

July 12, 2011

Assistant Administrator Gina A. McCarthy USEPA Headquarters Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 6101A Washington, DC 20460

Docket ID No. EPA-HQ-OAR-2009-0234

Proposed Utility Air Toxics Rule

Re:

Dear Assistant Administrator McCarthy:

Thank you for taking time out of your busy schedule to speak with me and the other OTC commissioners at our annual meeting in June. I am very pleased by the ambitious air pollution control agenda that you are prepared to advance in the coming months, which is why I am writing to you personally to express my support for EPA's proposed National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units (76 FR 24976; May 3, 2011). The proposal takes important steps to protect all Americans from the toxic air emissions associated with electricity generation, giving us cleaner air and facilitating a shift to more efficient, modern methods of electricity generation, including modern coal-fired generation.

Connecticut Department of Energy and Environmental Protection Comments on the

As you are well aware, Connecticut's geography makes us particularly vulnerable to emissions from the large electric generating units in the West and South. As you know, we have been quite unhappy with the ongoing pollution impacts of these plants on our citizens. We are therefore pleased to see strong national rules that will put those plants, many of which are older, coal-fired generating units, on an equal environmental regulatory footing with Connecticut's electric generators, many of which are clean, natural gas-fired plants and subject to some of the strictest emissions standards in the country. We are also pleased with the release of the Cross State Air Pollution Rule this week and look forward to your proposal of Transport Rule 2 later this year in hopes that these rules will take further decisive action to level the regulatory playing field.

I am also aware of the delicate task before you as you scrutinize the cumulative impact of these regulations on the electric generation sector. To assist your efforts, my technical staff has made recommendations to make the proposal and its implementation even better, and these suggestions are included as an attachment hereto. As the Connecticut Department of Environmental Protection recently became the Connecticut Department of Energy and Environmental Protection, our combined expertise is available to assist you to meet our shared air quality goals with an eye to our nation's economic revitalization. By working together, I hope that we will all be able to breathe easier.

Commissioner

DCE:mag

Erich Eschmann, EPA Headquarters cc:

Docket Administrator

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#### ATTACHMENT

#### Technical Comments of the

Connecticut Department of Energy and Environmental Protection on the Proposed National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units

ATTACHMENT AI: Documentation for EPA Base Case v4.10\_PTox, Chapter 3, Power System Operation Assumptions; TR2012 Base-case v4.10 IPM run; NEEDS Base Case v4.10 PTox, Mar2011

ATTACHMENT A2: CTDEEP Revisions to NEEDS v4.10\_PTox

ATTACHMENT B: 2008-2010 quarterly stack test results for mercury at Connecticut's

coal-fired EGUs

ATTACHMENT C: Peaking Unit Trading Agreements and Orders

The Connecticut Department of Energy and Environmental Protection (CTDEEP, formerly known as Connecticut Department of Environmental Protection or CTDEP) appreciates the opportunity to comment on the "National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units" (76 FR 24976, May 3, 2011), hereafter referred to as the "Utility NESHAP." CTDEEP is pleased that the U.S. Environmental Protection Agency (EPA) has acted to reduce mercury and other hazardous air pollutants (HAPs) from electric generating units (EGUs), but CTDEEP believes the proposal could be improved in several respects. To that end, CTDEEP has joined comments submitted in this docket by the National Association of Clean Air Agencies (NACAA) and Northeast States for Coordinated Air Use Management (NESCAUM). In addition to the comments presented by those two associations, CTDEEP offers six comments on the proposal herein. One of the six areas of comment is Connecticut-specific comments on EPA's base case power system operating assumptions and the National Electric Energy Data System (NEEDS) database used in the EPA modeling for the NESHAP. Those details are included in Attachments A1 and A2.

#### I. MERCURY LIMITS

Since 2008, Connecticut General Statute §22a-199 has limited the emissions rate of mercury from coal-fired EGUs to 0.6 lbs/TBtu or an emissions rate equal to a ninety percent reduction of mercury from measured inlet concentrations. Several other Northeast states have adopted similar requirements. The Utility NESHAP's mercury limits for coal-fired EGUs range from 1.0 lb/TBtu (1.2 lb/TBtu as referenced in EPA's letter to Utility Air Regulatory Group on 5/18/11) to 4.0 lb/TBtu, levels significantly less stringent limits than those in the Northeast. While CTDEEP understands that the nation's coal-fired EGUs include units much larger and using a range of technologies much broader than those in Connecticut, CTDEEP recommends that EPA establish an achievable mercury NESHAP standard demonstrated in practice. The compliance history of Connecticut's EGUs shows that its coal-fired units comply at levels

below Connecticut's 0.6 lbs/TBtu limitation. Quarterly stack test data from 2009-2010 (and the first quarter of 2011 for one of the facilities) are provided in Attachment B.

#### II. BETTER DEFINE THE LIMITED-USE SUBCATEGORY

At FR 25027, EPA indicates a willingness to include:

"...a limited use-subcategory to account for liquid oil-fired units that only operate a limited amount of time per year on oil and are inoperative the remainder of the year. Such units could have specific emission limitations, reduced monitoring requirements (limited operation may preclude the ability to conduct stack testing), or be held to the same emission limitations (which could be met through fuel sampling) as other liquid oil-fired units."

However, EPA does not give any details, such as specific number of hours, to describe what "limited amount of time" means, and the phrase is open to interpretation. EPA should define what constitutes a "limited amount of time" and allow for public comment when it has established a framework. The ability of sources to operate under a limited use-subcategory could significantly impact compliance costs and requirements associated with the Utility NESHAP. Also, the breadth of a limited use subcategory could influence other state programs to address emissions from units that operate for limited circumstances.

At page 25107 of the Utility NESHAP (40 CFR section 63.10006(s)), the opportunity to demonstrate compliance with the mercury, individual or total non-mercury HAP metals, hydrochloric acid (HCl), or hydrofluoric acid (HF) emissions limit based on fuel analysis seems broader than the liquid oil-fired limited use subcategory. If it is not EPA's intention to allow units other than liquid oil-fired limited use units to utilize a fuel analysis compliance mechanism, EPA should clarify the language.

#### III. TESTING REQUIREMENTS

For states with several EGUs subject to the Utility NESHAP, workload in observing emission tests and/or reviewing emission test protocols could greatly increase. For example, CTDEEP estimates that implementing the testing requirements of the Utility NESHAP could increase the workload of CTDEEP's emission testing staff by as much as 50%. The emissions testing staff ensures that testing is done in accordance with EPA methods. Given state resource constraints, additional staff would need to be taken from other duties to perform testing functions. Testing without adequate quality monitoring does not necessarily support compliance determinations. CTDEEP recommends that EPA consider revising the applicable monthly and bimonthly testing requirements in Section 63.10006 to quarterly testing requirements in order to provide a reasonable window of time for sources and states to maintain quality testing and review procedures.

It is not clear that the language at FR25107 (section 63.10006(p)) applies to low-emitting EGUs, and it is difficult to understand how the timing set out in section 63.10006(o) follows in section 63.10006(p). For example, it is unclear what the term "continue to meet" in section 63.10006(p)

means in the context of section 63.10006(o). EPA should clarify the language in these sections so that readers can more easily understand the requirements.

#### IV. LOW-SULFUR FUEL AS SO2 CONTROL STRATEGY

PSEG Bridgeport Harbor 3 is required to comply with the sulfur dioxide emissions rate or fuel sulfur content limits of Regulations of Connecticut State Agencies 22a-174-19a (<a href="http://www.ct.gov/dep/lib/dep/air/regulations/mainregs/sec19a.pdf">http://www.ct.gov/dep/lib/dep/air/regulations/mainregs/sec19a.pdf</a>), which PSEG accomplishes by use of low sulfur Indonesian coal. As a result, PSEG Bridgeport Harbor 3 currently meets the Utility NESHAP's sulfur dioxide limit of 0.20 lb/MMBtu for coal-fired EGUs. Under the Utility NESHAP, a unit with acid gas controls is not required to install and operate a HCl continuous emissions monitoring system (CEMS). EPA should clarify whether or not the use of low sulfur fuel would qualify as an acid gas control. If so, PSEG Bridgeport Harbor 3 may forgo the installation of HCl CEMS.

#### V. OUTPUT-BASED STANDARDS

In previous comment letters on the Transport Rule (dated September 30, 2010) and 3<sup>rd</sup> Transport Rule Notice of Data Availability (dated February 3, 2011), CTDEEP urged EPA to adopt output-based standards in order to reward more efficient units. At FR 25063, EPA states that it is proposing output-based standards where feasible. Although EPA does not specifically request comment on the use of output-based standards, CTDEEP supports EPA's proposal of output-based standards in the Utility NESHAP where feasible.

#### VI. EPA's Base Case v4.10 PTox and NEEDS v 4.10 PTox

CTDEP submitted comments on NEEDS v. 4.10 in response to the Transport Rule (see CTDEP comment letter dated September 30, 2010). However, EPA did not incorporate many of the changes in EPA Base Case v4.10 PTox, Mar2011 and NEEDS v4.10 PTox that CTDEP recommended be added to the database. EPA's failure to include corrections to the base case and NEEDS discourages states that painstakingly review the data to ensure more accurate modeling results and a better proposal. EPA should incorporate all of the changes that states make to the base case and NEEDS, or else explain to the states why the changes were not made. CTDEP changes to Base Case v4.10 PTox, Mar2011 and NEEDS v4.10 PTox, can be found in Attachments A1 and A2. Please note that several of the comments are identical to comments submitted to EPA previously in response to the Transport Rule (see CTDEP comment letter dated September 30, 2010).

# **ATTACHMENT AI**

- I) Documentation for EPA Base Case v4.10\_PTox, Chapter 3, Power System Operation Assumptions
- II) TR 2012 Base-case v4.10 IPM run
- III) NEEDS v4.10\_PTox, Mar2011

# I. DOCUMENTATION FOR EPA BASE CASE V4.10\_PTox, CHAPTER 3, POWER SYSTEM OPERATION ASSUMPTIONS

#### Appendix 3-2 State Power Sector Regulations included in EPA Base Case v4.10 PTox, Mar2011

NOx - The "Emission Specifications" field states that a 0.15 lbs/MMBtu rate limit in the winter season applies for all fossil electric generating units > 15 MW. The non-ozone season NOx limit does not apply to fossil-fired units unless the units are subject to both RCSA section 22a-174-22 and the NOx Budget Program.<sup>2</sup> EPA should revise the "Emissions Specifications" field as follows:

#### **Emission Specifications**

0.15 lbs/MMBtu non-ozone season rate limit (October 1 through April 30, inclusive) for all sources subject to RCSA section 22a-174-22 that are also NOx Budget Program sources.

• **SO**<sub>2</sub> - The "Bill" field states that the relevant legal references are Executive Order 19, RCSA 22a-198 and Connecticut General Statues (sic) (CGS) 22a-198. However, the correct regulatory references are RCSA section 22a-174-19a and Connecticut General Statutes section 22a-198. Executive Order 19 directed CTDEP to adopt regulations and laid out the framework for the requirements but did not apply directly to sources, so the reference to it should be deleted. In addition, the 0.33 lbs/MMBtu rate referenced in the "Emission Specifications" field is a quarterly rate instead of an annual rate, and the 0.33 lbs/MMBtu rate only applies to Title IV sources that are also equal to or greater than 15 MW or equal to or greater than 250 MMBtu/hr. As alternatives, sources can combust fuel with a fuel sulfur limit of equal to or less than 0.3% sulfur or can average and meet a quarterly emission rate of 0.3 lb/MMBtu. <sup>3</sup> For fossil fuel-fired sources equal to or greater than 15 MW or equal to or greater than 250 MMBtu/hr that are not Title IV sources, a 0.55 lb/MMBtu emission rate applies starting January 1, 2002 (as alternatives,

<sup>&</sup>lt;sup>2</sup> NOx Budget Program units are fossil fuel-fired stationary sources serving a generator with a nameplate capacity of 15 MW or greater or a fossil fuel-fired boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBtu/hr or more.

<sup>&</sup>lt;sup>3</sup> RCSA section 22a-174-19a(e), Sulfur dioxide emissions standards and fuel sulfur limits effective on and after January I, 2003. Notwithstanding the provisions of subsection (b) of this section, this subsection shall apply, on and after January 1, 2003, to the owner or operator of a Title iV source that is also an affected unit or units. On and after January 1, 2003, such owner or operator shall: (1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.3 % sulfur, by weight (dry basis); (2) Meet an average emission rate of equal to or less than 0.33 pounds S02 per MMBtu for each calendar quarter for an affected unit at a premises; or (3) Meet an average emission rate of equal to or less than 0.3 pounds S02 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at a premises.

sources can combust fuel with a fuel sulfur limit equal to or less than 0.5% sulfur or can average and meet a quarterly emission rate of 0.5 lb/MMBtu).<sup>4</sup>

#### EPA should revise the Bill, Emission Specifications and Implementation Status fields as follows:

RCSA section 22a-174-19a & Connecticut General Statutes (CGS) section 22a-198  1) Combust liquid or gaseous fuel with a fuel sulfur limit equal to or less than 0.5% sulfur by weight or 2) meet an average quarterly emission rate of 0.55 lbs/MMBtu or 3) meet an average quarterly emissions from two or more units are averaged.  1) Combust liquid or gaseous fuel with a fuel sulfur limit equal to or less than 0.3% sulfur by weight or 2) meet an average quarterly emission rate of 0.33 lbs/MMBtu or 3) meet an average quarterly emission rate of 0.33 lbs/MMBtu or 3) meet an average
average quarterly emission rate of 0.3 lbs/MMBtu if emissions from two or more units are averaged.

**Mercury** (Hg) -The "Bill" field references RCSA 22a-198, however the correct statutory reference is CGS section 22a-199. The reference to Public Act No. 03-72 should be removed since it was codified in CGS section 22a-199. In addition, the "Emission Specifications" field includes incorrect emission limit information. **EPA should revise the "Bill" and "Emissions Specifications" fields as follows:** 

<sup>&</sup>lt;sup>4</sup> RCSA section 22a-174-19a(c), Sulfur dioxide emission standards and fuel sulfur limits effective on and after January 1, 2002. On and after January 1, 2002 and except as provided in subsection (f) of this section, the owner or operator of an affected unit or units shall:

<sup>(1)</sup> Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.5 % sulfur, by weight (dry basis); (2) Meet an average emission rate of equal to or less than 0.55 pounds S02 per MMBtu for each calendar quarter for an affected unit at the premises; or (3) Meet an average emission rate of equal to or less than 0.5 pounds S02 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.

Bill	Emissions Specifications
CGS section 22a-199	(A) Meet an emissions rate of equal to or less than 0.6 pounds of mercury per TBtu, or (B) meet a mercury emissions rate equal to a ninety per cent reduction of mercury from the measured inlet conditions for the affected unit, whichever emissions rate is more readily achievable by such affected unit.

#### II. TR 2012 BASE-CASE V4.10 IPM RUN

As explained in CTDEP's comments on the Transport Rule submitted on September 30, 2010, the IPM Base Case model run for 2012 projects that the 9 oil/gas load following boilers (LFBs) in Connecticut will not operate in 2012. However, all 9 LFBs have already bid into the ISO-NE Forward Capacity Market through May 2013 and are contractually obligated to be available through that date, making it highly unlikely that they will cease operations by 2012. Furthermore, 8 of the 9 LFBs are contractually obligated to be available in the Forward Capacity Market through May 2014. Only Bridgeport 2 is not contractually obligated through May 2014. CTDEP recommends that EPA consider the Integrated Resource Plan model results (see Attachment C of CTDEP's September 30, 2010 Transport Rule comments) and contractual obligations of the LFBs and revise the IPM model results accordingly.

#### III. NEEDS V4.10 PTox, Mar2011

The items described below are also highlighted or changed in red in the spreadsheet in Attachment A2:

#### • Peaking unit NOx rates

NEEDS v4.10\_PTox includes either a 0.1490 lb/MMBtu NOx rate (all four modes) or a 1.111 or 1.201 lb/MMBtu default rate (all four modes) for the following units:

Table 1.

Unit	NEEDS v. 4.10_PTox rate (lb/MMBtu) (all 4 modes)	Actual emission concentration and/or rate	Regulatory emission limits* (based on 24 hours for ppmvd and non-ozone seasonal for lb/MMBtu)	Existing controls
Branford	0.1490	187.1 ppmvd 0.726 lb/MMBtu	75 ppmvd (oil) 0.15 lb/MMBtu	None
Cos Cob 10	0.1490	32.7 ppmvd 0.192 lb/MMBtu	75 ppmvd (oil) 0.15 lb/MMBtu	Water injection
Cos Cob 11	0.1490	33.3 ppmvd 0.185 lb/MMBtu	75 ppmvd (oil) 0.15 lb/MMBtu	Water injection
Cos Cob 12	0.1490	33.1 ppmvd 0.194 lb/MMBtu	75 ppmvd (oil) 0.15 lb/MMBtu	Water injection
Cos Cob 13	0.1490	34.9 ppmvd 0.194 lb/MMBtu	50 ppmvd (ULSD) 0.15 lb/MMBtu	Water injection

Cos Cob 14	0.1490	29.2 ppmvd	50 ppmvd (ULSD)	Water injection
		0.171 lb/MMBtu	0.15 lb/MMBtu	
Devon Station 10	1.201	172.7 ppmvd	75 ppmvd (oil)	None
		0.67 lb/MMBtu	0.15 lb/MMBtu	
NRG Norwalk	1.111	78.7 ppmvd	75 ppmvd (oil)	None
Harbor 10		0.514 lb/MMBtu	0.15 lb/MMBtu	
Tunnel 10	0.149	119.6 ppmvd	75 ppmvd (oil)	None
		0.698 lb/MMBtu	0.15 lb/MMBtu	
Franklin Drive	0.149	195.9 ppmvd	75 ppmvd (oil)	None
		0.76 lb/MMBtu	0.15 lb/MMBtu	
Middletown 10	0.149	146.9 ppmvd	75 ppmvd (oil)	None
		0.57 lb/MMBtu	0.15 lb/MMBtu	
South Meadow 11	0.149	135.4 ppmvd	75 ppmvd (oil)	None
		0.692 lb/MMBtu	0.15 lb/MMBtu	
South Meadow 12	0.149	119.8 ppmvd	75 ppmvd (oil)	None
		0.725 lb/MMBtu	0.15 lb/MMBtu	
South Meadow 13	0.149	131.4 ppmvd	75 ppmvd (oil)	None
		0.742 lb/MMBtu	0.15 lb/MMBtu	
South Meadow 14	0.149	130.0 ppmvd	75 ppmvd (oil)	None
		0.763 lb/MMBtu	0.15 lb/MMBtu	
Torrington	0.149	175.3 ppmvd	75 ppmvd (oil)	None
Terminal		0.68 lb/MMBtu	0.15 lb/MMBtu	
North Main Street	0.149	141.3 ppmvd	75 ppmvd (oil)	None
		0.553 lb/MMBtu	0.15 lb/MMBtu	

<sup>\*</sup>Or permitted emission limits in the case of Cos Cob 13 and 14

Presumably, the 0.1490 lb/MMBtu emission rate is from the non-ozone season restriction of 0.15 lbs/MMBtu in RCSA section 22a-174-22. However, with the exception of the Cos Cob units, these units are not controlled. All units have actual emission rates higher than 0.1490 lb/MMBtu and with the exception of the Cos Cob units, higher than 75 ppmvd (24-hr limit). These units do not have continuous emissions monitors, so the actual emission rates provided in Table 1 are from emissions test data. All of the units currently comply with permitted and/or regulatory limits by operating under Trading Agreements and Orders (see Attachment C) that allow the sources to purchase NOx discrete emission reduction credits and/or NOx allowances through May 31, 2014. The Trading Agreements and Orders set the framework by which the owners and operators of the peaking units will assess energy market conditions and current and planned environmental restrictions in order to determine operational status beyond May 31, 2014. CTDEP recommends that EPA revise NEEDS v4.10\_PTox to reflect the actual emission rates of the turbines in Table 1.

#### • <u>Unlisted existing/committed units</u>

There are several existing and committed units that are not listed in NEEDS v4.10\_PTox. CTDEP recommends that EPA include the units listed on Attachment A2 in NEEDS v4.10\_PTox.

 NOx combustion control for Milford Power, Wallingford Energy, Kleen Energy and Waterside Power NEEDS v4.10\_PTox lists dry low NOx Burners (with water injection for Wallingford Energy and Kleen Energy) for Milford Power, Wallingford Energy and Kleen Energy for NOx controls, but NOx controls consist of regular low NOx burners. All of Waterside Power's turbines have water injection, but unit 7 in NEEDS v4.10\_PTox does not have water injection listed as a NOx control. CTDEP recommends that EPA revise NEEDS v4.10\_PTox with the correct NOx controls.

#### • Committed units to be removed

EPA lists 2 committed units, a 24 MW combined cycle unit and a 100 MW combustion turbine that EPA **should remove from NEEDS** v4.10\_PTox. The 100 MW combustion turbine may be Waterbury Generation that is separately listed as an additional unit and CTDEP does not have knowledge of a 24 MW combined cycle unit that has started construction or secured financing to ensure start-up prior to the end of 2011.

#### Covanta Mid-CT Energy, units 11-13 mercury controls

ACI is listed as the mercury control for Covanta Mid-CT Energy units 11-13, but the units do not have ACI installed. CTDEP recommends that EPA remove ACI from the mercury controls column for Covanta Mid-CT Energy, units 11-13.

#### • John Street 1 & 2 and Cytec 1 & 2 NOx limits and controls

The John Street 1 & 2 and Cytec 1 & 2 units were issued revised permits in 2008. The NOx limit in the old permits was 2.67 lb/MMBtu. The NOx limit in the new permits is 0.27 lb/MMBtu for John Street 1 & 2 and 0.24 for Cytec 1 & 2. All of the units installed SCR for NOx control. Although NEEDS v4.10\_PTox is based on 2007 data, comments were added to the spreadsheet regarding the revised permit limits and NOx controls so that EPA may make updates in future versions of NEEDS.

#### • Middletown 12-15 and Devon Station 15-18

EPA lists the "Plant Type" as "Combined Cycle" for Middletown 12-15 and Devon Station 15-18. However, the units are all simple cycle combustion turbines, and therefore the plant type should be "Combustion Turbine". "Combustion Turbine" should be added to the "Combustion Turbine/IC Engine" column. The heat rates are listed as 6810 Btu/kwh, but should be higher, in the range of 8500-10,500 Btu/kwh, since the units are simple cycle. The Devon Station units are listed as starting operation in 2011, but the units actually started operating in 2010. None of the units have NOx combustion controls listed, but all of the units have water injection. CTDEP recommends that EPA correct the plant type, heat rates and NOx combustion controls columns for the Middletown 12-15 and Devon Station 15-18 units as well as the starting operation dates for Devon Station 15-18.

#### • Bridgeport Station 3

The ACI online year for Bridgeport Station 3 is listed as 2007, but the ACI online year was actually 2008. **CTDEP recommends that EPA correct the ACI online year for Bridgeport Station 3.** 

#### • Montville 5

Montville 5 has a "yes" in the cogen (cogeneration unit) column and it is not a cogeneration unit. CTDEP recommends that the status of Montville 5 as a cogen unit be changed to "No".

#### Middletown 2

Middletown 2 is listed as having a hot-side ESP for PM control. However, CTDEP's records show, and the unit's owner confirms, that Middletown 2 has a cold-side ESP. CTDEP recommends that EPA correct the PM control type from ESPH to ESPC.

#### American Ref-Fuel of SE CT, Covanta Bristol, Wheelabrator Bridgeport, Covanta Mid-CT and Wheelabrator Lisbon NOx rates

The uncontrolled NOx base rate, controlled NOx base rate, uncontrolled NOx policy rate and controlled NOx policy rate are all the same for American Ref-Fuel of SE CT, Covanta Bristol, Wheelabrator Bridgeport, Covanta Mid-CT and Wheelabrator Lisbon, yet all of the units have NOx controls (SNCR). The last iteration of NEEDS had a lower controlled NOx base rate and controlled NOx policy rate than the uncontrolled NOx base rate and uncontrolled NOx policy rate for all of the units. CTDEP recommends that the same controlled NOx base rates and controlled NOx policy rates as were included in the previous version of NEEDS be included in the current version of NEEDS. The lone exception is Covanta Bristol Unit 2, which in August 2010 was issued a permit lowering the allowable NOx limit from 200 ppmvd (0.343 lb/MMBtu) to 120 ppmvd (0.206 lb/MMBtu).

Unit	Recommended controlled NOx base rate and controlled NOx policy rates
American Ref-Fuel of SE CT, Blr 1, 2	0.3120, 0.3120
Covanta Bristol, Unit 1, 2	0.3300, 0.206
Wheelabrator Bridgeport, Blr 1, 2, 3	0.3080, 0.3080, 0.3080
Covanta Mid-CT, 11, 12, 13	0.2400, 0.2400, 0.2400
Wheelabrator Lisbon, BW1, BW2	0.2800, 0.2800

#### Cos Cob 13-14, Devon Station 15-18, Lake Road Generating Plant 1-3, Waterside Power, LLC 7, Middletown 12-15, John Street 1 & 2, Cytec 1 & 2, Kleen Energy U1 & U2, and CMEEC 8 SO<sub>2</sub> permit rates

The following rates should be included in the " $SO_2$  Permit Rate (lbs/MMBtu)" column. For Waterside Power, LLC 7, the 0.002 lbs/MMBtu limitation appears in the new source review permit. For Lake Road Generating Plant 1-3, the units are limited to burning 0.05% sulfur containing oil in new source review permits. All of the other listed units are limited to burning 0.0015% sulfur containing oil in new source review permits.

Unit	SO <sub>2</sub> Permit Rate (lbs/MMBtu
Cos Cob 13-14	0.0016
Devon Station 15-18	0.0016
Lake Road Generating Plant 1-3	0.054
Waterside Power, LLC 7	0.002
Middletown 12-15	0.0016
John Street 1 & 2	0.0016

Cytec 1 & 2	0.0016
Kleen Energy U1 & U2	0.0016
CMEEC 8	0.0016

#### • Boehringer Ingelheim 1

The uncontrolled NOx base rate, controlled NOx base rate, uncontrolled NOx policy rate and controlled NOx policy rate for Boehringer Ingelheim is 2.491 lbs/MMBtu. However, the permitted rate for this unit is 0.64 gm/bkhp-hr, which converts to about 0.17 lbs/MMBtu. CTDEP recommends that the NOx rates be changed accordingly.

#### • Norwalk 2

The uncontrolled NOx base rate, controlled NOx base rate, uncontrolled NOx policy rate and controlled NOx policy rate are all the same for Norwalk 2, yet the unit has NOx controls (SNCR). CTDEP recommends that the controlled NOx base rate and controlled NOx policy rate be changed to reflect the NOx controls in place at Norwalk 2.

## **ATTACHMENT A2**

# CTDEP REVISIONS TO NEEDS V4.10\_PTOX

## **NOTES:**

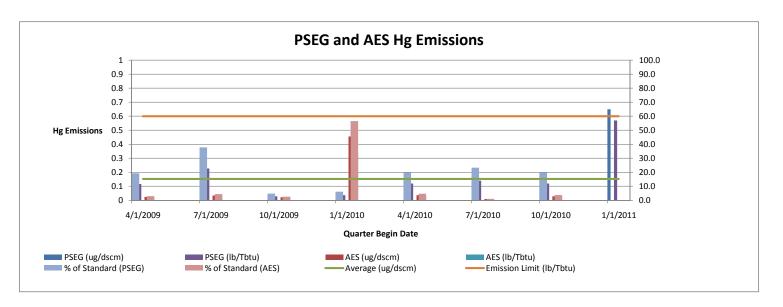
- 1) Due to its size, the Attachment A2 spreadsheet has been provided as an attachment to CTDEP's electronically filed comments and is not provided here in hardcopy form.
- 2) CTDEP's comments and recommended revisions to the NEEDS data are highlighted in red in the spreadsheet.

# **ATTACHMENT B**

2008-2010 (and first quarter of 2011 for one facility)
Quarterly Stack Test Results for Mercury from
Connecticut's Coal-Fired EGUs

Hg Test Results

	Quarter Begin Date	Hg (lb/Tbtu)	Hg (ug/dscm)	Method	Average (ug/m3)	Emission Limit (lb/ Tbtu)	% of Standard
	4/1/2009	0.116	0.159	29	0.152	0.6	19.3
	7/1/2009	0.227	0.304	29	0.152	0.6	37.8
	10/1/2009	0.029	0.038	30B	0.152	0.6	4.8
PSEG	1/1/2010	0.037	0.049	30B	0.152	0.6	6.2
FSEG	4/1/2010	0.12	0.162	30B	0.152	0.6	20.0
	7/1/2010	0.14	0.17	30B	0.152	0.6	23.3
	10/1/2010	0.12	0.15	30B	0.152	0.6	20.0
	1/1/2011	0.57	0.65	30B	0.152	0.6	95
	4/1/2009	0.018	0.024	30B	0.152	0.6	3.0
	7/1/2009	0.027	0.034	30B	0.152	0.6	4.5
AES	10/1/2009	0.016	0.022	30B	0.152	0.6	2.7
	1/1/2010	0.339	0.456	30B	0.152	0.6	56.5
	4/1/2010	0.028	0.037	30B	0.152	0.6	4.7
	7/1/2010	0.006	0.009	30B	0.152	0.6	1.0
	10/1/2010	0.023	0.029	30B	0.152	0.6	3.8
	Average	0.12106667	0.152866667				
	% of Standard	20.1777778					



# ATTACHMENT C

# PEAKING UNIT TRADING AGREEMENTS AND ORDERS

# NOTE:

Due to the large number of pages, the Attachment C Trading Agreements and Orders have been provided as an attachment to CTDEP's electronically filed comments and are not provided here in hardcopy form.

State of Connecticut	)	
and	)	
NRG Energy, Inc.,	)	
Middletown Power LLC,	)	Trading Agreement
NRG Middletown Operations Inc.,	)	and Order No. 8300
Montville Power LLC,	)	
NRG Montville Operations Inc.,	)	
Norwalk Power LLC,	)	
NRG Norwalk Harbor Operations Inc.	)	
Connecticut Jet Power LLC	)	

WHEREAS, the Commissioner of Environmental Protection ("Commissioner") and NRG Energy, Inc. et al. ("Respondents") agree that the Commissioner may issue a permit or order to allow emissions trading in accordance with Section 22a-174-22(j) of the Regulations of Connecticut State Agencies ("Regulations") as a method of compliance with Section 22a-174-22 of the Regulations:

- A. At the request and with the agreement of Respondents, the Commissioner finds the following:
  - 1. This Trading Agreement and Order supersedes Trading Agreement and Orders 8180 through 8184, 8251 and all subsequent modifications thereto.
  - 2. Respondents own and operate electricity generation facilities in Connecticut ("facilities").
  - 3. At the facilities, Respondents operate the emission units described in Tables 1-3 below, which are subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations") pertaining to the control of Nitrogen Oxide (NOx) emissions.
  - 4. For the purposes of this Trading Agreement and Order, the following definitions shall apply:
    - a. Allowable Emission Limit (AEL): the applicable NOx emission limit set forth in Section 22a-174-22(e) or Section 22a-174-22(f) of the Regulations corresponding to the emission units described in Tables 1-3 of this Trading Agreement and Order
    - b. Allowance: CAIR NOx Ozone Season allowance originally allocated to a CAIR NOx Ozone Season unit, as defined in Section 22a-174-22c of the Regulations, located in the State of Connecticut or a NOx allowance designated specifically for compliance during Ozone Season control periods and allocated to a CAIR NOx Ozone Season unit located in the State of Connecticut after the date of issuance of this Trading Agreement and Order.

- c. CAIR NOx Ozone Season unit: shall be as defined in Section 22a-174-22c of the Regulations
- d. Discrete Emission Reduction Credit (DERC): a unit that was generated and approved by the Commissioner in accordance with a Trading Agreement and Order issued by the Commissioner or generated and approved by the Commissioner in accordance with a protocol submitted and approved pursuant to Section 22a-174-38 of the Regulations. Such unit is equivalent to 1 ton of NOx emissions and may be used for emissions trading in accordance with Section 22a-174-22(j) of the Regulations, subject to the provisions of Part B of this Trading Agreement and Order.
- e. Full Load Emission Rate ("FLER"): Nitrogen Oxide ("NOx") emission rate corresponding to each emission unit described in Tables 1 and 3 of this Trading Agreement and Order that the Respondents shall not cause or allow the emissions of NOx from that emission unit to exceed; and that the Respondents agree such FLER shall serve as the basis for determining Estimated DERCs Required, Estimated Allowances Required, Actual DERCs required, and Actual Allowances Required in accordance with this Trading Agreement and Order.
- f. Non-Attainment Area: means the geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (Section 107 of the Act). Pursuant to 40 CFR 81.307, the designated ozone non-attainment areas in the State of Connecticut are: the Greater Connecticut, CT area and the New York-Northern New Jersey-Long Island, NY-NJ-CT area.
- g. CAIR NATS: "CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System" as defined in 40 CFR 96.302.
- h. Ozone Season: May 1 through September 30 of each calendar year or such period as defined by the U.S. Environmental Protection Agency, subsequent to the issuance of this Trading Agreement and Order.
- i. Non-Ozone Season: the period of consecutive calendar months between two successive Ozone Seasons

Table 1
CAIR NOx Ozone Season Units
NOx Stack Test Rates, FLERs and Allowable Limits (lbs/MMBtu, unless otherwise noted)

	ı				Innts (ibs/iviivibtu, umess other	1	
UNIT- Registration or Permit no.	Fuel	Heat Input (MMBtu)	Stack Test Rate	FLER	AEL	Date of Last Stack Test	Date of Next Stack Test
Boston Post Road Branford -10 Reg#-014-0008	other oil	256	0.726	0.8	0.29 0.15 (non-ozone season average, regardless of fuel burned)	8/10/06	8/10/11
Sound Shore Drive Greenwich-10 R-067-0052	other oil	256	0.192	0.22	0.15 (non-ozone season average, regardless of fuel burned)	11/19/08	11/19/13
Sound Shore Drive Greenwich-11 R-067-0053	other oil	256	0.185	0.22	0.15 (non-ozone season average, regardless of fuel burned)	11/19/08	11/19/13
Sound Shore Drive Greenwich-12 R-067-0054	other oil	256	0.194	0.22	0.15 (non-ozone season average, regardless of fuel burned)	11/19/08	11/19/13
Sound Shore Drive Greenwich-13 P 067-0097	other oil Nat gas	256	0.194	0.22	0.15 (non-ozone season average, regardless of fuel burned)	11/19/08	11/19/13
Sound Shore Drive Greenwich-14 P 067-0098	other oil Nat gas	256	0.171	0.22	0.15 (non-ozone season average, regardless of fuel burned)	11/19/08	11/19/13
Franklin Drive Torrington-10 R-183-0049	other oil Nat gas	256	0.76	0.8	0.29 0.15 (non-ozone season average, regardless of fuel burned)	10/25/05	10/25/10
South Main Street Torrington-10 R-183-0059	other oil	256	0.68	0.8	0.29 0.15 (non-ozone season average, regardless of fuel burned)	01/02/06	01/02/11
Middletown-10 R-105-0102	other oil	256	0.57	0.67	0.29 0.15 (non-ozone season average, regardless of fuel burned)	06/20/06	06/20/11
Norwalk-10 R-137-0032	other oil	256	0.514	0.52	0.29 0.15 (non-ozone season average, regardless of fuel burned)	01/26/10	01/26/15
Devon-10 R-105-0026	other oil	256	0.67	0.74	0.29 0.15 (non-ozone season average, regardless of fuel burned)	03/31/06	03/31/11

Table 2:									
(	CAIR NOx Ozone Season Unit, equipped with CEMS								
Allowable Limits (lbs/MMBtu, unless otherwise noted)									
UNIT- reg. or permit no.	Fuel	Heat Input (MMBTU/hr)	Allowable Emission Limit (AEL)						
Devon Unit-11 P-105-0040	other oil Nat gas	394	0.15 non-ozone season average, regardless of fuel burned						
Devon Unit-12 P-105-0041	other oil Nat gas	394	0.15 non-ozone season average, regardless of fuel burned						
Devon Unit-13 P-105-0042	other oil Nat gas	394	0.15 non-ozone season average, regardless of fuel burned						
Devon Unit-14 P-105-0043	other oil Nat gas	394	0.15 non-ozone season average, regardless of fuel burned						

Table 3:  Non CAIR NOx Ozone Season Unit  NOx Emission Rates, FLERs and Allowable Limits (lbs/MMBtu, unless otherwise noted)							
UNIT- reg. or Fuel permit no.		Heat Input (MMBtu/hr)	Stack Test Rate	FLER (lb/mmbtu)	Allowable Emission Limit (AEL)	Date of Last Stack Test	Date of Next Stack Test
Montville-10	other oil	29	3.09	3.11	2.35	03/24/06	03/24/11
Montville-11	other oil	29	1.93	2.96	2.35	08/23/06	08/23/11

- 5. The Respondents agree that the actual NOx emission rates from the emission units described in Tables 1-3, at times, exceed the corresponding AEL.
- 6. Pursuant to Section 22a-174-22(j) of the Regulations, Respondents propose to comply with Section 22a-174-22(e) of the Regulations, when operating the emission units described in Table 1 by means of emissions trading in accordance with the provisions of this Trading Agreement and Order.
- 7. The Respondents propose to use the full load emission rates ("FLERs") identified in Tables 1 and 3 for the purposes of calculating Actual DERCs/Allowances Required.

The Commissioner, in accordance with Section 22a-174-22(j) of the Regulations hereby allows Respondents to comply with Section 22a-174-22 of the Regulations at the facilities through the use of emissions trading, subject to the provisions of this Trading Agreement and Order.

- B. With the agreement of Respondents, the Commissioner, acting under Sections 22a-6, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes, hereby orders Respondents as follows:
  - 1. Expiration of this Trading Agreement and Order: The Respondents may only use emissions trading, subject to the provisions of this Trading Agreement and Order, until the date of expiration of this Trading Agreement and Order. The date of expiration of this Trading Agreement and Order shall be the earlier of:
    - a. May 31, 2014;
    - b. The date upon which the Respondents demonstrate to the Commissioner's satisfaction that actual NOx emissions from the emission units, at all times, do not exceed the corresponding AEL(s);
    - c. The date specified in any written notice from the Commissioner stating that the Respondents are no longer allowed to use emissions trading due to the Respondents' violation of any provision of this Trading Agreement and Order; or
    - d. The date specified in any written notice from the Commissioner, notifying the

Respondents that the Commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:

- (i) the promulgation of an Act, Statute, or Regulations; or
- (ii) the issuance of a judgment or court order.
- 2. Respondents shall obtain and use sufficient DERCs and/or Allowances in such a manner as to comply with Paragraphs B.9 and B.10 of this Trading Agreement and Order. All Allowances used must come from an emission unit that is within the same ozone nonattainment area as the Respondents. Any Allowances used to comply with this Trading Agreement and Order must be allocated for the control period that occurs during the same year those allowances are used for compliance with this Trading Agreement and Order. All DERCs used during the Ozone Season for each emissions unit described in Tables 1 and 3, shall have been generated during an Ozone Season.
- 3. Prior to using Allowances in accordance with Paragraphs B.9 and B.10 of this Trading Agreement and Order the Respondents shall obtain a General and/or Compliance Account in the CAIR NATS.
- 4. <u>Vintage Restriction</u>. For the purposes of compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order, DERCs shall only remain valid for five (5) calendar years from the year of the generation of such DERCs. DERCs older than five (5) calendar years from their creation are not valid for use for compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order.
- 5. Respondents shall not cause or allow actual NOx emissions from the operation of the emission units described in Tables 1 and 3 of this Trading Agreement and Order to exceed the corresponding FLERs. Compliance with the corresponding FLERs specified in Table 1 shall be determined based on the results of emissions testing performed in accordance with Section 22a-174-22 of the Regulations or based on NOx emissions monitored and recorded by a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendices B&F or 40 CFR 75.
- 6. Ozone Season Fuel Use Restriction: Notwithstanding the provisions of Paragraph B.3 of this Trading Agreement and Order, when operating the emission units described in Tables 1-3 during the Ozone Season, the Respondents shall operate those units while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are physically able to burn and that the Respondents are authorized to burn in accordance with Departmental permit, registration, or applicable regulation.
- 7. Notwithstanding Paragraph B.6 of this Trading Agreement and Order, during the Ozone Season, the Respondents may operate the emission units described above on fuels that result in higher emissions of NOx, if either:

- a. the availability of fuel oil that complies with Paragraph B.6 is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
- b. the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Respondents and the gaseous fuel supplier,
- c. the reliance on the lowest NOx emitting fuel type or combination of fuel types would prevent a timely response to a dispatch directive issued by the Independent System Operator New England (ISO NE) to provide electricity pursuant to obligations in the Locational Forward Reserve Market, or
- d. the unit is operating in order to conduct testing required by any governmental agency or auditing/testing required to demonstrate the ability to satisfy commitments made to ISO NE in the Forward Capacity and/or Locational Forward Reserve Markets.
- 8. <u>DERC/Allowance Use</u>. On the first day of each calendar month, the Respondents shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Actual DERCs Required and/or Actual Allowances Required in that month. Compliance with Paragraph B.8 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each month, Respondents shall estimate DERCs and/or Allowances required for such calendar month for the emission unit described in Tables 1 and 3 as follows:

#### Estimated DERCs/Allowances Required =

{(Estimated fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))}÷2000 lbs/ton

#### Where:

- AEL = Allowable Emission limit, as defined in Paragraph A.4 of this Trading Agreement and Order
- Discount (0.95) = 5% design margin applied to the AEL.
- b. No later than the twentieth day of each month, Respondents shall calculate actual DERCs and/or Allowances used in the preceding calendar month for the emission unit described in Tables 1 and 3 as follows:

#### Actual DERCs/Allowances Required =

{(Monthly fuel use MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))} ÷ 2000 lbs/ton

- 9. Non-Ozone Season DERC/Allowance Use. In addition to the requirements of Paragraph B.8 of this Trading Agreement and Order, on the first day of each Non-Ozone Season, the Respondents shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Non-Ozone Season Actual DERCs/Allowances Required for that Non-Ozone Season. Compliance with Paragraph B.9 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each Non-Ozone Season, Respondents shall estimate DERCs and/or Allowances required for that Non-Ozone Season for the emission units described in Tables 1 and 2 based on the average actual NOx emission rate from the emission unit and an emission limit of 0.15 lb/mmbtu as follows:

    Estimated Non-Ozone Season DERCs/Allowances Required (Table 1 units) =

{(Estimated Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton- $\Sigma$ ( Estimated DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

#### Estimated Non-Ozone Season DERCs/Allowances Required (Table 2 units) =

{(Estimated Non-Ozone Season fuel use in MMBtu) x ((Estimated Ozone Season Average NOx Emission rate lb/mmbtu) -  $(0.95 \times 0.15 lb/mmbtu)$ } ÷ 2000 lbs/ton- $\Sigma$ (Estimated DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

b. No later than thirty (30) days after the end of each Non-Ozone Season, the Respondents shall calculate Actual Non-Ozone Season DERCs and/or Allowances used during that Non-Ozone Season for the emission units described in Tables 1 and 2 as follows:

#### Actual Non-Ozone Season DERCs/Allowances Required (Table 1 units) =

{(Actual Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton– $\Sigma$ (Actual DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

#### Actual Non-Ozone Season DERCs/Allowances Required

{(Actual Non-Ozone Season fuel use in MMBtu) x ((Actual Non-Ozone Season Average NOx Emission Rate lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton- $\Sigma$ ( Actual DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8

10. On or before January 31, of each calendar year, the Respondents shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondents and/or transfer a quantity of Allowances from the Respondents' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to the sum of Actual DERCs/Allowances Required pursuant to Paragraph B.8 of this Trading Agreement and Order for the preceding calendar year, rounded up to the nearest whole ton.

- 11. Not more than ninety (90) days after the completion of the Non-Ozone Season, the Respondents shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondents and/or transfer a quantity of Allowances from the Respondents' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Notwithstanding the control period limitations of Paragraph B.2 of this Trading Agreement and Order, Allowances used to comply with this Paragraph for a Non-Ozone Season must have been originally allocated for the control periods that correspond to the same calendar years within that Non-Ozone Season.
- 12. <u>Doubling:</u> If the Actual DERCs/Allowances Required for any month, determined in accordance with Paragraph B.8, exceeds the quantity of DERCs and/or Allowances in the Respondents' possession on the first day of that month, then in addition to the deduction or transfer specified in Paragraph B.10, the Respondents shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondents and/or transfer a quantity of Allowances from the Respondents' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual DERCs/Allowances Required for that month. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.10 of this Trading Agreement and Order.

If the Actual DERCs/Allowances Required for any Non-Ozone Season, determined in accordance with Paragraph B.9, exceeds the quantity of DERCs and/or Allowances in the Respondents' possession on the first day of the Non-Ozone Season, then in addition to the deduction or transfer specified in Paragraphs B.11, the Respondents shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondents and/or transfer a quantity of Allowances from the Respondents' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.11 of this Trading Agreement and Order.

Notwithstanding the provisions of Paragraph B.12 of this Trading Agreement and Order, any violation of Paragraphs B.8 and B.9 of this Trading Agreement and Order may be subject to additional enforcement action as may be deemed appropriate by the Commissioner in accordance with the Department's enforcement response policy.

13. No later than December 31<sup>st</sup> of each year, Respondents shall deduct an additional quantity of ozone season DERCs from the current balance of DERCs possessed by the Respondents and/or transfer an additional quantity of Allowances from the Respondents' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT000000300 in the CAIR NATS) such that the total of DERCS/Allowances deducted and/or transferred in accordance with this Paragraph is equal to:

Where actual daily fuel use pertains to operation of Tables 1 and 3 emissions units on days that the Connecticut eight hour ozone levels were forecasted to be "moderate to unhealthy for sensitive groups", "unhealthy for sensitive groups", "unhealthy", or "very unhealthy" during the previous Ozone Season.

14. At the end of each calendar year, the Respondent shall demonstrate that any Allowances used for compliance with this Trading Agreement and Order during the year satisfy the requirements of Paragraph B.3 and are surplus, quantifiable, enforceable and permanent. This shall be determined for the emissions units in each Non-Attainment Area by demonstrating that the actual, aggregate NOx emissions during the most recent control period, as reported to the United States Environmental Protection Agency, from the emission unit(s) to which the Allowances were originally allocated were equal to or less than the aggregate amount of Allowances allocated to such unit(s) by the State of Connecticut minus the aggregate amount of Allowances transferred or used for compliance with this and any other Trading Agreement and Order.

The Respondents shall also demonstrate that any DERCs generated and/or used in accordance with this Trading Agreement and Order are:

<u>Real</u> 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>Surplus</u> 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 NOx controls are in place and operating, and an appropriate tracking system is in place to monitor all data required to verify and quantify the creation of DERCs.

<u>Enforceable</u> because the DERCs were generated in accordance with the provisions of this or a prior Trading Agreement and Order issued by the Commissioner.

- 15. <u>Maintenance and Tune-up.</u> Not more than 2 years from the date of issuance of this Trading Agreement and Order, the Respondents shall perform maintenance and inspection of the emission units listed in Tables 1-3. Such maintenance and inspection shall include, but not be limited to, the following:
  - a. Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
  - b. Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice;
  - c. Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or

current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity;

- d. Make and keep records including, but not limited to, the following:
  - Demonstration that any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Tables 1-3 in accordance with Paragraph B.15 of this Trading Agreement and Order has been performed in accordance with the manufacturer's specifications or current good engineering practice,
  - ii. The date and a description of any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1-3 in accordance with Paragraph B.15 of this Trading Agreement and Order,
  - iii. The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1-3 in accordance with Paragraph B.15 of this Trading Agreement and Order,
  - iv. The operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Paragraph B.15 of this Trading Agreement and Order.

#### 16. Record Keeping;

- a. By the close of each calendar day, the Respondents shall record the actual fuel type and the actual quantity of each type of fuel in units of volume per day or MMbtu per day for each fuel used the preceding day in an emission unit described in this Trading Agreement and Order,
- b. On of before the first day of each calendar month, the Respondents shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on the first calendar day of that calendar month,
- c. On or before the first day of each calendar month, the Respondents shall record the number of Allowances and corresponding identification numbers and allocation control periods for all Allowances in its possession on the first calendar day of that calendar month,
- d. On or before the first day of each calendar month, the Respondents shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the preceding calendar month,
- e. On or before the first day of each calendar month, the Respondents shall

record the number of Allowances and corresponding identification numbers, purchase/sales dates, allocation years, and seller/buyer for all Allowances purchased or sold during the preceding calendar month,

- f. On or before the first day of each calendar month, the Respondents shall record the Estimated DERCs/Allowances Required for that calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order.
- g. On or before the twentieth calendar day of each calendar month, the Respondents shall record the Actual DERCs/Allowances Required for the preceding calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order;
- h. On or before January 31 of each calendar year, the Respondents shall record the quantity of DERCs deducted in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order for the preceding year. Such records shall include the serial number and vintage of each DERC deducted from the Respondents' current balance pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- i. On or before January 31 of each calendar year, the Respondents shall record the quantity of Allowances transferred in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order. Such records shall include the identification number and allocation control period of each Allowance transferred pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- j. Not more than ninety (90) days after the completion of each Non-Ozone Season, the Respondents shall record the Non-Ozone Season average NOx emission rate for the emission units described in Tables 1 and 2, the quantity of DERCs and/or allowances possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted and/or Allowances transferred in accordance with Paragraphs B.11 and B.12 of this Trading Agreement and Order.
- k. For each month of the Ozone season, the Respondents shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order satisfy the requirements of Paragraph B.2. Generator certification of this fact shall be sufficient.
- 1. On each day during the ozone season that the Respondents operate in accordance with Paragraph B.7 of this Trading Agreement and Order, the Respondents shall make and keep Records of all emission unit operation in accordance with Paragraph B.7 of this Trading Agreement and Order, including copies of any written correspondence from the Respondents' fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units.
- 17. Respondents shall retain records and supporting documentation required by this Trading Agreement and Order for a minimum of five years, commencing on the date such records were created. Respondents shall provide the records specified above to the Commissioner

within thirty (30) days of receipt of a written request from the Commissioner. All records shall be maintained in accordance with Sections 22a-174-4 and 22a-174-22 of the Regulations.

- 18. Reporting: No later than March 1 of every year after issuance of this Trading Agreement and Order, the Respondents shall submit to the Commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.16.a B.16.i, and B.16.k-B.16.m of this Trading Agreement and Order. Not later than July 30 of each calendar year, the Respondents shall submit a written report containing copies of all records required pursuant to Paragraph B.16.j of this Trading Agreement and Order. The Commissioner may prescribe the forms to be used for the submission of these reports. The Respondents shall submit these reports on such forms, if prescribed by the Commissioner.
- 19. <u>FLER Violation</u>. Violation of an established FLER shall subject Respondents to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs or Allowances shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date that FLER compliance is achieved as approved by the Commissioner shall be used. Notwithstanding this requirement, exceedance of any FLER contained in Table 1 is a violation in Paragraph B.5 of this Trading Agreement and Order subject to enforcement action in accordance with the Department of Environmental Protection's Enforcement Response Policy, in effect at the time of such violation.
- 20. <u>FLER Modification</u>. FLERs set forth in Tables 1 and 3 of this Trading Agreement and Order may be modified only after the consent of the Commissioner by written modification of this Trading Agreement and Order.
- 21. Emissions Testing. The Respondents shall perform emissions testing in accordance with Section 22a-174-22(k) of the Regulations for each emission unit described in Tables 1 and 3 of this Trading Agreement and Order that is not equipped with a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendix B&F or 40 CFR 75.
- 22. Control Technology Evaluation: Not more than 12 months from the date of issuance of this Trading Agreement and Order, the Respondents shall submit a control technology evaluation to reduce emissions of NOx from the emissions units described in Table 1-3 to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs. Such evaluation shall include but not be limited to the following:
  - A detailed description of all subject emissions units, currently installed emissions controls equipment and methods, all currently installed emissions monitoring systems;
  - b. A detailed description of any and all additional or alternative emissions control equipment and methods or, combinations thereof, that are capable of reducing NOx emissions from subject emissions units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or

otherwise acquiring Allowances or DERCs;

- c. An evaluation of capital costs, annual operating costs, and total annualized \$/ton costs associated with the installation and operation of any and all additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emissions from the subject units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- d. An estimated schedule for the design, procurement, installation and operation of any additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emissions from the subject units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- e. A detailed description of any adjustments and/or modifications that must be made to the emissions monitoring systems for the subject emission units in order to demonstrate compliance with, at least, Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs; and
- f. A detailed description of any collateral environmental impacts that will result as a direct consequence of the Respondents' use of additional/alternative emissions control equipment and methods to reduce NOx emissions to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs.
- 23. <u>Full compliance</u>. Respondents shall not be considered in full compliance with this Trading Agreement and Order until all actions required by this Trading Agreement and Order have been completed as approved and to the Commissioner's satisfaction.
- 24. Approvals. Respondents shall use best efforts to submit to the Commissioner all documents required by this Trading Agreement and Order in a complete and approvable form. If the Commissioner notifies Respondents that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondents shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this Trading Agreement and 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 Trading Agreement and Order. Nothing in this paragraph shall excuse noncompliance or delay.

- 25. <u>Definitions</u>. As used in this Trading Agreement and Order "Commissioner" means the Commissioner or a representative of the Commissioner; The date of "issuance" of this Trading Agreement and Order is the date the Trading Agreement and Order is deposited in the U.S. mail or personally delivered, whichever is earlier.
- 26. <u>Dates</u>. The date of submission to the Commissioner of any document required by this Trading Agreement and Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under Trading Agreement and 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 Trading Agreement and Order, the word "day" as used in this Trading Agreement and Order means calendar day. Any document or action which is required by this Trading Agreement and 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.
- 27. 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 an individual, employed by the Respondents, who satisfies the criteria set forth in Section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies and by the individual(s) responsible for actually preparing such document. Each individual who signs documents in accordance with this Paragraph 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 Section 53a-157b of the Connecticut General Statutes and any other applicable law."

- 28. <u>Noncompliance</u>. This Trading Agreement and 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 Trading Agreement and Order may subject Respondents to an injunction and penalties.
- 29. <u>False statements</u>. Any false statement in any information submitted pursuant to this Trading Agreement and Order may be punishable as a criminal offense under Section 53a-157b of the Connecticut General Statutes and any other applicable law.
- 30. Notice of transfer; liability of Respondents. Until Respondents have fully complied with this Trading Agreement and Order, Respondents shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Trading Agreement and Order or after obtaining a new mailing or location address. Respondents' 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.

- 31. Commissioner's powers. Nothing in this Trading 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 past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondents pursuant to this Trading Agreement and 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 Respondents to undertake further investigation or further action to prevent or abate violations or pollution.
- 32. <u>Respondents' obligations under law.</u> Nothing in this Trading Agreement and Order shall relieve Respondents of other obligations under applicable federal, state and local law.
- 33. <u>No assurance by Commissioner.</u> No provision of this Trading Agreement and Order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondents pursuant to this Trading Agreement and Order will result in compliance or prevent or abate pollution.
- 34. <u>Access to premises</u>. Any representative of the Department of Environmental Protection may enter the without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 35. No effect on rights of other persons. This Trading Agreement and Order neither creates nor affects any rights of persons or municipalities that are not parties to this Trading Agreement and Order.
- 36. <u>No Creation of Property Rights.</u> This Consent Order does not create any property rights with respect to these DERCs or Allowances.
- 37. Notice to Commissioner of changes. Within 15 days of the date Respondents become 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, Respondents shall submit the correct or omitted information to the Commissioner.
- 38. Notification of noncompliance. In the event that Respondents become 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, Respondents 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, Respondents 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 Respondents shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondents 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.

39. <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 this Trading Agreement and Order or in writing by the Commissioner, be directed to:

Supervisor Administrative Enforcement Group Engineering and Enforcement Division Bureau of Air Management Department of Environmental Protection 79 Elm Street, 5<sup>th</sup> Floor Hartford, Connecticut 06106 (860) 424-3702

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

Re	espondents
Signature:	
Type Name:	
Type Title:	
Date:	
Issued as a final consent order of the Commission	oner of the Department of Environmental Protection.
Gary S. Rose, Director Engineering & Enforcement Division Bureau of Air Management	Date

TOWN OF MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document

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

Certificat	tion of Mailing
	, 2010, at A.M./P.M., I mailed a certified copy of Trading Agreement and . 8300 to the following, by placing it in the [U.S. mail/interdepartmental
· · · · · · · · · · · · · · · · · · ·	, 2010, at A.M./P.M., I mailed a plain copy of Trading Agreement and . <b>8300</b> to the following, by placing it in the [U.S. mail/interdepartmental mail]:
Signature:	:
Name: Title:	
Date:	



# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



April 29, 2010

Peter W. Egan Director of Environmental Affairs & Development Connecticut Resources Recovery Authority 100 Constitution Plaza, 6th Floor Hartford, CT 06103

Re: Nitrogen Oxide ("NOx") Trading Agreement and Order #8302

Dear Mr. Egan:

Enclosed is a copy of Trading Agreement and Order (TA&O) #8302. The TA&O is now enforceable by the State of Connecticut.

Over the next few months the Department will be taking steps to revise the annual reporting forms that you have become familiar with over the years to facilitate compliant submission of the reports required under the TA&O. When these forms are complete, electronic versions of the forms and instruction will be provided for your use. Until then, NOx Trading Program participants may generate their own forms for the reports required under the TA&O.

The terms of the new TA&O need to be incorporated into the Title V Operating Permit for your facility, if you have such. To do so, please kindly submit an application for a minor permit modification to your existing Title V Permit in accordance with Section 22a-174-2a of the Regulations of Connecticut State Agencies.

If your facility is likely to violate the TA&O due to an inability to acquire DERCs or Allowances, you should submit notice in accordance with the Notice of Noncompliance paragraph of this TA&O. In such Notice, you should demonstrate that all reasonable efforts to procure DERCs and/or Allowances were exhausted prior to submission of the Notice.

Should you have any questions regarding this letter or the TA&O, please contact me at (860) 424-3408.

Sincerely,

aimeson Sinclair

Supervising Air Pollution Control Engineer

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# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



	)	
State of Connecticut	)	Trading Agreement &
&	)	Order No. 8302
The Connecticut Resources Recovery	)	
Authority (CRRA)	)	

WHEREAS, the Commissioner of Environmental Protection ("Commissioner") and CRRA ("Respondent") agree that the Commissioner may issue a permit or order to allow emissions trading in accordance with Section 22a-174-22(j) of the Regulations of Connecticut State Agencies ("Regulations") as a method of compliance with Section 22a-174-22 of the Regulations:

- A. At the request and with the agreement of Respondent, the Commissioner finds the following:
  - 1. This Trading Agreement and Order supersedes Trading Agreement and Order 8116B and all subsequent modifications thereto.
  - 2. Respondent is a corporation that owns and/or operates an electricity generation facility at Reserve-Maxim Road, Hartford, Connecticut ("facility").
  - 3. At the facility, Respondent operates the emission units described in Table 1 below, which are subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations") pertaining to the control of Nitrogen Oxide (NOx) emissions.
  - 4. For the purposes of this Trading Agreement and Order, the following definitions shall apply:
    - a. Allowable Emission Limit (AEL): the applicable NOx emission limit set forth in Section 22a-174-22(e) or Section 22a-174-22(f) of the Regulations corresponding to the emission units described in Table 1 of this Trading Agreement and Order
    - b. Allowance: CAIR NOx Ozone Season allowance originally allocated to a CAIR NOx Ozone Season unit, as defined in Section 22a-174-22c of the Regulations, located in the State of Connecticut or a NOx allowance designated specifically for compliance during Ozone Season control periods and allocated to a CAIR NOx Ozone Season unit located in the State of Connecticut after the date of issuance of this Trading Agreement and Order.
    - c. CAIR NOx Ozone Season unit: shall be as defined in Section 22a-174-22c of the Regulations

- d. Discrete Emission Reduction Credit (DERC): a unit that was generated and approved by the Commissioner in accordance with a Trading Agreement and Order issued by the Commissioner or generated and approved by the Commissioner in accordance with a protocol submitted and approved pursuant to Section 22a-174-38 of the Regulations. Such unit is equivalent to 1 ton of NOx emissions and may be used for emissions trading in accordance with Section 22a-174-22(j) of the Regulations, subject to the provisions of Part B of this Trading Agreement and Order.
- e. CAIR NATS: "CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System" as defined in 40 CFR 96.302.
- f. Non-Attainment Area: means the geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (Section 107 of the Act). Pursuant to 40 CFR 81.307, the designated ozone non-attainment areas in the State of Connecticut are: the Greater Connecticut, CT area and the New York-Northern New Jersey-Long Island, NY-NJ-CT area.
- g. Ozone Season: May 1 through September 30 of each calendar year or such period as defined by the U.S. Environmental Protection Agency, subsequent to the issuance of this Trading Agreement and Order.
- h. Non-Ozone Season: the period of consecutive calendar months between two successive Ozone Seasons

UNIT- reg. or permit no.		Table 1 CAIR NOx Ozone Season Units NOx Emission Rates, FLERs and Allowable Limits							
	Fuel	Heat Input in MMBtu/hr	Stack Test Rate in lbs/MMBtu	Stack Test Rate in ppmvd	FLER in lb/MMBtu	Allowable Emission Limit (AEL) in lbs/MMBtu	Allowable Emission Limit (AEL) in ppmvd	Date of Last Stack Test	Date of Next Stack Test
11A Reg.# 075-0260	#2 oil or other distillate oil	256	0.675	132.5	0.81	0.289	75	11/15/09	11/15/14
11B Reg.# 075-0261	#2 oil or other distillate oil	256	0.71	138.4	0.81	0.289	75	11/15/09	11/15/14
12A Reg.# 075-0262	#2 oil or other distillate oil	256	0.744	124.8	0.81	0.289	75	11/14/09	11/14/14
12B Reg.# 075-0263	#2 oil or other distillate oil	256	0.706	114.8	0.81	0.289	75	11/14/09	11/14/14
13A Reg.# 075-0264	#2 oil or other distillate oil	256	0.750	132.5	0.81	0.289	75	11/8/09	11/8/14
13B Reg.# 075-0265	#2 oil or other distillate oil	256	0.733	130.3	0.81	0.289	75	11/8/09	11/8/14
14A Reg.# 075-0266	#2 or other distillate oil	256	0.755	124.0	0.81	0.289	75	11/7/09	11/7/14
14B Reg.# 075-0267	#2 oil or other distillate oil	256	0.771	136.1	0.81	0.289	75	11/7/09	11/7/14

- 5. The Respondent agrees that the actual NOx emissions rate from the emission units described in Table 1, at times, exceeds the corresponding AEL.
- 6. Pursuant to Section 22a-174-22(j) of the Regulations, Respondent proposes to comply with Section 22a-174-22(e) of the Regulations, when operating the emission units described in Table 1 by means of emissions trading in accordance with the provisions of this Trading Agreement and Order.
- 7. The Respondent proposes to use the full load emission rate ("FLER") identified in Table 1 for the purposes of calculating Actual DERCs/Allowances Required.

The Commissioner, in accordance with Section 22a-174-22(j) of the Regulations hereby allows Respondent to comply with Section 22a-174-22 of the Regulations at the facility through the use of emissions trading, subject to the provisions of this Trading Agreement and Order.

- B. With the agreement of Respondent, the Commissioner, acting under Sections 22a-6, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes, hereby orders Respondent as follows:
  - 1. Expiration of this Trading Agreement and Order: The Respondent may only use emissions trading, subject to the provisions of this Trading Agreement and Order, until the date of expiration of this Trading Agreement and Order. The date of expiration of this Trading Agreement and Order shall be the earlier of:
    - a. May 31, 2014;
    - b. The date upon which the Respondent demonstrates to the Commissioner's satisfaction that actual NOx emissions from the emission units, at all times, does not exceed the corresponding AEL(s);
    - c. The date specified in any written notice from the Commissioner stating that the Respondent is no longer allowed to use emissions trading due to the Respondent's violation of any provision of this Trading Agreement and Order; or
    - d. The date specified in any written notice from the Commissioner, notifying the Respondent that the Commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:
      - (i) the promulgation of an Act, Statute, or Regulations; or
      - (ii) the issuance of a judgment or court order.
  - 2. Respondent shall obtain and use sufficient DERCs and/or Allowances in such a manner as to comply with Paragraphs B.8 and B.9 of this Trading Agreement and Order. All Allowances used must come from an emission unit that is within the same ozone Non-Attainment area as the Respondent. Any Allowances used to comply with this Trading Agreement and Order must be allocated for the control period that occurs during the same year those allowances are

The Connecticut Resources Recovery Authority used

for compliance with this Trading Agreement and Order. All DERCs used during the Ozone Season for each emissions unit described in Table 1, shall have been generated during an Ozone Season.

- 3. Prior to using Allowances in accordance with Paragraphs B.8 and B.9 of this Trading Agreement and Order the Respondent shall obtain a General and/or Compliance Account in the CAIR NATS.
- 4. <u>Vintage Restriction</u>. For the purposes of compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order, DERCs shall only remain valid for five (5) calendar years from the year of the generation of such DERCs. DERCs older than five (5) calendar years from their creation are not valid for use for compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order.
- 5. Respondent shall not cause or allow actual NOx emissions from the operation of the emission units described in Table 1 of this Trading Agreement and Order to exceed the corresponding FLERs. Compliance with the corresponding FLERs specified in Table 1 shall be determined based on the results of emissions testing performed in accordance with Section 22a-174-22 of the Regulations or NOx emissions monitored and recorded by a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendices B&F or 40 CFR 75.
- 6. Ozone Season Fuel Use Restriction: Notwithstanding the provisions of Paragraph B.2 of this Trading Agreement and Order, when operating the emission unit described in Table 1 during the Ozone Season, the Respondent shall operate that unit while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are authorized to burn in accordance with Departmental permit, registration, or applicable regulation.
- 7. Notwithstanding Paragraph B.6 of this Trading Agreement and Order, during the Ozone Season, the Respondent may operate the emission units described above on fuels that result in higher emissions of NOx, if either:
  - a. the availability of fuel oil that complies with Paragraph B.6 is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
  - b. the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Respondent and the gaseous fuel supplier.
- 8. <u>DERC/Allowance Use</u>. On the first day of each calendar month, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Actual DERCs Required and/or Actual Allowances Required in that month. Compliance with Paragraph B.8 of this Trading Agreement and Order shall be determined as follows:

a. Before the first day of each month, Respondent shall estimate DERCs and/or Allowances required for such calendar month for the emission unit described in Table 1 as follows:

#### Estimated DERCs/Allowances Required =

{(Estimated fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))}÷2000 lbs/ton

#### Where:

- AEL = Allowable Emission limit, as defined in Paragraph A.4 of this Trading Agreement and Order
- Discount (0.95) = 5% design margin applied to the AEL.
- b. No later than the twentieth day of each month, Respondent shall calculate actual DERCs and/or Allowances used in the preceding calendar month for the emission unit described in Table 1 as follows:

#### Actual DERCs/Allowances Required =

 $\{(Monthly fuel use MMBtu) \times ((FLER lb/mmbtu) - (0.95 \times AEL))\} \div 2000 lbs/ton$ 

- 9. Non-Ozone Season DERC/Allowance Use. In addition to the requirements of Paragraph B.8 of this Trading Agreement and Order, on the first day of each Non-Ozone Season, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Non-Ozone Season Actual DERCs/Allowances Required for that Non-Ozone Season. Compliance with Paragraph B.9 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each Non-Ozone Season, Respondents shall estimate DERCs and/or Allowances required for that Non-Ozone Season for the emission unit described in Table 1 based on the average actual NOx emission rate from the emission unit and an emission limit of 0.15 lb/mmbtu as follows:

#### Estimated Non-Ozone Season DERCs/Allowances Required =

{(Estimated Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))  $\div$  2000 lbs/ton- $\Sigma$ ( Estimated DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

b. No later than thirty (30) days after the end of each Non-Ozone Season, the Respondents shall calculate Actual Non-Ozone Season DERCs and/or Allowances used during that Non-Ozone Season for each emission unit as follows:

#### Actual Non-Ozone Season DERCs/Allowances Required =

{(Actual Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton- $\Sigma$ ( DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

- 10. On or before January 31, of each calendar year, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Accounts to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such
  - that the total is equal to the sum of Actual DERCs/Allowances Required pursuant to Paragraph B.8 of this Trading Agreement and Order for the preceding calendar year, rounded up to the nearest whole ton.
- 11. Not more than ninety (90) days after the completion of the Non-Ozone Season, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Notwithstanding the control period limitations of Paragraph B.2 of this Trading Agreement and Order, Allowances used to comply with this Paragraph for a Non-Ozone Season must have been originally allocated for the control periods that correspond to the same calendar years within that Non-Ozone Season.
- 12. <u>Doubling:</u> If the Actual DERCs/Allowances Required for any month, determined in accordance with Paragraph B.8, exceeds the quantity of DERCs and/or Allowances in the Respondent's possession on the first day of that month, then in addition to the deduction or transfer specified in Paragraph B.10, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual DERCs/Allowances Required for that month. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.10 of this Trading Agreement and Order.

If the Actual DERCs/Allowances Required for any Non-Ozone Season, determined in accordance with Paragraph B.9, exceeds the quantity of DERCs and/or Allowances in the Respondent's possession on the first day of the Non-Ozone Season, then in addition to the deduction or transfer specified in Paragraphs B.11, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.11 of this Trading Agreement and Order.

Notwithstanding the provisions of Paragraph B.12 of this Trading Agreement and Order, any violation of Paragraphs B.8 and B.9 of this Trading Agreement and Order may be subject to additional enforcement action as may be deemed appropriate by the Commissioner in accordance with the Department's enforcement response policy.

13. No later than December 31<sup>st</sup> of each year, Respondent shall deduct an additional quantity of ozone season DERCs from the current balance of DERCs possessed by the Respondent and/or transfer an additional quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total of DERCS/Allowances deducted and/or transferred in accordance with this Paragraph is equal to:

6 x Σ{(Actual Daily Fuel Use in MMBtu) x ((FLER) - (0.95 x AEL))} ÷2000 lbs/ton

Where actual daily fuel use pertains to operation of Table 1 emissions units on days that the Connecticut eight hour ozone levels were forecasted to be "moderate to unhealthy for sensitive groups", "unhealthy for sensitive groups", "unhealthy", or "very unhealthy" during the previous Ozone Season.

- 14. At the end of each calendar year, the Respondent shall demonstrate that any Allowances used for compliance with this Trading Agreement and Order during the year are surplus, quantifiable, enforceable and permanent. This shall be determined by demonstrating that the actual NOx emissions during the ozone season, as reported to the United States Environmental Protection Agency, from the emission unit to which the Allowances were originally allocated were equal to or less than the amount of Allowances allocated to such unit by the State of Connecticut minus the Allowances used for compliance with this Trading Agreement and Order.
- 15. <u>Maintenance and Tune-up.</u> Not more than 1 year from the date of issuance of this Trading Agreement and Order, the Respondent shall perform maintenance and inspection of the emission unit listed in Table 1. Such maintenance and inspection shall include, but not be limited to, the following:
  - a. Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
  - b. Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice;
  - c. Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity;
  - d. Make and keep records including, but not limited to, the following:

- i. Demonstration that any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order has been performed in accordance with the manufacturer's specifications or current good engineering practice,
- ii. The date and a description of any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order,
- iii. The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order,
- iv. The operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Paragraph B.15 of this Trading Agreement and Order.

#### 16. Record Keeping;

- a. By the close of each calendar day, the Respondent shall record the actual fuel type and the actual quantity of each type of fuel in units of volume per day or MMbtu per day for each fuel used on the preceding day in an emission unit described in this Trading Agreement and Order;
- b. On of before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on the first calendar day of that calendar month,
- c. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers and allocation control periods for all Allowances in its possession on the first calendar day of that calendar month,
- d. On or before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the preceding calendar month,
- e. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers, purchase/sales dates, allocation years, and seller/buyer for all Allowances purchased or sold during the preceding calendar month,

- f. On or before the first day of each calendar month, the Respondent shall record the Estimated DERCs/Allowances Required for that calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order.
- g. On or before the twentieth calendar day of each calendar month, the Respondent shall record the Actual DERCs/Allowances Required for the preceding calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order;
- h. On or before January 31 of each calendar year, the Respondent shall record the quantity of DERCs deducted in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order for the preceding year. Such records shall include the serial number and vintage of each DERC deducted from the Respondents current balance pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- i. On or before January 31 of each calendar year, the Respondent shall record the quantity of Allowances transferred in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order. Such records shall include the identification number and allocation control period of each Allowance transferred pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- j. Not more than ninety (90) days after the completion of each Non-Ozone Season, the Respondent shall record the Non-Ozone Season average NOx emission rate for the emission unit described in Table 1, the quantity of DERCs and/or allowances possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted and/or Allowances transferred in accordance with Paragraphs B.11 and B.12 of this Trading Agreement and Order.
- k. For each month of the Ozone season, the Respondent shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order satisfy the requirements of Paragraph B.2. Generator certification of this fact shall be sufficient.
- 1. On each day during the ozone season that the Respondent operates in accordance with Paragraph B.7 of this Trading Agreement and Order, the Respondent shall make and keep Records of all emission unit operation in accordance with Paragraph B.7 of this Trading Agreement and Order, including copies of any written correspondence from the Respondent's fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units.

- 17. Respondent shall retain records and supporting documentation required by this Trading Agreement and Order for a minimum of five years, commencing on the date such records were created. Respondent shall provide the records specified above to the Commissioner within thirty (30) days of receipt of a written request from the Commissioner. All records shall be maintained in accordance with Sections 22a-174-4 and 22a-174-22 of the Regulations.
- 18. Reporting: No later than March 1 of every year after issuance of this Trading Agreement and Order, the Respondent shall submit to the Commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.16.a B.16.i, and B.16.k- B.16.m of this Trading Agreement and Order. Not later than July 30 of each calendar year, the Respondent shall submit a written report containing copies of all records required pursuant to Paragraph B.16.j of this Trading Agreement and Order. The Commissioner may prescribe the forms to be used for the submission of these reports. The Respondent shall submit these reports on such forms, if prescribed by the Commissioner.
- 19. FLER Violation. Violation of an established FLER shall subject Respondent to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs or Allowances shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date that FLER compliance is achieved as approved by the Commissioner shall be used. Notwithstanding this requirement, exceedance of any FLER contained in Table 1 is a violation in Paragraph B.5 of this Trading Agreement and Order subject to enforcement action in accordance with the Department of Environmental Protection's Enforcement Response Policy, in effect at the time of such violation.
- 20. <u>FLER Modification</u>. FLERs set forth in Table 1 of this Trading Agreement and Order may be modified only after the consent of the Commissioner by written modification of this Trading Agreement and Order.
- 21. Emissions Testing. The Respondent shall perform emissions testing in accordance with Section 22a-174-22(k) of the Regulations for each emission unit described in Table 1 of this Trading Agreement and Order that is not equipped with a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendix B&F or 40 CFR 75.
- 22. Control Technology Evaluation: Not more than 9 months from the date of issuance of this Trading Agreement and Order, the Respondent shall submit a control technology evaluation for the emissions units described in Table 1 to reduce emissions of NOx to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs. Such evaluation shall include but not be limited to the following:
  - a. A detailed description of all subject emissions units, currently installed emissions controls equipment and methods, all currently installed emissions monitoring systems;

- b. A detailed description of any and all additional or alternative emissions control equipment and methods or, combinations thereof, that are capable of reducing NOx emissions from subject emissions units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- c. An evaluation of capital costs, annual operating costs, and total annualized \$/ton costs associated with the installation and operation of any and all additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- d. An estimated schedule for the design, procurement, installation and operation of any additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject units to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- e. A detailed description of any adjustments and/or modifications that must be made to the emissions monitoring systems for the subject emission units in order to demonstrate compliance with, at least, Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs; and
- f. A detailed description of any collateral environmental impacts that will result as a direct consequence of the Respondent's use of additional/alternative emissions control equipment and methods to reduce NOx emissions to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs.
- 23. <u>Full compliance</u>. Respondent shall not be considered in full compliance with this Trading Agreement and Order until all actions required by this Trading Agreement and Order have been completed as approved and to the Commissioner's satisfaction.
- 24. <u>Approvals</u>. Respondent shall use best efforts to submit to the Commissioner all documents required by this Trading Agreement and 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 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this Trading Agreement

and 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 Trading Agreement and Order. Nothing in this paragraph shall excuse noncompliance or delay.

- 25. <u>Definitions</u>. As used in this Trading Agreement and Order "Commissioner" means the Commissioner or a representative of the Commissioner; The date of "issuance" of this Trading Agreement and Order is the date the Trading Agreement and Order is deposited in the U.S. mail or personally delivered, whichever is earlier.
- 26. <u>Dates</u>. The date of submission to the Commissioner of any document required by this Trading Agreement and Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under Trading Agreement and 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 Trading Agreement and Order, the word "day" as used in this Trading Agreement and Order means calendar day. Any document or action which is required by this Trading Agreement and 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.
- 27. 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 Respondent or, if Respondent is not an individual, by an individual, employed by the Respondent, who satisfies the criteria set forth in Section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies and by the individual(s) responsible for actually preparing such document. Each individual who signs documents in accordance with this Paragraph 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 Section 53a-157b of the Connecticut General Statutes and any other applicable law."
- 28. <u>Noncompliance</u>. This Trading Agreement and 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 Trading Agreement and Order may subject Respondent to an injunction and penalties.
- 29. <u>False statements</u>. Any false statement in any information submitted pursuant to this Trading Agreement and Order may be punishable as a criminal offense under Section 53a-157b of the Connecticut General Statutes and any other applicable law.

- 30. Notice of transfer; liability of Respondent. Until Respondent has fully complied with this Trading Agreement and Order, Respondent shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Trading Agreement and Order or after obtaining a new mailing or location address. Respondent'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.
- 31. Commissioner's powers. Nothing in this Trading 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 past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this Trading Agreement and 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.
- 32. <u>Respondent's obligations under law.</u> Nothing in this Trading Agreement and Order shall relieve Respondent of other obligations under applicable federal, state and local law.
- 33. No assurance by Commissioner. No provision of this Trading Agreement and 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 Trading Agreement and Order will result in compliance or prevent or abate pollution.
- 34. <u>Access to premises</u>. Any representative of the Department of Environmental Protection may enter the without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 35. No effect on rights of other persons. This Trading Agreement and Order neither creates nor affects any rights of persons or municipalities that are not parties to this Trading Agreement and Order.
- 36. No Creation of Property Rights. This Consent Order does not create any property rights with respect to these DERCs or Allowances.
- 37. Notice to Commissioner of changes. Within 15 days of the date Respondent 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, Respondent shall submit the correct or omitted information to the Commissioner.

- 38. Notification of noncompliance. In the event that Respondent 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, 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 ten (10) 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.
- 39. <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 this Trading Agreement and Order or in writing by the Commissioner, be directed to:

Supervisor Administrative Enforcement Group Engineering and Enforcement Division Bureau of Air Management Department of Environmental Protection 79 Elm Street, 5<sup>th</sup> Floor Hartford, Connecticut 06106 (860) 424-3702 Respondent consents to the issuance of this Trading Agreement and Order without further notice. The undersigned certifies that he/she is fully authorized to enter into this Trading Agreement and Order and to legally bind Respondent to the terms and conditions of the Trading Agreement and Order.

> The Connecticut Resources **Recovery Authority**

Type Name: Peter W. Egan

Type Title: Director of Environmental Affairs and Development

Issued as a final consent order of the Commissioner of the Department of Environmental Protection.

S. Rose, Director

Engineering & Enforcement Division

Bureau of Air Management

CITY OF HARTFORD LAND RECORDS MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document



# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



April 29, 2010

Mr. James A. Ginnetti, V.P.-Hydro &Wind FirstLight Power Resources Inc. 20 Church Street, 16th Floor Hartford, CT 06103

Re: Nitrogen Oxide ("NOx") Trading Agreement and Order # 8303

Dear Mr. Ginnetti:

Enclosed is a copy of Trading Agreement and Order (TA&O) #8303. The TA&O is now enforceable by the State of Connecticut.

Over the next few months the Department will be taking steps to revise the annual reporting forms that you have become familiar with over the years to facilitate compliant submission of the reports required under the TA&O. When these forms are complete, electronic versions of the forms and instruction will be provided for your use. Until then, NOx Trading Program participants may generate their own forms for the reports required under the TA&O.

The terms of the new TA&O need to be incorporated into the Title V Operating Permit for your facility, if you have such. To do so, please kindly submit an application for a minor permit modification to your existing Title V Permit in accordance with Section 22a-174-2a of the Regulations of Connecticut State Agencies.

If your facility is likely to violate the TA&O due to an inability to acquire DERCs or Allowances, you should submit notice in accordance with the Notice of Noncompliance paragraph of this TA&O. In such Notice, you should demonstrate that all reasonable efforts to procure DERCs and/or Allowances were exhausted prior to submission of the Notice.

Should you have any questions regarding this letter or the TA&O, please contact me at (860) 424-3462.

Sincerely.

Michael LaFleur

Air Pollution Control Engineer 3



# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



	)	
State of Connecticut	)	Trading Agreement &
&	)	Order No. 8303
FirstLight Hydro Generating Company	)	
	)	

WHEREAS, the Commissioner of Environmental Protection ("Commissioner") and FirstLight Hydro Generating Company ("Respondent") agrees that the Commissioner may issue a permit or order to allow emissions trading in accordance with Section 22a-174-22(j) of the Regulations of Connecticut State Agencies ("Regulations") as a method of compliance with Section 22a-174-22 of the Regulations:

- A. At the request and with the agreement of Respondent, the Commissioner finds the following:
  - 1. This Trading Agreement and Order supersedes Trading Agreement and Order 8279 and all subsequent modifications thereto.
  - 2. Respondent is a corporation that owns and/or operates an electricity generation facility at Tunnel Road, in Preston, Connecticut ("facility").
  - 3. At the facility, Respondent operates the emission unit described in Table 1 below, which is subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations") pertaining to the control of Nitrogen Oxide (NOx) emissions.
  - 4. For the purposes of this Trading Agreement and Order, the following definitions shall apply:
    - a. Allowable Emission Limit (AEL): the applicable NOx emission limit set forth in Section 22a-174-22(e) or Section 22a-174-22(f) of the Regulations corresponding to the emission unit described in Table 1 of this Trading Agreement and Order
    - b. Allowance: CAIR NOx Ozone Season allowance originally allocated to a CAIR NOx Ozone Season unit, as defined in Section 22a-174-22c of the Regulations, located in the State of Connecticut or a NOx allowance designated specifically for compliance during Ozone Season control periods and allocated to a CAIR NOx Ozone Season unit located in the State of Connecticut after the date of issuance of this Trading Agreement and Order.
    - c. CAIR NOx Ozone Season unit: shall be as defined in Section 22a-174-22c of the Regulations

- d. Discrete Emission Reduction Credit (DERC): a unit that was generated and approved by the Commissioner in accordance with a Trading Agreement and Order issued by the Commissioner or generated and approved by the Commissioner in accordance with a protocol submitted and approved pursuant to Section 22a-174-38 of the Regulations. Such unit is equivalent to 1 ton of NOx emissions and may be used for emissions trading in accordance with Section 22a-174-22(j) of the Regulations, subject to the provisions of Part B of this Trading Agreement and Order.
- e. CAIR NATS: "CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System" as defined in 40 CFR 96.302.
- f. Non-Attainment Area: means the geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (Section 107 of the Act). Pursuant to 40 CFR 81.307, the designated ozone non-attainment areas in the State of Connecticut are: the Greater Connecticut, CT area and the New York-Northern New Jersey-Long Island, NY-NJ-CT area.
- g. Ozone Season: May 1 through September 30 of each calendar year or such period as defined by the U.S. Environmental Protection Agency, subsequent to the issuance of this Trading Agreement and Order.
- h. Non-Ozone Season: the period of consecutive calendar months between two successive Ozone Seasons.

Table 1 CAIR NOx Ozone Season Units NOx Emission Rates, FLERs and Allowable Limits (lbs/MMBtu, unless otherwise noted)								
UNIT- reg. or permit no.	Fuel	FLER in lbs/mmbtu	Allowable Emission Limit (AEL) in lbs/mmbtu	AEL in ppmvd	Stack Test Rate in Ibs/MMBtu	Stack test rate in ppmvd	Date of Last Stack Test	Date of Next Stack Test
Tunnel Road- Preston 10	other oil	0.72	.29	75	0.698	119.6	3/29/2006	3/29/2011

- 5. The Respondent agrees that the actual NOx emissions rate from the emission unit described in Table 1, at times, exceeds the corresponding AEL.
- 6. Pursuant to Section 22a-174-22(j) of the Regulations, Respondent proposes to comply with Section 22a-174-22(e) of the Regulations, when operating the emission unit described in Table 1 by means of emissions trading in accordance with the provisions of this Trading Agreement and Order.

7. The Respondent proposes to use the full load emission rate ("FLER") identified in Table 1 for the purposes of calculating Actual DERCs/Allowances Required.

The Commissioner, in accordance with Section 22a-174-22(j) of the Regulations hereby allows Respondent to comply with Section 22a-174-22 of the Regulations at the facility through the use of emissions trading, subject to the provisions of this Trading Agreement and Order.

- B. With the agreement of Respondent, the Commissioner, acting under Sections 22a-6, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes, hereby orders Respondent as follows:
  - 1. Expiration of this Trading Agreement and Order: The Respondent may only use emissions trading, subject to the provisions of this Trading Agreement and Order, until the date of expiration of this Trading Agreement and Order. The date of expiration of this Trading Agreement and Order shall be the earlier of:
    - a. May 31, 2014;
    - b. The date upon which the Respondent demonstrates to the Commissioner's satisfaction that actual NOx emissions from the emission unit, at all times, does not exceed the corresponding AEL(s);
    - c. The date specified in any written notice from the Commissioner stating that the Respondent is no longer allowed to use emissions trading due to the Respondent's violation of any provision of this Trading Agreement and Order; or
    - d. The date specified in any written notice from the Commissioner, notifying the Respondent that the Commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:
      - (i) the promulgation of an Act, Statute, or Regulations; or
      - (ii) the issuance of a judgment or court order.
  - 2. Respondent shall obtain and use sufficient DERCs and/or Allowances in such a manner as to comply with Paragraphs B.8 and B.9 of this Trading Agreement and Order. All Allowances used must come from an emission unit that is within the same ozone nonattainment area as the Respondent. Any Allowances used to comply with this Trading Agreement and Order must be allocated for the control period that occurs during the same year those allowances are used for compliance with this Trading Agreement and Order. All DERCs used during the Ozone Season for each emissions unit described in Table 1, shall have been generated during an Ozone Season.
  - 3. Prior to using Allowances in accordance with Paragraphs B.8 and B.9 of this Trading Agreement and Order the Respondent shall obtain a General and/or Compliance Account in the CAIR NATS.

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- 4. <u>Vintage Restriction</u>. For the purposes of compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order, DERCs shall only remain valid for five (5) calendar years from the year of the generation of such DERCs. DERCs older than five (5) calendar years from their creation are not valid for use for compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order.
- 5. Respondent shall not cause or allow actual NOx emissions from the operation of the emission units described in Table 1 of this Trading Agreement and Order to exceed the corresponding FLERs. Compliance with the corresponding FLERs specified in Table 1 shall be determined based on the results of emissions testing performed in accordance with Section 22a-174-22 of the Regulations or NOx emissions monitored and recorded by a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendices B&F or 40 CFR 75.
- 6. Ozone Season Fuel Use Restriction: Notwithstanding the provisions of Paragraph B.2 of this Trading Agreement and Order, when operating the emission unit described in Table 1 during the Ozone Season, the Respondent shall operate that unit while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are authorized to burn in accordance with Departmental permit, registration, or applicable regulation.
- 7. Notwithstanding Paragraph B.6 of this Trading Agreement and Order, during the Ozone Season, the Respondent may operate the emission units described above on fuels that result in higher emissions of NOx, if either:
  - a. the availability of fuel oil that complies with Paragraph B.6 is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
  - b. the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Respondent and the gaseous fuel supplier.
- 8. <u>DERC/Allowance Use</u>. On the first day of each calendar month, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Actual DERCs Required and/or Actual Allowances Required in that month. Compliance with Paragraph B.8 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each month, Respondent shall estimate DERCs and/or Allowances required for such calendar month for the emission unit described in Table 1 as follows:

Estimated DERCs/Allowances Required =

{(Estimated fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))}÷2000 lbs/ton

#### Where:

- AEL = Allowable Emission limit, as defined in Paragraph A.4 of this Trading Agreement and Order
- <u>Discount (0.95)</u> = 5% design margin applied to the AEL.
- b. No later than the twentieth day of each month, Respondent shall calculate actual DERCs and/or Allowances used in the preceding calendar month for the emission unit described in Table 1 as follows:

#### Actual DERCs/Allowances Required =

 $\{(Monthly fuel use MMBtu) \times ((FLER lb/mmbtu) - (0.95 \times AEL))\} \div 2000 lbs/ton$ 

- 9. Non-Ozone Season DERC/Allowance Use. In addition to the requirements of Paragraph B.8 of this Trading Agreement and Order, on the first day of each Non-Ozone Season, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Non-Ozone Season Actual DERCs/Allowances Required for that Non-Ozone Season. Compliance with Paragraph B.9 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each Non-Ozone Season, Respondents shall estimate DERCs and/or Allowances required for that Non-Ozone Season for the emission unit described in Table 1 based on the average actual NOx emission rate from the emission unit and an emission limit of 0.15 lb/mmbtu as follows:

#### Estimated Non-Ozone Season DERCs/Allowances Required =

 $\{(Estimated Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))\} \div 2000 lbs/ton-<math>\Sigma$ ( Estimated DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

b. No later than thirty (30) days after the end of each Non-Ozone Season, the Respondents shall calculate Actual Non-Ozone Season DERCs and/or Allowances used during that Non-Ozone Season for each emission unit as follows:

#### Actual Non-Ozone Season DERCs/Allowances Required =

{(Actual Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton– $\Sigma$ ( DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

- 10. On or before January 31, of each calendar year, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Accounts to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to the sum of Actual DERCs/Allowances Required pursuant to Paragraph B.8 of this Trading Agreement and Order for the preceding calendar year, rounded up to the nearest whole ton.
- 11. Not more than ninety (90) days after the completion of the Non-Ozone Season, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Notwithstanding the control period limitations of Paragraph B.2 of this Trading Agreement and Order, Allowances used to comply with this Paragraph for a Non-Ozone Season must have been originally allocated for the control periods that correspond to the same calendar years within that Non-Ozone Season.
- 12. <u>Doubling:</u> If the Actual DERCs/Allowances Required for any month, determined in accordance with Paragraph B.8, exceeds the quantity of DERCs and/or Allowances in the Respondent's possession on the first day of that month, then in addition to the deduction or transfer specified in Paragraph B.10, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual DERCs/Allowances Required for that month. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.10 of this Trading Agreement and Order.

If the Actual DERCs/Allowances Required for any Non-Ozone Season, determined in accordance with Paragraph B.9, exceeds the quantity of DERCs and/or Allowances in the Respondent's possession on the first day of the Non-Ozone Season, then in addition to the deduction or transfer specified in Paragraphs B.11, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.11 of this Trading Agreement and Order.

Notwithstanding the provisions of Paragraph B.12 of this Trading Agreement and Order, any violation of Paragraphs B.8 and B.9 of this Trading Agreement and Order may be subject to additional enforcement action as may be deemed appropriate by the Commissioner in accordance with the Department's enforcement response policy.

13. No later than December 31<sup>st</sup> of each year, Respondent shall deduct an additional quantity of ozone season DERCs from the current balance of DERCs possessed by the Respondent and/or transfer an additional quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total of DERCS/Allowances deducted and/or transferred in accordance with this Paragraph is equal to:

6 x Σ{(Actual Daily Fuel Use in MMBtu) x ((FLER) - (0.95 x AEL))} ÷2000 lbs/ton

Where actual daily fuel use pertains to operation of Table 1 emissions units on days that the Connecticut eight hour ozone levels were forecasted to be "moderate to unhealthy for sensitive groups", "unhealthy for sensitive groups", "unhealthy", or "very unhealthy" during the previous Ozone Season.

- 14. At the end of each calendar year, the Respondent shall demonstrate that any Allowances used for compliance with this Trading Agreement and Order during the year are surplus, quantifiable, enforceable and permanent. This shall be determined by demonstrating that the actual NOx emissions during the ozone season, as reported to the United States Environmental Protection Agency, from the emission unit to which the Allowances were originally allocated were equal to or less than the amount of Allowances allocated to such unit by the State of Connecticut minus the Allowances used for compliance with this Trading Agreement and Order.
- 15. <u>Maintenance and Tune-up.</u> Not more than 1 year from the date of issuance of this Trading Agreement and Order, the Respondent shall perform maintenance and inspection of the emission unit listed in Table 1. Such maintenance and inspection shall include, but not be limited to, the following:
  - Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
  - b. Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice;
  - c. Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity;
  - d. Make and keep records including, but not limited to, the following:
    - Demonstration that any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order

has been performed in accordance with the manufacturer's specifications or current good engineering practice,

- The date and a description of any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order.
- iii. The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 1 in accordance with Paragraph B.15 of this Trading Agreement and Order,
- iv. The operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Paragraph B.15 of this Trading Agreement and Order.

#### 16. Record Keeping;

- a. By the close of each calendar day, the Respondent shall record the actual fuel type and the actual quantity of each type of fuel in units of volume per day or MMbtu per day for each fuel used on the preceding day in an emission unit described in this Trading Agreement and Order;
- b. On or before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on the first calendar day of that calendar month,
- c. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers and allocation control periods for all Allowances in its possession on the first calendar day of that calendar month,
- d. On or before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the preceding calendar month,
- e. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers, purchase/sales dates, allocation years, and seller/buyer for all Allowances purchased or sold during the preceding calendar month,

- f. On or before the first day of each calendar month, the Respondent shall record the Estimated DERCs/Allowances Required for that calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order.
- g. On or before the twentieth calendar day of each calendar month, the Respondent shall record the Actual DERCs/Allowances Required for the preceding calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order;
- h. On or before January 31 of each calendar year, the Respondent shall record the quantity of DERCs deducted in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order for the preceding year. Such records shall include the serial number and vintage of each DERC deducted from the Respondents current balance pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- i. On or before January 31 of each calendar year, the Respondent shall record the quantity of Allowances transferred in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order. Such records shall include the identification number and allocation control period of each Allowance transferred pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- j. Not more than ninety (90) days after the completion of each Non-Ozone Season, the Respondent shall record the Non-Ozone Season average NOx emission rate for the emission unit described in Table 1, the quantity of DERCs and/or allowances possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted and/or Allowances transferred in accordance with Paragraphs B.11 and B.12 of this Trading Agreement and Order.
- k. For each month of the Ozone season, the Respondent shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order satisfy the requirements of Paragraph B.2. Generator certification of this fact shall be sufficient.
- 1. On each day during the ozone season that the Respondent operates in accordance with Paragraph B.7 of this Trading Agreement and Order, the Respondent shall make and keep Records of all emission unit operation in accordance with Paragraph B.7 of this Trading Agreement and Order, including copies of any written correspondence from the Respondent's fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units.

- 17. Respondent shall retain records and supporting documentation required by this Trading Agreement and Order for a minimum of five years, commencing on the date such records were created. Respondent shall provide the records specified above to the Commissioner within thirty (30) days of receipt of a written request from the Commissioner. All records shall be maintained in accordance with Sections 22a-174-4 and 22a-174-22 of the Regulations.
- 18. Reporting: No later than March 1 of every year after issuance of this Trading Agreement and Order, the Respondent shall submit to the Commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.16.a B.16.i, and B.16.k- B.16.l of this Trading Agreement and Order. Not later than July 30 of each calendar year, the Respondent shall submit a written report containing copies of all records required pursuant to Paragraph B.16.j of this Trading Agreement and Order. The Commissioner may prescribe the forms to be used for the submission of these reports. The Respondent shall submit these reports on such forms, if prescribed by the Commissioner.
- 19. <u>FLER Violation</u>. Violation of an established FLER shall subject Respondent to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs or Allowances shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date that FLER compliance is achieved as approved by the Commissioner shall be used. Notwithstanding this requirement, exceedance of any FLER contained in Table 1 is a violation in Paragraph B.5 of this Trading Agreement and Order subject to enforcement action in accordance with the Department of Environmental Protection's Enforcement Response Policy, in effect at the time of such violation.
- 20. <u>FLER Modification</u>. FLERs set forth in Table 1 of this Trading Agreement and Order may be modified only after the consent of the Commissioner by written modification of this Trading Agreement and Order.
- 21. Emissions Testing. The Respondent shall perform emissions testing in accordance with Section 22a-174-22(k) of the Regulations for each emission unit described in Table 1 of this Trading Agreement and Order that is not equipped with a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendix B&F or 40 CFR 75.
- 22. Control Technology Evaluation: Not more than 9 months from the date of issuance of this Trading Agreement and Order, the Respondent shall submit a control technology evaluation for the emissions units described in Table 1 to reduce emissions of NOx to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs. Such evaluation shall include but not be limited to the following:
  - A detailed description of the subject emissions unit, currently installed emissions controls equipment and methods, all currently installed emissions monitoring systems;

- b. A detailed description of any and all additional or alternative emissions control equipment and methods or, combinations thereof, that are capable of reducing NOx emissions from the subject emissions unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- c. An evaluation of capital costs, annual operating costs, and total annualized \$/ton costs associated with the installation and operation of any and all additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- d. An estimated schedule for the design, procurement, installation and operation of any additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs:
- e. A detailed description of any adjustments and/or modifications that must be made to the emissions monitoring systems for the subject emission unit in order to demonstrate compliance with, at least, Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs; and
- f. A detailed description of any collateral environmental impacts that will result as a direct consequence of the Respondent's use of additional/alternative emissions control equipment and methods to reduce NOx emissions to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs.
- 23. <u>Full compliance</u>. Respondent shall not be considered in full compliance with this Trading Agreement and Order until all actions required by this Trading Agreement and Order have been completed as approved and to the Commissioner's satisfaction.
- 24. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this Trading Agreement and 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 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this Trading Agreement

and 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 Trading Agreement and Order. Nothing in this paragraph shall excuse noncompliance or delay.

- 25. <u>Definitions</u>. As used in this Trading Agreement and Order "Commissioner" means the Commissioner or a representative of the Commissioner; The date of "issuance" of this Trading Agreement and Order is the date the Trading Agreement and Order is deposited in the U.S. mail or personally delivered, whichever is earlier.
- 26. <u>Dates</u>. The date of submission to the Commissioner of any document required by this Trading Agreement and Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under Trading Agreement and 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 Trading Agreement and Order, the word "day" as used in this Trading Agreement and Order means calendar day. Any document or action which is required by this Trading Agreement and 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.
- 27. 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 Respondent or, if Respondent is not an individual, by an individual, employed by the Respondent, who satisfies the criteria set forth in Section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies and by the individual(s) responsible for actually preparing such document. Each individual who signs documents in accordance with this Paragraph 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 Section 53a-157b of the Connecticut General Statutes and any other applicable law."
- 28. <u>Noncompliance</u>. This Trading Agreement and 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 Trading Agreement and Order may subject Respondent to an injunction and penalties.
- 29. <u>False statements</u>. Any false statement in any information submitted pursuant to this Trading Agreement and Order may be punishable as a criminal offense under Section 53a-157b of the Connecticut General Statutes and any other applicable law.

30. Notice of transfer; liability of Respondent. Until Respondent has fully complied with this Trading Agreement and Order, Respondent shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Trading Agreement and Order or after obtaining a new mailing or location address. Respondent'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.

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- 31. Commissioner's powers. Nothing in this Trading 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 past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this Trading Agreement and 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.
- 32. <u>Respondent's obligations under law.</u> Nothing in this Trading Agreement and Order shall relieve Respondent of other obligations under applicable federal, state and local law.
- 33. No assurance by Commissioner. No provision of this Trading Agreement and 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 Trading Agreement and Order will result in compliance or prevent or abate pollution.
- 34. <u>Access to premises</u>. Any representative of the Department of Environmental Protection may enter the without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 35. No effect on rights of other persons. This Trading Agreement and Order neither creates nor affects any rights of persons or municipalities that are not parties to this Trading Agreement and Order.
- 36. No Creation of Property Rights. This Consent Order does not create any property rights with respect to these DERCs or Allowances.
- 37. Notice to Commissioner of changes. Within 15 days of the date Respondent 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, Respondent shall submit the correct or omitted information to the Commissioner.

- 38. Notification of noncompliance. In the event that Respondent 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, 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.
- 39. <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 this Trading Agreement and Order or in writing by the Commissioner, be directed to:

Supervisor
Administrative Enforcement Group
Engineering and Enforcement Division
Bureau of Air Management
Department of Environmental Protection
79 Elm Street, 5<sup>th</sup> Floor
Hartford, Connecticut 06106
(860) 424-3702

Trading Agreement & Order No. 8303

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

#### FirstLight Hydro **Generating Company**

Type Name: James A. Ginnetti

Type Title: Vice President

Issued as a final consent order of the Commissioner of the Department of Environmental Protection.

Engineering & Enforcement Division

Bureau of Air Management

TOWN OF PRESTON LAND RECORDS MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document

BUREAU OF AIR MANAGEMENT NEW SOURCE REVIEW / TITLE V

APR 29 2010



### STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



April 29, 2010

Mr. John Bilda General Manager Norwich Public Utilities 16 South Golden Street Norwich, CT 06360

Re: Nitrogen Oxide ("NOx") Trading Agreement and Order #8304

Dear Mr. Bilda:

Enclosed is a copy of Trading Agreement and Order (TA&O) #8304. The TA&O is now enforceable by the State of Connecticut.

Over the next few months the Department will be taking steps to revise the annual reporting forms that you have become familiar with over the years to facilitate compliant submission of the reports required under the TA&O. When these forms are complete, electronic versions of the forms and instruction will be provided for your use. Until then, NOx Trading Program participants may generate their own forms for the reports required under the TA&O.

The terms of the new TA&O need to be incorporated into the Title V Operating Permit for your facility, if you have such. To do so, please kindly submit an application for a minor permit modification to your existing Title V Permit in accordance with Section 22a-174-2a of the Regulations of Connecticut State Agencies.

If your facility is likely to violate the TA&O due to an inability to acquire DERCs or Allowances, you should submit notice in accordance with the Notice of Noncompliance paragraph of this TA&O. In such Notice, you should demonstrate that all reasonable efforts to procure DERCs and/or Allowances were exhausted prior to submission of the Notice.

Should you have any questions regarding this letter or the TA&O, please contact me at (860) 424-3408.

Sincerely,

Jaimeson Sinelair

Supervising Air Pollution Control Engineer

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# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



State of Connecticut	)	
and	)	
City of Norwich Department	)	Trading Agreement
of Public Utilities	)	and Order No. 8304

WHEREAS, the Commissioner of Environmental Protection ("Commissioner") and City of Norwich Department of Public Utilities ("Respondent") agree that the Commissioner may issue a permit or order to allow emissions trading in accordance with Section 22a-174-22(j) of the Regulations of Connecticut State Agencies ("Regulations") as a method of compliance with Section 22a-174-22 of the Regulations:

- A. At the request and with the agreement of Respondent, the Commissioner finds the following:
  - 1. This Trading Agreement and Order supersedes Trading Agreement and Order 8119A and all subsequent modifications thereto.
  - 2. Respondent owns and operates an electricity generation facility at 16 South Golden Street in Norwich, Connecticut ("facility").
  - 3. At the facility, Respondent operates the emission unit described in Table 1 below, which is subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations") pertaining to the control of Nitrogen Oxide (NOx) emissions.
  - 4. For the purposes of this Trading Agreement and Order, the following definitions shall apply:
    - a. Allowable Emission Limit (AEL): the applicable NOx emission limit set forth in Section 22a-174-22(e) or Section 22a-174-22(f) of the Regulations corresponding to the emission unit described in Table 1 of this Trading Agreement and Order
    - b. Allowance: CAIR NOx Ozone Season allowance originally allocated to a CAIR NOx Ozone Season unit, as defined in Section 22a-174-22c of the Regulations, located in the State of Connecticut or a NOx allowance designated specifically for compliance during Ozone Season control periods and allocated to a CAIR NOx Ozone Season unit located in the State of Connecticut after the date of issuance of this Trading Agreement and Order.
    - c. CAIR NOx Ozone Season unit: shall be as defined in Section 22a-174-22c of the Regulations

- d. Discrete Emission Reduction Credit (DERC): a unit that was generated and approved by the Commissioner in accordance with a Trading Agreement and Order issued by the Commissioner or generated and approved by the Commissioner in accordance with a protocol submitted and approved pursuant to Section 22a-174-38 of the Regulations. Such unit is equivalent to 1 ton of NOx emissions and may be used for emissions trading in accordance with Section 22a-174-22(j) of the Regulations, subject to the provisions of Part B of this Trading Agreement and Order.
- e. CAIR NATS: "CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System" as defined in 40 CFR 96.302.
- f. Non-Attainment Area: means the geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (Section 107 of the Act). Pursuant to 40 CFR 81.307, the designated ozone non-attainment areas in the State of Connecticut are: the Greater Connecticut, CT area and the New York-Northern New Jersey-Long Island, NY-NJ-CT area.
- g. Ozone Season: May 1 through September 30 of each calendar year or such period as defined by the U.S. Environmental Protection Agency, subsequent to the issuance of this Trading Agreement and Order.
- h. Non-Ozone Season: the period of consecutive calendar months between two successive Ozone Seasons

Table 1 CAIR NOx Ozone Season Units NOx Emission Rates, FLERs and Allowable Limits (lbs/MMBtu, unless otherwise noted)								
UNIT- reg. or permit no.	Fuel	Heat Input (MMBtu)	Stack Test Rates		AEL	FLER	Date of Last Stack	Date of Next Stack
			lb/mmbtu	ppmvd @ 15% O <sub>2</sub>	(ppmvd)	(lb/mmbtu)	Test	Test
Rolls Royce Turbine	#2 oil	249	0.5530	141.31	75	0.62	9/26/09	9/26/14

- 5. The Respondent agrees that the actual NOx emissions rate from the emission unit described in Table 1, at times, exceeds the corresponding AEL.
- 6. Pursuant to Section 22a-174-22(j) of the Regulations, Respondent proposes to comply with Section 22a-174-22(e) of the Regulations, when operating the emission unit described in Table 1 by means of emissions trading in accordance with the provisions of this Trading Agreement and Order.
- 7. The Respondent proposes to use the full load emission rate ("FLER") identified in Table 1

for the purposes of calculating Actual DERCs/Allowances Required.

The Commissioner, in accordance with Section 22a-174-22(j) of the Regulations hereby allows Respondent to comply with Section 22a-174-22 of the Regulations at the facility through the use of emissions trading, subject to the provisions of this Trading Agreement and Order.

- B. With the agreement of Respondent, the Commissioner, acting under Sections 22a-6, 22a-174, 22a-176, and 22a-177 of the Connecticut General Statutes, hereby orders Respondent as follows:
  - 1. Expiration of this Trading Agreement and Order: The Respondent may only use emissions trading, subject to the provisions of this Trading Agreement and Order, until the date of expiration of this Trading Agreement and Order. The date of expiration of this Trading Agreement and Order shall be the earlier of:
    - a. May 31, 2014;
    - b. The date upon which the Respondent demonstrate to the Commissioner's satisfaction that actual NOx emissions from the emission unit, at all times, do not exceed the corresponding AEL(s);
    - c. The date specified in any written notice from the Commissioner stating that the Respondent are no longer allowed to use emissions trading due to the Respondent' violation of any provision of this Trading Agreement and Order; or
    - d. The date specified in any written notice from the Commissioner, notifying the Respondent that the Commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:
      - (i) the promulgation of an Act, Statute, or Regulations; or
      - (ii) the issuance of a judgment or court order.
  - 2. Respondent shall obtain and use sufficient DERCs and/or Allowances in such a manner as to comply with Paragraphs B.8 and B.9 of this Trading Agreement and Order. All Allowances used must come from an emission unit that is within the same ozone nonattainment area as the Respondent. Any Allowances used to comply with this Trading Agreement and Order must be allocated for the control period that occurs during the same year those allowances are used for compliance with this Trading Agreement and Order. All DERCs used during the Ozone Season for each emissions unit described in Table 1, shall have been generated during an Ozone Season.
  - 3. Prior to using Allowances in accordance with Paragraphs B.8 and B.9 of this Trading Agreement and Order the Respondent shall obtain a General and/or Compliance Account in the CAIR NATS.

- 4. <u>Vintage Restriction</u>. For the purposes of compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order, DERCs shall only remain valid for five (5) calendar years from the year of the generation of such DERCs. DERCs older than five (5) calendar years from their creation are not valid for use for compliance with Section 22a-174-22 of the Regulations and the provisions of this Trading Agreement and Order.
- 5. Respondent shall not cause or allow actual NOx emissions from the operation of the emission units described in Table 1 of this Trading Agreement and Order to exceed the corresponding FLERs. Compliance with the corresponding FLERs specified in Table 1 shall be determined based on the results of emissions testing performed in accordance with Section 22a-174-22 of the Regulations or NOx emissions monitored and recorded by a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendices B&F or 40 CFR 75.
- 6. Ozone Season Fuel Use Restriction: Notwithstanding the provisions of Paragraph B.2 of this Trading Agreement and Order, when operating the emission unit described in Table 1 during the Ozone Season, the Respondent shall operate that unit while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are authorized to burn in accordance with Departmental permit, registration, or applicable regulation.
- 7. Notwithstanding Paragraph B.6 of this Trading Agreement and Order, during the Ozone Season, the Respondent may operate the emission units described above on fuels that result in higher emissions of NOx, if either:
  - a. the availability of fuel oil that complies with Paragraph B.6 is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
  - b. the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Respondent and the gaseous fuel supplier.
- 8. <u>DERC/Allowance Use</u>. On the first day of each calendar month, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Actual DERCs Required and/or Actual Allowances Required in that month. Compliance with Paragraph B.8 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each month, Respondent shall estimate DERCs and/or Allowances required for such calendar month for the emission unit described in Table 1 as follows:

Estimated DERCs/Allowances Required =

{(Estimated fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))}+2000 lbs/ton

#### Where:

- AEL = Allowable Emission limit, as defined in Paragraph A.4 of this Trading Agreement and Order
- <u>Discount (0.95)</u> = 5% design margin applied to the AEL.
- b. No later than the twentieth day of each month, Respondent shall calculate actual DERCs and/or Allowances used in the preceding calendar month for the emission unit described in Table 1 as follows:

#### Actual DERCs/Allowances Required =

{(Monthly fuel use MMBtu) x ((FLER lb/mmbtu) - (0.95 x AEL))} ÷ 2000 lbs/ton

- 9. Non-Ozone Season DERC/Allowance Use. In addition to the requirements of Paragraph B.8 of this Trading Agreement and Order, on the first day of each Non-Ozone Season, the Respondent shall possess a quantity of DERCs and/or Allowances that equals or exceeds the quantity of Non-Ozone Season Actual DERCs/Allowances Required for that Non-Ozone Season. Compliance with Paragraph B.8 of this Trading Agreement and Order shall be determined as follows:
  - a. Before the first day of each Non-Ozone Season, Respondents shall estimate DERCs and/or Allowances required for that Non-Ozone Season for the emission unit described in Table 1 based on the average actual NOx emission rate from the emission unit and an emission limit of 0.15 lb/mmbtu as follows:

#### Estimated Non-Ozone Season DERCs/Allowances Required =

{(Estimated Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15 lb/mmbtu)} ÷ 2000 lbs/ton- $\Sigma$ ( Estimated DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8)

b. No later than thirty (30) days after the end of each Non-Ozone Season, the Respondents shall calculate Actual Non-Ozone Season DERCs and/or Allowances used during that Non-Ozone Season for each emission unit as follows:

#### Actual Non-Ozone Season DERCs/Allowances Required =

{(Actual Non-Ozone Season fuel use in MMBtu) x ((FLER lb/mmbtu) - (0.95 x 0.15lb/mmbtu))}  $\div$  2000 lbs/ton– $\Sigma$ ( DERCS and/or Allowances Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.8

- 10. On or before January 31, of each calendar year, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent' NOx General and/or Compliance Accounts to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to the sum of Actual DERCs/Allowances Required pursuant to Paragraph B.8 of this Trading Agreement and Order for the preceding calendar year, rounded up to the nearest whole ton.
- 11. Not more than ninety (90) days after the completion of the Non-Ozone Season, the Respondent shall deduct a quantity of DERCS from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent's NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Notwithstanding the control period limitations of Paragraph B.2 of this Trading Agreement and Order, Allowances used to comply with this Paragraph for a Non-Ozone Season must have been originally allocated for the control periods that correspond to the same calendar years within that Non-Ozone Season.
- 12. <u>Doubling:</u> If the Actual DERCs/Allowances Required for any month, determined in accordance with Paragraph B.8, exceeds the quantity of DERCs and/or Allowances in the Respondent' possession on the first day of that month, then in addition to the deduction or transfer specified in Paragraph B.10, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual DERCs/Allowances Required for that month. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.10 of this Trading Agreement and Order.

If the Actual DERCs/Allowances Required for any Non-Ozone Season, determined in accordance with Paragraph B.9, exceeds the quantity of DERCs and/or Allowances in the Respondent' possession on the first day of the Non-Ozone Season, then in addition to the deduction or transfer specified in Paragraphs B.11, the Respondent shall also deduct a quantity of DERCs from the current balance of DERCs possessed by the Respondent and/or transfer a quantity of Allowances from the Respondent' NOx General and/or Compliance Account to the CT State NOx Retirement Account (Account ID CT0000000300 in the CAIR NATS) such that the total is equal to Actual Non-Ozone Season DERCs/Allowances Required for the most recently completed Non-Ozone Season. Such additional DERC deduction or Allowance transfer shall be performed at the same time as the DERC deduction or Allowance transfer specified in Paragraph B.11 of this Trading Agreement and Order.

Notwithstanding the provisions of Paragraph B.12 of this Trading Agreement and Order, any violation of Paragraphs B.8 and B.9 of this Trading Agreement and Order may be subject to additional enforcement action as may be deemed appropriate by the Commissioner in accordance with the Department's enforcement response policy.

- 13. In addition to acquiring and using DERCS and/or Allowances as required under prior Trading Agreement and Orders, the Respondent implemented the supplemental environmental program (SEP) incorporated by reference into Trading Agreement and Order No. 8119 at Exhibit 2. The SEP was designed to allow conversion of the City of Norwich's vehicles to natural gas, and to provide the necessary infrastructure to help encourage other vehicle owners in the Southeastern Connecticut region to convert their vehicles to natural gas. Respondent shall continue to work with the Connecticut State Agencies and the administration to encourage the use of Alternative Fuel Vehicles in the State.
- 14. At the end of each calendar year, the Respondent shall demonstrate that any Allowances used for compliance with this Trading Agreement and Order during the year are surplus, quantifiable, enforceable and permanent. This shall be determined by demonstrating that the actual NOx emissions during the ozone season, as reported to the United States Environmental Protection Agency, from the emission unit to which the Allowances were originally allocated were equal to or less than the amount of Allowances allocated to such unit by the State of Connecticut minus the Allowances used for compliance with this Trading Agreement and Order.
- 15. Maintenance and Tune-up. During the life of this Trading Agreement and Order, the Respondent shall inspect and maintain the unit in accordance with the Respondent's periodic maintenance schedule. Such schedule shall be maintained at the location of the unit and made available to the Commissioner or his/her designee upon request. The Respondent shall make and keep records of each inspection and maintenance event indicating the name and affiliation of the individual(s) performing the event, systems inspected/maintained during the event, parts replaced during the event, reason unit is believed to be in good working order following the event.

#### 16. Record Keeping;

- a. By the close of each calendar day, the Respondent shall record the actual fuel type and the actual quantity of each type of fuel in units of volume per day or MMbtu per day for each fuel used on the preceding day in an emission unit described in this Trading Agreement and Order;
- b. On of before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on the first calendar day of that calendar month,
- c. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers and allocation control periods for all Allowances in its possession on the first calendar day of that calendar month,
- d. On or before the first day of each calendar month, the Respondent shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the preceding calendar month,

- e. On or before the first day of each calendar month, the Respondent shall record the number of Allowances and corresponding identification numbers, purchase/sales dates, allocation years, and seller/buyer for all Allowances purchased or sold during the preceding calendar month,
- f. On or before the first day of each calendar month, the Respondent shall record the Estimated DERCs/Allowances Required for that calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order.
- g. On or before the twentieth calendar day of each calendar month, the Respondent shall record the Actual DERCs/Allowances Required for the preceding calendar month determined in accordance with Paragraph B.8 of this Trading Agreement and Order;
- h. On or before January 31 of each calendar year, the Respondent shall record the quantity of DERCs deducted in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order for the preceding year. Such records shall include the serial number and vintage of each DERC deducted from the Respondent current balance pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- i. On or before January 31 of each calendar year, the Respondent shall record the quantity of Allowances transferred in accordance with Paragraphs B.10 and B.12 of this Trading Agreement and Order. Such records shall include the identification number and allocation control period of each Allowance transferred pursuant to Paragraphs B.10 and B.12 of this Trading Agreement and Order.
- j. Not more than ninety (90) days after the completion of each Non-Ozone Season, the Respondent shall record the Non-Ozone Season average NOx emission rate for the emission unit described in Table 1, the quantity of DERCs and/or allowances possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted and/or Allowances transferred in accordance with Paragraphs B.11 and B.12 of this Trading Agreement and Order.
- k. For each month of the Ozone season, the Respondent shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraphs B.11 and B.12 of this Trading Agreement and Order satisfy the requirements of Paragraph B.2. Generator certification of this fact shall be sufficient.
- 1. On each day during the ozone season that the Respondent operates in accordance with Paragraph B.7 of this Trading Agreement and Order, the Respondent shall make and keep Records of all emission unit operation in accordance with Paragraph B.7 of this Trading Agreement and Order, including copies of any written correspondence from the Respondent' fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units.

- 17. Respondent shall retain records and supporting documentation required by this Trading Agreement and Order for a minimum of five years, commencing on the date such records were created. Respondent shall provide the records specified above to the Commissioner within thirty (30) days of receipt of a written request from the Commissioner. All records shall be maintained in accordance with Sections 22a-174-4 and 22a-174-22 of the Regulations.
- 18. Reporting: No later than March 1 of every year after issuance of this Trading Agreement and Order, the Respondent shall submit to the Commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.16.a B.16.i, and B.16.k-B.16.l of this Trading Agreement and Order. Not later than July 30 of each calendar year, the Respondent shall submit a written report containing copies of all records required pursuant to Paragraph B.16.j of this Trading Agreement and Order. The Commissioner may prescribe the forms to be used for the submission of these reports. The Respondent shall submit these reports on such forms, if prescribed by the Commissioner.
- 19. <u>FLER Violation</u>. Violation of an established FLER shall subject Respondent to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs or Allowances shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date that FLER compliance is achieved as approved by the Commissioner shall be used. Notwithstanding this requirement, exceedance of any FLER contained in Table 1 is a violation in Paragraph B.5 of this Trading Agreement and Order subject to enforcement action in accordance with the Department of Environmental Protection's Enforcement Response Policy, in effect at the time of such violation.
- 20. <u>FLER Modification</u>. FLERs set forth in Table 1 of this Trading Agreement and Order may be modified only after the consent of the Commissioner by written modification of this Trading Agreement and Order.
- 21. Emissions Testing. The Respondent shall perform emissions testing in accordance with Section 22a-174-22(k) of the Regulations for each emission unit described in Table 1 of this Trading Agreement and Order that is not equipped with a continuous emissions monitoring system that was approved by the Commissioner and that complies with Section 22a-174-4 of the Regulations and either 40 CFR 60, Appendix B&F or 40 CFR 75.
- 22. Control Technology Evaluation. Not more than 12 months from the date of issuance of this Trading Agreement and Order, the Respondent shall submit a control technology evaluation for the emissions unit described in Table 1 to reduce emissions of NOx to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs. Such evaluation shall include but not be limited to the following:
  - a. A detailed description of the subject emissions unit, currently installed emissions controls equipment and methods, all currently installed emissions monitoring systems;

- b. A detailed description of any and all additional or alternative emissions control equipment and methods or, combinations thereof, that are capable of reducing NOx emissions from the subject emissions unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- c. An evaluation of capital costs, annual operating costs, and total annualized \$/ton costs associated with the installation and operation of any and all additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- d. An estimated schedule for the design, procurement, installation and operation of any additional or alternative emissions control equipment and methods, or combinations thereof, that are capable of reducing NOx emission from the subject unit to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs;
- e. A detailed description of any adjustments and/or modifications that must be made to the emissions monitoring systems for the subject emission unit in order to demonstrate compliance with, at least, Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs; and
- f. A detailed description of any collateral environmental impacts that will result as a direct consequence of the Respondent's use of additional/alternative emissions control equipment and methods to reduce NOx emissions to, at a bare minimum, a rate or concentration that complies with the applicable limits of Section 22a-174-22 of the Regulations as may be amended, without using, tendering, or otherwise acquiring Allowances or DERCs.
- 23. <u>Full compliance</u>. Respondent shall not be considered in full compliance with this Trading Agreement and Order until all actions required by this Trading Agreement and Order have been completed as approved and to the Commissioner's satisfaction.
- 24. <u>Approvals</u>. Respondent shall use best efforts to submit to the Commissioner all documents required by this Trading Agreement and 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 30 days of the Commissioner's notice

of deficiencies. In approving any document or other action under this Trading Agreement and 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 Trading Agreement and Order. Nothing in this paragraph shall excuse noncompliance or delay.

- 25. <u>Definitions</u>. As used in this Trading Agreement and Order "Commissioner" means the Commissioner or a representative of the Commissioner; The date of "issuance" of this Trading Agreement and Order is the date the Trading Agreement and Order is deposited in the U.S. mail or personally delivered, whichever is earlier.
- 26. <u>Dates</u>. The date of submission to the Commissioner of any document required by this Trading Agreement and Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under Trading Agreement and 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 Trading Agreement and Order, the word "day" as used in this Trading Agreement and Order means calendar day. Any document or action which is required by this Trading Agreement and 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.
- 27. 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 an individual, employed by the Respondent, who satisfies the criteria set forth in Section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies and by the individual(s) responsible for actually preparing such document. Each individual who signs documents in accordance with this Paragraph 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 Section 53a-157b of the Connecticut General Statutes and any other applicable law."

- 28. <u>Noncompliance</u>. This Trading Agreement and 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 Trading Agreement and Order may subject Respondent to an injunction and penalties.
- 29. <u>False statements</u>. Any false statement in any information submitted pursuant to this Trading Agreement and Order may be punishable as a criminal offense under Section 53a-157b of the Connecticut General Statutes and any other applicable law.

- 30. Notice of transfer; liability of Respondent. Until Respondent have fully complied with this Trading Agreement and Order, Respondent shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Trading Agreement and Order or after obtaining a new mailing or location address. Respondent' 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.
- 31. Commissioner's powers. Nothing in this Trading 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 past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this Trading Agreement and 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.
- 32. <u>Respondent' obligations under law.</u> Nothing in this Trading Agreement and Order shall relieve Respondent of other obligations under applicable federal, state and local law.
- 33. <u>No assurance by Commissioner.</u> No provision of this Trading Agreement and 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 Trading Agreement and Order will result in compliance or prevent or abate pollution.
- 34. <u>Access to premises</u>. Any representative of the Department of Environmental Protection may enter the without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 35. No effect on rights of other persons. This Trading Agreement and Order neither creates nor affects any rights of persons or municipalities that are not parties to this Trading Agreement and Order.
- 36. No Creation of Property Rights. This Consent Order does not create any property rights with respect to these DERCs or Allowances.
- 37. Notice to Commissioner of changes. Within 15 days of the date Respondent become 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, Respondent shall submit the correct or omitted information to the Commissioner.

- 38. 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 Trading Agreement and 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.
- 39. <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 this Trading Agreement and Order or in writing by the Commissioner, be directed to:

Supervisor
Administrative Enforcement Group
Engineering and Enforcement Division
Bureau of Air Management
Department of Environmental Protection
79 Elm Street, 5<sup>th</sup> Floor
Hartford, Connecticut 06106
(860) 424-3702

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

Respondent

Signature:\_\_

Type Name:

Type Title: General Manager

Date: 4 - 28 - 10

Issued as a final consent order of the Commissioner of the Department of Environmental Protection.

Gary S. Rose, Director

Engineering & Enforcement Division

Bureau of Air Management

04-28-2010

Date

TOWN OF MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document