

UNION GAS LIMITED

**Application for approval to increase the operating pressures
in certain natural gas storage pools, to drill natural gas storage wells and to
construct a natural gas pipeline in the Township of Dawn-Euphemia in
Lambton County.**

EB-2016-0322

OEB STAFF INTERROGATORIES

Need for 2017 Storage Enhancement Project (Project)

Interrogatory 1

Ref: Evidence, page 2, paragraph 7

Preamble:

Union determined that the Dawn 156 and Bentpath pools are the preferred pools for increases in pressure and deliverability.

Questions:

- a) Please indicate which studies or models were the basis for Union's assessment and selection of the Dawn 156 and Bentpath pools as the preferred options for meeting the identified needs.
- b) Please summarize and define the criteria used to select these two pools for the Project.

Interrogatory 3

Ref: Evidence, pages 4-5 "Need for the Facilities"

Preamble:

Union asserts that the Project is needed based on a growing market demand for increased storage space and deliverability in Ontario.

Union identified that an additional working capacity of 49,000 cubic metres will be used to meet the requirements of its storage service customers.

Union stated that additional deliverability of 1,800 cubic metres per day has been contracted by a natural gas-fired generation plant. Union indicated that not all of

deliverability service requested by the gas-fired generating plant will be met by the Project and that Union plans to apply for additional storage enhancement (i.e. a second phase) in 2017 to meet the full demand of this customer.

Questions:

- a) Please provide quantitative summary information on the long-term growing demand in Ontario for storage space and deliverability annually, starting in 2017. Indicate the reference studies and sources used for the forecast.
- b) Please specify which of Union's storage service customers will be served by the additional working capacity resulting from increased pressure in the Dawn 156 pool.
- c) Please discuss the rationale for Union's decision to not enhance the deliverability necessary to meet the full demand of the generating plant at the same time, but to instead develop it in two phases. Address business, economic, environmental and cost aspects, as well as technical and operational aspects of Union's two-phase plan. Would there be any efficiencies gained by addressing the full demand at once? (For example, from a regulatory approval, cost, environmental, or construction perspective)

Request to Vary Condition on Maximum Operating Pressure in Dawn 156 Pool

Interrogatory 4

Ref: Evidence, pages 9-10, paragraphs 37-42

Preamble:

Union filed an application with the OEB to vary a condition related to the maximum operating pressure of the Dawn 156 pool. Union asked that it be allowed to increase the operating pressure to 8,290 kPaa, which corresponds to a pressure gradient of 17.2 kPa/m (0.76 psi/ft). Operation under this pressure should comply with the relevant requirements of the CSA Z341.1-14 "Storage of Hydrocarbons in Underground Formations" (CSA Z341.1-14) to the satisfaction of the Ministry of Natural Resources and Forestry (MNRF). In accordance with the requirements of the CSA Z341.1-14 and related to the vary order application, Union provided the MNRF with the following reports on the Dawn 156 pool for their review: (i) "What If" Analysis and Operability

Issues report (ii) Assessment of Neighbouring Activities (iii) Engineering Assessment (together “the Dawn 156 Pool Reports”).

Union stated that it understands that the MNRF will file comments on compliance with the CSA Z341.1-14 and on Engineering and Assessment of Neighbouring Activities in MNRF’s final submissions in this proceeding. It would be procedurally more efficient if Union provides evidence on the record confirming that the MNRF has reviewed and is satisfied with Union’s compliance with the CSA Z341.1-14 and the Dawn 156 Pool Reports.

Question:

Did or will Union communicate with the MNRF to obtain and file MNRF’s comments on compliance with the CSA Z341.1-14 and on the Dawn 156 Pool Reports prior to the date of submissions in this proceeding? If not, please explain.

Application for Well Licences

Interrogatory 5

Ref: Evidence, page 9, paragraph 39 and page 10, paragraph 42

Preamble:

Union applied to the OEB for licences allowing it to drill 3 Injection/Withdrawal (I/W) Wells in the Dawn 156 pool, to drill one I/W Well in the Bentpath pool, to deepen and convert one observation well in the Bentpath pool, and to deepen three I/W Wells in the Bentpath pool. The MNRF is the provincial authority that ensures all of the relevant requirements of the CSA Z341.1-14 for drilling, modifications, and operation of these wells is satisfied. Union stated that it filed all necessary studies with the MNRF for a review and it expects final comments, as well as a statement on compliance with the CSA Z341.1-14, from the MNRF will be provided in MNRF’s final submission in this proceeding. It would be procedurally more efficient if Union provides evidence on the record confirming that the MNRF has reviewed and is satisfied with Union’s compliance with the CSA Z341.1-14 and the studies provided.

Questions:

- a) Please list the studies filed with the MNRF's review as they relate to the Dawn 156 and to the Bentpath pool separately.
- b) What is the anticipated timeline for MNRF's review and final comments and conclusion on compliance with the CSA Z341.1-14?
- c) Did Union discuss with the MNRF the option of obtaining their comments prior to the date for written submissions in this proceeding? If not, please explain. If so, what are the anticipated timelines for obtaining the comments and filing them on the record with the OEB?

Pipeline Facilities

Interrogatory 6

Ref: Evidence, page 13, paragraphs 60 and 61

Preamble

Union specified the pipeline design location factors it uses for different locations (Class 1 and Class 2).

Questions:

- a) Please provide excerpts and references from relevant codes that define design factors and Class locations for pipelines.
- b) What is the basis for Union's decision to design the pipeline to meet or exceed Class 2 location requirements?

Land Matters

Interrogatory 7

Ref: Evidence, page 15, page 16, paragraph 75, line 4 and Schedule 21 "Pipeline Easement"

Preamble:

Union noted that the drilling of all wells, construction of pipelines and roadways will be in accordance with Storage Lease Agreements within the two storage pools. Union stated that although the existing Storage Lease Agreements allow Union to construct gathering pipelines it will offer directly affected landowners a new Pipeline Easement in the same form as Union filed in Schedule 21 of its evidence.

Union applied for approval under section 90 of the OEB Act to construct the pipelines. Section 97 of the OEB Act stipulates that an approval under section 90 cannot be granted until the OEB is satisfied that an applicant has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board. Union also stated that it will obtain these easements after construction.

Questions:

- a) Has the form of Pipeline Easement agreement that Union has offered or will offer to the landowners whose properties are directly affected by the proposed pipeline been previously approved by the OEB? If so, in which proceedings?
- b) Please explain the rationale for Union obtaining easement agreements after construction instead of prior to construction of the proposed facilities?

Interrogatory 8

Ref: Evidence, pages 16-17 paragraphs 78-79

Preamble:

Union stated that three out of six landowners have signed a Letter of Acknowledgment formally agreeing to the location of proposed facilities.

Questions:

- a) Please clarify which facilities locations have not been formally agreed upon by the directly affected landowners? List well locations and pipeline sections separately.

- b) What is the formal document that will set the agreed upon compensation by Union to the landowners for damages and other surface impacts of wells, pipelines and roadways construction?

Environmental Protection Plan

Interrogatory 9

Ref: Letter of Comment by Jake and Mary Smit, dated January 5, 2017

Preamble:

Jake and Mary Smit, landowners in the Dawn 156 pool filed a letter of comment with the OEB expressing the following concerns: i) gas content and water quality in the water well on their property; ii) testing and monitoring water quality in this water well; iii) noise levels resulting from operation of “156 station”; iv) fire and safety concerns related to operation of the station; and v) lack of communication initiated by Union. Union filed a letter of response dated January 18, 2017 outlining actions taken in regards to the landowners’ concerns.

Questions:

- a) Are there any other steps, beyond those outlined in the letter of response by Union dated January 18, 2017, that Union plans to take to address the five concerns expressed by Jake and Mary Smit?

Interrogatory 10

Ref: Evidence, pages 14-15 and Schedule 20: “2017 Storage Enhancement Project, Environmental Protection Plan”

Preamble:

The Environmental Protection Plan (EPP) which covers all facilities in the 2017 Storage Enhancement Project, including wells and pipelines, was submitted to the Ontario Pipeline Coordinating Committee (OPCC) for a review on October 25, 2016.

Questions:

- a) Please file a summary table of all comments Union received to date in the process of the EPP review by the OPCC. Include any other comments received from landowners or other parties.
- b) Provide copies of letters or emails Union received and sent to the OPCC and other parties with regard to the EPP.

Indigenous People Consultation

Interrogatory 11

Ref: Evidence, pages 17-19 “First Nations and Metis Consultation”

Preamble:

Union sent notifications of the Project on May 9, 2016 to Chiefs of Chippewa of the Thames First Nation, Caldwell First Nation, Aamjiwnaang First Nation, Walpole Island First Nation, and Kettle and Stoney Point First Nation.

Union met with Aamjiwaang First Nation on July 5, 2016. Aamjiwaang First Nation requested and was provided with copies of the Risk Analysis Report and an update presentation on Union’s Emergency procedures. The Chippewa of the Thames First Nation requested a meeting with Union but the evidence does not say if the meeting took place. Union stated that as of the date of application filing, no concerns or issues have been raised by these communities.

Questions:

- a) How did Union ensure that the list of potentially affected Indigenous communities was complete? Which sources of information did Union use, and which agencies or ministries were contacted for this purpose?
- b) After Union sent initial notification of the Project on May 9, 2016, did Union receive any response communication from the Indigenous communities? If so, please discuss and file copies of written communication or summaries of verbal conversations. If there was no further communication, did Union follow up with any of the communities to ensure the notification was received?

- c) Please provide any comments by the consulted Indigenous Communities and Union's replies since the date Union filed the application with the OEB.

Conditions of Approval – Well Licence

Interrogatory 12

Ref: Application EB-2016-0322

Preamble:

Union applied for well drilling licences under section 40(1) of the OEB Act. Should the OEB find the applications in the public interest it would issue a favourable report to the Minister of Natural Resources and Forestry recommending issuance of well licences and certain conditions

Question:

Please comment on the attached OEB staff proposed conditions of approval. Please note that these conditions are draft and subject to additions or changes.

**Union Gas Limited
EB-2016-0322
OEB Staff Proposed Conditions of
Approval**

1. General Requirements

- 1.1. Union Gas Limited (Union) shall rely on the evidence filed with the OEB in EB-2016-0322 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 licence is limited to twelve months from the date of the OEB's Report to the Ministry of Natural Resources and Forestry.

- 1.3 The authority granted under this Order to Union is not transferable to another party without leave of the OEB. For the purpose of this condition another party is any party except Union Gas Limited.

2. Construction Requirements

- 2.1 Union shall construct the facilities and restore the land in accordance with its Application and evidence given to the OEB, except as modified by this Order and these Conditions of Approval.
- 2.2 Union shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the OEB, and as follows:
- i) 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.
- 2.3 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. Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:
- a) a post construction report, within three months of the in-service date, which shall:

- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1.1;
 - ii. describe any impacts and outstanding concerns identified during construction;
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
 - iv. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.
- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
 - i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1.1;
 - ii. describe the condition of any rehabilitated land;
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts construction;
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and

- v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.

4. Project and Communication Requirements

- 4.1 For the purposes of these conditions, conformity of Union with CSA Z341 shall be to the satisfaction of the Ministry of Natural Resources and Forestry.
- 4.2 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 and Forestry, the OEB and to all appropriate landowners.
- 4.3 The OEB's designated representative for the purpose of these Conditions of Approval shall be the Manager, Supply and Infrastructure.

Conditions of Approval – Leave to Construct Pipelines

Interrogatory 12

Ref: Application EB-2016-0322

Preamble:

Union applied for OEB order for leave to construct facilities under section 90(1) of the OEB Act.

Question:

Please comment on the attached OEB staff proposed draft conditions of approval. Please note that these conditions are draft and subject to additions or changes.

Draft
Leave to Construct Conditions of Approval
Union Gas Limited
EB-2016-0322

1. Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the Board's Decision and Order in EB-2016-0322.
2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.

(b) Union shall give the OEB notice in writing:
 - i. of the commencement of construction, at least ten days prior to the date construction commences;
 - ii. of the planned in-service date, at least ten days prior to the date the facilities go into service;
 - iii. of the date on which construction was completed, no later than 10 days following the completion of construction; and
 - iv. of the in-service date, no later than 10 days after the facilities go into service.
3. Union shall implement all the recommendations of the Environmental Protection Plan filed in the proceeding.
4. Union shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.
5. Both during and after construction, Union shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:
 - (a) a post construction report, within three months of the in-service date, which shall:

- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;
 - ii. describe any impacts and outstanding concerns identified during construction;
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
 - iv. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.
- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
 - i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 3;
 - ii. describe the condition of any rehabilitated land;
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts construction;
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and

- v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.