

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ADMINISTRATIVE DISPUTE RESOLUTION**

In the matter of

Algonquin Gas Transmission LLC

OADR Docket nos.: 2019-008, 2019-009,
2019-10, 2019-11, 2019-12, 2019-013.
DEP File No: Application No. SE-15-027
No. X266786,
Air Quality Plan Approval
Weymouth, MA

TOWN OF BRAINTREE’S NOTICE OF CLAIM FOR AN ADJUDICATORY HEARING

The Town of Braintree (“Braintree”), acting by and through its Mayor, Charles C. Kokoros, hereby requests an adjudicatory hearing for the Final Best Available Control Technology (“BACT”) Determination, dated September 29, 2020, issued by the Department of Environmental Protection (“Department” or “MassDEP”) to the applicant, Algonquin Gas Transmission LLC (“Algonquin”). The BACT Determination was issued pursuant to the Department’s air pollution control regulations, at 310 C.M.R. 7.00 *et seq.* (“Regulations”). In its Determination, MassDEP found that an electric motor drive (“EMD”) did not represent BACT to reduce nitrogen oxide pollutant emissions and other pollutant emissions at the proposed compressor station in Weymouth. In reaching such determination, MassDEP reasoned that 1) the EMD was properly excluded as it would redefine the source; and 2) even if it were not excluded, the EMD was not a cost-effective control under the BACT analysis; and subsequently re-affirmed its August 26, 2019 BACT determination.

For the reasons stated herein, Braintree is filing this Notice of Claim, to seek further review of the Department's Final BACT Determination.¹

A. Braintree's Status as an "Aggrieved Person"

Braintree is entitled to an adjudicatory proceeding as an aggrieved person where portions of Braintree are within the recognized area of potential impacts from the Weymouth Compressor Station on the air quality within the Town and on the health of its residents. An "Aggrieved Person" is defined in Section 7.51(1)(a) of the Regulations as "any person who, because of an act or failure to act by the Department, may suffer an injury in fact that is different either in kind or magnitude from that suffered by the general public, and that is within the scope of the interests protected by [the Regulations]." (The Regulations define a "Person" to include a "political subdivision of the Commonwealth," i.e., a municipality.) *See generally*, "Health Impact Assessment of a Proposed Natural Gas Compressor Station in Weymouth, MA", dated January 4, 2019.

As one of the four municipalities that were within the Health Impact Assessment study area and were specifically addressed by the Department in the January 11, 2019, Air Quality Plan Approval (including review of existing conditions, assessment of potential impacts, and inclusion in operational monitoring and notification requirements imposed on the Project), Braintree is an "Aggrieved Person."

¹ The Town of Braintree specifically adopts and joins the "Objection to EMD BACT Determination and Notice of Claim for an Adjudicatory Appeal" submitted by the Town of Weymouth on this date.

The Regulations, at Section 7.51(1)(d), provide:

If the Department provides a public comment period on the proposed decision, then any person or ten person group may file written comments on the proposed decision during the public comment period provided by [the Regulations]. Failure by an aggrieved person or ten persons group to submit written comments as provided herein shall result in the waiver of any right to request an adjudicatory hearing. Where the Department is not required under [the Regulations] to provide a public comment period on the proposed decision, then an aggrieved person or ten persons group is not required to submit public comments as a prerequisite for obtaining the right to request an adjudicatory hearing.

On September 7, 2020 MassDEP issued a Public Notice whereby the public was invited to submit comments in response to its August 7, 2020 Preliminary Determination of BACT, pursuant to 310 C.M.R. 702(3)(i). On September 8, 2020, Braintree timely submitted its public comment letter, therefore preserving its right of appeal. Moreover, Braintree was the Petitioner in OADR Docket no.: 2019-12, and thereby was a party to the consolidated agency adjudicatory proceedings that resulted in remand to MassDEP, and the September 29, 2020 Final BACT Determination. This Notice of Claim is timely filed pursuant to 310 C.M.R. (1)(h) and the June 14, 2020 remand schedule, which set a deadline for this filing on or before October 9, 2020.

B. Algonquin Utilized an Erroneous Calculation of Annualized Capital Costs for the EMD

The calculation of annualized capital costs presented in the Addendum submitted on July 24, 2020, by Algonquin² has the effect of vastly overstating such costs, and thereby negatively affects the evaluation of the EMD’s cost-effectiveness. The error arises from the incorrect selection of a “nominal interest rate” that is inconsistent with the EPA Air Pollution Control Cost Manual (“Manual”) , notwithstanding the Addendum’s citation to the Manual and the Addendum’s assertion that Algonquin has followed the Manual’s recommendation.

The Addendum, at Section 4.4.3 “Economic Feasibility Analysis,” presents a calculation of the total costs (capital and operating) for the EMD as compared to the gas turbine. Section 4.4.3.1 (“Total Capital Investment”) provides an estimate that the additional capital cost for the EMD would be approximately \$12.2 million. (See Table 4.6 in Section 4.4.3.1.)

The Addendum, at Section 4.4.3.2.2 “Indirect Annual Costs,” further calculates the “annualized capital cost,” which is the annual payment that would be necessary to recover the capital investment, based on the life of the Project. To calculate the annualized capital cost, it is necessary to make assumptions as to the project life and the appropriate interest rate. Braintree does not object to the assumed project life of 50 years. However, the interest rate used in the capital-cost calculation is incorrect.

² For the reasons stated in the Notice of Claim submitted on behalf of the Town of Weymouth, Braintree disputes the assumptions that Algonquin relied on to calculate the capital costs of each alternative and, hence, the conclusion that Algonquin reached as to the difference in capital costs that would be associated with the selection of the EMD as BACT. For purposes of this appeal only, Braintree will rely on the capital cost calculation presented in the Addendum, in order to demonstrate the error in the method used to calculate the annualized capital costs.

In calculating the annualized capital cost, the Addendum applies a “nominal interest rate” of 10.137%, which “represents Algonquin’s current after-tax real rate of return[.]” The Addendum asserts that the selection of the 10.137% rate “aligns with the basis for interest rates as recommended in the [Manual].” A reading of the Manual indicates otherwise.

Section 2.5.2 of the Manual, entitled “Interest Rates,” clearly indicates that the interest rate that is selected should reflect a company’s borrowing costs, not its rate of return: “The interest rate at which a firm borrows is a key component in estimating the total costs of compliance.” (Emphasis added.) The Manual states, further, that: “the correct interest rate to use is the nominal interest rate, which is the rate firms actually face.” (Emphasis added.) The Manual indicates that, in the absence of firm-specific data as to borrowing costs, the appropriate rate to use is the Federal Reserve’s bank prime rate:

“For permit applications, if firm-specific nominal interest rates are not available, then the bank prime rate can be an appropriate estimate for interest rates given the potential difficulties in eliciting accurate private nominal interest rates since these rates may be regarded as confidential business information or difficult to verify. The bank prime rate is published by the Board of Governors of the Federal Reserve System.”

As of September 3, 2020, the bank prime rate, as published by the Federal Reserve, is 3.25%.

See “Selected Interest Rates (Daily) - H.15”, published by the Board of Governors of the Federal Reserve System, available at <https://www.federalreserve.gov/releases/h15/>.

Using an amortization schedule calculator³, it is possible to determine that Algonquin’s projected annualized capital cost of \$1,250,993 is based on a 50-year loan at an interest rate of 10.137%, with interest compounded annually and the first annual payment due on the first

³ See <https://financial-calculators.com/amortization-schedule>

anniversary of the loan. Applying an interest rate of 3.25% instead, while keeping all other factors the same, results in an annualized capital cost of \$498,623. Thus, Algonquin's use of an incorrect interest rate overstates the annualized capital cost for the EMD by \$752,370 per year.

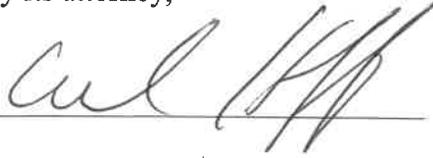
C. Relief Sought

Braintree respectfully requests that the Final BACT Determination be vacated and remanded to MassDEP to recalculate annualized capital costs (and, hence, the overall evaluation of costs for the EMD as compared to the gas turbine), using the rate of 3.25% as the nominal interest rate in the calculation, as recommended by the Manual; and reassess the cost analysis for EMD as BACT. Braintree further requests that the MassDep Commissioner issue a new Final Decision mandating EMD as BACT to reduce nitrous oxide emissions from the Weymouth Compressor Station.

Respectfully Submitted,

TOWN OF BRAINTREE,

By its attorney,

A handwritten signature in cursive script, appearing to read 'Crystal Huff', written over a horizontal line.

Crystal Huff (BBO# 681860)

Assistant Town Solicitor

Town of Braintree

One JFK Memorial Drive

Braintree, MA 02184

Phone: (781) 794-8085

Fax: (781) 794-8305

Email: chuff@braintreema.gov

Date:

10/9/2020