ENBRIDGE GAS DISTRIBUTION INC.
GTA Project (EB-2012-0451)

UNION GAS LIMITED
Parkway West (EB-2012-0433)

UNION GAS LIMITED
Brantford-Kirkwall / Parkway D (EB-2013-0074)

Council of Canadians Interrogatories for Enbridge, and Union Gas

ISSUE A.1 - COC 1

Reference: EB-2012-0451: Exhibit A, Tab 3, Schedule 5 - "NATURAL GAS DEMAND, SUPPLY & EXPECTED GAS SUPPLY BENEFITS," p. 14, Enbridge says that:

> In its Annual Energy Outlook 2012, the [US Energy Information Administration] EIA indicates that the largest contributor to natural gas production growth in the United States will be shale gas for the next two and a half decades. Specifically, the EIA expects gas production in the US Northeast7 to increase from about 1.5 tcf (4.2 bcf/d) in 2010 to approximately 5.4 tcf (14.7 bcf/d) in 2035[8]. Marcellus production is expected to account for roughly 3.0 tcf (8.2 bcf/d) of this projected production increase. Furthermore the EIA is projecting production growth, relative to other natural gas production regions in the US, to be greatest for the Northeast region.

Requests:

1. (a) Please provide any assessment of the supply risk associated with shale gas resources, and in particular those of the Marcellus and Utica formations, including risks arising from an overestimate of the resource supply, or from proposed or potential legislative or regulatory measures promulgated by federal or state governments.

   (b) Would Enbridge agree that the AEO 2012 projections are based generally on Federal, State, and local laws and regulations in effect as of the end of December 2011 and that the potential impacts of pending or proposed legislation, regulations, and standards (and sections of existing legislation that require implementing regulations or funds that have not been appropriated) are not reflected in the projections? If not, why not?

ISSUE A.1 - COC 2

Preamble:

> Enbridge and Union Gas have both emphasized the merits of diversifying their respective supply sources to enhance access to mostly US- based shale gas resources. Enbridge and Union Gas have also described the reduction of demand for services on the TransCanada Mainline, and the resulting impact this has had on the cost and future availability of these services. Substituting shale gas supply for that from the WCSB will exacerbate

Reference: EB-2012-0451: Exhibit A, Tab 3, Schedule 5, para. 52

> 52. TransCanada recently held an Existing Capacity Open Season for non-renewable service on various Mainline paths with service terminating in October 201522. In addition TransCanada also announced that it will be holding a binding open season to obtain firm commitments from interested parties for a pipeline – The Energy East Pipeline - to transport crude oil from Western Canada to Eastern Canadian markets23. The Energy East Pipeline involves converting approximately 3,000 kilometers of the Mainline to crude oil service in addition to the construction of approximately 1,400 kilometers of new pipeline.

Requests:

2. (a) Would Enbridge agree that the reduction or loss of gas supply service on the TCPL Mainline undermines supply diversity to the GTA, and if not, why not?

   (b) Would Union agree that the reduction or loss of gas supply service on the TCPL Mainline undermines supply diversity to the GTA, and if not, why not?

ISSUE A.1- COC 3

Reference: EB-2013-0074 - Application Section 11, p. 35:

> *(ii) Shale Basin Supply Risk*
>
> The new Contracts will obtain supply from the Dawn Hub. Changes in legislation or regulation might limit the available supply from shale basins. This risk is mitigated by the fact that the Dawn Hub is connected to many diverse supply basins.

Requests:

3. (a) Please describe the nature of the potential legislative or regulatory measures that a may affect the Shale Basin gas supply, and the extent to which such changes may impact supply from this source.

(b) Please indicate whether such potential measures would be federal or state specific and which particular Shale Basins would be affected?

(c) Please explain why, and the extent to which connection to diverse supply basins would ameliorate this risk.

ISSUE A.1. - COC 4

Reference: EB-2013-0074, Schedule 4-1, p. 12

> ICF was engaged to prepare a report that examines the rapidly changing dynamics of North American natural gas markets and the implications of these changes on consumers and businesses in Ontario. ICF states that: "In addition to declining WCSB production and high toll rates on the eastern mainline system, LNG exports and oil sands development in western Canada, which rely on WCSB production, may further limit Ontario's access to declining WCSB supplies."

Requests:

4. (a) Would Union Gas agree that competition for shale gas supply, including for LNG exports are a factor in assessing the availability and cost of supply from Marcellus and Utica shale gas reserves.

   (b) Please provide any assessment that Union Gas has carried out of any proposals to establish pipelines, LNG terminals, or other infrastructure projects intended to transport shale gas from the Marcellus and Utica reserves to markets outside Ontario.

ISSUE A.1. COC 5

Preamble:

The rapid development of shale gas in the United States has played a key role in displacing demand on the TCPL mainline and exerted considered price pressure on those still shipping on that pipeline. In response TCPL has taken various steps to deal with the problem of decreasing shipments.

Reference: EB- 2012, Exhibit A, Schedule 5, para. 27; and EB-2012 – 0433, Application Section 4, Changing Gas Supply Dynamics, para. 31(c), p.33/121:

> Suspension of the integrity work results in discrete sections of the Northern Ontario Line being "locked in" at derated pressures allowing no natural gas to flow on these sections of pipeline. These sections remain filled with natural gas and can be used in emergency situations to backstop deliveries to northern Ontario customers.

Union is not aware of any publically released long-term plans to complete the 2012 integrity program to restore capacity across northern Ontario. Combined with the conversion of a further portion of the TCPL Mainline to crude oil service, suspension of the integrity programs would significantly impact the capacity of the Northern Ontario Line and TCPL's ability to supply natural gas to Ontario. IDEM

Requests:

5. (a) Do TCPL actions in regard to its Mainline present consumers in Ontario and/or the GTA with a supply risk with respect access to WCSB gas resources, and if so, have efforts been made by Enbridge and/or Union to ameliorate this risk.

   (b) Would Enbridge agree that replacing gas supply from the WCSB with imports from the United States will exacerbate the problems that have lead TCPL to take the steps that will reduce the capacity of the Mainline to supply natural gas to Ontario?

   (c) Would Union agree that replacing gas supply from the WCSB with imports from the United States will exacerbate the problems that have lead TCPL to take the steps that will reduce the capacity of the Mainline to supply natural gas to Ontario?

ISSUE A.1 – COC 6

Ref: EB-2013-0074 Schedule 4-1, Page 23 of 36

ICF estimates that production of unconventional natural gas (including shale gas, tight gas, and CBM) will generally be much lower cost on a per-unit basis than conventional sources.

Request:

6. Please provide the estimated production cost referred to, and where possible indicate the specific conventional and unconventional sources for which these costs were estimated or projected.

ISSUE A.1: - COC 7

Reference: EB– 2012-0451, Exhibit A, Tab 3, Schedule 1, paras. 25 and 26; Exhibit A, Tab 3, Schedule 5 at paras 30; and Exhibit A, Tab 3, Schedule 5, Table A3 (Attachment Page 4/5)

Request:

7. (a) Please provide the price and supply assumptions for gas supply from the Marcellus shale formation for the years 2015 – 2025; and

(b) Please provide the price and supply assumptions for gas supply from the Utica Shale formation for the years 2015 – 2025; and

ISSUES: A.1, A.2 AND A.4 – COC 8

Reference: EB-2012-0451 Exhibit A, Tab 3, Schedule 5, Table A4 (Page 5/5).

Request:

8. Please define the terms 'demand charges', 'fuel charges', 'commodity charges', 'commodity cost', 'commodity premium', as used in Table A4. I reviewed pages 413-434 on supply. A couple of observations:

ISSUE A.1 AND A.4 – COC 9

Reference: EB-2012-0451 Exhibit A, Tab 3, Schedule 1, paras. 21, 24 and 25; Exhibit A, Tab 3, schedule 7, paras. 7 and 8.

9. Please explain why converting long haul discretionary transport to year round long haul firm transport will reduce efficiency and increase costs?

ISSUE A.1 AND A.4 – COC 10

Reference: EB- 2012 – 0451, Exhibit A, Tab 3, Schedule 5, para. 29

Request:

10. Please provide the terms of any contractual or other supply arrangements that have been entered into, or proposed, for service on the Tenessee Gas Pipeline, National Fuel Gas Supply, and TranCanada for gas produced from the Marcellus formation.

ISSUE A.1 AND A.4 – COC 11

Reference - EB- 2012 – 0451, Exhibit A, Tab 3, Schedule 5, para. 46

Request:

11. Please provide the assumption and calculations upon which the estimate of gas supply savings are based.