the Business Park, Networks believes it will be the case that Time of Use rates will be
9 preferable.

10
11 In summary, Network's submission is that Chatham-Kent Hydro erred in performing its
12 original rate analysis, as its assumption on customer types is based on one type of
13 customer only. At the Hearing, Chatham-Kent acknowledged that a large variety of users
14 could potentially use the Business Park (TR 428, 457). Therefore, in Networks'
15 submission, there will potentially be customers among the various businesses that may
16 wish to locate in the park that could be advantaged by Networks rates, just as in other
17 scenarios there will be customers advantaged by Chatham-Kent Hydro's rates. In any
18 event, the projected savings provide erroneous calculations of savings because too many
19 of the variables lack certainty and the rate calculations did not include scenarios where
20 Networks rates are advantageous.

21
22 Networks therefore suggests that, knowing that rates are transitional and new rates will
23 likely be applicable in 2006, current rate differences do not provide a sound basis for
24 assessing a location decision by a business, and are not a sound or rational basis for
25 deciding whether to amend distribution licences.

26 27 Reliability

28
29 There was testimony at the Hearing to the effect that the Chatham-Kent Hydro line which
30 would feed the business park would be more reliable than a similar feeder provided by
31 Networks. The Chatham-Kent witness acknowledged that the reliability statistics put

1 forward to support this assertion compare the urban reliability of Chatham-Kent Hydro,
2 as compared to the rural reliability statistics of Networks. Since this will be a rural line,
3 there is no evidence to suggest that the experience of Chatham-Kent Hydro with
4 lightning, animals, and car accidents will be any better than Networks' experience with
5 the same elements. (TR 1105,1106)

6
7 Networks demonstrated that it has connected and supplied hundreds of customers to its
8 Low Voltage system, which require the supply of load and reliability characterized by
9 Chatham-Kent (TR 1617,1618). Networks notes that the Dillon report, on which the
10 customer decision was based, concluded that reliability for Networks and Chatham-Kent
11 Hydro would be the same. (Chatham-Kent Hydro evidence, Exhibit B3.5, Tab 3, page 2).

12
13 Networks affirmed its ability to work with large, sophisticated customers in providing
14 appropriate levels of supply. (TR 1650,1651,1652) Networks further demonstrated this
15 ability by improving its M17 feeder reliability by 300% through investments in lightning
16 arrestors, increased conductor size, additional feeder tie-points, and a regulating station to
17 improve reliability of supply to Solvay, a Chatham-Kent Hydro customer embedded in
18 Networks' Low Voltage system. (TR 1649)

19
20 Mr. Schwarz, who testified for Chatham-Kent Hydro on reliability issues, also suggested
21 that Networks' reliability would be less because the Networks line would be somewhat
22 longer. The witness however, failed to acknowledge that the line is protected by
23 reclosers, which sectionalize the line, and therefore isolate outages. This was explained
24 by Mr. Kloostra in his direct evidence (TR 1647,1648). Mr. Schwarz affirmed that the
25 installation of sectionalizing equipment improves reliability (TR 1441-1446). It is being
26 wrongly presumed that Networks will not be designing its system to provide optimal
27 levels of reliability.

28
29 Furthermore, during cross-examination by Board Counsel, this witness, who was not
30 qualified by the Board as an expert witness, admitted that he did not understand the
31 reliability indices which the Electrical Industry, and the OEB, uses in benchmarking and

1 comparing levels of reliability by LDC's. These were the very indices that were used for
2 comparison of Networks and Chatham-Kent's reliability (TR 1404, 1406, 1410, 1419,
3 1425). Networks submits that the evidence provided by this witness should therefore be
4 afforded less weight.

5
6 Moreover, the dual feeder proposal put forward by Mr. Gee at the Hearing is more
7 reliable than that proposed by Chatham-Kent Hydro, since Networks geographically
8 supplies the development from alternate sources (TR 1627). The Networks proposal uses
9 two separate pole lines, whereas the Chatham- Kent proposal does not, and is therefore
10 more vulnerable to outages where the line is double circuit on a single pole line.

11
12 Finally, Networks notes the inappropriate introduction of new evidence in the Chatham-
13 Kent evidence related to the Solvay Plant. The Solvay plant is Chatham-Kent's customer.
14 It is not possible for Networks to respond to hearsay comments included in Final
15 Argument, nor should it be put in the position where it is forced to do so.

16 17 Approvals

18
19 Networks proposes to use existing right of way for the majority of the route, and does not
20 foresee any issues with obtaining additional property rights as required. Networks does
21 not foresee difficulties with obtaining road authority approvals from the customer, and
22 already has an approved crossing of Highway 401.

23 24 Issues relating to sharing of information

25
26 Networks notes that a great deal of emphasis is placed in the Argument of both Chatham-
27 Kent Hydro and the Municipality of Chatham Kent on the fact that Networks has made a
28 series of proposals for supply to the Business Park, rather than one proposal. A good deal
29 of Hearing time was also spent on this issue. In Network's submission, such criticisms
30 are without merit. Rather, it is Networks' view that it has been forced into the position of
31 having to respond to revisions to the Municipality of Chatham-Kent's requirements

1 which were never properly or fairly communicated to Networks. The hearing was the first
2 point at which the Municipality clearly stated to Networks that it wanted a dual source of
3 supply (i.e. two feeders) for the ten megawatts for reliability purposes, rather than for
4 additional capacity.

5
6 Networks notes that both the Municipality and Chatham-Kent Hydro have filed evidence
7 that confirms that the Municipality has changed the requirements. First, the Dillon report,
8 which was the original source of the recommendation to Council, did not compare
9 Chatham-Kent Hydro and Networks on the basis of dual feeder supply for ten megawatts.
10 (Chatham-Kent evidence, Exhibit B3.5, Tab 3, page 5). Rather, the Dillon report
11 compared the two utilities on the basis of 10 megawatt single circuit supply, with a
12 second circuit built at a later date, (but to provide up an additional ten megawatts for a
13 total of 20 megawatts.) (Municipality of Chatham-Kent evidence, Exhibit B3.5, Tab 3,
14 page 5, 'Connection Costs,' slide 7). Therefore, Dillon looked to the second feeder for
15 additional supply, not for reliability contingency for the first feeder, as the Municipality
16 has now wrongly suggested to the Board. (Chatham-Kent written Argument, May 23,
17 2003 at paragraph 3.5.) Moreover, Chatham-Kent's original proposal also quotes a single
18 feeder 10 MW option stating:

19
20 "the minimum required service for this development is a single-feeder
21 option assuming that the initial phases of the development would not
22 require more than 10 MW of capacity. A second feeder would essentially
23 double the amount of load capable of being serviced while increasing the
24 reliability and performance of the system." (Chatham-Kent Hydro
25 evidence, Exhibit A.3.1, Tab 3, page 7)

26
27 Clearly, Chatham-Kent Hydro also did not originally see the second feeder as being
28 required for contingency purposes.

29
30 Network's policy has always been to work with its customers to meet their requirements,
31 however in this case, circumstances have made it difficult to do so. The evidence is clear

1 that at some point, the customer's requirements must have changed. Clearly this change
2 was communicated to Chatham-Kent Hydro, but not to Networks.

3
4 Networks notes that the Municipality acknowledged in the Hearing that that it has been
5 advised throughout the Application process by Chatham-Kent Hydro (TR 346, 365, 594,
6 641). Indeed, the Chief Administrative Officer indicated in his testimony that he relies
7 on Chatham-Kent Hydro for information about Networks. Further, one municipal
8 witness acknowledged at the Hearing that there was no attempt made to correct
9 Network's understanding of the changed requirements, even after Network's reply
10 submissions were obtained, and the obvious misapprehension of the requirement was
11 known (TR 349). Instead, both the Applicant and the Municipality expended a great deal
12 of time and energy in criticizing Networks for changing its proposals.

13
14 This approach is not helpful, either to the Respondent Networks, or to the Board. In
15 Network's submission, an Applicant for a licence amendment should be required to
16 satisfy the Board at the outset of the process that it has properly informed the incumbent
17 distributor of all relevant facts, before the inception of the amendment process. Networks
18 also suggests that it would be helpful to the Board and to the Parties in presenting a well-
19 focussed case if there were an Interrogatory process prior to the Hearing, so that the
20 Parties could be sure of the facts, before appearing before the Board.

21
22 Conclusion

23
24 The proposed Business Park is in Networks' service territory, surrounded by Networks'
25 assets and customers. Networks is able to offer the Municipality of Chatham-Kent both
26 interim and long-term solutions which meet the customer's expressed needs at a lower
27 cost than Chatham-Kent Hydro, with the necessary levels of reliability. Furthermore,
28 Networks can supply both the interim and permanent solutions without the need for a
29 licence amendment. Networks can supply the full ten megawatts in the same time-frame
30 as Chatham-Kent Hydro, and in Networks respectful submission, it should be allowed to
31 do so.