Union Gas Limited Jacob Pool Development Project

Applications for Designation and Authorization to Operate Jacob Pool EB-2011-0013

Leave to Construct Natural Gas Pipelines EB-2011-0014

Well Drilling Licences EB-2011-0015

Board Staff Interrogatories

Designation and Authorization to Operate Jacob Pool (EB-2011-0013)

1. Reference: Pre-filed Evidence, Section 7, page 2 Paragraphs 10 and 11

According to the pre-filed evidence, Union holds all the Petroleum and Natural Gas ("P &NG)rights and Gas Storage Rights within the proposed Jacob Pool.

Please confirm that Union has the storage rights agreements with the landowners within the proposed boundaries of Jacob Designated Storage Area.

2. Reference: Pre-filed Evidence, Section 7, page 1 Paragraphs 5 and 6

Union stated that it would extend a compensation package consistent with Union's existing Gas Storage Landowner Compensation Program.

Please describe Union's Gas Storage Landowner Compensation Program. Specifically, please set out the following: landowners in Union's pools included in the program, the history and background of the program, the purpose of the program, the structure of compensation payments, annual adjustments to amount of payments, if any, and timing of payments.

3. Reference: Pre-filed Evidence, Section 7, page 1 Paragraphs 5 and 6

Union specified that it will offer to all Jacob Pool landowners compensation that includes combined P&NG and Gas Storage Lease rentals for inside acres of \$115.68

per acre and of \$ 34.73 per acre for outside acres. Union defines outside acres as the acreage held by a single deed or lease are severed by the Designated Storage Area ("DSA") boundary resulting in some acres being inside the DSA and some acres being outside the

- a. Please describe the status of the offers made for compensation and the acceptance, or not, by the Jacob Pool landowners.
- b. If any landowners declined Union's offer for compensation what approach will Union take to deal with such situations.
- c. What are Union's plans for a further follow up with these landowners?
- d. What other options are available to Union, if its offers are not accepted and there is still no agreement between Union and these landowners?
- 4. Reference: Pre-filed Evidence, Section 7, page 2 Paragraph 13

Union's pre-filed evidence outlines an approach which Union intends to take with respect to the Jacob Pool landowners who have acreage inside the existing Unit Area and currently receive annual P&NG rental payments. Specifically, Union proposed that, after the approval and prior to injection into the Jacob Pool, Union would negotiate and execute Amending Agreements that set out the payment structure for compensation that will match Union's Gas Storage Landowner Compensation Program.

- a. Please describe the rationale for this approach.
- b. Has Union considered other approaches and if so what are the reasons to select this particular approach?
- 5. Reference: Pre-filed Evidence, Section 3, page 1 Paragraphs 2 and 3

Union's evidence indicates that the Jacob Pool is one of several gas reservoirs within the Dover 7-5-VE Field.

- a. Please explain any prospects and plans for Union to develop other reservoirs within the Dover 7-5-VE Field as gas storage pools.
- b. What would be the estimated incremental capacity and anticipated time-line to develop any additional pools in the Dover 7-5-VE Field?
- 6. Reference: Pre-filed Evidence, Section 5, page 1 Paragraph 1-3

Regarding the planned delta pressuring of the Jacob Pool in year 1 and year 2, please:

- a. Comment Union's position if Board staff propose a condition of approval that would not allow increasing the operating pressure above that corresponding to the pressure gradient of 15.8 kPa/m of depth to the top of the reservoir until leave of the Board is obtained.
- b. Discuss the options for future increases in deliverability of the Jacob Pool.
- 7. Please comment on the attached Board staff draft conditions of approval provided in Attachment 1 to these Interrogatories. Please note that these conditions are standard conditions and are a draft version subject to additions or changes depending Board staff's further review of the evidence in this case.

Leave to Construct Application (EB-2011-0014)

8. Reference: Pre-filed Evidence, Section 2, page 2 Paragraph 6

Union stated that the storage capacity added by Jacob Pool development will be "...consistent with the sale of rest of Union's ex-franchise storage".

Regarding the cost of the project development, including the capital costs of pipelines and other facilities, please confirm that all the costs will be incurred by Union's shareholders and that Union's ratepayers will not incur any undue adverse rate impacts as a result of the Jacob Pool Gas Storage Project development and operation.

9. Reference: Pre-filed evidence Section 7, Page 3, Paragraphs 14-17

Regarding the negotiations for permanent and temporary easements, please describe the status of negotiations of those easements and the anticipated timeline for obtaining the required land rights for pipeline location and construction.

10. Reference: Pre-filed Evidence, Section 6, page 1, Paragraph, and Section 6 Schedule 2.

Union stated in the pre-filed evidence that a Summary of Comments received from government agencies and landowners during their review of Environmental Report will be filed "when available" in Section 6, Schedule 2.

- a. Please file a summary table and copies of documentation with comments received from landowners, OPCC and any other party to date.
- b. Please include a description on how Union plans to address any outstanding issues or concerns raised in the project public consultation process.
- 11. Reference: Pre-filed evidence Section 6

Please provide a list of required approvals and permits related to the proposed pipeline from other agencies and the anticipated timeline for obtaining them.

12. Please comment on the Board staff draft conditions of approval provided in Attachment 2 of these Interrogatories. Please note that these conditions are standard conditions and are a draft version subject to additions or changes depending Board staff's further review of the evidence in this case.

Well Drilling Licences Applications (EB-2011-0015)

13. Reference: Pre-filed Evidence, Section 6, page 2 Paragraphs 10 and 11 and Section 6, Schedule 1 "Environmental Report"

Union stated that it will follow the proposed mitigation measures described in Section 9 of the Environmental Report, entitled "Storage Pool Environmental Management Plan".

Please discuss in detail the environmental management and mitigation program that Union plans to implement specifically related to the well drilling operations.

14. Please comment on the Board staff draft conditions of approval provided in Attachment 3 to these Interrogatories. Please note that these conditions are standard conditions and are a draft version subject to additions or changes depending Board staff's further review of the evidence in this case.

ATTACHMENT 1

BOARD STAFF PROPOSED CONDITIONS OF APPROVAL AUTHORIZATION TO OPERATE JACOB DESIGNATED STORAGE POOL EB-2011-0013

Union Gas Limited Jacob Pool Storage Project

EB-2011-0013

Authorization to Inject, Store and Remove Gas

Board Staff Proposed Conditions of Approval

1. Operation of the Jacob Storage Pool

- 1.1 Union Gas Limited ("Union) shall rely on the evidence filed with the Board in the EB-2011-0013; EB-2011-0014 and EB-2011-0015 proceeding. Union shall comply with applicable laws, regulations and codes to the satisfaction of the responsible agency pertaining to the construction, operation and maintenance of the proposed project and should evaluations conducted in accordance with those applicable laws, regulations and codes identify any risk and/or specify any remedial work, shall implement, complete and maintain such works prior to commencement of any injection.
- 1.2 Union shall design, construct, operate, maintain and abandon the wells and facilities in accordance with the CSA Z341.1-10 Storage of Hydrocarbons in Underground Formations and in accordance with the *Oil, Gas and Salt Resources Act* and its regulations and operating standards.
- 1.3 Union shall protect the integrity of the reservoir and ensure the safe operation of the Jacob Storage Pool by complying with the requirements of the Provincial Operating Standard, CSA Standard Z341.1-10 and any other applicable laws, regulations and codes.
- 1.4 Union shall advise the Board's designated representative of any proposed material change or abnormal events in construction or restoration procedures that are reported to authorities. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 Union shall not operate the Jacob Storage Pool above a maximum allowed operating pressure representing a pressure gradient of 15.8 kPa/m of depth to the top of the reservoir until leave of the Board is obtained.
- 1.6 Union shall ensure that the construction, operation and maintenance of the Jacob Storage Pool do not affect the quality or supply of potable water. Union shall conduct a water well test prior to and after the first cycle of gas storage and implement a Water Well Monitoring Program. In the event that the quality of the

potable water is impacted by the construction, operation and maintenance of the Jacob Storage Pool, Union shall provide adequate fresh water supplies to all affected landowners until the problem is rectified.

- 1.7 Should Union fail to commence injection before June 1, 2012, Union shall be required to apply to the Board for an extension of the authority granted under the Board's Order and will be required to submit evidence to show why such an extension shall be granted.
- 1.8 Union shall, after the date on which the Board grants an order pursuant to Section 38(1) of the *Ontario Energy Board Act, 1998* ("the Act") and before commencement of drilling operations or pipeline construction to use the Designated Storage Area ("DSA") for storage, and thereafter while the DSA or any part thereof is being used for storage operations, obtain and maintain in full force and effect insurance coverage, including but not limited to, liability and pollution coverage, in the amount that is determined to be adequate by an independent party with expertise in adequacy of insurance coverage for environmental and other risks and potential impacts of gas storage operations in southwestern Ontario. Union shall file with the Board documentation proving that the insurance coverage has been obtained as required by this condition.

2. **General**

- 2.1 For the purposes of these conditions conformity of the Applicant with CSA Z341-10, the *Oil, Gas and Salt Resources Act*, and the *Provincial Operating Standard* shall be to the satisfaction of the Ministry of Natural Resources.
- 2.2 The authority granted under this Order to Union is not transferable to another party, without leave of the Board.
- 2.3 The Board's designated representative for the purpose of these conditions shall be the Manager, Natural Gas Applications.

3 **Just and Equitable Compensation**

Union shall offer to pay landowners and/or tenants just and equitable compensation for any damages, including present and future crop damage arising from: drilling of injection/withdrawal wells; installation of gathering pipelines; access road construction.

ATTACHMENT 2 BOARD STAFF PROPOSED CONDITIONS OF APPROVAL LEAVE TO CONSTRUCT APPLICATION EB-2011-0014

Union Gas Limited Jacob Pool Storage Project Leave to Construct Application EB-2011-0014 Board Staff Proposed Draft Conditions of Approval

1 General Requirements

- 1.1 Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2011-0013; EB-2011-0014 and EB-2011-0015 proceeding except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2012, unless construction has commenced prior to that date.
- 1.3 Union shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Union shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 Within 15 months of the final in-service date, Union shall file with the Board Secretary a Post Construction Financial Report. The Report shall indicate the actual capital costs of the project and an explanation for any significant variances from the estimated costs.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.
- 2.2 Union shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction

- site. Union shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 Union shall give the Board's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Union shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Easement Agreements

4.1 Union shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

5 Other Approvals

5.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

ATTACHMENT 3

BOARD STAFF PROPOSED CONDITIONS OF APPROVAL

LICENCES TO DRILL WELLS IN JACOB DESIGANTED GAS STORAGE POOL EB-2011-0015

Jacob Pool Development Project

Union Gas Limited EB-2011-0015

Board Staff Proposed Conditions of Approval

Wells Drilling Licences Application

1. General Requirements

- 1.1. Union Gas Limited ("Union) shall rely on the evidence filed with the Board in EB-2011-0013; EB-2011-0014 and EB-2011-0015 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
- 1.2 Authorization for the issuance of the drilling licences is limited to twelve months from the date of the Board's Report to the Ministry of Natural Resources.
- 1.3 The authority granted under this Order to Union is not transferable to another party without leave of the Board. For the purpose of this condition another party is any party except Union Gas Limited.

3. Construction Requirements

- 3.1 Union shall construct the facilities and restore the land in accordance with its Application and evidence and the undertakings given to the Board, except as modified by this Order and these Conditions of Approval.
- 3.2 Union shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the Board, and as follows:
 - Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.

- 3.3 Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.
- 3.4 Union, shall implement all the recommendations of the Jacob Storage Pool Environmental Management Plan in the pre-filed evidence.

4. Monitoring and Reporting Requirements

- 4.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 4.2. The interim monitoring report shall confirm Union adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 4.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

5. **Project and Communication Requirements**

- 5.1 For the purposes of these conditions, conformity of the Applicant with CSA Z341-10, shall be to the satisfaction of the Ministry of Natural Resources.
- 5.2 Union shall designate one of its employees as project manager who will be responsible for the fulfilment of these conditions, and shall provide the employee's name to the Ministry of Natural Resources, the Board and to all appropriate landowners.
- 5.3 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.