

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

IN RE:

**Algonquin Gas Transmission Company  
Burrillville Compressor Station  
Algonquin Lane  
Burrillville, RI 02830**

In Reference to A.H. File No. 95-52-AP

CONSENT AGREEMENT

This Consent Agreement is entered by and between the Department of Environmental Management, Division of Air Resources (hereinafter "the Division") and Algonquin Gas Transmission Company, Burrillville Compressor Station, Algonquin Lane, Burrillville, RI (hereinafter "Algonquin") pursuant to the Rhode Island Clean Air Act, Chapter 23-23 of the General Laws of Rhode Island, as amended, the Air Pollution Control Regulations adopted in accordance therewith, and the Department of Environmental Management Act, R.I.G.L. 42-17.1-2 et seq., and constitutes an alternative "Reasonably Available Control Technology" ("RACT") determination pursuant to Section 27.4.8 of Air Pollution Control Regulation No. 27, which became effective February 1, 1994.

Algonquin is regulated under Air Pollution Control Regulation No. 27, entitled "Control of Nitrogen Oxides Emissions". In order to assure that Algonquin complies and continues to comply with the provisions of Air Pollution Control Regulation No. 27, the Division and Algonquin hereby agree as follows:

1. That the Division has jurisdiction over the subject matter of this Consent Agreement and over the parties consenting to this Consent Agreement.
2. That Algonquin is subject to the provisions of Title 23, Chapter 23 of the Rhode Island General Laws, as amended, and the Air Pollution Control Regulations adopted in accordance therewith.
3. That the provisions of this Consent Agreement shall apply to and be binding upon Algonquin's Burrillville Compressor Station, its officers, directors, agents, servants, employees, operators, successors, and assignees.
4. That Algonquin operates the following NO<sub>x</sub> emitting equipment which are subject to the requirements of Regulation No. 27:
  - a. Two (2) Solar T-5700 simple cycle combustion turbines (Units 4,5)
  - b. Three (3) Clark TLA-8 reciprocating internal combustion engines (Units 1, 2, 3)
  - c. One (1) Cleaver-Brooks model CBH743-80 steam boiler
  - d. One (1) 350 hp Roline model L-3000 emergency standby internal combustion engine
5. That, the two (2) Solar T-5700 simple cycle combustion turbines were permitted by the Division in 1991 (Approval Nos. 1126 and 1127), after a Best Available Control Technology ("BACT") determination.

6. That, in accordance with Subsection 27.4.6, the RACT requirements do not apply to Units 4 and 5 because a permit pursuant to Regulation No. 9, "Approval to Construct, Install, Modify or Operate" was issued after January 6, 1989.
7. That, in accordance with Subsection 27.4.3, the internal combustion engines are subject to emission limitations for lean-burn engines of 2.5 grams per brake horsepower-hour when operated on natural gas.
8. That, Algonquin has submitted economic and technical documentation to the satisfaction of the Division that the emission limitation of 2.5 grams per brake horsepower-hour specified in Subsection 27.4.3 cannot be achieved.
9. That, Algonquin has proposed to install, operate and maintain a high energy ignition system ("HEIS") with air-to-fuel ratio ("A/F") control for the internal combustion engines as part of the NO<sub>x</sub> reduction strategy for the facility. A HEIS with A/F control was installed on each of the three (3) internal combustion engines prior to May 31, 1995.
10. That, Algonquin has provided information in the RACT determination which indicates that the expected NO<sub>x</sub> reduction with HEIS, in combination with A/F control is thirty (30) percent.

11. That, Algonquin shall achieve an emission limitation of 2.17 lbs NO<sub>x</sub>/MMBtu heat input or a maximum of 47.16 lbs NO<sub>x</sub>/hr, whichever is more stringent for the internal combustion engines, (based on the limit achievable with ignition retard and A/F control which has been commercially demonstrated).
12. That, Algonquin will tune the Cleaver-Brooks model CBH743-80 steam boiler at least once per year in accordance with the procedure described in Appendix A of Regulation No. 27.
13. That Algonquin will install and maintain, prior to May 31, 1995, a non-resettable elapsed time meter indicating elapsed engine operating time in cumulative hours on the emergency standby internal combustion engine.
14. That Algonquin will limit the operation of the emergency standby internal combustion engine to less than five hundred (500) hours during any consecutive twelve (12) month period, in accordance with Subsection 27.2.3.
15. That Algonquin will comply with the NO<sub>x</sub> RACT compliance testing and emissions monitoring requirements as follows:
  - a. Emission testing of the three (3) internal combustion engines shall be performed in accordance with Section 27.5. Testing shall be conducted by November 30, 1995, initially and annually thereafter to demonstrate compliance with the NO<sub>x</sub> emission limitation contained in Section 11 of

this Consent Agreement.

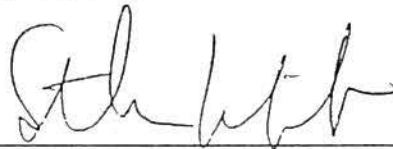
- b. Annual compliance testing for the combustion turbines will be performed in accordance with existing Approval Numbers 1126 and 1127.
16. That Algonquin will comply with monitoring, record-keeping and notification as follows:
- a. Fuel type, heat content of the fuel and fuel consumption for each combustion unit rated greater than or equal to one million BTU/HR, except for the emergency standby generator engine, will be measured and recorded monthly. This applies to Units 1, 2, 3, 4, 5 and the steam boiler.
  - b. For the steam boiler alone, the following records must also be maintained:
    1. date of annual tune-up;
    2. name of person performing tune-up;
    3. final excess oxygen setting from tuning procedure; and
    4. copy of the oxygen/CO curve developed as part of the tuning procedure.
  - c. By the 5th day of each month, the emergency standby generator engine hours of operation will be determined and recorded for the preceding twelve (12) month period by reading a non-resettable elapsed time meter indicating cumulative operating hours.

- d. If the 500 hour-per-year emergency standby engine operating restriction is ever exceeded in a twelve (12) month period, Algonquin will notify the Division within thirty (30) days of the end of the month during which the determination is made.
  - e. Records will be maintained to document that the emergency standby generator engine ignition timing is inspected and adjusted at least every three (3) years.
17. That Algonquin shall maintain any and all records required by this Consent Agreement for a period of five (5) years and these records shall be available for inspection by the Division and the United States Environmental Protection Agency upon request for the purpose of determining compliance with this Consent Agreement and in accordance with Section 27.6.11.
18. That it is agreed and understood by the parties that the implementation of the requirements of this Consent Agreement does not relieve Algonquin from compliance with any and all other requirements of the Rhode Island Clean Air Act and applicable State and Federal Air Pollution Control Regulations or with any applicable State and Federal Air Pollution Control Regulations that become effective and/or amended subsequent to the execution of this Consent Agreement.

Consented to in Substance and in Form:

State of Rhode Island and Providence Plantations  
Department of Environmental Management  
For the Director:

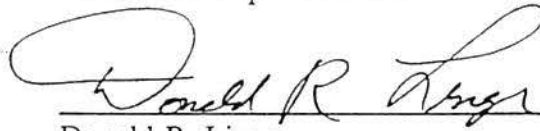
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Date

  
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Stephen Majkut, Chief  
Division of Air Resources

Algonquin hereby agrees to the above Consent Agreement, which becomes effective immediately upon being entered and issued.

Algonquin Gas Transmission Company  
Authorized Representative:

12/4/95  
Date

  
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Donald R. Linger  
Vice President, Transmission