- 1) Reference: Exhibit A, Tab 4, Schedule 3
- Preamble: We want to understand how the increase in compression will affect fuel use for M12 Dawn-Parkway transportation service.

Please provide the actual annual average M12 Dawn-Parkway fuel percentage for 2014, forecast for 2015 using 6 months actual and 6 months forecast and the projected annual average M12 Dawn-Parkway fuel percentages for 2016, 2017, and 2018.

- 2) Reference: Exhibit A, Tab 5, Schedule 1
- Preamble: On August 26, 2015, the National Energy Board announced that with Union Gas and Enbridge Gas Distribution were withdrawing their complaint regarding contracting as a result of a Settlement Term sheet reached with TCPL. The term sheet included commitments by TCPL for the provision of capacity to the Eastern Ontario Triangle if Energy East transfers the pipeline assets.

Please provide ICF's evaluation of the implications of the capacity commitments on the Dawn Parkway system as it pertains to the study provided in Tab 5.

- 3) Reference: Exhibit A, Tab 5, Page 12
- Preamble: Union's contracts originating at Kirkwall (i.e. Kirkwall to Dawn, Kirkwall to Parkway and M12-X transportation services) for firm transportation services total 1.3 PJ/d effective November 1, 2017.
- a) Please break out the 1.3 PJ/d by service (i.e. Kirkwall to Dawn, Kirkwall to Parkway, and M12-X).
- b) Please provide a description of each Kirkwall to Dawn contract that will be in effect on November 1, 2017, including rate schedule, customer, contract quantity, contract start date, and contract end date.
- c) Have the shippers that have contracted for firm Kirkwall to Dawn transportation service also contracted for firm transportation service to Kirkwall on TCPL?
- d) How much of the 1.3 PJ/d under contracts originating at Kirkwall is assumed to be delivered at Kirkwall on a design day for system planning purposes? How much leaves Kirkwall toward Parkway on the design day?

- 4) Reference: Exhibit A, Tab 5, Schedule 1, Page 21
- Preamble: Exhibit 2-5 shows a 1,121 MMcf per day increase in January gas flows from New York to Ontario from 2014 to 2035.
 - a) What were the actual average daily net deliveries into TCPL at Niagara/Chippewa for January 2014?
 - b) Please provide the projected January net deliveries into TCPL at Niagara/Chippewa for each year of the forecast period (through 2035). How much of this gas is expected to flow to Kirkwall?
- 5) Reference: Exhibit A, Tab 5, Schedule 1, page 26
- Preamble: The increase in gas supply from the Marcellus and Utica region will be facilitated by additional pipeline capacity from Eastern Ohio to Michigan and Ontario, or through Niagara, as existing pipeline capacity from this region into Ontario is fully utilized.

Did ICF confirm this assertion with TCPL? If not, please provide TCPL's response to ICF's inquiry on existing capacity.

- 6) Reference: Exhibit A, Tab 5, Schedule 1, page 39
- Preamble: While producers are under pressure to bring gas to market during the summer months, it is uncertain whether a reversal during the summer months would be economic to bring gas into Ontario, given the capital costs.
 - a) Please describe the capital costs referred to in the preamble.
 - b) Please quantify these costs and reference the sources of data in the quantification.
 - c) What impact will theses costs have on rates?
 - d) What is ICF's landed cost forecast for gas at Iroquois in 2020 assuming there is the availability of flow from Waddington to Iroquois?
- 7) Reference: Exhibit A, Tab 5, Schedule 1, Page 40.
- Preamble: We want to understand what ICF has assumed for pipeline capacity additions from the Marcellus/Utica areas to Niagara and Chippewa.

Which of the projects listed in Table 4.7 that will deliver to Niagara or Chippewa are included in the modeling analysis that is described in this report? Please provide the capacities and in-

service dates any additional capacity expansions into Niagara/Chippewa that are included in the modeling during the forecast period (through 2035).

8) Reference: Exhibit A, Tab 5, Schedule 1, Page 47, Exhibit 5-1

Preamble: The Referenced exhibit depicts Dominion South lower than AECO until about 2025, rising above AECO for a brief period, then reversing to go below AECO a few years after.

What factors does ICF forsee that contribute to the relative rise and then reversal of Dominion South relative to AECO?

9) Reference: Exhibit A, Tab 5, Schedule 1, Page 39.

Please explain why ICF concludes that high capital costs will prevent Iroquois and TCPL from making the interconnection facilities at Iroquois bidirectional.

10) Reference: Exhibit A, Tab 5, Schedule 1, Page 40.

- Preamble: We want to understand what ICF has assumed for pipeline capacity additions from the Marcellus/Utica areas to Iroquois Gas Transmission System (IGTS) at Wright, NY and other Zone 1 points.
 - a) Which of the projects listed in Table 4.7 that delivery into IGTS are included in the modeling analysis that is described in this report? If the Northeast Energy Direct project is included, what capacity is assumed for the Supply Path segment of the project?
 - b) Please provide the capacities and in-service dates for any other capacity expansions into IGTS that are assumed to go into service during the forecast period (e.g. Constitution Expansion, additional Dominion Transmission expansion to Canajoharie, NY).
 - c) Please provide the capacity ICF has assumed from Waddington to Iroquois. If the number is zero, please provide the impact on their analysis if the capacity were actually 0.3PJ/d.

10) Reference: Exhibit A, Tab 5, Schedule 1, Page 41.

Preamble: We want to understand what ICF has assumed for pipeline capacity additions from the Marcellus/Utica areas to Michigan and Dawn.

- a) Which of the projects listed in Table 4-8 are included in the modeling analysis that is described in this report? For each included project, please specify the assumed increase in delivery capacity into Michigan and the assumed increase in delivery capacity into Dawn.
- b) Please provide the capacities and in-service dates for any other capacity expansions to Michigan and Dawn that are assumed to go into service during the forecast period. For each expansion, please specify the assumed increase in delivery capacity into Michigan and the assumed increase in delivery capacity into Dawn.

11) Reference: Exhibit A, Tab 6, Pages 16-19.

Preamble: Union notes that there is a risk of Dawn-Parkway capacity turnback.

Please provide a table showing all Dawn-Parkway M12 contracts that currently have end dates before 11/1/2017. For each contract, please show the current contract quantity and the contract quantity that Union has assumed will be extended past 11/1/2017.

12) Reference: Exhibit A, Tab 8, Schedule 2

Preamble: We are interested in the impact of Kirkwall deliveries on the D-P system.

- a) Please confirm that the results in Schedule 2 include all facilities for which approval is requested in this application.
- b) Please re-run the model using 100,000 GJ/d being delivered to Kirkwall on the peak day providing the results in Figure 2 with the addition of table providing:
 - i) Pressure at each lateral
 - ii) The flow between each lateral
- c) Would the additional surplus at Parkway impact the facilities expected to be required in 2018?
- d) What would the value of the surplus capacity be using C1 rates if all surplus was sold for the winter period?
- e) Please re-run the model providing the results requested in b) after removing each non-Dawn compressor individually.