

## SECTION 1

### PROJECT SUMMARY

1. The Heritage Pool ("Heritage Pool") will add an additional 0.95 Bcf of storage capacity to Union's integrated storage system.
2. The proposed facilities include:
  - a. Two new injection/withdrawal ("I/W") wells in the Heritage Pool;
  - b. Conversion of an existing production well to a Guelph Observation well.
  - c. 1.9 kilometres of NPS 8 transmission pipeline between the Heritage Pool pipeline commingling point and the St. Clair Line Station;
  - d. 540 metres of NPS 8, storage gathering pipelines within the Heritage Pool; and,
  - e. Upgraded station facilities including filtration/separation, measurement and compression at the existing St. Clair Line Station.
3. Union Gas Limited ("Union") is seeking an order designating as a gas storage area, the lands which contain the geological formation in the County of Lambton, referred to as the Heritage Pool. The Heritage Pool is scheduled to commence storage operations by July 1, 2009.
4. Union is seeking an order from the Board granting the right to inject gas into, store gas in and remove gas from the Heritage Pool. Union would be the owner, developer and operator of all of the proposed storage facilities.
5. Union is also requesting that the Board issue a favourable report to the Minister of Natural Resources to enable the Minister to issue licenses to drill a total of two natural gas storage wells within the lands that comprise the Heritage Pool. Union has applied to the Ministry of Natural Resources ("MNR") for these licenses.
6. An Environmental Protection Plan ("EPP") has been prepared for the proposed facilities. The EPP will be provided to the Ontario Pipeline Coordination Committee ("OPCC") and local First Nations. Directly affected landowners received a copy of

the Executive Summary of the EPP and will be provided with a copy of the EPP upon request. The EPP outlines a number of environmental mitigation measures that, in conjunction with Union's standard pipeline construction and well drilling specifications, will allow construction of the proposed facilities with minimal impact to the environment.

7. Operation of the new Heritage Pool is scheduled to begin no later than July 1, 2009. In order to meet this in-service date, Union plans to order well casing and wellhead materials in early 2009. Union plans to order pipeline materials in January, 2009. Well drilling is scheduled to begin in June 2009 and Union plans to commence construction of the pipelines by June 2009.
8. In order to meet this construction timetable, a Board Decision and a favourable report to the Minister of Natural Resources by June 2009 is respectfully requested.

## SECTION 2

### NEED FOR FACILITIES

#### INCREMENTAL MARKET REQUIREMENTS

##### Introduction

1. Union believes that storage expansion is necessary to efficiently serve growing natural gas demand in eastern Canada (especially linked to demand growth in natural gas fired generation) and the U.S. Northeast markets, and that the demand for storage over the near and longer term exceeds the available supply.
2. A number of authorities have identified the need to develop additional storage<sup>1</sup>.
  - The National Energy Board<sup>2</sup> identified several factors supporting the need for more storage, including growing needs for gas fired power generation, and balancing LNG deliveries (primarily due to LNG arriving in North America in the summer).
  - The Federal Energy Regulatory Commission noted that natural gas storage expansion will act to reduce price volatility and assure that peak demand can be met<sup>3</sup> and
  - The Interstate Natural Gas Association of America noted that a significant increase in the amount of gas storage capacity will be required to meet growing peak month demand and the need for high deliverability storage to serve the requirements of power generation.<sup>4</sup>

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<sup>1</sup> NGEIR Decision, at p. 48.

<sup>2</sup> National Supply & Demand Scenarios: Putting Gas Storage Into Context, NEB Presentation, Sheila Leggett, Vice-Chair National Energy Board, October 1, 2008 as posted at <http://www.neb-one.gc.ca/clf-nsi/rpblctn/spchsndprsntrn/spchsndprsntrn2008-eng.html>

<sup>3</sup> Rate Regulation of Certain Underground Storage Facilities, "Notice of Proposed Rulemaking", FERC Stats. & Regs. 113 FERC\*\*61,306 (2005), pp. 7-10; and Rate Regulation of Certain Underground Storage Facilities, Final Rule, Order No. 678, 115 FERC\*\*61,343 (June 19, 2006), at pp. 5 and 6.

<sup>4</sup> Pipeline and Storage Infrastructure for a 30 Tcf Market, Interstate Natural Gas Association of America, January 2002, at p 43.

3. During its Natural Gas Forum process, the Board recognized a probable need for investment in storage capacity and deliverability<sup>5</sup> and examined storage and storage services in detail through its NGEIR proceeding (EB-2005-0551).

4. In its NGEIR Decision, the Board confirmed its view of the need for additional storage investment:

*“The Board also agrees that further development of storage would benefit Ontario consumers in terms of reduced price volatility, enhanced security of supply and an overall enhanced competitive market at Dawn.”<sup>6</sup>*

5. Furthermore, the Board concluded that:

*“It is in the public interest for storage and storage services to be further developed”<sup>7</sup>*

6. Union believes that demand for storage will continue to grow for the foreseeable future and views market area storage, and particularly the Michigan – Dawn region, to be well positioned to meet the growing storage demand. Union believes that this region will continue to evolve integrated service offerings to meet the Ontario and Northeast United States demand.

**Selling the Storage Capacity Created**

7. Union will manage the sale of the storage capacity created by the completion of the Heritage Pool in the same manner that all of Union’s ex-franchise storage is sold. Specifically, the capacity will be added to the overall portfolio and then placed into the market in one of three ways:

- a) Sold via an Open Season and/or;
- b) Sold via a direct negotiation with a customer and/or
- c) Sold via Union responding to a Request for Proposal initiated by a customer.

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<sup>5</sup> Natural Gas Regulation in Ontario: A Renewed Policy Framework, Report on the Ontario Energy Board Natural Gas Forum, March 30, 2005, at p. 40.

<sup>6</sup> NGEIR Decision, at p. 50.

<sup>7</sup> NGEIR Decision, at p. 63.

**Support for Need**

8. In light of the foregoing Board and industry views, and based on its own assessment of the future demands for storage services, Union is confident that there will be sufficient market demand for the storage services created by development of the Heritage Pool. Union believes that the facilities proposed and the designation of the lands sought is therefore in the public interest and should proceed as proposed.

## SECTION 4

### PROPOSED FACILITIES

#### Description of Proposed Facilities

1. A total of two I/W wells and one Guelph Observation well are planned in the Heritage Pool.
2. Approximately 1.9 km of NPS 8 transmission pipeline and 540 metres of NPS 8 gathering lines will be constructed from the Heritage Pool to the St. Clair Line Station, as shown in Section 4-Schedule 1.
3. Compression facilities are also required at the St. Clair Line Station. A 450 HP compressor and the proposed ancillary facilities are required to fully utilize the working capacity of the storage pool. Station upgrades at the existing St. Clair Line Station will also be completed to accommodate the flows and operational requirements for the Heritage Pool.
4. A commitment to purchase the compressor and other materials with long delivery times was necessary by August, 2008 to meet the in-service date of July 25, 2009.
5. Union proposes to construct the facilities in accordance with its standard construction procedures and the environmental mitigation measures outlined in the Environmental Report ("EPP").
6. All facilities will be operated in accordance with Union's Operating and Maintenance Procedures and Emergency Response Plans.

#### Wells

7. The Heritage Pool will require two I/W wells. Union is proposing to drill a horizontal leg from the stratigraphic test well UH.1. Union Heritage 2 ("UH.2") is a new proposed vertical I/W well. A copy of the MNR well applications and surveys are included in Section 4-Schedule 2. The locations of the proposed wells, as shown in Section 4-Schedule 1, were selected based on information from all wells within the proposed DSA and the seismic interpretation

8. A workover will be completed on HMS.8-6-15 and the well will be converted to a Guelph Observation well.
9. The I/W wells will be drilled using a combination of rotary and cable tool drilling methods. Section 4-Schedule 3 describes the drilling procedure that Union will employ for drilling. Section 4-Schedule 4 outlines the casing specifications for the proposed storage wells. All aspects of the well drilling and design will be completed in accordance with CAN/CSA-Z341 and the Oil, Gas and Salt Resources of Ontario, Provincial Operating Standards.
10. Access to the proposed wells will be provided by permanent all-weather access roads as shown on the drawing attached to the landowner Acknowledgements found in Section 6-Schedule 8.
11. In order to begin well drilling in June 2009, materials will be ordered in January.

#### **Pipeline Facilities**

12. A NPS 8 transmission pipeline will be constructed from the Heritage Pool to the St. Clair Line Station (Section 4-Schedule 1). The pipeline will be approximately 1.9 km in length.
13. The Heritage Pool will require 540 metres of NPS 8 gathering lines (Section 4-Schedule 1).
14. Design and pipe specifications for the proposed storage gathering and transmission pipelines are outlined in Section 4-Schedule 5. All the design specifications are in accordance with the *Ontario Regulation 210/01 for Oil and Gas Pipeline Systems*.
15. The Maximum Operating Pressure ("MOP") for the proposed gathering pipelines and the proposed transmission pipeline is 11,549 kPa.
16. The proposed pipelines are located primarily within a Class 1 location. For a pipeline within a Class 1 location, Union uses location factors of 0.9 for general locations, 0.75 for road crossings, 0.625 for pipe within a station and a design factor of 0.8. For a pipeline within a Class 2 location, Union uses location factors of 0.9 for general locations, 0.625 for road crossings, 0.625 for pipe within a station and a design factor of 0.8.
17. Union proposes to construct the pipeline to meet or exceed Class 2 location requirements. The pipeline design and pipe specifications can be found in Section 4-Schedule 5.
18. Section 4-Schedule 6 describes the techniques and methods of construction that Union will employ for the construction of the proposed pipelines.

19. The pipelines will be installed in accordance with all applicable codes and Union's standard pipeline construction procedures.
20. In order for construction of the proposed NPS 8 pipeline to commence in June, the pipe and valves will be ordered in January, 2009 and all other materials will be ordered by February, 2009. The proposed construction schedule is found in Section 4-Schedule 7.

#### **Station Facilities**

21. Station upgrades at the existing St. Clair Line Station will also be completed to accommodate the flows and operational requirements for the Heritage Pool. Upgrades within the St. Clair Line Station will include gas filtration and liquids separation equipment, ultrasonic flow measurement, remote telemetry/control building(s) and equipment, compressor, and associated valving/ancillary equipment to accommodate the Heritage Storage Pool development.
22. A 450 HP compressor will be required at the St Clair Line Station. The compressor design and the proposed ancillary facilities will allow Union to turnover the full working capacity of the storage pool.
23. A commitment to purchase the compressor and other materials with long delivery times was necessary by August 2008 to meet the in-service date of July 25, 2009.
24. Union proposes to construct the facilities in accordance with its standard construction procedures and the environmental mitigation measures outlined in the Environmental Report ("ER").

#### **Proposed Storage Operation**

25. Storage operations are planned to commence at the Heritage Pool on July 1, 2009. This will allow adequate to inject the necessary cushion gas and the working gas volume prior to November 1, 2009
26. The Heritage Pool will be operated at a cushion pressure of 2,100 kPaa corresponding to an inventory of 5,400  $10^3\text{m}^3$ . The inventory of the Heritage Pool at a maximum operating

pressure of 10,623 kPaa will be approximately 32,300  $10^3\text{m}^3$ , resulting in a working inventory of approximately 26,900  $10^3\text{m}^3$ .

27. During injection and withdrawal, gas will be controlled, measured, filtered and compressed at the connection to the Sarnia Industrial Line Station.
28. During injection operations, gas will flow from the Sarnia Industrial Line Station into the Heritage Pool. As the pool pressure approaches 4,926 kPaa, compression will be utilized to fill the pool at a design flow rate of 200  $10^3\text{m}^3/\text{day}$  until the pool reaches the maximum operating pressure.
29. During withdrawal operations, gas will flow from the Heritage Pool to the Sarnia Industrial Line Station at a design withdrawal rate of 319  $10^3\text{m}^3/\text{day}$ . As the pool pressure declines, compression will be used to maintain a delivery pressure of 4,926 kPaa until the pool reaches cushion pressure.
30. During operation of the Heritage Pool, Union's Emergency Response Plans and Standard Operating Procedures will be followed.

## SECTION 6

### LAND MATTERS

#### Storage Land Matters

1. Union holds the majority of petroleum and natural gas ("P&NG") rights and Gas Storage rights in the Heritage Pool proposed designated storage area ("DSA"). The landowners with leases have received, and are continuing to receive, all payments required under these agreements.
2. After the Heritage Pool has been developed for gas storage, Union will administer and maintain the annual rental payments to all affected landowners.
3. Payment for P&NG and Gas Storage Agreement rentals, well and roadway payments will be made at the standard Lambton County storage rates. Prior to the date of injection of natural gas an offer for residual gas will be made in accordance with the terms of the Gas Storage Agreements.
4. The offer of purchase for residual gas will be extended to the landowners within the proposed DSA with a participating interest in residual gas as established in the Unit Operation Agreements or the Unit Operation Amending Agreement as applicable.
5. Union proposes to offer a compensation package to the landowners that are consistent with Union's existing Gas Storage Landowner Compensation Program. The combined P&NG and Gas Storage Lease rentals will be \$114.53 per acre. The specific components of the offer for 2009 are as follows:

P&NG Lease Rental	\$ 24.90 per acre
Gas Storage Lease Rental:	<u>\$ 89.63 per acre</u>
Combined Storage Rental	\$114.53 per acre

6. The offer for wells, roads and outside acreage rental payments are as follows:

Gas Storage Well Payment	\$1,300.37 per well
Roadway Payment	\$1,021.72 per acre
Outside Acreage (combined P&NG and Gas Storage)	\$ 34.39 per acre

**Note:** These payments are currently adjusted annually by the Consumer Price Index for the preceding July 1 to June 30 period.

7. Outside acres result when the acreage held by a single deed or lease are severed by the DSA boundary resulting in some acres being inside the DSA and some acres being outside the DSA boundary.

### **HERITAGE POOL**

8. The ownership of the gas wells and all production equipment located in the Heritage Pool was purchased by Union. This was done so that Union would own and be responsible for all physical plant, assets, and equipment on the subject lands. This approach enables Union to operate and maintain the wells for gas storage and pay all associated surface well rentals.
9. The metes and bounds description of the proposed Heritage Pool DSA is described in Section 6-Schedule 1.
10. The land plat map displayed in Section 6-Schedule 2 identifies the property owners and the holder of the P&NG agreements for each property within the proposed Heritage Pool DSA. The land plat map displayed in Section 6-Schedule 3 identifies the property owners and the holder of the Gas Storage Agreements for each property within the proposed DSA. Section 6-Schedule 4 lists all of the landowners and interested parties including all of the encumbrancers for each property within the proposed Heritage Pool DSA. The Property Agreement Summary, copies of the P&NG Lease Agreements and copies of the Gas Storage Leases as applicable for each property within the proposed DSA are filed as Tabs 1 to 12 inclusive.
11. Union holds all but two P&NG Leases for this pool. One Lease is for Part of Lot 8, Concession 15, Geographic Township at Sombra, now Township of St. Clair. This land is

owned by "Her Majesty, the Queen, Public Lands, Frontier Lands, Management Division, Energy Sector. The second Lease is for Part of Lot 6, Concession 15, Geographic Township of Sombra, now Township of St. Clair. This land is owned by Her Majesty the Queen, represented by the Minister of Highways for the Province of Ontario. Union anticipates obtaining these Leases in the near future.

12. Union holds all but one of the Gas Storage Lease rights in the Heritage Pool. This Lease is for Part of Lot 6, Concession 15, Geographic Township of Sombra, now Township of St. Clair. This land is owned by Her Majesty the Queen represented by the Minister of Highways for the Province of Ontario. Union anticipates obtaining this Lease in the near future.
13. The purchase price for the residual gas will be offered based on a twelve and one-half percent (12½%) royalty multiplied by the remaining recoverable volumes (above 50 psi) of reserves, as set out in the Gas Storage Lease Agreement, multiplied by the actual market price at the wellhead paid to Ontario producers of or the month preceding the date of first injection or as otherwise negotiated.
14. After project approval, but before injection, Union proposes to negotiate and execute Amending Agreements - Schedule of Payments with all landowners to alter the payment structure of the existing agreements to match the compensation package paid to landowners within Union's existing storage pools as referred to in paragraphs 5 and 6 of this section.

#### **NPS 8 Transmission Pipeline**

15. The proposed NPS 8 pipeline connects the Heritage Pool to the St. Clair Line Station.
16. Union requires approximately 2 hectares of permanent easement for the proposed pipeline. Section 6-Schedule 5 lists the names and addresses of all affected landowners and the dimensions of the permanent easements required. As of the date of filing, Options for the permanent easements have been obtained.
17. Union's Grant of Easement form which is attached as Section 6-Schedule 6 is the form

developed following the EB-2005-0550 Strathroy-Lobo TFEP hearing.

18. Union will require approximately 0.8 hectares of temporary easement for the proposed construction. The affected landowners and dimensions of temporary easement are also outlined in Section 6-Schedule 4. Union will employ the Temporary Land Use Agreement form previously approved by the Board and used by Union in the past on pipeline projects. These agreements are for a period of two years. This period allows Union an opportunity to return following construction to perform further clean-up work as required.
19. At the conclusion of construction, Union will seek a Full and Final Release from each of the directly affected landowners. This Release covers any compensation for actual damages resulting from the pipeline construction.
20. Union will also use a Letter of Understanding ("LOU") between Union and landowners for the project. The LOU outlines compensation, damage mitigation, clean-up, and restoration policies to be implemented for the project. It also constitutes a framework for individual landowner negotiations. The LOU is structured so that common concerns can be addressed in a consistent and mutually-acceptable fashion.
21. The LOU provides a benchmark for individual negotiations for land rights. If necessary, updates or site-specific reports by mutually-acceptable appraisers will be paid for by Union to resolve questions of land values.
22. During individual negotiations with affected landowners, property-specific matters of compensation for land rights and anticipated damages, as well as site-specific mitigation measures will be settled. These measures are documented in the LOU.

**Well Drilling, Roads and Gathering Lines**

23. Drilling of wells, construction of roadways, and construction of gathering pipelines within the DSA will be undertaken pursuant to existing Storage Lease Agreements with the landowners.

24. In the Heritage Pool, injection withdrawal wells will be drilled on the William Forbes estate. An Observation well will be established on the William G. Robson property. The location of wells can be found in Section 4-Schedule 1.
25. Permanent all-weather roadways are required to accommodate vehicular traffic to the existing and proposed well locations and will be used on an ongoing basis during and following construction. These access roads will be used where possible for construction and maintenance of the gathering pipelines in order to minimize environmental disturbance. The location of the access roads, wells and gathering lines is shown in Section 6-Schedule 7.
26. Letters of Acknowledgement stating that there is no objection to the commencement of drilling of the wells and construction of the permanent all-weather access roads and gathering lines in the locations proposed have been presented to the estate. Signed Letters of Acknowledgment have been received from the estate and are included as Section 6-Schedule 8.
27. Although Union has the authority it requires to install the gathering lines pursuant to the existing Storage Lease Agreements, Union will secure easements for the gathering lines in order to clearly define their location and register them on title. Union's Grant of Easement form is attached as Section 6-Schedule 6. Union will obtain these easements after construction.
28. Compensation for all crop damage and other surface impacts from the construction of wells, pipeline, and roadways will be paid to the landowner or tenant farmer where applicable. At the conclusion of construction, Union will seek a Full and Final Release from each of the directly affected landowners or tenant farmers.
29. Union will use a Construction Commitment Letter ("CCL") between Union and landowners for the gathering lines on the project. The CCL outlines mitigation, clean-up, and restoration policies to be implemented for the project. It also constitutes a framework for individual landowner negotiations. The CCL is structured so that common concerns of the landowners can be addressed in a consistent and mutually-acceptable fashion.

30. During ongoing discussions with affected landowners, property-specific matters, as well as site-specific mitigation measures will be finalized. The measures are documented in the CCL.

#### **Landowner Contacts**

31. Union has implemented a comprehensive program to provide landowners, tenants, and other interested persons with information regarding the proposed development. Project information was distributed through correspondence and individual meetings.

#### **Construction Monitoring and Follow-Up**

32. During the construction phase, Union will arrange for a Landowner Relations Agent to be available to ensure that commitments made to the landowners are fulfilled and to address questions or concerns of the landowners. In addition, any complaint received by Union related to the construction will be recorded and monitored to ensure follow-up. This process assists in resolving complaints and fulfilling commitments.
33. After construction, negotiations with landowners continue where necessary to settle any damages that were not foreseen or compensated for prior to construction.