

Energy, Mines and Resources Oil and Gas Resources Box 2703

Whitehorse, Yukon, Y1A 2C6 Telephone: (867) 667-5087 Fax: (867) 393-6262

# **LNG Facility Licence**

No. 1140 Amendment No. 0

Yukon Oil and Gas Act ("Act") Oil and Gas Licence Administration Regulations OIC 2004/157 ("OGLAR") Gas Plant Processing Regulation OIC 2013/162 ("GPPR")

> Effective Date: July 11, 2014 Expiry Date: July 11, 2054

Pursuant to the Oil and Gas Act and Section 16 of the GPPR, a licence is hereby granted to

Licensee:

Yukon Energy Corporation

**Identification Code: 522472** 

Address:

#2 Miles Canyon Road, PO Box 5920, Whitehorse, Yukon Y1A 6S7

This Licence authorizes the activities described within the application for the following

**Application Date:** 

December 6, 2013

**Facility Name:** 

The Whitehorse Diesel - Natural Gas Conversion Project (the "Facility")

**Description:** 

The Licensee will use liquefied natural gas ("LNG") as a fuel source for power generation at the Whitehorse power plant site, which requires construction, operation, and maintenance of facilities consisting of three 166.5 m3 storage tanks, vaporization, distribution, and off-loading.

Coordinates:

Refer to Schedule 1 for details. 60°41'47.87"N. 135°2'51.06"W

Legal Description:

Lot 1288, Quad 105 D/11, 102523 CLSR YT, Plan 2014-0004,

**Reference Map:** 

Drawing WGO-D-C100-01 Rev 0 by KGS Group 29-May-2014

**General Construction Contractor(s):** 

Allnorth Consultants Limited

**Construction Period:** 

July 11, 2014 to January 31, 2015

### **Terms and Conditions:**

- 1. The following documents comprise the management systems for the purposes of the GPPR:
  - a. Corporate Administration Policy, CA-001, May 2013
  - b. Health and Safety Policies
    - i. HS-001, Jan 2014
    - ii. HS-002, Jan 2014
    - iii. HS-003, Jan 2014
    - iv. HS-004, Jan 2014
    - v. HS-005, Jan 2014
    - vi. HS-006, Jan 2014
    - vii. HS-007, Jan 2013
    - viii. HS-008, Jan 2014
    - ix. HS-010, Jan 2013 x. HS-011, Jan 2014
  - c. Environmental Policy, EN-001, Feb 2012



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- d. Environmental Management System Procedure
  - i. EMS-MP-001, Feb 2012
  - ii. EMS-MP-002, Feb 2012
  - iii. EMS-MP-003, Feb 2012
  - iv. EMS-MP-004, Feb 2012
  - v. EMS-MP-005, Feb 2012
  - vi. EMS-MP-006, Feb 2012
  - vii. EMS-MP-007, Feb 2012
  - viii. EMS-MP-008, Feb 2012
  - ix. EMS-MP-009, Feb 2012
  - x. EMS-MP-010, Feb 2012
  - xi. EMS-MP-011, Feb 2012
  - xii. EMS-MP-012, Feb 2012
  - xiii. EMS-MP-013, Feb 2012
  - xiv. EMS-MP-014, Feb 2012
- e. Health and Safety Management System Overview, Dec 2013
- 2. Each of the following prescribed programs, as defined in the GPPR, is comprised of the following documents listed below that prescribed program:
  - a. Safety Program:
    - i. Safe Work Planning Program, Mar 2012
    - ii. Safe Job Procedures
      - 1. SJP-002, May 2014
      - 2. SJP-003, May 2013
    - iii. Safe Work Practice Guidelines
      - 1. SWP-002, Mar 2014
      - 2. SWP-006, Mar 2014
      - 3. SWP-009, Jan 2013
      - 4. SWP-017, Mar 2014
      - 5. SWP-024, Mar 2014
      - 6. SWP-027, Oct 2013
      - 7. SWP-044, Mar 2014
      - 8. SWP-048, Feb 2012
      - 9. SWP-100, Mar 2014
      - 10. SWP-101, Mar 2014
      - 11. SWP-102, Mar 2014



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- 12. SWP-103, Mar 2014
- 13. SWP-104, Mar 2014
- 14. SWP-105, Mar 2014
- 15. SWP-106, Mar 2014
- 16. SWP-107, Mar 2014
- iv. YEC Employee Safety Orientation, 2012
- v. Contractor Safety Orientation and Information, 2014
- vi. HAZOP Review, Allnorth, 5 Mar 2014
- vii. Risk Analysis Memorandum, Allnorth, 18 Jun 2014
- viii. Control Narrative Table Rev 1, 06 Jun 2014
- ix. Thermal Radiation Calculation Rev 1, Braemar Engineering, 28 May 2014
- b. Environmental Protection Program:
  - i. Environmental Work Practice Guidelines
    - 1. EMS-EWP-001, Dec 2013
    - 2. EMS-EWP-002, Dec 2013
    - 3. EMS-EWP-003, Dec 2013
    - 4. EMS-EWP-004, Dec 2013
    - 5. EMS-EWP-005, 04 Mar 2014
    - 6. EMS-EWP-006, 04 Mar 2014
    - 7. EMS-EWP-007, Dec 2013
    - 8. EMS-EWP-008, 04 Mar 2014
    - 9. EMS-EWP-010, Dec 2013
    - 10. EMS-EWP-011, 04 Mar 2014
    - 11. EMS-EWP-012, Dec 2013
    - 12. EMS-EWP-013, Dec 2013
  - ii. Whitehorse Rapids Generation Site Spill Response Plan Rev 4, 24 Feb 2014
  - iii. Air Quality Assessment Study, SENES Consultants Limited, 21 Oct 2011
  - iv. Vapour Dispersion Model Rev 3, Braemar Engineering, 10 Jul 2014
  - v. Noise Impact Assessment, SENES Consultants Limited, Dec 2013
- c. Quality Control and Quality Assurance Program
  - Whitehorse Diesel-Natural Gas Conversion Project Project Quality Management Plan, Allnorth, 04 Dec 2013
  - ii. Inspection and Test Plan Procedure, Allnorth, 04 Dec 2013
  - QA/QC Program Maintenance of the LNG Storage, Vaporization and Generation Facility, YEC, March 12, 2014
- d. Facility Emergency Response Procedure for LNG Storage and Handling, 05 May 2014



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- 3. As contemplated in Section 11(1)(k) of the GPPR, the Licensee shall follow the facility venting procedure as submitted to the COO on April 15, 2014.
- 4. The Licensee shall not undertake any activity under this Licence unless it is undertaken in accordance with the Oil and Gas Act and regulations; any authorization issued in respect of the Facility, including this Licence, as amended from time to time; any Directions or Orders of the COO; and, to the extent they are not inconsistent with the foregoing the Licensee's Application (including the Application Form) and any representations made by the Licensee to the COO during the Licence review process.
- 5. An obligation of the Licensee will survive the termination or expiry of this Licence if it is expressly required or reasonably implied in pursuit of the objectives of the *Oil and Gas Act*.
- 6. An amended Licence replaces and supersedes all previous version of this Licence.
- 7. This Licence shall not be construed as affecting any obligation the Licensee may have under a Federal, Territorial, or Municipal law.
- 8. A copy of the Licence will be kept on site.

Kyle Rolling, P.Eng, Chief Operations Officer

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#### **SCHEDULE 1**

The following documents comprise the description of the facility:

- 1. Civil Site Layout Plan, WG0-D-C000-02 Rev E. 22 May 2014
- 2. Civil Site Layout, WG0-D-C100-01 Rev 0, 29 May 2014
- 3. Glycol System PFD, WG0-D-M300-01 Rev 0, 04 Jun 2014
- 4. Natural Gas System PFD, WG0-D-M301-01 Rev 0, 04 Jun 2014
- 5. Piping & Instrumentation Diagram, GP-YEC-P&ID-M01 to -M08, Rev 0, 04 Jun 2014
- 6. Tank Final Arrangement, HN-189-10.34/CS-FA, 27 Feb 2014
- 7. Tank General Arrangement, HN-189-10.34/CS-GA, 02 Feb 2014
- 8. Relief Valve Sizing Calculations, 06 Mar 2014
- 9. Piping & Instrumentation Diagram, WG0-D-E000-01 Rev 0, 04 Jun 2014
- 10. Piping & Instrumentation Diagram, WG0-D-E001-01 Rev 0, 04 Jun 2014
- 11. Piping & Instrumentation Diagram, WG0-D-E002-01 Rev 0, 04 Jun 2014
- 12. Piping & Instrumentation Diagram, WG0-D-E003-01 Rev 0, 04 Jun 2014
- 13. Piping & Instrumentation Diagram, WG0-D-E004-01 Rev 0, 04 Jun 2014
- 14. Piping & Instrumentation Diagram, WG0-D-E005-01 Rev 0, 04 Jun 2014
- 15. Electrical Area Classification, WG0-D-E401-01 Rev 0, 04 Jun 2014
- 16. Instrument Plan, WG0-D-E450-05 Rev 0, 04 Jun 2014
- 17. Instrument Plan, WG0-D-E450-06 Rev 0, 04 Jun 2014
- 18. Electrical Systems Plan Detail, WG0-D-E407-02 Rev 0, 04 Jun 2014
- 19. Electrical Systems Plan Detail, WG0-D-E407-03 Rev 0, 04 Jun 2014