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April 22, 2016

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Filed via RESS

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Board File No. EB-2016-0004
Parkland Fuel Corporation ("Parkland") Responses to Interrogatories

Please find enclosed Parkland's responses to the interrogatories of the Board Staff, the Consumers Council of Canada, the Federation of Rental-housing Providers of Ontario and the Vulnerable Energy Consumers Coalition.

The responses to interrogatories are being filed on RESS and two hard copies will be sent to the Board.

Yours truly,

fw: Richard King
AD

cc: Intervenors in EB-2015-0179 and EB-2016-0004

EB-2016-0004

ONTARIO ENERGY BOARD

APPLICATION UNDER THE ONTARIO ENERGY BOARD'S OWN MOTION TO CONSIDER POTENTIAL ALTERNATIVE APPROACHES TO RECOVER COSTS OF EXPANDING NATURAL GAS SERVICE TO COMMUNITIES THAT ARE NOT CURRENTLY SERVED

INTERROGATORY RESPONSES OF PARKLAND FUEL CORPORATION – EXHIBIT S12

April 22, 2016

Board Staff Interrogatory # 1

Ref: Affidavit of Gary Highland, paragraphs 12-13

Mr. Highland's affidavit states that "[t]he difference in emissions between propane and natural gas combustion are insignificant."

Does the word "emissions" include greenhouse gases? If not, what are the differences in greenhouse gas emissions between propane and natural gas combustion?

Response to Board Staff Interrogatory # 1

For the purposes of this discussion, emissions do include greenhouse gases.

Board Staff Interrogatory # 2

Ref: Affidavit of Gary Highland, paragraphs 12-13

The affidavit states that while propane will not contribute to pollution in its unused state if released, natural gas will. Methane is 25-27 times more toxic as a greenhouse gas than carbon dioxide. Fugitive emissions of natural gas during extraction, transmission and distribution are still being quantified, however both the Canadian and US federal governments recently committed to reducing methane emissions by 25%.

In your opinion, is fugitive emission of natural gas a larger issue in extraction and processing or distribution?

Response to Board Staff Interrogatory # 2

Due to the significant global warming potential of methane relative to carbon dioxide, fugitive emissions of methane at each stage of the process (production, processing, transmission and distribution) are an issue and reduce the comparative climate advantage of natural gas. A US study (Gas Research Institute and EPA) of natural gas leakage rates concluded that 32% of methane emissions are a result of leakage from the distribution sector.[1]

[1] Carey Bylin, et al, "New Measurement Data Has Implications For Quantifying Natural Gas Losses From Cast Iron Distribution Mains," Pipeline and Gas Journal, September, 2009.

Board Staff Interrogatory # 3

Ref: Comments on Economic Issues Raised in EB-2016-0004, Kalyan Dasgupta and James F. Nieberding, Ph.D., Pages 16 and 17, Para 5.5 to 5.7

The evidence notes that the traditional method of pricing new natural gas pipeline construction has been to roll in new capital expenditures with the existing rate base of pipelines and to increase rates accordingly. The evidence further suggests that from a strict economic efficiency perspective, the correct approach to follow is a strict incremental cost approach; each project should produce incremental revenues that exceed its incremental cost. The report claims that the dangers of cross subsidization are inherent in rolled in pricing.

a) The OEB in its EBO 188 guidelines has attempted to address the issue of the incremental cost approach by setting the minimum target of the Rolling Project Portfolio at 1.1. Please provide your opinion on this guideline set by the OEB and explain why this guideline is not sufficient to address any incremental cost concerns.

b) The report raises concerns about rolling in new capital expenditures into existing rate base in order to calculate rates. However, the report does not recommend any alternatives. If alternatives do exist, please explain how these alternatives would be implemented for ratemaking purposes including the use of multiple rate bases and the process of allocating costs across the different rate classes.

Response to Board Staff Interrogatory # 3

a) We recognize that the OEB has attempted to address the issue of the "incremental cost approach" through its minimum target for the Rolling Project Portfolio, and that EBO 188 is an attempt to balance the pursuit of new expansion projects (that might be uneconomic on a stand-alone basis) while minimizing cross-subsidization. We recognize that the current "test" attempts to put bounds around the extent to which uneconomic expansions are carried out and to limit inefficient cross-subsidization. Our understanding of the current proceeding (EB-2016-0004) at the time we submitted our evidence was that it concerned potentially relaxing the approach in EBO 188 (e.g., proposals to relax the test and permit projects with individual PIs of as low as 0.4 whose inclusion in a portfolio of expansion projects would drive the profitability of the portfolio as a whole down below 1.0), not about its fundamental ability to promote economic efficiency. Submissions by Enbridge and Union Gas made coincident to our own submission underscore this point. Union Gas states at p. 6 of its evidence "The Board should consider portfolios and projects with PI's of less than 1.0 and 0.8, respectively." Enbridge reports at ¶ 69 that the thirty-nine community expansion projects it is considering have forecast PIs of between 0.15 and 0.70. Our commentary only addresses (a) the rationale for implementing rules to limit the degree of cross-subsidy that otherwise uneconomic expansion projects can receive, (b) the possible reasons for relaxing such cross-subsidy rules (e.g., externality or public benefit arguments) that might be advanced, and (c) the economic distortions created by the method through which subsidies are provided (lump-sum versus changes to marginal prices, etc.). In our view, relaxing the current approach in EBO 188 to allow for more cross-subsidization to fund otherwise uneconomic pipeline

expansions would likely result in the types of economic inefficiencies and distortions identified in our report.

b) We did not seek to address rate-making methods in our evidence, only to illuminate the economic rationales for avoiding inefficient cross-subsidies. We note that "rolling in" new capital with existing capital principally creates a problem when it causes average costs and therefore prices for existing ratepayers to increase. Consider the following example. Assume that an existing natural gas system has revenues of $100 and costs of $100 (including various fixed and overhead costs). An expansion of this system would, if built on a stand-alone basis, have costs of $12. Because there are economies of scope between the expansion and the existing system, the total cost of having both systems is only $110 and not $112 ($112 = $100 + $12, the sum of the two stand-alone costs). That is, the stand-alone cost of providing the existing service is $100, the stand-alone cost of providing expanded service is $12, and the cost of providing them together is $110. From this perspective, the incremental cost of the expansion system is $10 (total cost with expansion less total cost in the absence of the expansion).[2]

Suppose that the expansion system's ratepayers have a willingness to pay that equals $10 (or greater). In this case, the expansion system's incremental revenue equals its incremental cost and the project is economic. In this instance, average costs for the existing ratepayers would remain the same, there is no cross-subsidy from existing to new ratepayers, and "rolling in" the expansion system does not cause any allocative economic inefficiency as customers receiving the benefits of the expansion are made better off without making existing system ratepayers worse off. If, however, the expansion system only generated revenues of $9, then the utility would have to raise $110-$9 = $101 from the existing system (i.e., a subsidy of $1 would need to be assessed against existing ratepayers). In this case, under a rolled-in approach, a cross-subsidy will occur when the average cost taken across the existing and expanded systems exceeds the average cost of the existing system. The expansion project will still be built if the $101 can be recovered from the captive ratepayers of the existing system, and it is in this circumstance that the problems with "rolled-in" pricing arise.

This example is meant to illustrate that before an expansion project is built and tolled on a "rolled in" basis, it should be subjected to the incremental cost test. If an expansion project does not pass this "test", then proceeding with it would be inefficient as a matter of economics. If it does pass it, then "roll in" would appear to be immaterial. As stated in our evidence, "From a strict economic efficiency perspective, the correct approach to follow is a strict incremental cost approach: each project should produce incremental revenues that exceed its incremental cost. ... However, this rule is not satisfied under rolled-in pricing because the last unit or last increment of capacity is

[2] This example is the same as that provided in the paper by Costello (2013) that we cite in our evidence (at pp. 28-29). The benefit to expansion customers from existing customers is $2 which is the difference between the cost of serving new customers alone ($12) and the cost of serving new customers along with existing customers ($10), and the incremental cost of the existing system is $98 ($110-$12), i.e., the difference between the cost of operating the integrated system versus operating only the expansion portion of the system.

obtained at a price which is below the cost of providing it." (¶ 5.6) Economic principles suggest that a "burden test" such as the incremental cost test should be required before any rates are "rolled in." We understand that regulators such as the FERC and the OEB often require "burden tests" which (whether perfectly or imperfectly) capture some of the logic of the incremental pricing rule. We would suggest that such rules not be relaxed except if there is a compelling demonstration that subsidized expansions are economically justified (i.e., if natural gas expansions produce benefits for Ontario at large and not just the areas in which the expansions occur, and those benefits are specifically linked to natural gas expansion, and the magnitude of these benefits exceed the amount of subsidy provided).

As we discuss in our evidence, rolled-in pricing also distorts the competitive landscape and does not respect the principle of "cost causer pays." Allowing incumbent gas utilities to "roll-in" capital associated with uneconomic expansions into their regulated rate base amounts to an (inefficient) cross-subsidy from existing to new ratepayers, artificially lowers the costs to incumbent utilities of new expansions, and distorts existing competition between these incumbents on the one hand, and alternative fuel suppliers and new entrants on the other hand (since these firms have not received subsidies for their capital expansions). Adherence to an incremental cost test would not result in such incorrect market "signals". In short, if there are existing regulatory "burden tests" that approximate the incremental cost criterion, then our evidence addresses the value of respecting those tests. We do not address regulatory innovations over and above the existing protective mechanisms reflected in the burden tests.

Board Staff Interrogatory # 4

Ref: Comments on Economic Issues Raised in EB-2016-0004, Kalyan Dasgupta and James F. Nieberding, Ph.D., Page 22, Para 6.8 and 6.9

The evidence states that an important reason for regulating a firm is that it has market power that is unlikely to be corrected by competitive entry. This would not, however, describe the position of a new natural gas system in areas where other fuels are incumbent. The areas that are currently unserved by natural gas pipelines may well be relevant geographical markets for the purpose of competitive analysis. This competition economics perspective suggests that far from rolling-in the capital of these systems into a regulated rate base, these systems should be operated much as unregulated affiliates are operated.

a) Are the authors suggesting that the Ontario Energy Board (OEB) forebear from regulating expansion of natural gas in communities that are not economic to serve? If so, how would the OEB protect the public interest in that context and ensure just and reasonable rates?

b) Assuming that the OEB were to forebear from regulating rates in areas that are not economic to serve and the communities do receive natural gas service, is there a possibility that this could eventually lead to a monopoly gas service provider in the specific communities?

Response to Board Staff Interrogatory # 4

a) In areas unserved by natural gas there is competition (to varying degrees) among incumbent fuel sources such as propane, wood, fuel oil, etc., and this competition occurs on an unregulated basis. Only electricity distribution companies' rates are regulated (and that is because they provide electricity, a basic and essential service whose distribution has generally been held to exhibit natural monopoly characteristics). The fact that over several decades the OEB has not instituted regulation of retail rates for fuels such as propane suggests that competition between different fuel sources and between different providers of the same fuel source ensures what regulators term "just and reasonable rates". In economic terms, these are rates that are reasonably well aligned with the underlying costs of providing service.

Economic regulation has typically been predicated on (a) a desire to control the exercise of significant and enduring market power (such as that which an unregulated natural monopoly could possess) and (b) a desire to capture any cost efficiency benefits from natural monopoly. In areas with incumbent fuel sources, there is already competition in place, and a natural gas provider would only need to be regulated if it acquired a monopoly position. Absent extensive subsidies, the expansion projects that are being considered in this proceeding do not appear to be economic. In these cases, the expansions would not even be able to cover their long-run average cost of service, let alone price above this long-run average cost – one of the hallmarks of significant

market power.[3] A natural gas distributor would not have significant market power since it would struggle to acquire customers who utilize other fuel sources at a price that would let it earn a normal return on capital. Therefore, the first justification for economic regulation is not present. In addition, since extensive subsidies would be required to roll-out the contemplated natural gas expansions, displacing incumbent fuels with natural gas does not serve the purpose of achieving cost efficiency. Absent the usual rationales for regulation, the OEB should continue what is effectively its current policy of forbearing from regulating the provision of heating fuels in these areas. Natural gas expansions should simply be viewed as another potential entrant in this unregulated market.

Our concern is that in this context, instead of being predicated upon cost efficiency and the control of market power, the existence of OEB regulation over the natural gas distributors could be used to provide a mechanism—rolled-in pricing—to cross-subsidize uneconomic natural gas expansions and disrupt existing competition.[4]
Even if it were true that the actual cost savings to expansion-area consumers substantially exceed the costs of deployment (as suggested by Table 10 in Enbridge's evidence for instance), then would-be natural gas providers should be willing to bet on their ability to convince customers of the value of switching. Their position would be no different from that of a new entrant (in any industry) with a different technology that faces the task of convincing customers to switch to its new technology. In unregulated markets, there is no regulator that subsidizes switching to the new technology; rather, it is the competitors themselves that bear the burden (and risk) of educating and convincing customers to switch. There is, in general, no justification for using rate regulation to subsidize one particular technology where the usual predicates for economic regulation are absent.

b) The situation envisaged by the question—an unregulated natural gas monopoly—seems most unlikely to us based on the evidence submitted in this proceeding. Many of the submissions in this proceeding assume or demonstrate that natural gas expansions in unserved communities in Ontario are uneconomic (e.g., out of 39 expansion projects contemplated by Enbridge, not one seems to come close to paying for itself). These submissions suggest that such expansions would occur only if a subsidy were provided.[5] The provision and administration of such subsidies will require regulatory consent and regulatory oversight. Therefore, it does not appear at all likely that natural gas will displace incumbent fuel providers to the extent that it monopolizes the market for

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[3] See Church, J and R. Ware (2000), Industrial Organization: A Strategic Approach (Toronto: McGraw-Hill) at p. 603, for example, which equates significant market power with the ability to set prices above long-run average cost, including a normal return on capital employed.

[4] Economic theory suggests that regulated utilities and their shareholders may have incentives to expand the regulated asset base of the firm under certain circumstances. These incentives are discussed in Footnote 54 of our evidence.

[5] If an area were uneconomic to serve, then presumably a natural gas provider would not find it profitable to enter it absent subsidies.

heating fuels absent regulation (i.e., create an unregulated natural gas monopoly).[6] If a natural gas monopoly were to develop, that would likely be the result of regulatory subsidies authorized by the OEB that had the effect of displacing alternative fuel providers. In our view, this outcome—the regulator substituting competition among alternative fuels with a natural gas monopoly—would be contrary to the OEB's mandate to foster competition in the sale of gas to users[7]. Again, as stated in our answer to the preceding question, economic principles suggest that rate regulation should not be used as a means by which natural gas distributors can cross-subsidize natural gas expansions and potentially displace investments in existing fuel sources that were made on the basis of correct market signals regarding the cost of providing service.

[6] Indeed, economic principles suggest that the existence of unregulated competition between fuel sources should provide a "check" on any unregulated natural gas entrant into an unserved area who may attempt to exercise market power.

[7] OEB Act, Section 1, Part 2(1).

Board Staff Interrogatory # 5

Ref: Evidence of EPCOR Utilities Inc. (Dr. Adonis Yatchew), pages 12-13 and 21-22

Evidence of Mr. Dasgupta and Dr. Nieberding

Dr. Yatchew's evidence recommends that the Board establish and administer an "Expansion Reserve". The Expansion Reserve would collect a levy from all small volume natural gas customers, and use these funds to finance natural gas expansion in the province. The Expansion Reserve could be accessed by any gas distributor.

Without repeating the concerns that have been expressed about cross subsidization in Parkland's evidence, do Mr. Dasgupta or Dr. Nieberding have any comments on EPCOR's proposed Expansion Fund?

Response to Board Staff Interrogatory # 5

As we have outlined in our evidence, an economic basis might exist for Ontarians to subsidize natural gas expansions into rural areas if 1) natural gas expansions produce benefits for Ontario at large and not just the rural areas in which the expansions occur, 2) those social benefits are specifically linked to natural gas expansion into rural areas, and 3) the magnitude of these benefits exceeds the amount of subsidy provided. Even given a public policy preference for expanding natural gas systems, we noted that a 2013 National Regulatory Research Institute (NRRI) working paper characterized the benefits of expanding natural gas as "so far lack[ing] empirical support, at least in providing policy-makers with reliable evidence that their magnitude is sufficient to warrant governmental actions." (¶ 4.12 of our evidence).

Notwithstanding this caution against the socialization of costs associated with (uneconomic) expansions of natural gas systems, if the rest of Ontario supports the general goal of economic development of rural communities, then the least distortionary way of funding this would be an income transfer by Ontarians to these rural communities. It would not justify subsidizing natural gas expansions through increased taxation of Ontario natural gas consumption. The London Economics International (LEI) study presented by Union Gas supports the notion that the most efficient funding mechanism to effect such a goal is one where all taxpayers – not just ratepayers – share the burden (see LEI Figure 4). In light of this, Dr. Yatchew advocates a Province-wide levy on current natural gas ratepayers to fund what he claims are Province-wide benefits: "[T]he Board should establish and administer an Expansion Reserve which would be funded by a small volumetric levy on Province-wide sales of natural gas to current customers. System expansion brings direct and indirect benefits throughout the Province." (¶ 29).

As outlined in our evidence, such an approach violates basic tenets of regulatory economics in that it is more distortionary than alternate mechanisms. First, if natural gas expansions generate benefits throughout Ontario as Dr. Yatchew claims, these benefits should be paid for by a tax applied to all provincial taxpayers, not only current natural gas ratepayers. While Ontarians may have an interest in the economic development of rural areas (where natural gas systems have lower penetration rates) or in environmentally friendly public policies, there is no economic reason to

choose natural gas expansions as the means to effect such policies as opposed to, say, cash grants to local communities that these communities can choose to use for such purposes. Moreover, Dr. Yatchew's Expansion Reserve apparently would be available only to natural gas distributors. Even if these subsidies are distributed in a lump-sum manner (rather than in a rate distorting manner such as cross-subsidies), they still are restrictive of how the money can be spent. This effectively renders them an "in-kind" subsidy (i.e., earmarked for natural gas only) rather than a cash transfer that could be used to fund the economic development of rural areas, or to advance environmentally friendly public policies (e.g., switching to propane from heating oil).[8]

Second, even if a subsidy to specifically fund natural gas expansions were justified (which we suggest it is not), it is not optimal (as a matter of economics) to raise this subsidy by taxing natural gas consumption in the rest of Ontario. An increase in the per-unit price of natural gas by other Ontario ratepayers (what we presume a "volumetric levy" to be) would be the most distortionary way to pay for expansions because such a tax distorts marginal consumption and investment decisions, and works against economic efficiency. The least distortionary way to fund natural gas expansions would be a straightforward income transfer from all Ontarians to do it.[9]

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[8] See Rosen (1995, pp. 167-171) for a discussion of why in-kind transfers (generally) are inferior with respect to economic efficiency than are equivalent income transfers.. (Cited in ¶ 7.3 of our comments)

[9] For example, Hausman, J. and Shelanski, H. (1999), "Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal Service Subsidies", Yale Journal on Regulation, Volume 16, pp.19-51 at 33 (cited in ¶ 4.7 of our evidence) state, "[I]t is well established that targeted subsidies paid from general taxation are often the most efficient way to fund specific activities." Harvey S. Rosen (1995) Public Finance. 4th ed., pp. 316-317 (cited in ¶ 3.13 of our evidence) states, "[M]any economists prefer direct income transfers to commodity subsidies..."

Vulnerable Energy Consumers Coalition Interrogatory # 1

a) In Paragraph 12 there is a statement that methane and carbon dioxide are "toxic". Please provide a definition of a toxic gas and explain why Parkland considers methane and carbon dioxide toxic gasses.

Response to Vulnerable Energy Consumers Coalition Interrogatory # 1

a) The reference to "toxic" was in relation to methane as a greenhouse gas as compared to carbon dioxide as indicated in the full context of the statement in evidence. Both are greenhouse gases. However as stated in the evidence, methane is 25-27 times more potent as a greenhouse gas than carbon dioxide.

Consumers Council of Canada Interrogatory # 1

Reference: General

Please specify whether any of the submitted material is intended to be accepted as expert evidence; if so, please specify precisely which assertions within the submitted material are intended to be expert opinions and identify the relevant expert.

Response to Consumers Council of Canada Interrogatory # 1

The report filed by Parkland entitled "Comments on Economic Issues Raised in EB-2016-0004" is intended to be accepted as expert evidence. The report was prepared by Kalyan Dasgupta and James F. Nieberding, Ph.D., whose qualifications were discussed in section 2 of the report and whose CVs were attached to the report.

Federation of Rental-housing Providers of Ontario Interrogatory # 1

Please provide Parkland's expert views on the alternative approach outlined by Enbridge including, but not limited to:

a. The SES approach with extended term

b. The Community Expansion portfolio approach

Response to Federation of Rental-housing Providers of Ontario Interrogatory # 1

The Enbridge proposal, like the Union proposal, requires a cross-subsidy from Enbridge's existing ratepayers to those who may benefit from the community expansion program contemplated by Enbridge. As we outlined in our evidence, cross-subsidies from one ratepayer group to another are economically inefficient, and adversely impact both allocative efficiency and dynamic efficiency. Exceptions to a strict "no-cross-subsidy" rule might apply to projects where there is a clear "external" benefit to those providing the subsidy from the project (and where the magnitude of these benefits exceeds the subsidy amount). The identity of the beneficiaries and the nature of the benefit are also critical: if the external benefit is to Ontario society as opposed to just natural gas ratepayers, then all taxpayers rather than just ratepayers should provide the subsidy. The external benefit to society should also be specifically linked to natural gas and not to general economic development in rural areas – a goal that can be facilitated in a number of different ways. Cash transfers to communities that let them spend it according to their own best calculations of the social return on investment would be closer to the generally accepted economic principle that cash transfers are preferable to an "in-kind" provision of a good or service.

Even if subsidies specific to natural gas were to be given, then a lump-sum cash subsidy provided by taxpayers would be more efficient than a cross-subsidy from existing utility ratepayers that involves raising per-unit rates for these ratepayers. For example, if businesses in rural areas could not afford the switching costs associated with natural gas conversion, and such business adoption of natural gas was a critical spur for economic development, then a general economic development fund (supported by general taxation) could provide a cash amount that makes up for the difference between the construction costs and the businesses' maximum capacity to pay. In this light, the Province (which has jurisdiction over general tax) should consider revenue-raising mechanisms that minimize economic distortions—e.g., setting aside a proportion of auction or privatization proceeds to fund economic development or natural gas expansions, as these revenue-raising mechanisms do not carry the "excess burden" associated with taxation and subsidies that we discuss in our evidence.[10]

Enbridge's evidence does not address the question of who exactly benefits from natural gas expansions (taxpayers or just ratepayers). It also does not provide an account of whether the benefit derived is specific to natural gas expansion—i.e., whether it is more efficient to provide

[10] See Footnote 3 of our evidence for the definition of "excess burden" associated with a subsidy or a tax.

additional support for economic development or to specifically subsidize natural gas expansion. Thus it does not establish either a convincing case for a subsidy, and it particularly does not establish that the type of regulatory cross-subsidies that it proposes are warranted. We note that the Enbridge submission states that the net present value of Stage 1 and Stage 2 benefits is positive. That is, increased customer rates in Stage 1 are offset by the cost savings to customers in Stage 2. However, a more meaningful cost-benefit test would have measured the external benefits to those who provide the subsidy – if there are large cost savings from natural gas expansions that only accrue to customers in expansion areas, then the costs should be borne only by those customers. Second, if the cost savings to consumers in expansion areas are vastly greater than the additional costs associated with the expansions, then there should be no requirement for subsidies as distribution companies should be able to raise incremental revenues that exceed incremental costs. Although Enbridge claims (at ¶25) that all customers will benefit from the increased scale of operations, Enbridge's analysis shows that costs for existing customers will go up rather than down, which necessarily implies an inefficient cross-subsidy.[11]

With respect to Enbridge's proposal for a system expansion surcharge (SES) recovered from the beneficiaries of the expansion, this proposal respects the "cost causer pays" principle in that it requires high-cost customers in expansion communities to pay more. However, ideally one would gauge whether these high-cost customers are high-cost because both marginal and fixed costs of providing service are higher, or whether the high cost is due to high fixed costs, but the marginal (operating) costs of providing service are similar to those of existing distribution customers. In the latter situation, a higher flat monthly fee rather than a higher per-unit price would be a more economically efficient form of pricing. Enbridge's proposal to recover some costs from municipalities that benefit from incremental tax revenues is also consistent with the principle that the funding of the expansion should come from the communities in which the expansion happens. The practicality of this proposal is not something we are able to comment on.

In summary, we would be skeptical of any proposal that relaxes the current OEB test and advocates the need for subsidies to fund gas expansions. As we have outlined in our evidence, economic principles do not justify specific subsidies to fund the expansion of natural gas systems. If benefits of doing so accrue to Ontario-at-large, then the expansions should be taxpayer-financed and not ratepayer-financed. Regardless of its specifics, Enbridge's proposal assumes that natural gas expansions should be subsidized by existing ratepayers. We disagree with this premise of Enbridge's proposal, and consider this proposal substantively similar (for our purposes) to that advanced by Union.[12] Further, and unaddressed by Enbridge or Union, the displacement of existing fuel sources is another cost to society that should be considered when contemplating natural gas subsidies.

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[11] In terms of the analysis laid out in Section 5 of our evidence, existing system ratepayers, by definition, are paying the stand-alone cost of the existing system. Raising their rates above this stand-alone cost, even in the presence of alleged scale and scope economies, involves raising the price for these ratepayers above the stand-alone cost of the existing system—which means that there is necessarily a cross-subsidy involved.

[12] It is not completely clear to us from Enbridge's submission whether Enbridge proposes that the rate increase to existing ratepayers be effected through a per-unit increase or a flat-fee increase.

Federation of Rental-housing Providers of Ontario Interrogatory # 2

Preamble: On page 12, EPCOR outlines its proposition for an Expansion Reserve and on page 13 defends the existence and value of cross-subsidizations.

Please provide Parkland's expert views on the Expansion Reserve concept and the EPCOR defense of such an approach.

Response to Federation of Rental-housing Providers of Ontario Interrogatory # 2

(Please also refer to our response to Board Staff-3). EPCOR's evidence suggests that the benefits of natural gas accrue throughout the Province.[13] Assuming that such Province-wide benefits exist, funding subsidies by taxing all taxpayers would be a more equitable and efficient arrangement than imposing the burden of the subsidy only on the (narrower) group of existing ratepayers. Broadly speaking, EPCOR's evidence (similar to that of Enbridge and Union) suffers from its failure to identify who benefits from natural gas expansions, whether payers and beneficiaries are well aligned, whether the benefits are such that they warrant subsidies specific to natural gas, and whether the magnitude of these benefits exceeds the subsidy amount. Although EPCOR's expert argues that a "volumetric levy" has appeal because it ensures that all customers, regardless of location, have the same subsidy requirement per-unit of gas, standard economic theory of taxation suggests that a subsidy that distorts the marginal price of a good will invariably have an "excess burden" associated with it. As we have outlined in our evidence and other responses, the contemplated method is not the least distortionary method of providing the subsidy.
It may be that there is always some degree of cross-subsidy inherent within existing natural gas systems, as EPCOR's expert notes when discussing cost allocations and that past customers have been cross-subsidized. We recognized this type of "equity" argument in Footnote 26 of our evidence. During the past several decades the natural gas distribution network in Ontario has been significantly expanded. However, our understanding is that universal gas service has never been a policy goal, and over these past several decades the communities in which expansions are now being contemplated have remained unserved by natural gas. During that time, alternative fuel sources have served these areas, and suppliers of these alternative fuels have made substantial investments in their own distribution capabilities. These policy and commercial realities appear to reveal the uneconomic nature of providing natural gas service to the communities in which

[13] EPCO's expert suggests some possible economic benefits, although without providing much supporting detail. EPCOR's expert compares natural gas expansion to road construction, for example, but natural gas expansions do not increase economic interconnectedness between regions in the way that transportation links conceivably can. EPCOR's expert also notes benefits in the form of potentially increased sharing of costs—but if expansions have the net effect of raising existing ratepayers' rates, then these cost economies are irrelevant as they are exceeded by the amount of subsidy that flows from existing ratepayers to the expansion customers. In any case, if EPCOR constructs natural gas expansions in Ontario communities, there may be no cost sharing benefits for Enbridge or Union ratepayers (from whom subsidies will be raised), and any system reliability or performance benefits would depend on a substantial degree of integration between the EPCOR-built expansions and the existing Enbridge and Union systems.

expansions are now being contemplated. If the degree of cross-subsidization in the past and present were used as a justification for more comprehensive cross-subsidization in the future, then this effectively amounts to an implicit adoption of universal natural gas service regardless of the cost to other ratepayers and regardless of the loss in value by alternate fuel source providers. In such an environment, standard principles of utility regulation would seem to no longer apply and the OEB would assume what is essentially an economic development role. Our concerns in this regard were echoed by the Board Staff in 1996, "Economic development and the enforcement of social policy objectives is not the purpose of utility regulation." (Interim Board Report, August 15th 1996, EBO-188, at 3.4.1)."

With regard to EPCOR's comments on franchise bidding and competition, "competition for the market" (as discussed by EPCOR's expert) could be achieved through a "reverse auction" system which grants franchises to bidders with the lowest subsidy requirements. Indeed, keen competition to win franchises may induce bidders to invest in promotional and awareness-raising activities, as well as to be more aggressive in soliciting contributions to construction from customers with a high willingness to pay. If the cost savings to customers in rural areas were as large as suggested by some evidence submitted to the Board (e.g., by Enbridge and Union Gas), then it ought to be possible to educate consumers or help them overcome other barriers to switching such that no subsidy to switch is required. For example, reverse auctions for universal telecommunications service in India have sometimes led to firms paying for the right to serve a franchise area.[14] As we have outlined in our evidence, instead of funding the subsidy by distorting rates throughout the Province, the required subsidy could be funded (in lump-sum fashion) by taxpayers, possibly even through earmarked funds that are raised through non-distortionary mechanisms. However, there would be no economic merit in having Union or Enbridge ratepayers subsidize expansions by other utilities from which they could receive no conceivable benefit in the form of improved system performance or enhanced scale and scope economies.

In summary, we fundamentally disagree with the principle of subsidizing natural gas expansions in areas where alternative fuel providers already have an extensive presence. We also disagree with the volumetric levy that EPCOR proposes. We agree with the principle of encouraging franchise bidding. However, this does not justify the "expansion reserve" that EPCOR proposes, and we think any subsidy should be provided by the broadest group of beneficiaries – taxpayers than ratepayers – if the benefits of natural gas expansion are indeed Province-wide.

[14] Scott Wallsten, "Reverse Auctions and Universal Telecommunications Service: Lessons from Global Experience", *Federal Communications Law Journal*, Volume 61, Issue 2, at pp.375-76.