3 June 2015

Mr. Thomas V. Wooden
V.P. Operations
Algonquin Gas Transmission, LLC
P.O. Box 1642
Houston, TX 77251-1642

Dear Mr. Wooden:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your applications for the installation of fuel burning equipment and air pollution control equipment located at the Burrillville Compressor Station in Burrillville, Rhode Island.

Enclosed are minor source permits issued pursuant to our review (Approval Nos. 2289-2291).

The issuance of these minor source permits qualifies as an Off-Permit Change for your Title V Operating Permit under subsection 29.11.2 of Air Pollution Control Regulation No. 29. The minor source permits will be incorporated into your operating permit at the time of renewal or re-opening.

A copy of the minor source permits and a copy of your application should be maintained with your operating permit at all times until the permits are incorporated into your operating permit. In addition, as stated in subsection 29.11.2(d) of Air Pollution Control Regulation No. 29, the permit shield in Section II of your operating permit shall not apply to the permits until they are incorporated into your operating permit.

If there are any questions concerning these permits, please contact me at (401)-222-2808, extension 7028 or at *aleida.whitney@dem.ri.gov*.

Sincerely,

Aleida M. Whitney
Senior Air Quality Specialist
Office of Air Resources

cc: Burrillville Building Official
Mr. Reagan Mayces - Spectra Energy, Algonquin Gas Transmission, LLC
Ms. Kristine Davies – Trinity Consultants
Ms. Wendy Merz – Trinity Consultant

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

ALGONQUIN GAS TRANSMISSION, LLC

APPROVAL NOs. 2289 and 2290

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Algonquin Gas Transmission, LLC

For the following:

Installation of a Solar Mars Turbine-driven Compressor Unit, Model No. 100-16002S4 (Approval No. 2289), equipped with SoLoNOx™ dry low NOx combustion technology and an oxidation catalyst (Approval No. 2290). The turbine will be fired with natural gas.

Located at: *Burrillville Compressor Station*

Algonquin Lane, Burrillville, RI

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Algonquin Gas Transmission, LLC* **from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.**

Douglas L. McVay, Chief
Office of Air Resources

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

ALGONQUIN GAS TRANSMISSION, LLC

APPROVAL NOs. 2289 and 2290

The following requirements are applicable to the Solar Mars natural gas-fired turbine-driven compressor unit, Model No. 100-16002S4, equipped with SoLoNOx^{TM} dry low NOx emission technology and an oxidation catalyst unless otherwise stated:

A. Emission Limitations

1. The following emission limitations apply during normal, steady-state operations (50% - 100% load) for all ambient temperatures above 0˚F:

   a. Nitrogen oxides (as nitrogen dioxide (NO_2))

      The emissions of nitrogen oxides discharged to the atmosphere from the turbine shall not exceed 9 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 4.69 lbs/hr, whichever is more stringent.

   b. Carbon Monoxide (CO)

      (1) The emissions of carbon monoxide discharged to the atmosphere from the turbine shall not exceed 25 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 0.40 lbs/hr, whichever is more stringent.

      (2) Emissions of carbon monoxide generated from the turbine shall be treated by an oxidation catalyst which is designed to reduce CO emissions by 95% before discharge to the atmosphere.

   c. Volatile Organic Compounds (VOCs)

      (1) The emission rate of volatile organic compounds discharged to the atmosphere from the turbine shall not exceed 0.0034 lbs per million BTU heat input (HHV) or 0.50 lbs/hr, whichever is more stringent.

      (2) Emissions of volatile organic compounds generated from the turbine shall be treated by an oxidation catalyst which is designed

to reduce VOC emissions by 50% before discharge to the atmosphere.

d. Sulfur Dioxide (SO_2)

(1) The sulfur content of the fuel burned in the turbine shall not exceed 5 grains total sulfur per 100 dry standard cubic feet.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from the turbine shall not exceed 2.02 lbs/hr.

e. Particulate Matter (as $PM_{10}/PM_{2.5}$)

The emission rate of particulate matter discharged to the atmosphere from the turbine shall not exceed 0.0066 lbs per million BTU heat input (HHV) or 0.95 lbs/hr, whichever is more stringent.

2. The following emission limitations apply during normal steady state operations (50% - 100% load) for all ambient temperatures between 0˚F and -20˚F:

a. Nitrogen oxides (as nitrogen dioxide (NO_2))

The emissions of nitrogen oxides discharged to the atmosphere from the turbine shall not exceed 42 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 22.58 lbs/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

(1) The emissions of carbon monoxide discharged to the atmosphere from the turbine shall not exceed 100 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 1.64 lbs/hr, whichever is more stringent.

(2) Emissions of carbon monoxide generated from the turbine shall be treated by an oxidation catalyst which is designed to reduce CO emissions by 95% before discharge to the atmosphere.

c. Volatile Organic Compounds (VOC)

(1) The emission rate of volatile organic compounds discharged to the atmosphere from the turbine shall not exceed 0.0069 lbs per million BTU heat input (HHV) or 1.02 lbs/hr, whichever is more stringent.

(2) Emissions of volatile organic compounds generated from the turbine shall be treated by an oxidation catalyst which is designed

to reduce VOC emissions by 50% before discharge to the atmosphere.

d. Sulfur Dioxide (SO_2)

(1) The sulfur content of the fuel burned in the turbine shall not exceed 5 grains total sulfur per 100 dry standard cubic feet.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from the turbine shall not exceed 2.09 lbs/hr.

e. Particulate Matter (as $PM_{10}/PM_{2.5}$)

The emission rate of particulate matter discharged to the atmosphere from the turbine shall not exceed 0.0066 lbs per million BTU heat input (HHV) or 0.98 lbs/hr, whichever is more stringent.

3. The following emission limitations apply during normal steady state operations (50% - 100% load) for all ambient temperatures less than or equal to -20˚F:

a. Nitrogen oxides (as nitrogen dioxide (NO_2))

The emissions of nitrogen oxides discharged to the atmosphere from the turbine shall not exceed 120 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 64.52 lbs/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

(1) The emissions of carbon monoxide discharged to the atmosphere from the turbine shall not exceed 150 ppmv, on a dry basis, corrected to 15% O_2 (1 hour average) or 2.45 lbs/hr, whichever is more stringent.

(2) Emissions of carbon monoxide generated from the turbine shall be treated by an oxidation catalyst which is designed to reduce CO emissions by 95% before discharge to the atmosphere.

c. Volatile Organic Compounds (VOC)

(1) The emission rate of volatile organic compounds discharged to the atmosphere from the turbine shall not exceed 0.010 lbs per million BTU heat input (HHV) or 1.54 lbs/hr, whichever is more stringent.

(2) Emissions of volatile organic compounds generated from the turbine shall be treated by an oxidation catalyst which is designed

to reduce VOC emissions by 50% before discharge to the atmosphere.

d. Sulfur Dioxide (SO_2)

(1) The sulfur content of the fuel burned in the turbine shall not exceed 5 grains total sulfur per 100 dry standard cubic feet.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from the turbine shall not exceed 2.09 lbs/hr.

e. Particulate Matter (as $PM_{10}/PM_{2.5}$)

The emission rate of particulate matter discharged to the atmosphere from the turbine shall not exceed 0.0066 lbs per million BTU heat input (HHV) or 0.98 lbs/hr, whichever is more stringent.

4. The following emission limitations apply during startup and shutdown operations. Startup shall be defined as that period of time from initiation of combustion turbine firing until the unit reaches steady state load operation. Steady state operation shall be reached when the combustion turbine has reached minimum load (50%) and the combustion turbine is declared available for load changes. The turbine startup period shall not exceed 9 minutes. Unit shutdown shall be defined as that period of time from steady state operation to cessation of combustion turbine firing. The turbine shutdown period shall not exceed 8.5 minutes.

a. Nitrogen oxides (as nitrogen dioxide (NO_2))

(1) The total quantity of nitrogen oxides discharged to the atmosphere from the turbine during startup operations shall not exceed 1.52 pounds per event.

(2) The total quantity of nitrogen oxides discharged to the atmosphere from the turbine during shutdown operations shall not exceed 1.76 pounds per event.

b. Carbon Monoxide (CO)

(1) The total quantity of carbon monoxide discharged to the atmosphere from the turbine during startup operations shall not exceed 146.98 pounds per event.

(2) The total quantity of carbon monoxide discharged to the atmosphere from the turbine during shutdown operations shall not exceed 8.04 pounds per event.

c. Volatile Organic Compounds (VOCs)

(1) The total quantity of volatile organic compounds discharged to the atmosphere from the turbine during startup operations shall not exceed 1.84 pounds per event.

(2) The total quantity of volatile organic compounds discharged to the atmosphere from the turbine during shutdown operations shall not exceed 1.01 pounds per event.

5. The following emission limitations apply during all load conditions, including startup and shutdown, and for all ambient temperatures:

a. Nitrogen oxides (as nitrogen dioxide (NO_2))

The emission rate of nitrogen oxides discharged to the atmosphere from the turbine shall not exceed 38,968 pounds in any consecutive 12-month period.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from the turbine shall not exceed 66,106 pounds in any consecutive 12-month period.

c. Volatile Organic Compounds (VOCs)

The emission rate of volatile organic compounds discharged to the atmosphere from the turbine shall not exceed 5,106 pounds in any consecutive 12-month period.

6. Visible emissions from the turbine shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour.

7. Listed Toxic Air Contaminants (facility-wide)

a. Benzene

The total quantity of benzene emissions discharged to the atmosphere from all piping component leaks for the entire facility shall not exceed:

(1) 0.15 pounds per hour; and,

(2) 3.6 pounds per day; and,

(3) 192 pounds in any consecutive 12-month period. Calculation of the 12-month rolling period will begin upon implementation of the Leak Detection and Repair (LDAR) program required under Condition H.1.

B. Operating Requirements

1. Natural gas shall be the only fuel used in the turbine.

2. The owner/operator shall limit the quantity of natural gas combusted in the turbine to 1,143,252,000 SCF in any consecutive 12-month period.

3. The oxidation catalyst shall be operated and maintained in accordance with the manufacturer's recommendations.

4. There shall be no bypassing of the oxidation catalyst.

C. Monitoring Requirements

1. Natural gas flow to the turbine shall be continuously measured and recorded.

2. The owner/operator shall continuously monitor and record the inlet temperature to the oxidation catalyst.

3. The owner/operator shall continuously monitor and record turbine inlet air temperature while the turbine is operating. The owner/operator may utilize ambient temperature monitoring data recorded at the nearest observing station which collects National Weather Service (NWS) data for data substitution purposes should the monitoring and recording system which is integral to the turbine malfunction.

4. The owner/operator shall measure and record the pressure drop across the oxidation catalyst a minimum of once per month. The date, time and measurement shall be recorded.

D. Testing Requirements

1. Within 60 days of achieving the maximum production rate, but no later than 180 days of start-up, initial performance testing shall be conducted for the turbine. Performance testing shall be conducted for nitrogen oxides, carbon monoxide, volatile organic compounds and particulate matter.

   Thereafter, performance testing shall be conducted for nitrogen oxides and carbon monoxide on an annual basis, to determine compliance with the nitrogen oxides and carbon monoxide emission limitations in Conditions A.1.a and A.1.b of this permit.

If the results from the performance test is less than or equal to 75 percent of the applicable emission limit for that pollutant, the frequency of subsequent performance tests may be reduced to once every 2 years for that pollutant. If the results of any subsequent performance test exceed 75 percent of the emission limit for that pollutant, annual performance tests must be resumed.

2. A stack testing protocol shall be submitted to the Office of Air Resources for review at least 60 days prior to the performance of any stack tests. The owner/operator shall provide the Office of Air Resources at least 60 days prior notice of any performance test.

3. All test procedures used for emissions testing shall be conducted in accordance with Appendix A of 40 CFR 60 or another method approved by the Office of Air Resources and U.S. Environmental Protection Agency (EPA) prior to the performance of any emissions tests.

4. The owner/operator shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment.

5. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitations.

6. A final report of the results of the stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing.

7. All stack testing must be observed by a representative of the Office of Air Resources to be considered acceptable, unless the Office of Air Resources provides prior written authorization to the owner/operator to conduct the testing without an observer present.

E. Recordkeeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine and record the fuel usage for the previous 12 month period for the turbine.

2. The owner/operator shall notify the Office of Air Resources whenever the quantity of natural gas combusted in the turbine exceeds 1,143,252,000 SCF for any consecutive 12 month period.

3. The owner/operator shall maintain records of the hours of operation, including any start up, shut down or malfunction in the operations of the turbine.

4. The owner/operator shall maintain records of the date and the hours of operation when:

a. the turbine inlet air temperature is equal to or below 0˚F and greater than -20˚F; and,

b. the turbine inlet air temperature is equal to or below - 20˚F.

5. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of nitrogen oxides, carbon monoxide and volatile organic compounds discharged to the atmosphere from the turbine exhaust during the previous 12-months. The emission rates used shall be the allowable emission rates in Section A of this permit. The records shall include a sample calculation for each pollutant. The owner operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

6. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the quantity of nitrogen oxides discharged to the atmosphere from the turbine exhaust exceeds 38,968 pounds in any consecutive 12-month period.

7. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the quantity of carbon monoxide discharged to the atmosphere from the turbine exhaust exceeds 66,106 pounds in any consecutive 12-month period.

8. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the quantity of volatile organic compounds discharged to the atmosphere from the turbine exhaust exceeds 5,106 pounds in any consecutive 12-month period.

9. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of benzene discharged to the atmosphere from all piping components during the previous month. Hourly emission averages shall be calculated and shall be used for comparison to the hourly emission limitations. Daily emission totals shall be calculated to be used for comparison to the daily emission limitation. Monthly and annual emission averages shall be calculated to be used for comparison to the annual emission limitation. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

10. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of benzene discharged to the atmosphere from all piping components exceeds the hourly, daily or annual emission limitations in Conditions A.6.a.(1)-(3) of this permit.

11. The owner/operator shall maintain copies of current, valid purchase contracts, tariff sheets or transportation contracts specifying that the maximum total sulfur

content for the natural gas combusted in the turbine is 5 grain per 100 standard cubic feet or less. These copies shall be made accessible for review by the Office of Air Resources or its authorized representative and EPA. These records shall include a certified statement, signed by the owner/operator of the facility, that the records represent all of the fuel combusted in the turbine.

12. The owner/operator shall maintain records of the inlet temperature to the oxidation catalyst.

13. The owner/operator shall maintain records of the pressure drop measurements across the oxidation catalyst.

14. The owner/operator shall notify the Office of Air Resources of the anticipated date of the initial start-up of the turbine up to 60 days prior, but no less than 30 days prior, to such date.

15. The owner/operator shall notify the Office of Air Resources in writing of the date of actual initial start-up of the turbine no later than fifteen days after such date.

16. The owner/operator shall maintain records of any inspections or maintenance performed on the oxidation catalyst. The records shall include:

    a. the name of the person conducting the inspection or maintenance;

    b. the date service is performed;

    c. the results or actions; and,

    d. the date the catalyst is replaced.

17. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.

18. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to this equipment that would:

    a. Change the representation of the facility in the application.

    b. Alter the applicability of any state or federal air pollution rules or regulations.

    c. Result in the violation of any terms or conditions of this permit.

    Such notification shall include:

- Information describing the nature of the change.

- Information describing the effect of the change on the emission of any air contaminant.

- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

19. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

20. All records required in this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources or its authorized representative and EPA upon request.

F. Other Permit Conditions

1. To the extent consistent with the requirements of this permit and applicable federal and state laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.

2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.

3. The emission and dispersion characteristics of all sources of benzene at the facility shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions of benzene from the facility do not cause or contribute to air pollution in violation of any National Ambient Air Quality Standard. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22.

4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing

emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

5. The turbine is subject to the requirements of the Federal New Source Performance Standards 40 CFR 60, Subpart A (General Provisions) and Subpart KKKK (Standards of Performance for Stationary Combustion Turbines).

G. Malfunctions

1. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

    a. The malfunction was not attributable to improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error;

    b. The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;

    c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.

    d. All possible steps were taken to minimize emissions during the period of time that repairs were performed.

    e. Emissions during the period of time that the repairs were performed will not:

        (1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and

        (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.

f. The reasons that it would be impossible or impractical to cease the source operation during said period.

g. The owner/operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

H. Leak Detection and Repair (LDAR)

1. The owner/operator shall develop and implement a Leak Detection and Repair (LDAR) program for the entire facility. The LDAR program shall be submitted to the Office of Air Resources within 90 days of issuance of this permit for approval. The LDAR program shall include, at a minimum, the following elements:

   a. A list of all of the components in natural gas and pipeline liquids service that have the potential to leak and a piping and instrumentation diagram (PI&D) that shows the location of each component.

   b. Identification of any components that will not be included in the LDAR program and the reasons that they are not included.

   c. The leak screening techniques and leak measurement techniques to be used.

   d. The schedule for the frequency of leak screening and measurement.

   e. The procedures for repairing and keeping track of leaking equipment.

   f. The method(s) to be used to calculate fugitive emissions from leaking components.

   The LDAR program shall be implemented no later than 180 days after issuance of this permit.

2. Any leaks identified using the following methods shall be repaired.

   a. For EPA Method 21 monitoring, a leak is defined as follows:

(1) For valves and connectors, any VOC concentration above 500 ppmv as methane.

(2) For pump seals, any VOC concentration above 2000 ppmv as methane.

b. For infra-red camera monitoring or Audio/Visual/Olfactory (AVO) monitoring, a leak is any detectable emissions, including the visual indication of liquids dripping.

3. Leak repair and remonitoring

a. The first attempt to repair a leak must be made no later than five (5) business days after discovery, unless parts are unavailable, the equipment requires shutdown to complete repair, or other good cause exists. If parts are unavailable, they must be ordered promptly and the physical attempt to eliminate the leak (i.e., the equipment is adjusted or otherwise altered to eliminate a leak) must be made within fifteen (15) business days of receipt of the parts. If shutdown is required, the physical attempt to eliminate the leak must occur during the next scheduled shutdown. If delay is attributable to other good cause, the physical attempt to eliminate the leak must be completed within fifteen (15) business days after the cause of delay ceases to exist.

b. Within fifteen (15) business days of the physical attempt to eliminate the leak, the leak must be remonitored to verify the repair was effective.

c. Leaks discovered pursuant to the leak detection methods of the approved LDAR program shall not be subject to enforcement unless the owner or operator fails to perform the required repairs in accordance with this section.

4. Recordkeeping. The owner or operator shall maintain the following records for each leak inspection and make them available to the Office of Air Resources upon request.

a. The date for the inspection;

b. A list of all of the components that were monitored and identification of any components that were not monitored and the reasons why.

c. A list of the leaking components found and the monitoring method(s) used to determine the presence of the leak;

d. The date of first attempt to repair each leak and, if necessary, any additional attempt to repair the leak;

e. The date each leak was repaired;

f. The date each leak was remonitored to verify the effectiveness of the repair, and the results of the remonitoring;

g. A listing of all components for which repair has been delayed shall be maintained on a Delayed Repair list. The list shall include the basis for placing leaking components on the list and the date each component was placed on the list. If parts are needed, the list shall include the date parts were ordered and the date parts were received. If shutdown is required to repair the part, the list shall include the date of the next scheduled shutdown.

5. Reporting: The owner or operator must submit a semiannual report that includes, at a minimum, the following information regarding leak detection and repair activities conducted during the previous six months:

a. The total number of inspections;

b. The total number of leaks identified, broken out by component type;

c. A list of the leaks repaired during the semi-annual period;

d. The number of leaks currently on the Delayed Repair list;

e. A description of any changes to the LDAR program, including identification of any new components and an updated PI&D; and

f. Each report shall be accompanied by a certification by the responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Each report must cover the applicable semiannual reporting period from January 1 through June 30 or July 1 through December 31. Each report must be postmarked or delivered no later than 45 calendar days after the end of the semiannual reporting period.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

ALGONQUIN GAS TRANSMISSION, LLC

APPROVAL NO. 2291

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Algonquin Gas Transmission, LLC

For the following:

Installation of a Waukesha 585 hp, emergency, lean burn, reciprocating internal combustion engine-generator set, Model No. VGF24GL (Approval No. 2291). The engine-generator set will be fired with natural gas.

Located at: *Burrillville Compressor Station*

Algonquin Lane, Burrillville, RI

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Algonquin Gas Transmission, LLC* **from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.**

Douglas L. McVay, Chief
Office of Air Resources

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

ALGONQUIN GAS TRANSMISSION, LLC

APPROVAL NO. 2291

A. Emission Limitations

1. Sulfur Dioxide

   The sulfur content of any gaseous fuel burned in the emergency generator shall not exceed 5 grain total sulfur per 100 dry standard cubic feet.

2. Visible emissions from the emergency generator shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one-hour. This visible emission limitation shall not apply during startup of an emergency generator. Startup shall be defined as the first ten minutes of firing following the initiation of firing.

B. Operating Requirements

1. The maximum firing rate for the emergency generator shall not exceed 4537 cubic feet per hour which is the maximum design capacity of the unit.

2. The emergency generator shall not operate more than 500 hours in any 12-month period.

3. The emergency generator shall be used only during emergencies or for maintenance or testing purposes. Emergency means an electric power outage due to a failure of the electrical grid, on-site disaster, local equipment failure, or public service emergencies such as flood, fire, or natural disaster. Emergency shall also mean periods during which ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.

4. The emergency generator shall not be operated in conjunction with any voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant or system operator unless such program is implemented at the same time as ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or

manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.

C. Continuous Monitoring

1. The emergency generator shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the unit.

D. Record Keeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation for the emergency generator for the previous 12-month period.

2. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceeds 500 hours for the emergency generator.

3. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.

4. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual start-up of the emergency generator.

5. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to this emergency generator that would:

    a. Change the representation of the facility in the application.

    b. Alter the applicability of any state or federal air pollution rules or regulations.

    c. Result in the violation of any terms or conditions of this permit.

    Such notification shall include:

    - Information describing the nature of the change.

    - Information describing the effect of the change on the emission of any air contaminant.

    - The scheduled completion date of the planned change.

    Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

6. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7. All records required as a condition of this permit must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

E. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the emergency generator shall be designed, constructed and operated in accordance with the representation of the equipment in the permit application.

2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.

3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the emergency generator in a manner consistent with good air pollution control practice for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the emergency generator.

4. The owner/operator is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines). Compliance with all applicable provisions therein is required.