



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

February 5, 2018

Jeffrey Araujo  
Canal Station  
9 Freezer Road  
Sandwich, MA 02563

**RE: Sandwich, MA**  
Authorization No.: to be determined  
Application No.: 17AQ30-000003-APP  
FMF No.: 315656  
**PROPOSED CO<sub>2</sub> BUDGET EMISSION  
CONTROL PLAN**

Dear Mr. Araujo:

The Southeast Regional Office of the Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has reviewed your CO<sub>2</sub> Budget Emission Control Plan (“ECP”), filed pursuant to Regulation 310 CMR 7.70 Massachusetts CO<sub>2</sub> Budget Trading Program (“RGGI”) as contained in 310 CMR 7.00 Air Pollution Control regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E. This ECP concerns the proposed operation of your simple cycle electric generating combustion turbine with a nominal generating capacity of 350 megawatts, designated as Emission Unit (“EU”) 3 at Canal Station, 9 Freezer Road, Sandwich, Massachusetts (“the Facility”).

MassDEP has determined that your ECP is administratively and technically complete and that the ECP specifications for monitoring, reporting, and the holding of allowances for EU # 3 are in conformance with the requirements of 310 CMR 7.70, and proposes to approve said ECP as submitted, subject to the conditions below.

Prior to taking final action on this ECP, this proposed ECP is subject to a 21 day public comment period as required by 310 CMR 7.70(3)(d). As such, a Public Notice of comment period will be published in the Environmental Monitor on February 7, 2018. The public comment period will extend until February 28, 2018.

Please review the entire ECP carefully, as it stipulates the particular conditions with which the Permittee must comply in order for the facility to operate in compliance with the regulations. Failure to comply with this ECP will constitute a violation of the regulations and can result in the revocation of the ECP.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: [www.mass.gov/dep](http://www.mass.gov/dep)

Printed on Recycled Paper

**1. BACKGROUND AND DESCRIPTION OF FACILITY**

The Facility will be configured as EU # 3 and will operate as dispatched by the Independent System Operator – New England (ISO-NE). If EU # 3 is monitored by ISO NE, then the Permittee shall continue to meet ISO-NE requirements. EU # 3 will consist of one simple cycle turbine with a nominal electric generating capacity of 350 Megawatts (“MW”).

**2. EMISSION UNIT (EU) IDENTIFICATION**

The following emission units listed in Table 1 are subject to and regulated by this ECP:

<b>Table 1</b>		
<b>EU</b>	<b>Description</b>	<b>Design Capacity</b>
3	Simple cycle combustion turbine	3,471,000,000 Btu/hr (0°F firing ULSD)  3,425,000,000 Btu/hr (0°F firing natural gas)

**3. APPLICABLE REQUIREMENTS**

**A. CARBON DIOXIDE (CO<sub>2</sub>) EMISSIONS MONITORING**

The Permittee shall ensure the methods for determining hourly CO<sub>2</sub> mass emissions are contained in a monitoring plan, approved by the United States Environmental Protection Agency (“EPA”), and that the methods shall meet the requirements of 310 CMR 7.70(8). The CO<sub>2</sub> mass emissions monitoring methodology is specified in Table 2:

<b>Table 2</b>	
<b>EU</b>	<b>CO<sub>2</sub> Mass Emissions Monitoring Methodology</b>
3	40 CFR Part 75 (except equation G-1)

**B. NET OUTPUT PROCEDURES**

In accordance with 310 CMR 7.70(8)(h) the Permittee shall use the following quality assurance / quality control procedures and the methods for determining net output from 3 as specified in Table 3:

<b>Table 3</b>			
<b>EU</b>	<b>Net Output Monitoring Method</b>	<b>Quality Assurance/ Quality Control Procedure</b>	<b>Net Output (E<sub>net</sub>) Determination Calculation</b>
3	Net generation billing meter	OP18	E <sub>net</sub> = NET

**Table 3 Key:**

E<sub>net</sub> = Net Output from Unit

NET = Net generation from billing meter

If communications or other problems cause data to be marked as invalid, the Permittee shall use *ISO-New England Operating Procedure No. 18 – Metering and Telemetering* for quality assurance / quality control purposes. The most current version shall be used by the Permittee.

Pursuant to 310 CMR 7.70(3)(f)2., if the Permittee proposes a change in the output monitoring methodology then the Permittee shall submit a revised output monitoring plan and form (AQ30) to MassDEP and obtain approval from MassDEP prior to making the modification. MassDEP will modify the ECP upon approval of the revised output monitoring plan.

**C. CO<sub>2</sub> ALLOWANCE TRACKING SYSTEM**

In accordance with 310 CMR 7.70(1)(e)3. and 310 CMR 7.70(6)(e), as of midnight March 1 occurring after the relevant control period and each relevant interim control period, or if that March 1 is not a business day, midnight of the first business day thereafter, the Permittee shall hold, in the Permittee’s CO<sub>2</sub> Allowance Tracking System Account, an amount of CO<sub>2</sub> allowances:

- i. Equal to the total tons of CO<sub>2</sub> emitted from EU # 3 during the control period less any CO<sub>2</sub> emissions attributable to the burning of eligible biomass, determined in accordance with 310 CMR 7.70(6) and (8), from EU # 3 for the control period; or
- ii. 0.50 times the number of tons of CO<sub>2</sub> emissions for the interim control period less any CO<sub>2</sub> emissions attributable to the burning of eligible biomass, determined in accordance with 310 CMR 7.70(6) and (8), from EU # 3 for the interim control period.

In accordance with 310 CMR 7.70(7), the Permittee shall submit any transfers to MassDEP in the format specified by MassDEP. The Permittee shall not use CO<sub>2</sub> allowances acquired after a control period to comply with allowance holding and transferring requirements for the prior control period. The Permittee shall not transfer a CO<sub>2</sub> offset allowance in order to comply with the requirements of 310 CMR 7.70(1)(e)3.a. beyond the applicable percent limitations set out in 310 CMR 7.70(6)(e)1.c.

Each ton of actual CO<sub>2</sub> interim emissions in excess of the amount of allowances held by the Permittee shall constitute a separate violation of 310 CMR 7.70 and applicable state law. Each ton of actual CO<sub>2</sub> emissions in excess of the CO<sub>2</sub> Budget Emissions Limitation for a control period shall constitute a separate violation of 310 CMR 7.70 and applicable state law.

A CO<sub>2</sub> allowance is a limited authorization by MassDEP to the Permittee to emit 1 ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> Budget Trading Program. It is not a property right and it may be revoked at any time at the discretion of MassDEP.

In accordance with 310 CMR 7.70(1)(e)4., in the event that the Permittee has an exceedance in any control period, or any interim control period, the Permittee shall:

- i. Forfeit CO<sub>2</sub> allowances required for deduction under 310 CMR 7.70(6)(e)4.a., provided that CO<sub>2</sub> offset allowances may not be used to cover excess emissions; and
- ii. Pay any fine, penalty, or assessment or comply with any other remedy imposed by MassDEP under 310 CMR 7.70(6)(e)4.b.

**D. COMPLIANCE DEMONSTRATION**

The Permittee shall comply with the monitoring / testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below:

<b>Table 4</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
3	1. In accordance with 310 CMR 7.70(8), the Permittee shall comply with all monitoring and testing requirements for annual CO <sub>2</sub> emissions, net electrical output, and net steam output.

<b>Table 5</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
3	1. In accordance with 310 CMR 7.70(1), the Permittee shall keep on site at the source all records required under 310 CMR 7.70(1), 310 CMR 7.70(2) and 310 CMR 7.70(8), for a period of 10 years, or unless otherwise stated by MassDEP.

<b>Table 6</b>	
<b>EU</b>	<b>Reporting Requirements</b>
3	1. In accordance with 310 CMR 7.70(8)(d), the Permittee shall submit electronically to MassDEP's Southeast Regional Office and EPA any notification of testing or any testing protocol no later than 21 days prior to the first scheduled day of testing.
3	2. In accordance with 310 CMR 7.70(8)(e)3., the Permittee shall submit a Monitoring System certification to MassDEP's Southeast Regional Office within 45 days after completing all CO <sub>2</sub> monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b).
3	3. In accordance with 310 CMR 7.70(4)(a)1., the Permittee shall submit a Triennial Compliance Certification Report for each control period electronically in the RGGI CO <sub>2</sub> Allowance Tracking System (COATS) to MassDEP by

<b>Table 6</b>	
<b>EU</b>	<b>Reporting Requirements</b>
	March 1 of the calendar year following the control period.
3	4. In accordance with 310 CMR 7.70(8)(h)6.c, the Permittee shall submit an Annual Net Output Report for each calendar year electronically to MassDEP in a format prescribed by MassDEP by March 1 of the preceding calendar year.
3	5. In accordance with 310 CMR 7.70(8)(e)4.b, the Permittee shall submit a Quarterly CO <sub>2</sub> Emissions Report electronically to EPA within 30 days following the end of the calendar quarter covered by the report.

Should you have any questions concerning this ECP, please contact the undersigned by telephone at 508-946-2824 or in writing at the letterhead address.

For the Massachusetts Department of Environmental Protection, Bureau of Air and Waste.

*This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.*

---

Thomas Cushing  
 Permit Chief, Bureau of Air and Waste

cc: Sandwich Board of Health  
 Sandwich Fire Department  
 MassDEP/ Boston – Michelle Blanchard  
 MassDEP/ NERO – William Lamkin  
 G. Lipka, Tetra Tech