

## STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



| In the matter of                  | )   |                    |
|-----------------------------------|-----|--------------------|
| State of Connecticut              | )   | TRADING AGREEMENT  |
| and                               | )   | AND ORDER No. 8123 |
| Algonquin Gas Transmission Compan | y ) |                    |

Whereas, the Commissioner of Environmental Protection ("Commissioner") and the Algonquin Gas Transmission Company ("Algonquin") agree that it is in the public interest that they work cooperatively to improve the air quality within the State of Connecticut and that the use of emission reduction trading will achieve this result in a timely and cost-effective manner:

- A. At the request and with the agreement of Algonquin, the Commissioner finds the following:
  - Algonquin is a corporation which owns and operates a natural gas compressor station located at Shunpike Road, Cromwell, Connecticut ("facility") .
  - 2. At the facility, Algonquin operates six internal combustion engines, two emergency generators, and two identical Solar Centaur T-4700 Natural Gas Turbine Engines, identified as follows:

| Unit # | Town | Premise | Permit # |
|--------|------|---------|----------|
| C-7    | 034  | 158     | P-5      |
| C-8    | 034  | 158     | P-6      |

3. In 1994, the permit to operate for Unit # C-7 was revised to allow a minor increase in horsepower output. This increase did not result in a significant increase in emissions and therefore the turbine was not subject to a Best Available Control Technology ("BACT") review as part of the permit revision process.

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Pursuant to Section 22a-174-22, Regulations of Connecticut State Agencies ("Regulations"), Unit # C-7 must meet a  $NO_x$  emission limitation of 0.9 lb/MMBTU (24-hour average) before and after May 31, 1995.

- 4. In 1994, Algonquin added dry low-NOx emission control on Unit # C-7. The control equipment was placed into service on November 1, 1994. In accordance with the terms and conditions of this Trading Agreement and Order, Algonquin may obtain approval of actual reductions in NO $_{\rm x}$  emissions generated through combustion control for use as both continuous and discrete emission reduction credits ("ERCs").
- 5. Algonquin performed Department of Environmental Protection ("DEP" or "Department") approved stack tests on Unit # C-7 indicating a pre-installation NOx baseline emission rate of 0.41 lbs/MMBTU (test in February 1983) and a post-installation NOx rate of 0.05 lbs/MMBTU (test in July 1995). A permanent limitation on the NOx emission rate of 0.17 lbs/MMBTU is included in the permit-to-operate issued in 1994.
- 6. Pursuant to Section 22a-174-22(j) of the Regulations, Algonquin intends to generate continuous and discrete ERCs until May 1, 1999.

A continuous stream of ERCs will be created from the difference between the baseline test rate of 0.41 lbs/MMBTU and the permit limitation of 0.17 lbs/MMBTU, a stream of ERCs of .24 lbs/MMBTU. Algonquin indicates that 30 tons per year of offsets, based on a heat input of 250,000 MMBTUs, would be created, subject to any use restrictions that may be applicable to the user under Section 22a-174-3(1)(5) of the Regulations.

Initials: 95A

This continuous stream of ERCs, or the portion of it exceeding 30 tons if offsets are used, may be approved retrospectively as discrete ERCs, based on actual fuel input (appropriately discounted).

Additional discrete ERCs will be generated retrospectively, based on actual fuel use, from the difference between the permit limitation of 0.17 lbs/MMBTU and the actual rate of 0.05 lbs/MMBTU. Approved ERCs are defined for purposes of this trading order as those for which the Commissioner has provided written authorization for use in compliance with Section 22a-174-22 of the Regulations.

- 7. When calculating discrete ERCs, ten (10) percent of the ERCs generated at unit C-7 will be retired and permanently removed from all calculations to assure a benefit to the environment. Another ten (10) percent discount will be removed and permanently retired due to uncertainty resulting from the use of a single approved stack test.
- When properly documented by Algonquin, and approved by the Commissioner, the emission reductions identified above, and as computed in accordance with the terms of this trading order, will conform to the requirements of Section 22a-174-22(j)(3) of the Regulations.

  Specifically, the reductions will be:

Real because they will result in a reduction of actual emissions released into the air, net of any consequential increase in actual emissions resulting from shifting demand. The emission reductions will be properly measured, recorded and reported.

<u>Ouantifiable</u> because they are based on approved stack testing, applied in an appropriate reliable and replicable protocol, providing the rate and total mass amount of reduction.

nitials: 95A Date: 4-16-97

Surplus because they are not required by any Connecticut statute or regulation mandated by a current State Implementation Plan (SIP), and are not currently relied upon in any applicable attainment plan, any reasonable further progress plan or milestone demonstration.

<u>Permanent</u> because the combustion control system will be in place and operating, and an appropriate tracking system is in place to monitor all data required to verify and quantify the creation of ERCs.

Enforceable because the ERCs are 1) approved by the Commissioner retrospectively after the submission by Algonquin of the quarterly report that will document their creation or 2) incorporated into a permit as a restriction on NOx emissions.

- 9. The Commissioner reserves the right to modify such baseline emission rates to meet any new requirements established for unit C-7 subsequent to this order or to reflect new DEP approved stack testing.
- 10. As documented in Attachment 1, page 1, attached to and incorporated by reference into this trading agreement and order, 59.1 discrete ERCs (15.6 during the ozone season and 43.5 during the non-ozone season) were created at unit # C-7 between November 1, 1994 and December 31, 1996 from the continuous stream of 0.24 lbs/MMBTU. This incorporates a ten percent uncertainty discount and a ten percent environmental discount.

Additional discrete ERCs were created (see Attachment 1, page 2) during the same time period from the difference between the permit limit of 0.17 lbs/MMBTU and the stack test of 0.05 lbs/MMBTU. As shown on page 2 of Attachment 1, this resulted in 29.6 ERCs

nitials: 977 Date: 4-16-97

TRADING AGREEMENT AND ORDER No. 8123

(7.8 during the ozone season, 21.8 during the non-ozone season), net of both discounts.

The sum of ERCs created between November 1, 1994 and December 31, 1996, is 88.7 (23.4 during the ozone season, 65.3 during the non-ozone season).

B. The Commissioner, in accordance with the provisions of this Trading Agreement and Order, pursuant to Section 22a-174-22(d)(4) of the Regulations, will allow approved sources within Connecticut to use a permanent stream of continuous ERCs at a rate of 0.24 lbs/MMBTU for purposes of compliance under Section 22a-174-22(j) or 22a-174-3(l)(5) of the Regulations to achieve a portion of the nitrogen oxide emission reductions required or as emissions offsets for new sources. The Commissioner will allow approved sources within Connecticut to use 88.7 tons of discrete NOx ERCs described in paragraph A.10.(23.4 during the ozone season, 65.3 during the non-ozone season).

Upon sufficient documentation as prescribed below, the Commissioner will provide written approval of additional creation of ERCs by Algonquin retrospectively. Approved ERCs created by Algonquin may be held or transferred to other sources. Discrete ERCs shall remain valid until they are used or until April 30, 1999, whichever occurs first. The Commissioner may allow the survival and use of discrete ERCs beyond April 30, 1999. Continuous ERCs at a rate of 0.24 lbs/MMBTU and 250,000 MMBtu per year, resulting in 30 tons per year, may be used permanently as offsets for new sources, subject to any restrictions that may be applicable to the user under Section 22a-174-3(1)(5) of the Regulations.

C. With the agreement of Algonquin, the Commissioner, acting under Sections 22a-6, 22a-171, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes, orders Algonquin as follows:

Initials:

TRADING AGREEMENT AND ORDER No. 8123

- 1. For purposes of generating continuous ERCs from Unit # C-7, Algonquin shall use a baseline of 0.41 lb/MMBtu and a heat input of 250,000 MMBTU per year. Notwithstanding the above, the Commissioner reserves the right to modify such baseline emission rate to meet any new requirements which may be established subsequent to this Trading Agreement and Order or as a result of additional approved stack testing.
- When calculating discrete ERCs, ten (10) percent of the ERCs shall be retired by the facility and removed permanently from all calculations to assure a benefit to the environment and another ten (10) percent will be deducted from all ERCs to compensate for the uncertainty associated with a single approved stack test.
- 3. Algonquin shall maintain records showing  $NO_x$  mass emissions, monthly heat input, and ERCs generated net of the ten (10) percent environmental discount and a ten (10) percent uncertainty discount.
- 4. In requesting discrete ERC approval, Algonquin shall provide documentation containing actual monthly heat input in MMBTU and shall indicate if and when any additional DEP approved stack tests have been completed. Discrete ERCs shall be calculated in accordance with the following:

 $\{[(0.17 \text{ lbs/MMBTU} - 0.05 \text{ lbs/MMBTU}) \times \text{actual fuel use}] \times .9* \times .9**\} \div 2000$ 

In requesting discrete ERC approval from the continuous ERC rate of 0.24 lbs/MMBTU, these ERCs shall be calculated as follows:

{[(0.41 lbs/MMBTU - 0.17 lbs/MMBTU) x actual fuel use] x .9\* x .9\*\*} ÷ 2000
\*uncertainty discount \*\*environmental discount

954

Date: 4-/6-97

Initials:

- 5. No later than March 1 of every year after issuance of this trading order, Algonquin shall provide to the Commissioner a record of each sale or other transfer, and use of any and all of the ERCs approved within and subsequent to issuance of this trading order until all such ERCs have been used. These reports will be on a form prescribed by the Commissioner. This reporting may cease if a central registry is approved by the Commissioner. Should Algonquin choose to discontinue the generation of ERCs, Algonquin will notify the Commissioner to assist in ERC planning.
- 6. Algonquin shall retain records and supporting documentation as described in this trading order for a minimum of five years, commencing on the date such records were created. Algonquin shall provide the records specified above to the Commissioner within thirty (30) days of receipt of a written request from the Commissioner.
- 7. As used in this Trading Agreement and Order, "Commissioner" means the Commissioner of Environmental Protection or an agent of the Commissioner.
- 8. Notification of noncompliance. In the event that Algonquin becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Trading Agreement and Order or of any document required hereunder, Algonquin shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, Algonquin shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be

Initials: 47

1

achieved, and Algonquin shall comply with any dates which may be approved in writing by the Commissioner. Notification by Algonquin shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

9. Certification of documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this Trading Agreement and Order shall be signed by the chief executive officer of Algonquin or a duly authorized representative of such officer, as those terms are defined in Section 22a-430-3(b)(2) of the Regulations, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157 of the Connecticut General Statutes, and in accordance with any other applicable statute."

10. Final Agreement and Order. This Trading Agreement and Order is the final agreement and order by and between the Commissioner and Algonquin with respect to the matters addressed herein, and shall not be modified without the written agreement of both parties.

| Initials:  | GAH | Date: 4-16-97 |
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TRADING AGREEMENT AND ORDER No. 8123

- 11. False statements. Any false statement in any information submitted pursuant to this Trading Agreement and Order may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes or, in accordance with Section 22a-6, under Section 53a-157 of the Connecticut General Statutes.
- 12. Notice of transfer; liability of Algonquin and others. Until May 1, 1999, and in accordance with Public Act 95-218, Algonquin shall notify the Commissioner in writing at least thirty (30) days prior to transferring any license held by Algonquin to any other party and shall notify the Commissioner in writing no later than fifteen (15) days after transferring all or any portion of the operations, the facility or the business which are the subject of this Trading Agreement and Order, or obtaining a new mailing or location address. Algonquin's obligations under this Trading Agreement and Order shall not be affected by the passage of title to any property to any other person or municipality.
- Agreement and Order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law which are willful or criminally negligent or for which penalties have not been specifically provided in this Trading Agreement and Order, including but not limited to violations of any permit issued by the Commissioner. If at any time the Commissioner determines that the actions taken by Algonquin pursuant to this Trading Agreement and Order have not fully achieved compliance with Section 22a-174-22 of the Regulations, the Commissioner may

Initials:

Date: \_ 4 - 16 - 97

· Algonquin Gas Transmission Company

TRADING AGREEMENT AND ORDER No. 8123

institute any independent proceeding to require Algonquin to undertake further investigation or further action.

- 14. Algonquin's obligations under law. Nothing in this Trading Agreement and Order shall relieve Algonquin of other obligations under applicable federal, state and local law.
- 15. Access to records and facility. Any representative of the Department of Environmental Protection may enter the facility and inspect and copy records within normal business hours without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 16. No effect on rights of other persons. This Trading Agreement and Order shall neither create nor affect any rights of persons who or municipalities which are not parties to this Trading Agreement and Order.
- 17. No Creation of Property Rights. This Trading
  Agreement and Order does not create any property
  rights with respect to the ERCs created pursuant to
  this Trading Agreement and Order.
- 18. Notice to Commissioner of changes. Within fifteen
  (15) days of the date Algonquin becomes aware of a
  change in any information submitted to the
  Commissioner under this Trading Agreement and Order,
  or that any such information was inaccurate or
  misleading or that any relevant information was
  omitted, Algonquin shall submit the correct or omitted
  information to the Commissioner.
- 19. <u>Submission of documents</u>. Any document required to be submitted to the Commissioner under this Trading Agreement and Order shall, unless otherwise specified in writing by the Commissioner, be directed to:

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| nitials: | Date: | 4-16-97 |

RETURN RECEIPT REQUESTED
Certified Document No

TRADING AGREEMENT
AND ORDER No. 8123

Ms. Wendy Jacobs
Department of Environmental Protection
Bureau of Air Management
Engineering and Enforcement Division
79 Elm Street
Hartford, Connecticut 06106

Algonquin consents to the issuance of this consent order without further notice. The undersigned certifies that he/she is fully authorized to enter into this consent order and to legally bind Algonquin to the terms and conditions of the Trading Agreement and Order.

| C: anatura                                     | Algonquii                     | Mall )     | smission Company                            |
|------------------------------------------------|-------------------------------|------------|---------------------------------------------|
| Signature:                                     |                               | 1400       |                                             |
| Type Name:                                     | Patrick J. Hes                | ter        |                                             |
| Type Title:                                    | Vice President                | and Gener  | al Counsel                                  |
| Date:                                          | april 16,                     | 1997       |                                             |
| Issued as a fina<br>Environmental P            | al consent order rotection on | of the Com | nmissioner of 18 , 1997. Sidney J. Holbrook |
| TOWN OF CROMWEL: LAND RECORDS MAILED CERTIFIE: |                               |            | Commissioner                                |