STATE OF CONNECTICUT )

VS. )

ALGONQUIN GAS TRANSMISSION, LLC )

) Order No. 2515

CONSENT ORDER

A. With the agreement of Algonquin Gas Transmission, LLC (the “Respondent”), the Commissioner of the Department of Energy & Environmental Protection (“Commissioner”) finds the following:

1. Algonquin Gas Transmission, LLC (“Algonquin”), a subsidiary of Enbridge Inc., transports natural gas throughout New England, by way of a 1,129 mile-long pipeline system. Algonquin operates a total of three (3) natural gas compressor stations in Connecticut. The Chaplin compressor station (“facility”), which is located at 539 Tower Hill Road, is the subject of this Consent Order.

2. The main emission units at the facility are:

   a. One 74.91 MMBtu/hr natural gas-fired Solar Taurus 60-7802 turbine that was constructed in June of 2017, and operates under New Source Review (“NSR”) permit No. 034-0007. Hereafter, this turbine will be identified as “Unit 1”.

   b. One 74.91 MMBtu/hr natural gas-fired Solar Taurus 60-7802 turbine that was constructed in June of 2017, and operates under NSR permit No. 034-0008. Hereafter, this turbine will be identified as “Unit 2”.

   c. One 74.91 MMBtu/hr natural gas-fired Solar Taurus 60-7802 turbine that was constructed in June of 2015, and operates under NSR permit No. 034-0006. Hereafter, this unit will be identified as “Unit 3”.

   d. One 62.29 MMBtu/hr natural gas-fired Solar Centaur 50-6202 turbine that was constructed in June of 2017. This unit operates under NSR permit No. 034-0009. Hereafter, this unit will be identified and “Unit 4”.

Date Issued: ____________
3. The facility is a “Title V source” as defined in Section 22a-174-33(a)(10) of the Regulations of Connecticut State Agencies (“RCSA”). Title V permit No. 034-0004-TV was most recently renewed on 11/4/2019.

4. On 8/30/2018, the Respondent submitted a Title V Semi-Annual Monitoring Report, in accordance with Section 22a-174-33(o) of the RCSA, and Section VLE of their Title V permit. In it, the Respondent reported that they deviated from their permit requirements from 1/1/2018 through 6/30/2018, by not monitoring and recording the following: “startup event”, “shutdown event”, and “transient event”, as these terms are defined in NSR permit Nos. 034-0007, 034-0008, and 034-0009, and Title V permit No. 034-0004-TV.

5. The deviations reported by the Respondent violated Parts V.A.3, V.A.5, V.B.9, V.B.10, V.B.11, and V.B.12, of the facility’s NSR permit Nos., 034-0007, 034-0008, and 034-0009, as well as the facility’s Title V permit No. 034-0004-TV. As a result, a Notice of Violation (“NOV”) No. 17959 was issued to the Respondent on 4/16/2019.

6. The startup dates for Units 1, 2, and 4 were October of 2017. A 2/5/2019 record review by Department Staff revealed that the stated deviations were not included in the Respondent’s March 2018 Semi-Annual Report (which covers deviations that occurred in the latter half of 2017); as well as in the facility’s 2017 Annual Compliance Certification. As a result, NOV #17960 was issued to the Respondent on 4/16/2019.

7. Each of the four turbines are equipped with SoLoNO₃ technology to control Nitrogen Oxide (“NOₓ”) emissions. Carbon Monoxide (“CO”) and Volatile Organic Compound (“VOC”) emissions are controlled with an oxidation catalyst.

8. Part III.D of the NSR permits for Units 1, 2, 3, and 4 and Section III.A.2.v of the facility’s Title V permit states: “The Permittee shall operate and maintain the turbine, air pollution control equipment and monitoring equipment in accordance with manufacturer’s specifications and written recommendations.”

9. The operation and maintenance manual for the oxidation catalyst states: “Pressure drop and CO destruction measurements across the catalyst should be taken on a regular basis by Plant operators to monitor the catalyst performance and need for maintenance”.

10. On 1/28/2019 and 1/29/2019, Field Staff conducted a Pre-Inspection Questionnaire (“PIQ”) inspection at the facility. Field Staff discovered that the Respondent failed to operate the oxidation catalysts for the turbines in accordance with manufacturer’s specifications. Specifically:

   a. The facility has not kept CO destruction measurements, for any of the turbines, since the Units’ startup dates.

   b. For Units 1 and 2, the facility did not have accurate records of the pressure drop across the catalysts for calendar 2017 and 2018.
c. For Unit 3, the maximum pressure drop across the catalyst bed, as stated in the design specifications is 3.74 inches of H₂O. For approximately 618 hours in December of 2017, the recorded pressure drop across the oxidation catalyst was -1.49 inches of H₂O.

d. For Unit 4, the maximum pressure drop across the catalyst bed, as stated in the design specifications, is 3.72 inches of H₂O. For approximately 335 hours in the month of October 2017, the recorded pressure drop across the oxidation catalyst was 30 inches of H₂O.

11. Part V.A.2 of NSR permit Nos. 034-0006, 034-0007, 034-0008, and 034-0009, and Section III.2.b.iii of the facility’s Title V permit requires the Respondent to “…continuously monitor the oxidation catalyst inlet temperature (°F). The Permittee shall maintain this parameter within the ranges recommended by that manufacturer to achieve compliance with the emission limits in the permit.”

12. During the PIQ, field staff discovered that the Respondent had failed to accurately monitor the oxidation catalyst inlet temperature for Units 3 and 4 since the Units’ startup dates of May of 2016, and October of 2017, respectively.

13. An NOV #17961 was issued to the Respondent on 4/16/2019 for the violations cited in paragraphs A.10 and A.12 of this Consent Order.

14. The PIQ inspection also revealed that the facility failed to accurately calculate and report shakedown emissions for Units 1, 2, 3, and 4. This violation was also cited in NOV #17961.

15. On 5/6/2019, the Respondent submitted a compliance statement in response to NOV #17959. In it, they state that as of 9/13/2018, programmable logic control (“PLC”) tags have been created and implemented to automatically monitor and record the startup, shutdown, and transient periods of operations for the units.

16. In response to the violations cited in NOV #17960, the Respondent’s submitted revised Title V Semi-Annual Monitoring Report and a revised Title V Compliance Certification to include the stated deviations of their permits.

17. In response to the violations cited in NOV #17961, the Respondent replaced the thermocouples on Units 3 and 4. The Respondent stated that the oxidation catalyst differential pressure transmitters for the Units were also repaired. According to the Respondent, the oxidation catalysts are currently within the manufacturer’s recommended pressure drop specifications. In response to this NOV, the Respondent also submitted revised shakedown emissions calculations for the Units.

18. On 5/27/2020, the Respondent submitted a revised emission inventory for calendar year 2017. The inventory was revised to include an uncontrolled emission factor associated with shakedown emission for Units 1, 2, and 4.
19. By virtue of the above, the Respondent has violated and is in violation of permit Nos. 034-0006, 034-0007, 034-0008, 034-0009, 034-0004-TV, as well as Sections 22a-174-3a(h) of the RCSA.

B. With the agreement of the Respondent, the Commissioner, pursuant to Sections 22a-6, 22a-171, 22a-174, 22a-177, and 22a-178 of the Connecticut General Statutes, orders as follows:

1. The Respondent shall immediately comply with all terms and conditions of NSR permit Nos. 034-0006, 034-0007, 034-0008, 034-0009, and Title V permit No. 034-0004-TV.

2. The Respondent shall conduct emissions testing to demonstrate that Units 1, 2, 3, and 4 comply with the CO and VOC emission limits of their permits. Emissions testing is to be conducted in accordance with paragraph B.4 of this Consent Order. All four (4) units must be tested by no later than May 15, 2021. The emission testing that is required under this Consent Order will not count towards the recurrent tests that are required in Part VLC. the Units’ NSR permits.

3. Preventative Maintenance Plan. Within sixty (60) days from the date of issuance of this Consent Order, the Respondent shall submit, for the Commissioner’s review and written approval, a preventative maintenance plan for the Unit 1, 2, 3, and 4 oxidation catalysts. The plan shall incorporate manufacturer specific guidelines for the inspection, cleaning, repair, adjustment, and replacement of the oxidation catalysts and their components. The plan must include written certification that employees at the facility have been trained on all aspects of the plan, and of their duty to comply with it.

4. Emissions Testing. Except as otherwise provided in this Consent Order or by the Commissioner in writing, all emissions testing required under this Consent Order shall be conducted and reported as follows:

Prior to conducting the emissions testing required in paragraph B.2., the Respondent shall submit to the Commissioner, for the Commissioner’s review and written approval, an Intent To Test (“ITT”) protocol for such emissions testing. The ITT protocol shall include at least:

a. The Department’s Bureau of Air Management Test Form No. 1, “Intent to Test”;

b. A detailed description of all aspects of facility operations (e.g., type and quantity of raw materials utilized) and of any air pollutant control equipment in use (e.g., screen mesh size, control equipment efficiency) which may affect emissions testing results, and how and when such information will be monitored;

c. A detailed description of each emissions testing methodology to be utilized, provided that all such methodologies shall conform to those approved by the U.S. Environmental Protection Agency and the Commissioner; and
d. A description of each discharge point at which emissions testing is to be conducted.

The Respondent shall provide to the Commissioner any information that the Commissioner deems necessary to review Respondent’s ITT protocol. The Respondent shall schedule all emissions testing so as to allow the Commissioner to be present during such testing and to independently verify relevant facility operations, air pollution control equipment parameters, and testing procedures. Within forty-five (45) days after completing any emissions testing required by this consent order, the Respondent shall submit to the Commissioner a written report providing the results of such testing; within fifteen (15) days of a notice from the Commissioner indicating any deficiencies in such report, the Respondent shall submit a revised report.

5. Civil penalty. The Respondent shall pay a penalty of $22,000 as the total civil penalty to be sought by the Commissioner for those, and only those, violations described in paragraphs A.1 through A.19 of this Order. This penalty is payable as follows: On or before thirty (30) days after issuance of this Order the Respondent shall pay $11,000 in accordance with paragraph B.6 of this Order, and Respondent shall pay $11,000 as a Supplemental Environmental Project in accordance with paragraph B.7 of this Order.

6. Payment of penalties. On or before thirty (30) days after the issuance of this Order, the Respondent shall pay $11,000 by mail or personally delivered to the Department of Energy and Environmental Protection, Bureau of Financial and Support Services--Accounts Receivable Office, 79 Elm Street, Hartford, CT 06106-5127. Such payment shall be by certified or bank check payable to the “Connecticut Department of Energy and Environmental Protection.” The check shall state on its face, “Bureau of Air Management Civil Penalty, Air Enforcement Division” and “Consent Order #2515.”

7. Statewide Supplemental Environmental Project (SEP) Account Payment.

a. On or before thirty (30) days after issuance of this Consent Order, the Respondent shall pay $11,000 by mail or personally delivered to the Department of Energy and Environmental Protection, Bureau of Financial and Support Services--Accounts Receivable Office, 79 Elm Street, Hartford, CT 06106-5127. The payment shall be by certified or bank check payable to the “Connecticut Department of Energy and Environmental Protection.” The check shall state on its face, “Statewide SEP Account” and “Consent Order #2515.”

b. The Respondent shall not claim or represent any SEP payment made pursuant to this Consent Order constitutes an ordinary business expense or charitable contribution or any other type of tax-deductible expense. The Respondent shall not seek or obtain any other tax benefit, such as a tax credit, as a result of the payment under this paragraph.

c. If the Respondent disseminates any publicity, including but not limited to any press releases regarding funding a SEP, the Respondent shall include a
statement that such funding was made in settlement of an enforcement action brought by the Commissioner.

8. **Title V Emissions Fees.** On or before sixty (60) days after issuance of this Consent Order, the Respondent shall pay a total of $643 in accordance with paragraph B.9 of this Order in outstanding emission fees for shakedown emissions that occurred in calendar years 2016 and 2017.

9. **Payment of Title V Emission Fees.** Payment of Title V emission fees under this Consent Order shall be mailed or personally delivered to the Department of Energy & Environmental Protection, Bureau of Financial Support Services, Accounts Receivables Office, 79 Elm Street, Hartford, CT 06106-5127, and shall be by certified check or bank check payable to Treasurer, State of Connecticut. The check shall state on its face, “Bureau of Air Management, Title V Emission Fees, Consent Order No. 2515.”

10. **Full Compliance.** Respondent shall not be considered in full compliance with this Order until all actions required by this Order have been completed as approved and to the Commissioner’s satisfaction.

11. **Approvals.** Respondent shall use best efforts to submit to the Commissioner all documents required by this Order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty (30) days of the Commissioner’s notice of deficiencies. In approving any document or other action under this Order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Order. Nothing in this paragraph shall excuse noncompliance or delay.

12. **Definitions.** As used in this Order, “Commissioner” means the Commissioner or a representative of the Commissioner.

13. **Dates.** The date of “issuance” of this Order is the date the Order is deposited in the U.S. mail or personally delivered, whichever is earlier. The date of the submission to the Commissioner of any document required by this Order shall be date such document is received by the Commissioner. The date of any notice by the Commissioner under this Order, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this Order, the word “day” as used in this Order means calendar day. Any document or action which is required by this Order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.
14. **Certification of documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this consent order shall be signed by Respondent or, if Respondent is not an individual, by Respondent’s chief executive officer or a duly authorized representative of such officer, as those terms are defined in §22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual(s) responsible for actually preparing such document, and each such individual 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, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that 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 under §53a-157b of the Connecticut General Statutes and any other applicable law."

15. **Noncompliance.** This Order is a final Order of the Commissioner with respect to the matters addressed herein, and is nonappealable and immediately enforceable. Failure to comply with this Order may subject Respondent to an injunction and penalties.

16. **False statements.** Any false statement in any information submitted pursuant to this Order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.

17. **Notice of transfer; liability of Respondent.** Until the Respondent have fully complied with this Order, Respondent shall notify the Commissioner in writing no later than fifteen (15) days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Order or after obtaining a new mailing or location address. Respondent’s obligations under this Order shall not be affected by the passage of title to any property to any other person or municipality.

18. **Commissioner's powers.** Except as provided hereinabove with respect to payment of civil penalties, nothing in this 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 past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by the Respondent pursuant to this Order have not successfully corrected all violations, fully characterized the extent or degree of any pollution, or successfully abated or prevented pollution, the Commissioner may institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution.

19. **Respondent's obligations under law.** Nothing in this Order shall relieve Respondent of other obligations under applicable federal, state and local law.
20. **No assurance by Commissioner.** No provision of this Order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this Order will result in compliance or prevent or abate pollution.

21. **Access to site.** Any representative of the Department of Energy and Environmental Protection may enter the facility without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Order.

22. **No effect on rights of other persons.** This Order neither creates nor affects any rights of persons or municipalities that are not parties to this Order.

23. **Notice to Commissioner of changes.** Within fifteen (15) days of the date Respondent become aware of a change in any information submitted to the Commissioner under this Order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.

24. **Notification of noncompliance.** In the event that Respondent become aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Order or of any document required hereunder, Respondent shall immediately notify by telephone the individual identified in the next paragraph 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. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent 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.

25. **Submission of documents.** Any document required to be submitted to the Commissioner under this Order shall, unless otherwise specified in this order or in writing by the Commissioner, be directed to:

   Lakisha Stephenson  
   Department of Energy and Environmental Protection  
   Bureau of Air Management  
   Air Enforcement Division  
   79 Elm Street, 5th Floor  
   Hartford, Connecticut 06106-5127
Respondent 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 the Respondent to the terms and conditions of the Consent Order.

ALGONQUIN GAS TRANSMISSION, LLC

Signature: [Signature]
Type Name: Bradley F. Shama
Type Title: Vice President, U.S. Operations
Date: 11/16/2020

Issued as a final Order of the Commissioner of Energy and Environmental Protection.

Betsy Wingfield
Deputy Commissioner
Department of Energy & Environmental Protection

December 1, 2020
[Note: This sheet is not a part of the order and is only attached to the original Order which is retained in separate DEEP files which are accessible to the public with close supervision. The Order must be mailed to the Respondent by certified mail, return receipt requested. If the Respondent is a business, send a certified copy to the attention of a person at the business.]

Certification of Mailing

On __________, 2020, at ___ A.M./P.M., I mailed a certified copy of State Order No. 2515 to the following, by placing it in the [U.S. mail/interdepartmental mail]:

On __________, 2020, at ___ A.M./P.M., I mailed a plain copy of State Order No. 2515 to the following, by placing it in the [U.S. mail/interdepartmental mail]:

Signature: ____________________________________________
Name: ________________________________________________
Title: ________________________________________________
Date: ________________________________________________