ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule. B);

AND IN THE MATTER OF an Application by Union Gas Limited pursuant to Section 36(1) of the *Ontario Energy Board Act, 1998*, for an Order or Orders approving the 2015 to 2020 Demand Side Management Plan (DSM).

EB-2015-0029/EB-2015-0049

Interrogatories From

The Association of Power Producers of Ontario (APPrO)

To

Green Energy Coalition (GEC)

August 5, 2015

Question: 1

Reference: i) Page 27, first bullet point[1]

> ***Continuing Union's large industrial program for T2/R100 customers****.* *Experience from 2013 and 2014 suggests that would – by itself – roughly double Unions forecast savings for 2016 to 2020*

ii) Page 31

> *While Union's estimate of free ridership is admittedly based on an outdated study, its implicit conclusion that there are substantial cost-effective savings that large customers would not pursue absent efficiency programs is consistent with assessments from other jurisdictions. For example, a recent jurisdictional scan conducted by Navigant Consulting for the Ontario gas Technical Evaluation Committee found that the average free rider rate from evaluations of twenty-four different gas utility Custom C&I programs – which are typically targeted to the largest customers – was between 30% and 40% (meaning 60% to 70% of savings would not have occurred without the utility programs).*

ii) Page 32

> *"allowing Union to terminate its large industrial program would mean foregoing a huge portion of achievable savings and – because these savings tend to be more cost effective than those that can be acquired from other, smaller customers – an even larger portion of economic benefits"*

Preamble: Mr. Neme makes a statement about potentially doubling Union Gas Limited's (**Union**) savings 2016-2020 by continuing Union's large industrial program for T2/Rate 100 customers. This statement may rely on a free ridership estimate. APPrO would like understand the basis for this statement and whether the Navigant study is representative of Union's T2/Rate 100 customers.

a) Please confirm that the statement made in Reference i) was based on the free ridership rate of 54% that was established in 2008 by Summit Blue. If not confirmed, please explain.
b) Please confirm that the above-noted 2008 Summit Blue study was based on a study published using data that was collected pre-2008.
c) In Reference ii) Mr. Neme recognizes that the Union's free ridership study is out of date, and uses a Navigant report to support the contention that there are still significant savings in utility Custom Commercial and Industrial (**C&I**) programs based on an evaluation of 24 US jurisdictions.
    i. The link in footnote 69 of Mr. Neme's evidence was broken; please provide a correct link to the referenced Navigant Study.
    ii. Please indicate if Mr. Neme assisted Navigant in its research or preparation of the report in any way. If so, please provide details regarding the support that was provided.
    iii. Please provide a description of the methodology used by Navigant to obtain the information for its report.
    iv. Please list the major assumptions that Navigant used to collect and analyze the information.

[1] All references are to the evidence of Chris Neme on behalf of the Green Energy Coalition dated July 29, 2015 unless otherwise indicated.

v. Please confirm that Union offers custom C&I programs to the following rate classes: M4, M5, M7, T1, and Rate 20 categories, in addition to T2 and Rate 100. If not confirmed, please explain.

vi. Please confirm that Enbridge Gas Distribution Inc.'s (**EGD**) custom C&I programs are offered to rate classes 6, 110, 115, 135, 145, and 170. If not confirmed, please explain.

vii. Please list each of the 24 jurisdictions that were used to come up with Navigant's conclusions noted in Reference ii). Please also provide the rationale why these 24 jurisdictions were selected vs a comprehensive review.

viii. Please confirm that the Navigant also expressed concern about the accuracy of their results. If not confirmed, please explain.

ix. Please provide the specific Navigant reference to support Mr. Neme's statement "*….the average free rider rate….was between 30% and 40%"*.

d) Please confirm that if the customer were to complete energy efficiency measures independent of a mandatory rate payer funded DSM program, the energy savings could still occur. If so, please confirm that such independent measures would not be accounted for within the utility DSM program. If not confirmed, please explain.

e) Please confirm that if DSM budgets were to be reallocated to T2 and Rate 100 rate classes, the DSM budget for other rate classes would decline and the related energy savings in those rate classes would also decline. If not confirmed, please explain.

f) Please provide an estimate of the annual energy savings that would be lost from other rate classes if DSM budgets were to be reallocated to rate T2 and Rate 100.

Question: 2

Reference: i) Page 29

Preamble: The evidence indicates that: *"However, since the majority of the increase in savings I would expect from Union would come from T2/R100 customers, which have historically provided the most cost-effective savings in Union's portfolio, it is possible if not likely that the estimate of additional net benefits for Union are even greater than my simple extrapolation suggests".*

a) Please provide any and all data or documentation that you have used to support or assess the base level of efficiency and conservation measures that are undertaken by T2/R100 customers.

b) Please provide any and all data to support:

i. Your assessment that Union's most cost-effective measures are for T2/R100 customers; and

ii. The relative cost-effectiveness of Union's undertaking the efficiency measures on behalf of T2/R100 customers and T2/R100 customers undertaking the efficiency measures directly. Please provide all assumed or estimated costs related to administration and overhead.

Question: 3

Reference: i) Page 32

"*virtually all of Union's eligible large industrial customers are participating in its Self-Direct program*".

ii) EB-2012-0337 Exhibit B5.15, in which Union provided the following interrogatory response:

Filed: 2012-10-25
EB-2012-0337
Exhibit B5.15
Page 1 of 1

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Reference: Exhibit A, Tab 1, Appendix B

Preamble: Union provides some of the program incentives on slide 8. APPrO would like to better understand these incentives proposed.

a) For customers that would typically be eligible for Rate 100 or T2, and for each of the 10 program elements shown on slide 8, please provide the average cost of implementing these program elements (where reasonably possible) and show the total cost of implementing the program, incentive amount provided by Union, the amount that the customer would fund on its own and the percentage funded directly by each of Union through ratepayer funded DSM and the percentage funded directly by the customer.

Response:

Union does not track the cost of implementing at the program element level. Union does track the incentives provided and customer project cost at the measure level. Please see the table below for incentive funding provided by Union, the amount the customer would fund on its own and the percentages funded directly by Union and the customer accordingly.

Rate T1 / Rate 100 - 2011 Results

				% Funding - average		$ Funding - average	
Offering	**# of Projects**	**Incentive $ Provided By Union**	**Customer Project $**	**By Union**	**By Customer**	**By Union**	**By Customer**
O & M	157	$ 1,989,254	$ 23,169,661	9%	91%	$ 12,670	$ 147,577
Capital	43	$ 1,180,959	$ 31,632,015	4%	96%	$ 27,464	$ 735,628
Engineering Feasibility	17	$ 104,373	$ 395,718	26%	74%	$ 6,140	$ 17,138
Process Improvement	33	$ 444,509	$ 1,394,046	32%	68%	$ 13,470	$ 28,774
Steam Trap	20	$ 80,243	$ 252,633	32%	68%	$ 4,012	$ 8,620
Education	2	$ 16,000	$ 45,185	35%	65%	$ 8,000	$ 14,593
	272	**$ 3,815,338**	**$ 56,889,258**				

iii) EB-2012-0337 Transcript Volume 2, February 1, 2013

Preamble: APPrO would like to review Mr. Neme's understanding of the participation in Union's DSM program by Rate T2 and Rate 100 customers.

a) Please confirm that T2 and Rate 100 rates currently include mandatory funding for Union's DSM program to fund customer incentives and Union overheads. If not confirmed, please explain.

b) Please confirm that all customers in T2 and Rate 100 are eligible to receive the customer incentive portion of the DSM funding that they paid for in rates via Union's Self-Direct program.
c) Please confirm that it would be logical for any T2 or Rate 100 customer that is interested in reducing its energy costs and reducing its emissions to offset a portion of the total cost to implement the energy efficiency measure to apply for a refund of a portion of the amount paid in rates. If not confirmed, please explain.
d) Please confirm that the Self-Direct program requires the customers to submit an energy plan to Union for "approval" prior to the customer knowing that the project will be funded.
e) From Reference ii), please confirm that the average amount of customer DSM incentive funds provided by Union as a percentage of the total cost to implement those customer projects funded by Union is approximately 6.7% ($3,815,338/$56,889,258).

Question: 4

Reference: i) Page 16
ii) Ontario's Climate Change Update, page 16

Preamble: Mr. Neme's evidence indicates that natural gas accounts for approximately 30% of all greenhouse gas (**GHG**) emissions in the province of Ontario (the **Province**) and that the 2030 projected emissions are anticipated to be at 1990 levels in a business as usual (**BAU**) scenario.

a) Please provide any and all data and documentary support and all third party verification relied upon to arrive at the assertion that natural gas accounts for 30% of all GHG emissions in the Province.
b) Please confirm that 1990 GHG emissions in Ontario are approximately 25 MT lower than 2005 emissions and 2014 emissions are approximately 42 MT lower than BAU.
c) Please confirm that the assertion that Provincial emissions will increase to 1990 levels (they are currently more than 6% below 1990 levels) by 2030 is in the absence of the announced cap and trade program and conservation measures that are set out in footnote 32 of Mr. Neme's evidence.
d) Please confirm that the implementation of a carbon policy in Ontario will have a direct impact on Union and Enbridge's large volume customers (**LVC**), who are intended to be included in the cap and trade scheme.
e) Please confirm that the evidence suggests that LVCs should be required to both pay for DSM in rates and pay for any and all required emission allowances.
f) Please confirm that even if a customer responded to the intended carbon price signal and decreased usage, it would still be required to pay for DSM in rates under your proposal.

g) Please justify your adopted carbon price estimate and complete the following chart:

Auction Period		**Auction Price**		
2013	**Q1**	**California**	**Québec**	**RGGI[2]***
	Q2			
	Q3			
	Q4			
2014	**Q1**			
	Q2			
	Q3			
	Q4**			
2015	**Q1**			
	Q2			

*while not technically linked, Québec provides for consideration of RGGI allowances in related export transactions for power.
**California/Québec linked auction.

h) Please provide the net present value (**NPV**) of each and all measures and their lifespans (a) using the actual carbon prices for Québec, (b) reflecting the actual lifespan of each measure, and (c) adjusting for free-ridership.

i) Please provide any and all assumptions that you have made about the point of carbon regulation for each and all of the following sectors:
   i. transportation
   ii. buildings
   iii. electricity
   iv. industry

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS
5th day of August, 2015

Lisa (Elisabeth) DeMarco
Zizzo Allan DeMarco LLP
Counsel for APPrO

[2] Regional Greenhouse Gas Initiative