



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6301-00072/00014
Mod 0 Effective Date: 03/18/2008 Expiration Date: 03/17/2013
Mod 1 Effective Date: Expiration Date:
Mod 2 Effective Date: 02/06/2009 Expiration Date: 03/17/2013

Permit Issued To: ASTORIA ENERGY LLC
17-10 STEINWAY ST
ASTORIA, NY 11105

ASTORIA ENERGY II LLC
17-10 STEINWAY ST
ASTORIA, NY 11105

Contact: ASTORIA ENERGY LLC
17-10 STEINWAY ST
ASTORIA, NY 11105-1097
(978) 287-9529

Facility: ASTORIA ENERGY LLC & ASTORIA ENERGY II LLC
17-10 STEINWAY ST
ASTORIA, NY 11105-1097

Contact: CHRISTOPHER PRICE
ASTORIA ENERGY LLC
17-10 STEINWAY ST
ASTORIA, NY 11105
(201) 424-4019

Description:

PERMIT DESCRIPTION
Astoria Energy LLC & Astoria Energy II LLC
DEC ID # 2-6301-00072/00014 (Ren 1, Mod 1)

The Title V Permit for Astoria Energy LLC & Astoria Energy II LLC (previously known as Astoria Energy LLC) is modified to include conditions recently promulgated under regulations 6 NYCRR Parts 242, 243, 244, and 245. These regulations require facilities to obtain/possess at least as many allocations of carbon dioxide (CO₂), sulfur dioxide (SO₂) and oxides of nitrogen (NO_x) as they emit into the atmosphere during a specified period of time. An allocation is a unit of pollution which is limited by a budget established by the regulations. The Department developed these regulations in response to the United States Environmental Protection Agencies (EPA's) recent Clean Air Interstate Rule



(CAIR). The regulations are included in New York's State Implementation Plan (SIP) which has been approved by EPA as required by the Clean Air Act of 1990.

This project is a major modification to place the applicable Clean Air Interstate Rule (CAIR) rules in Astoria Energy LLC's & Astoria Energy II LLC's Title V permit. The permit conditions for the following regulations are added to the permit modification:

1. CAIR NO_x Ozone Season Trading Program, 6 NYCRR 243, which replaces Part 204 in the year 2009 and reduces the state-wide ozone-season NO_x allocation by 335 in the year 2015 compared with the current Part 204 allocation.
2. CAIR NO_x Annual Trading Program, 6 NYCRR Part 244, which replaced the combined Part 237 and Part 204 programs in the year 2009, and reduces the state-wide annual NO_x allocation by 53% in the year 2015 compared to the current combined Part 204 and Part 237 allocations.
3. CAIR SO₂ Trading Program, 6 NYCRR Part 245, which, replaces Part 238 in the year 2010 and reduces the state-wide annual sulfur dioxide allocation by 28% in the year 2015 compared to the current Part 238 allocation.

The above three permit conditions include emission monitoring, record keeping, reporting and certification requirements. are added to the permit.

4. This project also includes the addition of Part 242, CO₂ Budget Trading Program, 6 NYCRR 242, which is the RGGI (Regional Greenhouse Gas Initiative) regulation. This Part establishes the New York State component of the CO₂ Budget Trading Program, which is designed to stabilize and then reduce anthropogenic emissions of CO₂, a greenhouse gas, from CO₂ budget sources in an economically efficient manner. In addition, there is no state-wide allocation.
5. This project also involves the modification of the Ammonia slip emission limit for Processes P10 & P12 from 5.0 to 10.0 ppm by volume (dry, corrected to 15% O₂), to comply with BACT (Best Available Control Technology) under 40 CFR 52-21.A.

Process P10 in Emission Unit U-00001 represents distillate fuel oil (limit of 0.033 % sulfur by weight) firing in the four (4) identical combustion turbines (Emission Sources 0T001, 0T002, 0T003 & 0T004). And Process P12 in Emission Unit U-00001 represents distillate fuel oil firing in the four (4)



identical combustion turbines (Emission Sources OT001, OT002, OT003 & OT004) with natural gas duct firing.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: JOHN F CRYAN
NYSDEC
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5407

Authorized Signature: _____ Date: ____ / ____ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
 - Applications for permit renewals, modifications and transfers
 - Permit modifications, suspensions or revocations by the Department
 - Permit modifications, suspensions or revocations by the Department

Facility Level

- Submission of application for permit modification or renewal-REGION 2 HEADQUARTERS



DEC GENERAL CONDITIONS

****** General Provisions ******

For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.

GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1-1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1-1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1-1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1-1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 1-2: Relationship of this Permit to Other Department Orders and Determinations

Applicable State Requirement: ECL 3-0301.2(m)

Item 1-2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 1-3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6NYCRR 621.11

Item 1-3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 1-3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 1-3.3:

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be



submitted prior to actual transfer of ownership.

Condition 1-5: Permit modifications, suspensions or revocations by the Department

Applicable State Requirement: 6NYCRR 621.13

Item 1-5.1:

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

Condition 1-4: Permit modifications, suspensions or revocations by the Department

Applicable State Requirement: 6NYCRR 621.13

Item 1-4.1:

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 1-6: Submission of application for permit modification or renewal-REGION 2

HEADQUARTERS

Applicable State Requirement: 6NYCRR 621.6(a)

Item 1-6.1:

Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street

New York State Department of Environmental Conservation
Facility DEC ID: 2630100072



Long Island City, NY 11101-5407
(718) 482-4997



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: ASTORIA ENERGY LLC
17-10 STEINWAY ST
ASTORIA, NY 11105

ASTORIA ENERGY II LLC
17-10 STEINWAY ST
ASTORIA, NY 11105

Facility: ASTORIA ENERGY LLC & ASTORIA ENERGY II LLC
17-10 STEINWAY ST
ASTORIA, NY 11105-1097

Authorized Activity By Standard Industrial Classification Code:
4911 - ELECTRIC SERVICES
5171 - PETROLEUM BULK STATIONS & TERMINALS
6512 - NONRESIDENTIAL BUILDING OPERATORS

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 24 6NYCRR 201-6: Emission Unit Definition
- 1-1 6NYCRR 243-1.6(a): Permit Requirements
- 1-2 6NYCRR 243-1.6(b): Monitoring requirements
- 1-3 6NYCRR 243-1.6(c): NOx Ozone Season Emission Requirements
- 1-4 6NYCRR 243-1.6(d): Excess emission requirements
- 1-5 6NYCRR 243-1.6(e): Recordkeeping and reporting requirements
- 1-6 6NYCRR 243-2.1: Authorization and responsibilities of CAIR designated representative
- 1-7 6NYCRR 243-2.4: Certificate of representation
- 1-8 6NYCRR 243-8.1: General requirements
- 1-9 6NYCRR 243-8.1: Prohibitions
- 1-10 6NYCRR 243-8.3: Out of control periods
- 1-11 6NYCRR 243-8.5(d): Quarterly reports
- 1-12 6NYCRR 243-8.5(e): Compliance certification
- 1-13 6NYCRR 244-1: CAIR NOx Annual Trading Program General Conditions
- 1-14 6NYCRR 244-2: Designated CAIR Representative
- 1-15 6NYCRR 244-8: Compliance Certification
- 1-16 6NYCRR 245-1: CAIR SO2 Trading Program General Provisions
- 1-17 6NYCRR 245-2: Designated CAIR Representative
- 1-18 6NYCRR 245-8: Compliance Certification

Emission Unit Level

- 53 6NYCRR 201-6: Emission Point Definition By Emission Unit
- 54 6NYCRR 201-6: Process Definition By Emission Unit

EU=U-00001,EP=00004,Proc=P10

- 1-19 40CFR 52.21(j), Subpart A: Compliance Certification
- 112 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00001,EP=00004,Proc=P12

- 1-20 40CFR 52.21(j), Subpart A: Compliance Certification
- 140 40CFR 52.21(j), Subpart A: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 149 ECL 19-0301: Contaminant List
- 1-21 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 150 : Unavoidable noncompliance and violations
- 1-22 6NYCRR 211.2: Air pollution prohibited
- 151 : Air pollution prohibited
- 1-23 6NYCRR 242-1.5: CO2 Budget Trading Program - Excess emission requirements
- 1-24 6NYCRR 242-1.5: Compliance Demonstration
- 1-25 6NYCRR 242-1.5: Compliance Demonstration



FEDERALLY ENFORCEABLE CONDITIONS

****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

Item A: Emergency Defense - 6NYCRR Part 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or

operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department

within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.



- Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)**
Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.
- Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR Part 201-6.5(a)(5)**
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item H: Property Rights - 6 NYCRR Part 201-6.5(a)(6)**
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)**



If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the



effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.



Item M: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

The following conditions are subject to annual compliance certification requirements for Title V permits only.

Condition 24: Emission Unit Definition
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 201-6

Item 24.1(From Mod 1):

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00001

Emission Unit Description:

Emission Unit U00001 represents four (4) identical GE 7421FA gas combustion turbines (Emission Sources 0T001, 0T002, 0T003 & 0T004), each rated at 2191 MM Btu/hr, including the 388 MM Btu/hr each duct burner (Emission Controls 00DB1, 00DB2, 00DB3 & 00DB4; respectively, when firing natural gas (Processes P01 & P11) at -5 deg Fahrenheit, and 2047 MM Btu/hr when firing distillate fuel oil (Processes P10 & P12) at -5 deg Fahrenheit. Each turbine is equipped with a dry low NOx burner (Emission Controls 0DLN1, 0DLN2, 0DLN3 & 0DLN4; respectively). Emission Unit U00001 also represents one Cleaver Brooks 99 MM Btu/hr auxiliary boiler (Emission Source BOIL1) that fires natural gas (Process 05). It is used for startups and shares the turbine stack. Also, in order to reduce carbon monoxide (CO) emissions and volatile organic compounds (VOC), each turbine is equipped with an oxidation catalyst (Emission Controls 00DB1, 00DB2, 00DB3 & 00DB4; respectively) in the HRSG design. Control of the ammonia feed rate will be based on the NOx and fuel flow in order to control the NOx emissions when firing distillate oil, water injection (Emission Controls 0WI01, 0WI02, 0WI03 & 0WI04; respectively) will be used. The emissions of VOC and CO will be controlled through the use of an oxidation catalyst (Emission Controls 00CO1, 00CO2, 00CO3 & 00CO4) equipped in the HRSG design of the turbine. The emissions of ammonia are based on the NOx emission and the fuel flow and will be controlled by water



injection (Emission Controls 0WI01, 0WI02, 0WI03 & 0WI04) and efficient use of the SCR (Emission Controls 0SCR1, 0SCR2, 0SCR3 & 0SCR4). The boiler exhausts parallel to the turbine stack, but shares the turbine stack to the atmosphere (Emission Point 00004). Natural gas is the primary fuel and distillate fuel oil is the back-up fuel.

Emission Unit U-00001 has the following Emission Sources:

00DB1, 00DB2, 00DB3 & 00DB4 Duct
Burners

0T001, 0T002, 0T003 & 0T004 Gas Combustion
Turbines

Emission Unit U-00001 has the following Emission Controls:

00CO1, 00CO2, 00CO3 & 00CO4 Carbon Monoxide
Oxidation Catalyst

0DLN1, 0DLN2, 0DLN3 & 0DLN4 Low NO_x
Combustor

0SCR1, 0SCR2, 0SCR3 & 0SCR4 Selective Catalytic
Reduction

0WI01, 0WI02, 0WI03 & 0WI04 Water Injection
Control

Emissions from the above emission sources/controls are exhausted through one common stack, which is identified as Emission Point 00004 with four separate flues

The NO_x emissions will be reduced with SCR - selective catalytic reduction (Emission Controls 0SCR1, 0SCR2, 0SCR3 & 0SCR4) in the HRSG Heat Recovery Steam Generator) design of the turbine, each equipped with a duct burner (Emission Sources 00DB1, 00DB2, 00DB3 & 00DB4) for supplemental firing. The emissions of VOC and CO will be controlled through the use of an oxidation catalyst (Emission Controls 00CO1, 00CO2, 00CO3 & 00CO4) equipped in the HRSG design of the turbine. When firing distillate oil, NO_x emissions will be controlled through water injections (Emission Controls 0WI01, 0WI02, 0WI03 & 0WI04) and SCR (Emission Controls 0SCR1, 0SCR2, 0SCR3 & 0SCR4) in the HRSG design of the turbine. The emissions of particulate matter (PM/PM-10) will be controlled through the use of clean burning fuels (natural gas and distillate oil). The emissions of sulfur dioxide (SO₂) and sulfuric acid mist (H₂SO₄) will be controlled through the use of low sulfur fuels (natural gas and low sulfur distillate oil). The



emissions of ammonia are based on the NO_x emission and the fuel flow and will be controlled by water injection (Emission Controls 0WI01, 0WI02, 0WI03 & 0WI04) and efficient use of the SCR (Emission Controls 0SCR1, 0SCR2, 0SCR3 & 0SCR4).

Building(s): TGB

Item 24.2(From Mod 0):

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00002

Emission Unit Description:

Emission Unit U00002 represents a diesel fire suppression water pump (Emission Source 00DFP). The diesel fire suppression water pump will be used for emergencies (Process P22), less than 500 hours/year. Emissions from the diesel fire pump are exhausted through a stack, which is identified as Emission Point 00005.

Building(s): TGB

**Condition 1-1: Permit Requirements
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-1.6(a)

Item 1-1.1:

The CAIR designated representative of each CAIR NO_x Ozone Season source shall:

- (i) submit to the department a complete CAIR permit application under section 243-3.3 in accordance with the deadlines specified in section 243-3.2; and
- (ii) submit in a timely manner any supplemental information that the department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

The owners and operators of each CAIR NO_x Ozone Season source shall have a CAIR permit issued by the department under Subpart 243-3 for the source and operate the source and the unit in compliance with such CAIR permit.

**Condition 1-2: Monitoring requirements
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-1.6(b)

Item 1-2.1:

The emissions measurements recorded and reported in accordance with Subpart 243-8 shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under subdivision (c) of this section.

**Condition 1-3: NO_x Ozone Season Emission Requirements
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-1.6(c)



Item 1-3.1:

As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under section 243-6.5(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with Subpart 243-8. The CAIR NO_x ozone season is the period beginning May 1 of a calendar year, except as provided in section 243-1.6(c)(2), and ending on September 30 of the same year, inclusive.

A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under sections 243-8.1(b)(1), (2), (3), or (7) and for each control period thereafter.

A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of this section, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with Subparts 243-6, 243-7, and 243-9.

A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under section 243-1.5 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

A CAIR NO_x Ozone Season allowance does not constitute a property right.

Upon recordation by the Administrator under Subpart 243-6, 243-7, or 243-9, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

**Condition 1-4: Excess emission requirements
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 243-1.6(d)

Item 1-4.1:

If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(1) the owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under section 243-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law; and

(2) each ton of such excess emissions and each day of such control period shall constitute a separate violation of this Subpart, the Act, and applicable State law.



**Condition 1-5: Recordkeeping and reporting requirements
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-1.6(e)

Item 1-5.1:

Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator.

- (i) The certificate of representation under section 243-2.4 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under section 243-2.4 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with Subpart 243-8, provided that to the extent that Subpart 243-8 provides for a three-year period for recordkeeping, the three-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.

**Condition 1-6: Authorization and responsibilities of CAIR designated
representative
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-2.1

Item 1-6.1:

Except as provided under section 243-2.2, each CAIR NO_x Ozone Season source, including all CAIR NO_x Ozone Season units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NO_x Ozone Season Trading Program concerning the source or any CAIR NO_x Ozone Season unit at the source.

The CAIR designated representative of the CAIR NO_x Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NO_x Ozone Season units at the source and shall act in accordance with the certification statement in section 243-2.4(a)(4)(iv).

Upon receipt by the Administrator of a complete certificate of representation under section 243-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NO_x Ozone Season source represented and each CAIR NO_x Ozone Season unit at the source in all matters pertaining to the CAIR NO_x Ozone Season Trading Program,



notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source or unit.

No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NO_x Ozone Season Allowance Tracking System account will be established for a CAIR NO_x Ozone Season unit at a source, until the Administrator has received a complete certificate of representation under section 243-2.4 for a CAIR designated representative of the source and the CAIR NO_x Ozone Season units at the source.

Each submission under the CAIR NO_x Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NO_x Ozone Season source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

**Condition 1-7: Certificate of representation
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-2.4

Item 1-7.1:

Unless otherwise required by the department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the department or the Administrator. Neither the department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

**Condition 1-8: General requirements
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 243-8.1

Item 1-8.1:

The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NO_x Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this Subpart and in Subpart H of 40 CFR Part 75. For purposes of complying with such requirements, the definitions in section 243-1.2 and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be deemed to refer to the terms "CAIR NO_x Ozone Season unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in section 243-1.2. The owner or operator of a unit that is not a CAIR NO_x Ozone Season unit but that is monitored under 40 CFR 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NO_x Ozone Season unit.



'Requirements for installation, certification, and data accounting.' The owner or operator of each CAIR NOx Ozone Season unit shall:

- (1) install all monitoring systems required under this Subpart for monitoring NOx mass emissions and individual unit heat input (including all systems required to monitor NOx emission rate, NOx concentration, stack gas moisture content, stack gas flow rate, CO2 or O2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.71 and 40 CFR 75.72);
- (2) successfully complete all certification tests required under section 243-8.2 and meet all other requirements of this Subpart and 40 CFR Part 75 applicable to the monitoring systems under paragraph (a)(1) of this section; and
- (3) record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

Condition 1-9: Prohibitions
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 243-8.1

Item 1-9.1:

No owner or operator of a CAIR NOx Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this Subpart without having obtained prior written approval in accordance with section 243-8.6.

No owner or operator of a CAIR NOx Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this Subpart and 40 CFR Part 75.

No owner or operator of a CAIR NOx Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this Subpart and 40 CFR Part 75.

No owner or operator of a CAIR NOx Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this Subpart, except under any one of the following circumstances:

- (i) during the period that the unit is covered by an exemption under section 243-1.5 that is in effect;
- (ii) the owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this Subpart and 40 CFR Part 75, by the department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or
- (iii) the CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with section 243-8.2(d)(3)(i).

Condition 1-10: Out of control periods



Effective for entire length of Permit

Applicable Federal Requirement:6NYCRR 243-8.3

Item 1-10.1:

Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or appendix D or appendix E to, 40 CFR Part 75.

Condition 1-11: Quarterly reports
Effective for entire length of Permit

Applicable Federal Requirement:6NYCRR 243-8.5(d)

Item 1-11.1:

The CAIR designated representative shall submit quarterly reports, as follows:

If the CAIR NO_x Ozone Season unit is subject to an Acid Rain emissions limitation or a CAIR NO_x emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this Subpart, the CAIR designated representative shall meet the requirements of Subpart H of 40 CFR Part 75 (concerning monitoring of NO_x mass emissions) for such unit for the entire year and shall report the NO_x mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) for a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008;

(ii) for a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under section 243-8.1(b), unless that quarter is the third or fourth quarter of 2007 or the first quarter of 2008, in which case reporting shall commence in the quarter covering May 1, 2008 through June 30, 2008.

The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).

For CAIR NO_x Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units (6 NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the NO_x mass emission data, heat input data, and other information required by this Subpart.

Condition 1-12: Compliance certification
Effective for entire length of Permit

Applicable Federal Requirement:6NYCRR 243-8.5(e)

Item 1-12.1:

The CAIR designated representative shall submit to the Administrator a compliance certification



(in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) the monitoring data submitted were recorded in accordance with the applicable requirements of this Subpart and 40 CFR Part 75, including the quality assurance procedures and specifications;

(2) for a unit with add-on NOx emission controls and for all hours where NOx data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate NOx emissions; and

(3) for a unit that is reporting on a control period basis under subparagraph (d)(2)(ii) of this section, the NOx emission rate and NOx concentration values substituted for missing data under Subpart D of 40 CFR Part 75 are calculated using only values from a control period and do not systematically underestimate NOx emissions.

**Condition 1-13: CAIR NOx Annual Trading Program General Conditions
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 244-1

Item 1-13.1:

1) As of midnight of March 1, or midnight of the first business day thereafter if March 1 is not a business day, the owners and operators shall hold, in their compliance account, Clean Air Interstate Rule (CAIR) NOx allowances available for compliance deductions for the previous control period (January 1 through December 31), in an amount not less than the total tons of nitrogen oxides emissions from all CAIR NOx units at the source during that control period. A CAIR NOx allowance shall not be deducted for a control period in a calendar year before the year for which the CAIR NOx allowance was allocated. [244-1.6(c)(1), 244-1.2(b)(5), 244-1.2(b)(36), 244-1.6(c)(3)]

2) The owners and operators shall hold in their compliance account, CAIR NOx allowances available for compliance deductions for the control period starting on the later of January 1, 2009 or the deadline for meeting a CAIR NOx unit's monitor certification requirements under section 244-8.1(b)(1), (2), or (5) and for each control period thereafter. [244-1.6(c)(2)]

3) If a CAIR NOx source emits nitrogen oxides during any control period in excess of the CAIR NOx emissions limitation, the owners and operators of the CAIR NOx source shall surrender the CAIR NOx allowances required for deduction under 6NYCRR Part 244-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this permit, the Act, and applicable State law. [(244-1.6(d)]

4) Unless otherwise provided, the owners and operators of the CAIR NOx source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator: [244-1.6(e)]

(i) The certificate of representation under 6NYCRR Part 244-2.4 for the CAIR designated representative for the source and all documents that demonstrate the truth of the statements in the



certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five year period until such documents are superseded because of the submission of a new certificate of representation under 6NYCRR Part 244-2.4 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 6NYCRR Part 244-8, provided that to the extent that 6NYCRR Part 244-8 provides for a three year period for recordkeeping, the three year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NOx Annual Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NOx Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NOx Annual Trading Program.

**Condition 1-14: Designated CAIR Representative
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 244-2

Item 1-14.1:

1) Each Clean Air Interstate Rule (CAIR) NOx source shall have one CAIR designated representative and may have one alternate representative, as per 6NYCRR Part 244-2.2, with regard to all matters under the CAIR NOx Annual Trading Program. The CAIR designated representative shall be selected by an agreement binding on the owners and operators of the source and act in accordance with the certification statement in 6NYCRR Part 244-2.4(a)(4)(iv). Upon receipt by the Administrator of a complete certificate of representation under 6NYCRR Part 244-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NOx source represented in all matters pertaining to the CAIR NOx Annual Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source. [244-2.1(a), (b) & (c)]

(2) Each submission under the CAIR NOx Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NOx source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." [244-2.1(e)]

**Condition 1-15: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 244-8

Item 1-15.1:

The Compliance Certification activity will be performed for the Facility.



Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-15.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Monitoring and Reporting NOX emissions

(1) The owners and operators, and to the extent applicable, the CAIR designated representative shall comply with all recordkeeping and reporting requirements in this condition, the applicable recordkeeping and reporting requirements under 40 CFR 75, and the requirements of 6NYCRR Part 244-2.1(e)(1).

(2) The CAIR designated representative shall submit quarterly reports of the the NOx mass emissions data and heat input data for each CAIR NOx unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 6NYCRR Part 244-8.1(b), unless that quarter is the third or fourth quarter of 2007, in which case reporting shall commence in the quarter covering January 1, 2008 through March 31, 2008.

(3) The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).

(4) For CAIR NOx units that are also subject to an Acid Rain emissions limitation or the CAIR NOx Ozone Season Trading Program, CAIR SO2 Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units (6NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the NOx mass emission data, heat input data, and other information required by this Subpart.

(5) 'Compliance certification.' The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary



responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(i) the monitoring data submitted were recorded in accordance with the applicable requirements of 6NYCRR Part 244 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

(ii) for a unit with add-on NO_x emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate NO_x emissions.

(6) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR part 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or appendix D or appendix E to 40 CFR part 75. [244-8.3(a)]

(7) Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under 6NYCRR Part 244-8.1(a)(1) that may significantly affect the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b) . Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO_x monitoring system under appendix E to 40 CFR part 75, under 6NYCRR Part 244-8.1(a)(1) are subject to the recertification requirements in 40 CFR 75.20(g)(6). [224-8.2(d)(2)

Monitoring Frequency: CONTINUOUS



Averaging Method: ANNUAL TOTAL
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

**Condition 1-16: CAIR SO2 Trading Program General Provisions
Effective for entire length of Permit**

Applicable Federal Requirement:6NYCRR 245-1

Item 1-16.1:

1) As of midnight of March 1, or midnight of the first business day thereafter (if March 1 is not a business day) for a control period, the owners and operators of each Clean Air Interstate Rule (CAIR) SO2 source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO2 allowances available for compliance deductions for the control period (January 1 through December 31) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO2 units at the source. A CAIR SO2 allowance shall not be deducted, for compliance with the requirements under paragraph (2) of this section, for a control period in a calendar year before the year for which the CAIR SO2 allowance was allocated.
[(245-1.2(b)(5), 245-1.6(c)(1), 245-1.2(b)(36), 245-1.6(c)(3)]

2) The owners and operators shall hold in their compliance account, CAIR SO allowances available for compliance deductions for the control period starting on the later of January 1, 2010 or the deadline for meeting a CAIR SO2 unit's monitor certification requirements under section 245-8.1(b)(1), (2), or (5) and for each control period thereafter. [245-1.6(c)(2)]

3) If a CAIR SO2 source emits sulfur dioxide during any control period in excess of the CAIR SO2 emissions limitation, the owners and operators of the source shall surrender the CAIR SO2 allowances required for deduction under 6NYCRR Part 245-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this Subpart, the Act, and applicable State law.
[(245-1.6(d)]

4) Unless otherwise provided, the owners and operators of the CAIR SO2 source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator: [245-1.6(e)]

(i) The certificate of representation under 6NYCRR Part 245-2.4 for the CAIR designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under 6NYCRR Part 245-2.4 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 6NYCRR Part 245-8, provided that to the extent that 6NYCRR Part 245-8 provides for a three-year period for recordkeeping, the three-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO2 Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR SO2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO2 Trading Program.



**Condition 1-17: Designated CAIR Representative
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 245-2

Item 1-17.1:

1) Each CAIR SO₂ source shall have one and only one CAIR designated representative and may have one alternate representative, as per 6NYCRR Part 245-2.2, with regard to all matters under the CAIR SO₂ Trading Program. The CAIR designated representative of the CAIR SO₂ source shall be selected by an agreement binding on the owners and operators of the source and all CAIR SO₂ units at the source and shall act in accordance with the certification statement in 6NYCRR Part 245-2.4(a)(4)(iv). Upon receipt by the Administrator of a complete certificate of representation under 6NYCRR Part 245-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR SO₂ source represented and each CAIR SO₂ unit at the source in all matters pertaining to the CAIR SO₂ Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source or unit.
[245-2.1(a), (b) & (c)]

(2) Each submission under the CAIR SO₂ Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR SO₂ source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
[245-2.1(e)]

**Condition 1-18: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 245-8

Item 1-18.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 1-18.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Monitoring and Reporting SO₂ emissions:

1) The owners and operators, and to the extent applicable,



the Clean Air Interstate Rule (CAIR) designated representative, of a CAIR SO₂ unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 245-8 and in 40 CFR Part 75, Subparts F and G. For purposes of complying with such requirements, the definitions in section 245-1.2 and 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be deemed to refer to the terms "CAIR SO₂ unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in section 245-1.2. The owner or operator of a unit that is not a CAIR SO₂ unit but that is monitored under 40 CFR 75.16(b)(2) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR SO₂ unit. [245-8.1]

2)The owner or operator of each CAIR SO₂ unit shall:
[245-8.1(a)]

(i) install all monitoring systems required under this Subpart for monitoring SO₂ mass emissions and individual unit heat input (including all systems required to monitor SO₂ concentration, stack gas moisture content, stack gas flow rate, CO₂ or O₂ concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.11 and 40 CFR 75.16);

(ii) successfully complete all certification tests required under Part 245-8.2 and meet all other requirements of this section and 40 CFR Part 75 applicable to the monitoring systems under this section; and

(iii) record, report, and quality-assure the data from the monitoring systems under paragraph of this section.

3) The owner or operator shall meet the monitoring system certification and other requirements of section 245-8.1(a)(1) and (2) on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under section 245-8.1(a)(1) on and after the following dates.
[245-8.1(b)]

(i) For the CAIR SO₂ unit that commences commercial operation before July 1, 2008, by January 1, 2009.

(ii) For the CAIR SO₂ unit that commences commercial operation on or after July 1, 2008, by the later of the following dates: January 1, 2009; or 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation.

4) Whenever the owner or operator makes a replacement, modification, or change in any certified continuous



emission monitoring system under section 245-8.1(a)(1) that may significantly affect the ability of the system to accurately measure or record SO₂ mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system under section 245-8.1(a)(1) is subject to the recertification requirements in 40 CFR 75.20(g)(6). [245-8.2(d)(2)]

5) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable missing data procedures in Subpart D of or appendix D to 40 CFR Part 75. [245-8.3(a)]

6) The CAIR designated representative shall comply with all recordkeeping and reporting requirements in section 245-8.3, the applicable recordkeeping and reporting requirements in Subparts F and G of 40 CFR Part 75, and the requirements of section 245-2.1(e)(1). [245-8.5(a)]

7) The owner or operator of a CAIR SO₂ unit shall comply with requirements of 40 CFR 75.62 for monitoring plans. [245-8.5(b)]

8) The CAIR designated representative shall submit an application to the department within 45 days after completing all initial certification or recertification tests required under section 245-8.2, including the information required under 40 CFR 75.63. [245-8.5(c)]

9) The CAIR designated representative shall submit quarterly reports of the SO₂ mass emissions data and heat input data for each CAIR SO₂ unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:



[245-8.5(d)(1)]

i) the calendar quarter covering January 1, 2009 through March 31, 2009 for a unit that commences commercial operation before July 1, 2008; or

ii) for a unit that commences commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under section 245-8.1(b), unless that quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009.

10) The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.64. [245-8.5(d)(2)]

11) For CAIR SO₂ units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units (6 NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the SO₂ mass emission data, heat input data, and other information required by this Subpart. [245-8.5(d)(3)]

12) The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that: [245-8.5(e)]

i) the monitoring data submitted were recorded in accordance with the applicable requirements of this Subpart and 40 CFR Part 75, including the quality assurance procedures and specifications; and

ii) for a unit with add-on SO₂ emission controls and for all hours where SO₂ data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate SO₂ emissions.

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL TOTAL

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.



Subsequent reports are due every 3 calendar month(s).

****** Emission Unit Level ******

Condition 53: Emission Point Definition By Emission Unit
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 201-6

Item 53.1(From Mod 1):

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00001

Emission Point: 00004

Height (ft.): 269

Diameter (in.): 444

NYTMN (km.): 4514.853 NYTME (km.): 593.06 Building: TGB

Item 53.2(From Mod 0):

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00002

Emission Point: 00005

Height (ft.): 50

Diameter (in.): 6

NYTMN (km.): 4514.767 NYTME (km.): 593.018 Building: TGB

Condition 54: Process Definition By Emission Unit
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 201-6

Item 54.1(From Mod 1):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: P10

Source Classification Code: 2-01-001-01

Process Description:

Process P10 in Emission Unit U-00001 represents distillate fuel oil (limit of 0.033 % sulfur by weight) firing in the four (4) identical combustion turbines (Emission Sources 0T001, 0T002, 0T003 & 0T004).

All four (4) combustion turbines are dual-fueled and all four turbines may operate at the same time. Natural gas is the primary fuel and distillate fuel oil is the back-up fuel. For this process, selective catalytic reduction (SCR) and water injection (WI) are used to control NOx emissions. Emissions of VOC and CO are controlled through the use of an oxidation catalyst. Each combustion turbine is expected to operate up to 8,760 hours/year on natural



gas and up to 720 hours/year on distillate oil. The maximum distillate fuel oil throughput for Process P10 may not exceed 41.6 million gallons per year. The emissions from this process exhaust through a common stack identified as Emission Point 00004 with four separate flues.

Emission Source/Control: 0T001 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T002 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T003 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T004 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 00CO1 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO2 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO3 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO4 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 0SCR1 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR2 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR3 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR4 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0WI01 - Control
Control Type: WATER INJECTION

Emission Source/Control: 0WI02 - Control
Control Type: WATER INJECTION

Emission Source/Control: 0WI03 - Control
Control Type: WATER INJECTION

Emission Source/Control: 0WI04 - Control



Control Type: WATER INJECTION

Item 54.2(From Mod 1):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: P12

Source Classification Code: 2-01-001-01

Process Description:

Process P12 in Emission Unit U-00001 represents distillate fuel oil firing in the four (4) identical combustion turbines (Emission Sources OT001, OT002, OT003 & OT004) with natural gas duct firing. The maximum firing rate for a single turbine plus duct burner is 2,191 MM Btu/hr (HHV). The maximum firing rate for a single duct burner is 388 MM Btu/hr. Due to limitations in the steam cycle portion of the plant, the maximum duct burner firing cannot occur when a turbine is operating at its maximum natural gas firing rate (1968 MM BTU/hr). Therefore, duct burner firing will only occur with less than 100 % load.

All four combustion turbines are dual-fueled and all four turbines may operate at the same time. Natural gas is the primary fuel and distillate fuel oil is the back-up fuel. For this process, dry low NOx burners (DLN) and selective catalytic reduction (SCR) and water injection (WI) are used to control NOx emissions. Emissions of VOC and CO are controlled through the use of an oxidation catalyst (duct burner in the HRSG design). Each combustion turbine is expected to operate up to 8,760 hours/year on natural gas and up to 720 hours/year on distillate oil. The maximum distillate fuel oil throughput for Process P12 may not exceed 41.6 million gallons per year. The emissions from this process exhaust through a common stack identified as Emission Point 00004 with four separate flues.

The permit's emissions criteria for Process P12 would follow the emissions limit set forth for Process P10, and there would be NO INCREASE IN EMISSIONS.

Emission Source/Control: 00DB1 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB2 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB3 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB4 - Combustion
Design Capacity: 388 million Btu per hour



Emission Source/Control: 0T001 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T002 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T003 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T004 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 00CO1 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO2 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO3 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO4 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 0DLN1 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN2 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN3 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN4 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0SCR1 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR2 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR3 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR4 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0WI01 - Control
Control Type: WATER INJECTION

Emission Source/Control: 0WI02 - Control
Control Type: WATER INJECTION



Emission Source/Control: 0WI03 - Control
Control Type: WATER INJECTION

Emission Source/Control: 0WI04 - Control
Control Type: WATER INJECTION

Item 54.3(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: P01

Source Classification Code: 2-01-002-01

Process Description:

Process P01 in Emission Unit U-00001 represents natural gas firing in the four (4) identical combustion turbines (Emission Sources 0T001, 0T002, 0T003 & 0T004) with natural gas duct firing. The maximum firing rate for a single turbine plus duct burner is 2,191 MM Btu/hr (HHV). The maximum firing rate for a single duct burner is 388 MM Btu/hr. Due to limitations in the steam cycle portion of the plant, the maximum duct burner firing cannot occur when a turbine is operating at its maximum natural gas firing rate (1968 MM BTU/hr). Therefore, duct burner firing will only occur with less than 100 % load.

All four combustion turbines are dual-fueled and all four turbines may operate at the same time. Natural gas is the primary fuel and distillate fuel oil is the back-up fuel. For this process, dry low NOx burners (DLN) and selective catalytic reduction (SCR) are used to control NOx emissions. Emissions of VOC and CO are controlled through the use of an oxidation catalyst. Each turbine is expected to operate up to 8,760 hours/year on natural gas and up to 720 hours/year on distillate oil. The maximum natural gas throughput for Process P01 may not exceed 69,868 million cubic feet per year. The emissions from this process exhaust through a common stack identified as Emission Point 00004 with four separate flues.

Emission Source/Control: 00DB1 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB2 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB3 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 00DB4 - Combustion
Design Capacity: 388 million Btu per hour

Emission Source/Control: 0T001 - Combustion
Design Capacity: 2,047.1 million Btu per hour



Emission Source/Control: 0T002 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T003 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T004 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 00CO1 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO2 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO3 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO4 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 0DLN1 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN2 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN3 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN4 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0SCR1 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR2 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR3 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR4 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 54.4(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: P05

Source Classification Code: 1-02-006-04

Process Description:

Process P05 in Emission Unit U-00001 represents natural



gas firing in the 99 MM Btu/hr auxiliary boiler (Emission Source BOIL1). This boiler fires natural gas only and is expected to operate up to 900 hours/year on natural gas. For the boiler, it is estimated that 88.8 MM cubic feet/year of natural gas will be used. The boiler's emissions exhaust parallel to the four turbines stack, but shares the four turbines stack to the atmosphere (Emission Point 00004).

Emission Source/Control: BOIL1 - Combustion
Design Capacity: 99 million Btu per hour

Item 54.5(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: P11

Source Classification Code: 2-01-001-01

Process Description:

Process P11 in Emission Unit U-00001 represents natural gas firing in the four (4) identical combustion turbines (Emission Sources 0T001, 0T002, 0T003 & 0T004) without duct firing. The maximum natural gas throughput for Process P11 may not exceed 68,959 million cubic feet per year.

All four combustion turbines are dual-fueled and all four turbines may operate at the same time. Natural gas is the primary fuel and distillate fuel oil is the back-up fuel. For this process, dry low NO_x burners (DLN) and selective catalytic reduction (SCR) are used to control NO_x emissions. Emissions of VOC and CO are controlled through the use of an oxidation catalyst. Each turbine is expected to operate up to 8,760 hours/year on natural gas and up to 720 hours/year on distillate oil. The maximum natural gas throughput for Processes P01 & P11 combined may not exceed 69,868 million cubic feet per year. The emissions from this process exhaust through a common stack identified as Emission Point 00004 with four separate flues.

Emission Source/Control: 0T001 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T002 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T003 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: 0T004 - Combustion
Design Capacity: 2,047.1 million Btu per hour



Emission Source/Control: 00CO1 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO2 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO3 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 00CO4 - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: 0DLN1 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN2 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN3 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0DLN4 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: 0SCR1 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR2 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR3 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: 0SCR4 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 54.6(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002

Process: P22

Source Classification Code: 2-80-002-18

Process Description:

Process P22 in Emission Unit U-00002 represents the 300 brake horsepower diesel fire suppression water pump firing diesel fuel oil. The diesel fire suppression water pump is expected to operate less than 500 hours/year on diesel fuel oil. The emissions from this process exhaust through a stack identified as Emission Point 00005.

Emission Source/Control: 00DFP - Combustion
Design Capacity: 300 horsepower (mechanical)



Condition 1-19: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 1-19.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P10

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 1-19.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will control Ammonia emission through proper operation and control of the Selective Catalytic Reduction (SCR). Control of the Ammonia feed rate will be based on the NOx and fuel flow.

Manufacturer Name/Model Number: CEM

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 3 calendar month(s).

Condition 112: Compliance Certification
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Expired by Mod 1

Item 112.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P10

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 112.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Astoria Energy LLC will control Ammonia emission through proper operation and control of the Selective Catalytic Reduction (SCR). Control of the Ammonia feed rate will be based on the NOx and fuel flow.

Manufacturer Name/Model Number: CEM

Parameter Monitored: AMMONIA

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-20: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 1-20.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P12

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 1-20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will control Ammonia emission through proper operation and control of the Selective Catalytic Reduction (SCR). Control of the Ammonia feed rate will be based on the NOx and fuel flow.

Manufacturer Name/Model Number: CEM

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 3 calendar month(s).



Condition 140: Compliance Certification
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Expired by Mod 1

Item 140.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P12

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 140.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Astoria Energy LLC will control Ammonia emission through proper operation and control of the Selective Catalytic Reduction (SCR). Control of the Ammonia feed rate will be based on the NOx and fuel flow.

Manufacturer Name/Model Number: CEM

Parameter Monitored: AMMONIA

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

Subsequent reports are due every 3 calendar month(s).



STATE ONLY ENFORCEABLE CONDITIONS

****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 149: Contaminant List

Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable State Requirement:ECL 19-0301

Item 149.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007446-09-5



Name: SULFUR DIOXIDE

CAS No: 007664-41-7

Name: AMMONIA

CAS No: 007664-93-9

Name: SULFURIC ACID

CAS No: 0NY075-00-0

Name: PARTICULATES

CAS No: 0NY075-00-5

Name: PM-10

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0

Name: VOC

**Condition 1-21: Unavoidable noncompliance and violations
Effective for entire length of Permit**

Applicable State Requirement: 6NYCRR 201-1.4

Item 1-21.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These



reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 150: Unavoidable noncompliance and violations
Effective between the dates of 03/18/2008 and Permit Expiration Date**

Applicable State Requirement:

Expired by Mod 1

Item 150.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a



written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superseded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

Condition 1-22: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement:6NYCRR 211.2

Item 1-22.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 151: Air pollution prohibited
Effective between the dates of 03/18/2008 and Permit Expiration Date

Applicable State Requirement:

Expired by Mod 1

Item 151.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 1-23: CO2 Budget Trading Program - Excess emission requirements
Effective for entire length of Permit



Applicable State Requirement:6NYCRR 242-1.5

Item 1-23.1:

The owners and operators of a CO₂ budget source that has excess emissions in any control period shall:

- (1) forfeit the CO₂ allowances required for deduction under 6 NYCRR Part 242-6.5(d)(1), provided CO₂ offset allowances may not be used to cover any part of such excess emissions; and
- (2) pay any fine, penalty, or assessment or comply with any other remedy imposed under 6 NYCRR Part 242-6.5(d)(2).

Condition 1-24: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6NYCRR 242-1.5

Item 1-24.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-24.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owners and operators and, to the extent applicable, the CO₂ authorized account representative of each CO₂ budget source and each CO₂ budget unit at the source shall comply with the monitoring requirements of Subpart 242-8. The emissions measurements recorded and reported in accordance with Subpart 242-8 of this Part shall be used to determine compliance by the unit with the following CO₂ requirements:

- (1) The owners and operators of each CO₂ budget source and each CO₂ budget unit at the source shall hold CO₂ allowances available for compliance deductions under Section 242-6.5, as of the CO₂ allowance transfer deadline, in the source's compliance account in an amount not less than the total CO₂ emissions for the control period from all CO₂ budget units at the source, as determined in accordance with Subparts 242-6 and 242-8.
- (2) Each ton of CO₂ emitted in excess of the CO₂ budget emissions limitation shall constitute a separate violation of this Part and applicable state law.
- (3) A CO₂ budget unit shall be subject to the requirements specified in item 1 starting on the later, of January 1, 2009 or the date on which the unit commences operation.
- (4) CO₂ allowances shall be held in, deducted from, or transferred among CO₂ Allowance Tracking System accounts



in accordance with Subparts 242-5, 242-6, and 242-7, and Section 242-10.7.

(5) A CO₂ allowance shall not be deducted, in order to comply with the requirements specified in item 1, for a control period that ends prior to the allocation year for which the CO₂ allowance was allocated. A CO₂ offset allowance shall not be deducted, in order to comply with the requirements under item 1, beyond the applicable percent limitations set out in 6NYCRR Part 242-6.5(a)(3).

(6) A CO₂ allowance under the CO₂ Budget Trading Program is a limited authorization by the Department or a participating state to emit one ton of CO₂ in accordance with the CO₂ Budget Trading Program. No provision of the CO₂ Budget Trading Program, the CO₂ budget permit application, or the CO₂ budget permit or any provision of law shall be construed to limit the authority of the Department or a participating state to terminate or limit such authorization.

(7) A CO₂ allowance under the CO₂ Budget Trading Program does not constitute a property right.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-25: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6NYCRR 242-1.5

Item 1-25.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owners and operators of the CO₂ budget source and each CO₂ budget unit at the source shall keep on site at the source each of the following documents for a period of 10 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 10 years, in writing by the department.

(i) The account certificate of representation for the CO₂ authorized account representative for the source and each



CO2 budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 6 NYCRR Part 242-2.4, provided that the certificate and documents shall be retained on site at the source beyond such 10-year period until such documents are superseded because of the submission of a new account certificate of representation.

(ii) All emissions monitoring information, in accordance with Subpart 242-8 and 40 CFR 75.57.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CO2 Budget Trading Program.

(iv) Copies of all documents used to complete a CO2 budget permit application and any other submission under the CO2 Budget Trading Program or to demonstrate compliance with the requirements of the CO2 Budget Trading Program.

The CO2 authorized account representative of a CO2 budget source and each CO2 budget unit at the source shall submit the reports and compliance certifications required under the CO2 Budget Trading Program, including those under Subpart 242-4.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072

