



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6301-00072/00014
Effective Date: 10/04/2013 Expiration Date: 10/03/2018

Permit Issued To: 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

Contact: MICHAEL STOCKSTAD
ASTORIA ENERGY LLC & ASTORIA ENERGY II LLC
17-10 STEINWAY ST
ASTORIA, NY 11105-1097
(718) 626-5711

Description:

PERMIT DESCRIPTION
Astoria Energy LLC & Astoria Energy II LLC
DEC ID # 2-6301-00072/00014 (Ren 2, Mod 0)

Astoria Energy LLC & Astoria Energy II LLC is located at 17-10 Steinway Street in the Astoria section of Queens, New York. The facility consists of a nominal 1,150 megawatt (MW) combined-cycle natural gas fired facility with the ability to use low-sulfur distillate oil (0.033 % by weight sulfur until June 30, 2014, and 0.0015% by weight sulfur thereafter) as a back up fuel. The major components of the facility include four (4) General Electric Model No. 7241FA combustion turbines, four (4) heat recovery steam generators (HRSGs) each equipped with a duct burner for supplemental firing, two (2) steam turbines with two (2) air cooled condensers, four (4) nested exhaust flues, an auxiliary boiler, a diesel firewater pump, the switchyard and the associated equipment, air cooled condensers, and the water treatment facility with associated tankage. Distillate fuel oil is stored in two (2) existing tanks on site.

The turbines fire natural gas for up to 8,760 hours per year and distillate oil for up to 720 hours/year. The duct burners fire only natural gas. Distillate fuel oil is stored in existing tanks on site. The four (4) combustion turbines produce electricity and exhaust to the HRSGs. The steam that is produced in the HRSGs is used to drive the steam turbines to produce additional electricity. Low



temperature steam that exhausts from the steam turbines flows into the air-cooled condensers. Condensate from the air-cooled condensers is returned to the HRSGs. The facility technology is referred to as combined-cycle because electric power is generated in both gas and steam turbines resulting in a highly efficient process of fuel utilization. The Standard Industrial Code for this facility is 4911- Electrical Services (establishments engaged in the generation, transmission, and/or distribution of electric energy for sale).

Astoria Energy LLC & Astoria Energy II LLC consist of one 36.5 MM Btu/hr auxiliary boiler (Emission Source BOIL1) and four (4) GE Combustion Turbine units (Emission Sources 0T001, 0T002, 0T003 & 0T004) each rated at 2,047 MM Btu/hr (Emission Unit U-00001), each with supplemental firing duct burners of 388 MM Btu/hr heat input each (Emission Sources 00DB1, 00DB2, 00DB3 & 00DB4). Two of the four (4) combustion turbines (Emission Sources 0T001 & 0T002) and a single Alstom Steam Turbine were constructed on August 1, 2004 and began natural gas commercial operation on natural gas on May 21, 2006 after successfully completing the required stack test on natural gas (Phase 1 of the project). The same two combustion turbines, Turbine 1 & Turbine 2 (Emission Sources 0T001 & 0T002) first fired low sulfur distillate oil on December 16 and December 19, 2006; respectively. The commissioning of low sulfur distillate oil was completed on January 22, 2010 for Combustion Turbine 1 and on January 21, 2010 for Combustion Turbine 2. The other two combustion turbines (Emission Sources 0T003 & 0T004), the single Steam Turbine, and the auxiliary boiler (Emission Source BOIL1) have completed construction (Phase 2 of the project) in March, 2011. Combustion Turbine 3 first fired on April 5, 2011, and its commercial operation began on April 11, 2011. Combustion Turbines 3 & 4 completed natural gas commissioning on June 19, 2011 and the low sulfur distillate oil commissioning was completed on June 27, 2011. The auxiliary boiler completed commissioning on June 16, 2011. Each turbine is equipped with a dry low NO_x burner (Emission Controls 0DLN1, 0DLN2, 0DLN3 & 0DLN4). In order to reduce nitrogen oxides (NO_x) emissions, each turbine is equipped with SCR - selective catalytic reduction (Emission Controls 0SCR1, 0SCR2, 0SCR3 & 0SCR4) in the HRSG design. Also, in order to reduce carbon monoxide (CO) emissions and volatile organic compounds (VOC), each turbine is equipped with an oxidation catalyst (Emission Controls 00CO1, 00CO2, 00CO3 & 00CO4) in the HRSG design. Control of the ammonia feed rate will be based on the NO_x and fuel flow and in order to control the NO_x emissions when firing distillate oil, water injection (Emission Control 0WI01, 0WI02, 0WI03 & 0WI04) will be used. This configuration represents Best Available Control Technology (BACT). The proposed pollution control equipment will also result in the Lowest Achievable Emission Rate (LAER) for NO_x, CO and volatile organic compounds (VOC). The four (4) combustion turbines will fire natural gas as the primary fuel with



duct firing (Process P01), without duct firing (Process P11), and distillate fuel oil which has a sulfur limit of 0.033% by weight (until June 30, 2014 and 0.0015% by weight thereafter) without duct firing (Process P10) and with duct firing (Process P12). The turbines fire natural gas for up to 8,760 hours/year and distillate oil for up to 720 hours/year. The duct burners fire natural gas only. The emissions from the four turbines/duct burners exhaust through one common stack, identified as Emission Point 00001 with four (4) separate flues. The same stack will be used for the 36.5 MM Btu/hr auxiliary boiler (Emission Source BOIL1). Emission Unit U-00001 also consists of a 36.5 MM Btu/hr auxiliary boiler which has not been constructed yet. The boiler will only fire natural gas (Process P05) for up to 900 hours/year. The estimated annual consumption for the boiler is 88.8 MM cu ft/yr of natural gas. The emissions from the boiler will exhaust through one stack identified as Emission Point 00004 (the same stack as the four turbines). The facility has a second emission unit (U-00002) for the 300 bhp diesel fire pump (emission source 00DFP). The diesel fire pump was constructed on 1/1/2002 and began operation on 12/1/2006. The diesel fire pump operates on oil (Process P22). The diesel fire pump is expected to operate up to 500 hours/year. The emissions from the diesel fire pump exhaust through one stack identified as Emission Point 00005.

The potential emissions of major air pollutants from this facility will exceed the major source thresholds for all of the PSD (Prevention of Significant Deterioration - 40 CFR 52-A.21(j)) regulated pollutants. As part of the application, the applicant provided a control technology analysis for the various pollutants based on the area's attainment status and the potential emissions from the facility. The facility is located in a severe non-attainment area for ozone. Oxides of Nitrogen (NO_x) and volatile organic compounds (VOCs) are precursors to ozone formation and are treated as non-attainment pollutants, even though the area is in attainment for NO_x. Since the original Title V permit application was filed, all of metropolitan New York City area (project site) has been reclassified as attainment for carbon monoxide. As of November of 2002, the CO has been redesignated from non-attainment to attainment pollutant in the severe ozone region (New York City Metropolitan Area), and the applicability threshold for CO for a Title V has increased from 50 tpy to 100 tpy. Therefore, the facility will need to meet the more stringent lowest achievable emission rate (LAER - 6 NYCRR 231-2.7(b)) requirements for the emissions of NO_x, VOC and CO. The NO_x emissions are reduced with SCR - selective catalytic reduction in the HRSG design of the turbine. The emissions of VOC and CO are controlled through the use of an oxidation catalyst equipped in the HRSG design of the turbine. When firing distillate oil, NO_x emissions are controlled through water injections and SCR in the HRSG design of the turbine. The emissions of particulate matter (PM/PM-10) are controlled through the use of clean burning fuels (natural gas and distillate oil). The emissions of sulfur



dioxide (SO₂) and sulfuric acid mist (H₂SO₄) are 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 are controlled by water injection and efficient use of the SCR.

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c), including two (2) storage tanks for distillate oil with capacities of approximately 6.3 million gallons each, the switchyard, air cooled condensers, and the water treatment facility with associated tankage.

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

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: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 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 1.2:

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 1.3:

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

Applicable State Requirement: ECL 3-0301 (2) (m)

Item 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 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 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 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 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 to the Department for review and approval.



Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

The Department reserves the right to exercise all available authority 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 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

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

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: 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: 10/04/2013

Permit Expiration Date: 10/03/2018



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6 NYCRR 201-6.4 (a) (7): Fees
- 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 201-6.4 (e): Compliance Certification
- 7 6 NYCRR 202-2.1: Compliance Certification
- 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 9 6 NYCRR 215.2: Open Fires - Prohibitions
- 10 6 NYCRR 200.7: Maintenance of Equipment
- 11 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 18 6 NYCRR 202-1.1: Required Emissions Tests
- 19 40 CFR Part 68: Accidental release provisions.
- 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 21 6 NYCRR Subpart 201-6: Steady state and fuel switching emission limit applicability.
- 22 6 NYCRR Subpart 201-6: Emission Unit Definition
- 23 6 NYCRR Subpart 201-6: Compliance Certification
- 24 6 NYCRR Subpart 201-6: Compliance Certification
- 25 6 NYCRR Subpart 201-6: Compliance Certification
- 26 6 NYCRR Subpart 201-6: Compliance Certification
- 27 6 NYCRR Subpart 201-6: Compliance Certification
- 28 6 NYCRR Subpart 201-6: Compliance Certification
- 29 6 NYCRR Subpart 201-6: Compliance Certification
- 30 6 NYCRR Subpart 201-6: Compliance Certification
- 31 6 NYCRR Subpart 201-6: Compliance Certification
- 32 6 NYCRR Subpart 201-6: Compliance Certification
- 33 6 NYCRR Subpart 201-6: Compliance Certification
- 34 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 35 6 NYCRR 201-6.4 (f): Compliance Certification
- 36 6 NYCRR Subpart 201-7: Facility Permissible Emissions
- 37 6 NYCRR 202-1.5: Prohibitions
- 38 6 NYCRR Subpart 202-2: Emission Statements
- 39 6 NYCRR Part 207: Submittal of Episode Action Plans
- 40 6 NYCRR 211.1: Air pollution prohibited
- 41 6 NYCRR 225-1.2 (b): Compliance Certification
- 42 6 NYCRR 225-1.2 (g): Compliance Certification



- 43 6 NYCRR 225-1.2 (h): Compliance Certification
- 44 6 NYCRR 231-2.4: Notification and reporting requirements.
- 45 6 NYCRR 231-2.4: Emission offset requirements
- 46 6 NYCRR 243-1.6 (a): Permit Requirements
- 47 6 NYCRR 243-1.6 (b): Monitoring requirements
- 48 6 NYCRR 243-1.6 (c): NOx Ozone Season Emission Requirements
- 49 6 NYCRR 243-1.6 (d): Excess emission requirements
- 50 6 NYCRR 243-1.6 (e): Recordkeeping and reporting requirements
- 51 6 NYCRR 243-2.1: Authorization and responsibilities of CAIR
designated representative
- 52 6 NYCRR 243-2.4: Certificate of representation
- 53 6 NYCRR 243-8.1: General requirements
- 54 6 NYCRR 243-8.1: Prohibitions
- 55 6 NYCRR 243-8.3: Out of control periods
- 56 6 NYCRR 243-8.5 (d): Quarterly reports
- 57 6 NYCRR 243-8.5 (e): Compliance certification
- 58 6 NYCRR Subpart 244-1: CAIR NOx Annual Trading Program General
Conditions
- 59 6 NYCRR Subpart 244-2: Designated CAIR Representative
- 60 6 NYCRR Subpart 244-8: Compliance Certification
- 61 6 NYCRR Subpart 245-1: CAIR SO2 Trading Program General Provisions
- 62 6 NYCRR Subpart 245-2: Designated CAIR Representative
- 63 6 NYCRR Subpart 245-8: Compliance Certification
- 64 40CFR 52.21(j), Subpart A: Compliance Certification
- 65 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.
- 66 40CFR 60.7(a), NSPS Subpart A: Date of construction notification -
If a COM is not used.
- 67 40CFR 60.7(b), NSPS Subpart A: Recordkeeping requirements.
- 68 40CFR 60.7(d), NSPS Subpart A: Excess emissions report.
- 69 40CFR 60.7(f), NSPS Subpart A: Facility files for subject sources.
- 70 40CFR 60.8(a), NSPS Subpart A: Performance testing timeline.
- 71 40CFR 60.8(b), NSPS Subpart A: Performance test methods.
- 72 40CFR 60.8(c), NSPS Subpart A: Required performance test information.
- 73 40CFR 60.8(d), NSPS Subpart A: Prior notice.
- 74 40CFR 60.8(e), NSPS Subpart A: Performance testing facilities.
- 75 40CFR 60.8(f), NSPS Subpart A: Number of required tests.
- 76 40CFR 60.9, NSPS Subpart A: Availability of information.
- 77 40CFR 60.11, NSPS Subpart A: Opacity standard compliance testing.
- 78 40CFR 60.12, NSPS Subpart A: Circumvention.
- 79 40CFR 60.13, NSPS Subpart A: Monitoring requirements.
- 80 40CFR 60.14, NSPS Subpart A: Modifications.
- 81 40CFR 60.15, NSPS Subpart A: Reconstruction
- 82 40 CFR Part 72: Facility Subject to Title IV Acid Rain Regulations
and Permitting
- Emission Unit Level**
- 83 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 84 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 85 6 NYCRR Subpart 201-7: Emission Unit Permissible Emissions
- 86 6 NYCRR Subpart 201-7: Process Permissible Emissions

EU=U-00001

- 87 6 NYCRR 231-2.5: Compliance Certification



- 88 6 NYCRR 231-2.5: Compliance Certification
- 89 6 NYCRR 231-2.5: Compliance Certification
- 90 6 NYCRR 231-2.6: Compliance Certification
- 91 6 NYCRR 231-2.6: Compliance Certification
- 92 6 NYCRR 231-2.6: Compliance Certification
- 93 6 NYCRR 231-2.9: Compliance Certification
- 94 40CFR 52.21, Subpart A: Compliance Certification
- 95 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification

EU=U-00001,Proc=P10

- 96 40CFR 60.44c(g), NSPS Subpart Dc: Alternate compliance methods for sulfur dioxide.

EU=U-00001,EP=00004

- 97 6 NYCRR 201-6.4 (b): Compliance Certification
- 98 6 NYCRR 201-6.4 (b): Compliance Certification
- 99 6 NYCRR 227-1.3 (a): Compliance Certification
- 100 40CFR 52.21, Subpart A: Compliance Certification
- 101 40CFR 52.21(j), Subpart A: Compliance Certification
- 102 40CFR 52.21(j), Subpart A: Compliance Certification
- 103 40CFR 60.47a(c), NSPS Subpart Da: Compliance Certification

EU=U-00001,EP=00004,Proc=P01

- 104 6 NYCRR 231-2.7 (b): Compliance Certification
- 105 6 NYCRR 231-2.7 (b): Compliance Certification
- 106 6 NYCRR 231-2.7 (b): Compliance Certification
- 107 6 NYCRR 231-2.7 (b): Compliance Certification
- 108 6 NYCRR 231-2.7 (b): Compliance Certification
- 109 6 NYCRR 231-2.7 (b): Compliance Certification
- 110 40CFR 52.21(j), Subpart A: Compliance Certification
- 111 40CFR 52.21(j), Subpart A: Compliance Certification
- 112 40CFR 52.21(j), Subpart A: Compliance Certification
- 113 40CFR 52.21(j), Subpart A: Compliance Certification
- 114 40CFR 52.21(j), Subpart A: Compliance Certification
- 115 40CFR 52.21(j), Subpart A: Compliance Certification
- 116 40CFR 52.21(j), Subpart A: Compliance Certification
- 117 40CFR 52.21(j), Subpart A: Compliance Certification
- 118 40CFR 60.334(b), NSPS Subpart GG: Compliance Certification

EU=U-00001,EP=00004,Proc=P05,ES=BOIL1

- 119 6 NYCRR 227-2.4 (c) (1) (i): Compliance Certification
- 120 6 NYCRR 227-2.4 (c) (1) (ii): Compliance Certification
- 121 6 NYCRR 231-2.7 (b): Compliance Certification
- 122 6 NYCRR 231-2.7 (b): Compliance Certification
- 123 6 NYCRR 231-2.7 (b): Compliance Certification
- 124 6 NYCRR 231-2.7 (b): Compliance Certification
- 125 6 NYCRR 231-2.7 (b): Compliance Certification
- 126 6 NYCRR 231-2.7 (b): Compliance Certification
- 127 40CFR 52.21(j), Subpart A: Compliance Certification
- 128 40CFR 52.21(j), Subpart A: Compliance Certification
- 129 40CFR 52.21(j), Subpart A: Compliance Certification



- 130 40CFR 52.21(j), Subpart A: Compliance Certification
- 131 40CFR 52.21(j), Subpart A: Compliance Certification

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

- *132 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 133 6 NYCRR 231-2.7 (b): Compliance Certification
- 134 6 NYCRR 231-2.7 (b): Compliance Certification
- 135 6 NYCRR 231-2.7 (b): Compliance Certification
- 136 6 NYCRR 231-2.7 (b): Compliance Certification
- 137 6 NYCRR 231-2.7 (b): Compliance Certification
- 138 6 NYCRR 231-2.7 (b): Compliance Certification
- 139 40CFR 52.21(j), Subpart A: Compliance Certification
- 140 40CFR 52.21(j), Subpart A: Compliance Certification
- 141 40CFR 52.21(j), Subpart A: Compliance Certification
- 142 40CFR 52.21(j), Subpart A: Compliance Certification
- 143 40CFR 52.21(j), Subpart A: Compliance Certification
- 144 40CFR 52.21(j), Subpart A: Compliance Certification
- 145 40CFR 52.21(j), Subpart A: Compliance Certification
- 146 40CFR 52.21(j), Subpart A: Compliance Certification
- 147 40CFR 52.21(j), Subpart A: Compliance Certification
- 148 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00001,EP=00004,Proc=P11

- 149 6 NYCRR 231-2.7 (b): Compliance Certification
- 150 6 NYCRR 231-2.7 (b): Compliance Certification
- 151 6 NYCRR 231-2.7 (b): Compliance Certification
- 152 6 NYCRR 231-2.7 (b): Compliance Certification
- 153 6 NYCRR 231-2.7 (b): Compliance Certification
- 154 6 NYCRR 231-2.7 (b): Compliance Certification
- 155 40CFR 52.21(j), Subpart A: Compliance Certification
- 156 40CFR 52.21(j), Subpart A: Compliance Certification
- 157 40CFR 52.21(j), Subpart A: Compliance Certification
- 158 40CFR 52.21(j), Subpart A: Compliance Certification
- 159 40CFR 52.21(j), Subpart A: Compliance Certification
- 160 40CFR 52.21(j), Subpart A: Compliance Certification
- 161 40CFR 52.21(j), Subpart A: Compliance Certification
- 162 40CFR 52.21(j), Subpart A: Compliance Certification

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

- *163 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 164 6 NYCRR 231-2.7 (b): Compliance Certification
- 165 6 NYCRR 231-2.7 (b): Compliance Certification
- 166 6 NYCRR 231-2.7 (b): Compliance Certification
- 167 6 NYCRR 231-2.7 (b): Compliance Certification
- 168 6 NYCRR 231-2.7 (b): Compliance Certification
- 169 6 NYCRR 231-2.7 (b): Compliance Certification
- 170 40CFR 52.21(j), Subpart A: Compliance Certification
- 171 40CFR 52.21(j), Subpart A: Compliance Certification
- 172 40CFR 52.21(j), Subpart A: Compliance Certification
- 173 40CFR 52.21(j), Subpart A: Compliance Certification
- 174 40CFR 52.21(j), Subpart A: Compliance Certification
- 175 40CFR 52.21(j), Subpart A: Compliance Certification

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



- 176 40CFR 52.21(j), Subpart A: Compliance Certification
- 177 40CFR 52.21(j), Subpart A: Compliance Certification
- 178 40CFR 52.21(j), Subpart A: Compliance Certification
- 179 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00002

- 180 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification

EU=U-00002,EP=00005,Proc=P22,ES=00DFP

- 181 6 NYCRR 231-2.7 (b): Compliance Certification
- 182 6 NYCRR 231-2.7 (b): Compliance Certification
- 183 6 NYCRR 231-2.7 (b): Compliance Certification
- 184 40CFR 52.21(j), Subpart A: Compliance Certification
- 185 40CFR 52.21(j), Subpart A: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 186 ECL 19-0301: Contaminant List
- 187 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 188 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 189 6 NYCRR 242-1.5: CO2 Budget Trading Program - Excess emission requirements
- 190 6 NYCRR 242-1.5: Compliance Demonstration
- 191 6 NYCRR 242-1.5: Compliance Demonstration

NOTE: * preceding the condition number indicates capping.



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 - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;

(3) During the period of the emergency the facility owner 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 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 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 - 6 NYCRR 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 6 NYCRR 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 201-6.2 (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 201-6.2 (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 201-6.4 (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 201-6.4 (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 201-6.4 (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 201-6.4 (a) (6)

This permit does not convey any property rights of any sort or any exclusive privilege.



Item I: Severability - 6 NYCRR 201-6.4 (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 201-6.4 (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 201-6.4 (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.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

**Condition 1: Acceptable Ambient Air Quality
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

**Condition 2: Fees
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (7)

Item 2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

**Condition 3: Recordkeeping and Reporting of Compliance Monitoring
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-6.4 (c)



Item 3.1:

The following information must be included in any required compliance monitoring records and reports:

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.2 of Part 201.

**Condition 4: Records of Monitoring, Sampling, and Measurement
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (2)

Item 4.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

**Condition 5: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:



Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.
- (4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill



Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. 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. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.



The initial report is due 4/30/2014.
Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 201-6.4 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

- i. Compliance certifications shall contain:
 - the identification of each term or condition of the permit that is the basis of the certification;
 - the compliance status;
 - whether compliance was continuous or intermittent;
 - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related record keeping and reporting requirements of this permit;
 - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
 - such additional requirements as may be specified elsewhere in this permit related to compliance certification.
- ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.
- iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the



Department.

iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

The address for the BQA is as follows:

NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2014.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:
The Compliance Certification activity will be performed for the Facility.

Item 7.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.



Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due by April 15th for previous calendar year

Condition 8: Recordkeeping requirements
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 8.1:

(a) The following records shall be maintained for at least five years:

- (1) a copy of each emission statement submitted to the department; and
- (2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 9: Open Fires - Prohibitions
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 215.2

Item 9.1:

Except as allowed by Title 6 NYCRR Section 215.3, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item 9.2

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

- (a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke



producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.

(h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.

(i) Prescribed burns performed according to Part 194 of this Title.

(j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.

(k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.

(l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.

[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

**Condition 10: Maintenance of Equipment
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 200.7

Item 10.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

**Condition 11: Recycling and Salvage
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.



Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

No person shall unnecessarily remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Condition 13: Exempt Sources - Proof of Eligibility

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-3.2 (a)

Item 13.1:

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 14: Trivial Sources - Proof of Eligibility

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-3.3 (a)

Item 14.1:

The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

Condition 15: Requirement to Provide Information

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (4)

Item 15.1:

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 16: Right to Inspect

Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (8)

Item 16.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

- (i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and
- (iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 17: Off Permit Changes

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)

Item 17.1:

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

- (i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

Condition 18: Required Emissions Tests

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 202-1.1



Item 18.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

**Condition 19: Accidental release provisions.
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:40 CFR Part 68

Item 19.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:
 - 1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,
 - 2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

**Condition 20: Recycling and Emissions Reduction
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:40CFR 82, Subpart F

Item 20.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

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

Condition 21: Steady state and fuel switching emission limit applicability.



Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 21.1:The emission limits for NO_x, CO, and NH₃ are monitored by continuous emissions monitors (CEMs), and apply only during periods of steady state operation of the turbines (exclusion of start-up, shutdown, and fuel switching events). The owner or operator is required to develop emission limits for these pollutants during periods of start-up, shutdown, and fuel switching for both natural gas and distillate oil firing modes of operation.

Condition 22: Emission Unit Definition
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 22.1:

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 NO_x burner (Emission Controls 0DLN1, 0DLN2, 0DLN3 & 0DLN4; respectively). Emission Unit U00001 also consists of one (1) Nebraska 36.5 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 NO_x and fuel flow in order to control the NO_x 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 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). 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 NOx 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 NOx 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, NOx 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 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,

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



0SCR3 & 0SCR4).

Building(s): TGB

Item 22.2:

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, and burns 500 ppm sulfur #2 diesel fuel. Emissions from the diesel fire pump are exhausted through a stack, which is identified as Emission Point 00005. Data for the 6081H Base Model Fire Pump:

Engine Manufactured by John Deere Co., the fire pump driver is manufactured by Clarke, Model JW6H-UF40.
6 Cylinders
4 Cycle
Lean burn
Turbocharged

Emission Data in g/bhp-hr for CO, PM & NMHC+NOx contaminants :

RPM	BHP	Fuel (gal/hr)	CO	PM	NMHC+NOx
1760	290	13.5	0.51	0.13	5.73
2100	300	14.0	0.32	0.12	4.65
2350	300	14.5	0.41	0.16	4.11

Building(s): TGB

Condition 23: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6



Item 23.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T004



Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 23.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NOx and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up after extended outage or combustion tuning event limits for NOx for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NOx and CO, but not for NH3 limitations since it is not a regulated pollutant.

START-UP - AFTER EXTENDED OUTAGE OR COMBUSTION TUNING
EVENT: NOx: 2,100 lbs/event

Extended start-ups to perform combustion tuning, or the period after an extended outage to bring a combustion turbine unit back online, shall not exceed 14 hours and may occur a maximum of 4 times per calendar year per combustion turbine generator engine.

The emission limit of 2,100 pounds for total NOx emissions per start-up after extended outage or combustion tuning event not exceeding 14 hours per occurrence and may occur a maximum of 4 times per calendar year per combustion turbine generator engine, applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.



Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

NOx limit: 2,100 lbs/event for start-up - after extended outage or combustion tuning event.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2100 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 24: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 24.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO3



Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0WI01
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0WI02
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0WI03
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0WI04

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission



rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up after extended outage or combustion tuning event limits for CO for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

START-UP - AFTER EXTENDED OUTAGE OR COMBUSTION TUNING EVENT: CO: 2,400 lbs/event

Extended start-ups to perform combustion tuning, or the period after an extended outage to bring a combustion turbine unit back online, shall not exceed 14 hours and may occur a maximum of 4 times per calendar year per combustion turbine generator engine.

The emission limit of 2,400 pounds for total CO emissions per start-up after extended outage or combustion tuning event not exceeding 14 hours per occurrence and may occur a maximum of 4 times per calendar year per combustion turbine generator engine, applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia



and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

CO limit: 2,400 lbs/event for start-up - after extended outage or combustion tuning event.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 2400 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 25: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 25.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001	Emission Point: 00004



Process: P10	Emission Source: 0SCR4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI01
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI02
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI03
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI04
Regulated Contaminant(s): CAS No: 000630-08-0	CARBON MONOXIDE

Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up distillate oil limits for CO for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.



Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

START-UP - DISTILLATE OIL: CO: 2,000
lbs/event

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the combustion turbine generator begins operating at a 1:1 fuel-to-water ratio plus 60 minutes, not to exceed 10 hours. Mode 6Q is achieved after start-up is complete.

The emission limit of 2,000 pounds for total CO emissions per start-up of distillate oil event not exceeding ten (10) hours applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

CO limit: 2,000 lbs/event for distillate oil start-up.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 2000 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: CONTINUOUS

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 26: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 26.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T004

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001	Emission Point: 00004



Process: P12	Emission Source: 00CO2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T004
Regulated Contaminant(s): CAS No: 000630-08-0	CARBON MONOXIDE

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates limit for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following fuel transfer limits for CO for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.



FUEL TRANSFER: CO: 300 lbs/event

Fuel Transfer is defined as the period of time from initiation of the fuel transfer process in the combustion turbine generator engine until the fuel transfer process is completed, not to exceed 120 minutes per occurrence.

The emission limit of 300 pounds for total CO emissions per fuel transfer event not exceeding 120 minutes per occurrence applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

CO limit: 300 lbs/event for fuel transfer.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 300 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 27: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6



Item 27.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO4



Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T001



Emission Unit: U-00001 Emission Point: 00004
Process: P12 Emission Source: 0T002

Emission Unit: U-00001 Emission Point: 00004
Process: P12 Emission Source: 0T003

Emission Unit: U-00001 Emission Point: 00004
Process: P12 Emission Source: 0T004

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following shutdown limits for CO for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

SHUTDOWN: CO: 300 lbs/event

Shutdown is defined as the period of time when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated, not to exceed 120 minutes per occurrence.

The emission limit of 300 pounds for total CO emissions per shutdown event not exceeding 120 minutes per occurrence applies to each of the four combustion turbines

New York State Department of Environmental Conservation
Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Process: P10	Emission Source: 0SCR4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR1



Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0T004

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following fuel transfer limits for NO_x for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated



pollutant.

FUEL TRANSFER: NOx: 300 lbs/event

Fuel Transfer is defined as the period of time from initiation of the fuel transfer process in the combustion turbine generator engine until the fuel transfer process is completed, not to exceed 120 minutes per occurrence.

The emission limit of 300 pounds for total NOx emissions per fuel transfer event not exceeding 120 minutes per occurrence applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

NOx limit: 300 lbs/event for fuel transfer.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 300 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 29: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 29.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR3



Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T004

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up natural gas limits for CO for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

START-UP - NATURAL GAS: CO: 1,500 lbs/event

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the combustion turbine generator engine



begins operating in Mode 6Q plus 60 minutes, not to exceed 10 hours.

The emission limit of 1,500 pounds for total CO emissions per start-up of natural gas event not exceeding ten (10) hours applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

CO limit: 1,500 lbs/event for natural gas start-up.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 1500 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 30: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 30.1:

The Compliance Certification activity will be performed for the facility:



The Compliance Certification applies to:

Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI01
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI02
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI03
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0WI04

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN



Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up distillate oil limits for NO_x for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

START-UP - DISTILLATE OIL: NO_x

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the combustion turbine generator begins operating at a 1:1 fuel-to-water ratio plus 60 minutes, not to exceed 10 hours. Mode 6Q is achieved after start-up is complete.

The emission limit of 2,000 pounds for total NO_x emissions per start-up of distillate oil event not exceeding ten (10) hours applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is



standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

NOx limit: 2,000 lbs/event for distillate oil start-up.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2000 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 31: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 31.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00CO4
Emission Unit: U-00001	Emission Point: 00004

New York State Department of Environmental Conservation
Permit ID: 2-6301-00072/00014 Facility DEC ID: 2630100072



Process: P01	Emission Source: 00DB1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T004

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 31.2:
Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following start-up natural gas limits for NO_x for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

START-UP - NATURAL GAS: NO_x: 1,500 lbs/event

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the combustion turbine generator engine operating in Mode 6Q plus 60 minutes, not to exceed 10 hours.

The emission limit of 1,500 pounds for total NO_x emissions per start-up of natural gas event not exceeding ten (10) hours applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA combustion turbines).

After mode 6Q is achieved during start-up, the operators



then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

NOx limit: 1,500 lbs/event for natural gas start-up.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 1500 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -
SEE MONITORING DESCRIPTION
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 32: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 32.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 00DB4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001	Emission Point: 00004

New York State Department of Environmental Conservation
Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Process: P01	Emission Source: 0DLN2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P01	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T003



Emission Unit: U-00001 Process: P10	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0DLN4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0SCR4
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T001
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T002
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T003
Emission Unit: U-00001 Process: P11	Emission Point: 00004 Emission Source: 0T004
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR1
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR2
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR3
Emission Unit: U-00001 Process: P12	Emission Point: 00004 Emission Source: 0SCR4



Emission Unit: U-00001
Process: P12

Emission Point: 00004
Emission Source: 0T001

Emission Unit: U-00001
Process: P12

Emission Point: 00004
Emission Source: 0T002

Emission Unit: U-00001
Process: P12

Emission Point: 00004
Emission Source: 0T003

Emission Unit: U-00001
Process: P12

Emission Point: 00004
Emission Source: 0T004

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

According to Condition # 34 for 6 NYCRR 201-6 (the paragraph above), Astoria Energy LLC & Astoria Energy II LLC is proposing the following shutdown limits for NO_x for Combustion Turbine Unit No. 101 (CT1) - Emission Source 0T001, Unit No. 201 (CT2) - Emission Source 0T002, Unit No. 301 (CT3) - Emission Source 0T003, and Unit No. 401 (CT4) - Emission Source 0T004.

Astoria Energy LLC & Astoria Energy II LLC utilizes an Air Cooled Condenser technology to provide cooling of the condensate for each of the four combustion turbine units. The facility is submitting limitations for NO_x and CO, but not for NH₃ limitations since it is not a regulated pollutant.

SHUTDOWN: NO_x: 300 lbs/event

Shutdown is defined as the period of time when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated, not to exceed 120 minutes per occurrence.



The emission limit of 300 pounds for total NO_x emissions per shutdown event not exceeding 120 minutes per occurrence applies to each of the four combustion turbines indicated in this condition. The emissions in excess of this limit shall be reported in the excess emission report. All records shall be maintained at the facility for a period of at least five (5) years.

Mode 6Q is a GE Frame 7FA operating mode that indicates the combustion turbine unit has gotten into a steady-state operating condition (full load). It is the last mode as a combustion turbine unit comes up on MW load (this is standard for all Frame 7FA Combustion turbines).

After mode 6Q is achieved during start-up, the operators then begin to add ammonia, emission controls and balance out the auxiliary equipment in order to complete the start-up. This is similar on distillate oil start-ups, where water injection is modified after the unit achieves Mode 6Q operation to control emissions (as well as ammonia and balance of the facility).

Conversely, on a shutdown, the combustion turbine unit comes out of Mode 6Q on the downside.

These combustion turbine units cannot achieve compliance when not running in Mode 6Q.

On a shutdown, the combustion turbine comes out of Mode 6Q on the downside.

NO_x limit: 300 lbs/event for shutdown.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 300 pounds per event
Reference Test Method: 40 CFR Part 75
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 33: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 33.1:
The Compliance Certification activity will be performed for the Facility.

Item 33.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall, within one year following the commencement of commercial operation, submit start-up, shutdown, and fuel switching data with an application for permit modification to establish enforceable combustion turbine start-up, shutdown, and fuel switching emission rates for NO_x and CO, and confirm that such established rates would not result in a violation of applicable NAAQS.

In the event that a minimum of 15 start-ups and 15 shutdowns, while firing distillate oil, does not occur within the one year period defined above, the owner or operator will be required to submit start-up and shutdown data, with an application for permit modification, once the 15 start-ups and shutdowns while firing distillate oil occur.

Also, if a minimum of 15 fuel switches do not occur within the one year period defined above, the owner or operator will be required to submit fuel switching data with an application for permit modification once the 15 fuel switches occur.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 34: Progress Reports Due Semiannually
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-6.4 (d) (4)

Item 34.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**Condition 35: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-6.4 (f)

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 35.1:

The Compliance Certification activity will be performed for the Facility.

Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The four combustion turbines may not operate below 40% load except during periods of start-up, shutdown, fuel switching, or malfunction (not to exceed 3 hours/occurrence) and during periods of annual electrical feed line maintenance (not to exceed 24 hrs/yr).

The facility currently has installed new GE technology package - OPERATIONAL FLEXIBILITY (Op Flex) which allows the combustion turbines to operate down to 40% inlet load, rather than the current normal of 50%.

The 40% minimum inlet load operational flexibility is allowed as long as there is no increase in emissions at that level that would result in emissions above existing standards for the following:

1. NO_x for NO_x RACT (6 NYCRR 227-2).
2. NO_x, VOC and CO for LAER/NSR (6 NYCRR 231-2.7(b)).
3. SO₂, H₂SO₄, NH₃, and PM-a₀/Particulates for BACT/PSD (40 CFR 52-A.21(j)).

Parameter Monitored: INLET LOADING

Lower Permit Limit: 40 percent

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED
VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

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

Condition 36: Facility Permissible Emissions
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 36.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 007446-09-5

PTE: 292,000 pounds per year

Name: SULFUR DIOXIDE

Condition 37: Prohibitions
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 202-1.5

Item 37.1:

No person shall conceal an emission by the use of air or other gaseous diluents to achieve compliance with an emission standard which is based on the concentration of a contaminant in the gases emitted through a stack.

Condition 38: Emission Statements
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 202-2

Item 38.1:

The provisions of 6NYCRR Subpart 202-2 apply to this facility.

Condition 39: Submittal of Episode Action Plans
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Part 207

Item 39.1:

An episode action plan must be submitted for approval by the Department in accordance with the requirements of 6NYCRR Part 207. The plan shall contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode action plan when an air pollution episode is in effect.

Condition 40: Air pollution prohibited
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 211.1

Item 40.1:

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 41: Compliance Certification



Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 225-1.2 (b)

Item 41.1:

The Compliance Certification activity will be performed for the Facility.

Item 41.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of any stationary combustion installation that fires either solid fuels or oil are limited to the firing of solid fuels or oil with a sulfur content listed in paragraph 6 NYCRR 225-1.(2)(b) through June 30, 2014.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.033 percent by weight

Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 42: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 225-1.2 (g)

Item 42.1:

The Compliance Certification activity will be performed for the Facility.

Item 42.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:



Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 43: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 225-1.2 (h)

Item 43.1:

The Compliance Certification activity will be performed for the Facility.

Item 43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



PG & E originally transferred 3-5534-00104 145 tpy of VOC
from General Motors Corp.

Con Ed. - Astoria 2-6301-00006 145 tpy of CO

Condition 46: Permit Requirements
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 46.1:

The CAIR designated representative of each CAIR NOx 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 NOx 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 47: Monitoring requirements
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 47.1:

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

Condition 48: NOx Ozone Season Emission Requirements
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 48.1:

As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NOx Ozone Season source and each CAIR NOx Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NOx 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 NOx Ozone Season units at the source, as determined in accordance with Subpart 243-8. The CAIR NOx 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 NOx 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.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



A CAIR NOx 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 NOx Ozone Season allowance was allocated.

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

A CAIR NOx Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOx Ozone Season Trading Program. No provision of the CAIR NOx 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 NOx 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 NOx Ozone Season allowance to or from a CAIR NOx Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Condition 49: Excess emission requirements
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 49.1:

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

(1) the owners and operators of the source and each CAIR NOx Ozone Season unit at the source shall surrender the CAIR NOx 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 50: Recordkeeping and reporting requirements
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 50.1:

Unless otherwise provided, the owners and operators of the CAIR NOx Ozone Season source and each CAIR NOx 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 NOx 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 NOx Ozone Season Trading Program.

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

Condition 51: Authorization and responsibilities of CAIR designated representative
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 243-2.1

Item 51.1:

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

The CAIR designated representative of the CAIR NOx Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NOx 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 NOx Ozone Season source represented and each CAIR NOx Ozone Season unit at the source in all matters pertaining to the CAIR NOx 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 NOx Ozone Season Allowance Tracking System account will be established for a CAIR NOx 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 NOx Ozone Season units at the source.

Each submission under the CAIR NOx Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NOx 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 52: Certificate of representation
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 243-2.4

Item 52.1:

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 53: General requirements
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 243-8.1

Item 53.1:

The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NOx 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 NOx 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 NOx 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 NOx 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 243-8.1(a)(1); and



(3) record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

Condition 54: Prohibitions
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 243-8.1

Item 54.1:

No owner or operator of a CAIR NO_x 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 NO_x Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NO_x 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 NO_x 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 NO_x 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 NO_x 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 55: Out of control periods
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 243-8.3

Item 55.1:

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 56: Quarterly reports
Effective between the dates of 10/04/2013 and 10/03/2018



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

Item 56.1:

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

If the CAIR NOx Ozone Season unit is subject to an Acid Rain emissions limitation or a CAIR NOx 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 NOx mass emissions) for such unit for the entire year and shall report the NOx 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 NOx Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NOx 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 NOx mass emission data, heat input data, and other information required by this Subpart.

Condition 57: Compliance certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 57.1:

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 58: CAIR NOx Annual Trading Program General Conditions
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement: 6 NYCRR Subpart 244-1

Item 58.1:

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 59: Designated CAIR Representative
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 244-2

Item 59.1:

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 60: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 244-8

Item 60.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 60.2:

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.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 61: CAIR SO₂ Trading Program General Provisions



Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 245-1

Item 61.1:

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 SO₂ 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 62: Designated CAIR Representative

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 245-2



Item 62.1:

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 63: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 245-8

Item 63.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 63.2:

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.
The initial report is due 1/30/2014.



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

Condition 64: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 64.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 64.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel in the turbines with up to 720 hours of distillate fuel oil as a backup. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the only fuel in the boiler. The sulfur content of the distillate fuel oil will be no more than 0.033% by weight until June 30, 2014, and 0.0015% by weight thereafter. The distillate fuel oil is to be tested each time it is transferred to the storage tank.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.033 percent by weight

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL
CHANGE

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 65: EPA Region 2 address.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.4, NSPS Subpart A

Item 65.1:

All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the following address:

Director, Division of Enforcement and Compliance Assistance



Condition 68: Excess emissions report.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.7(d), NSPS Subpart A

Item 68.1:

A summary report form, for each pollutant monitored, shall be sent to the Administrator in the form prescribed in Figure 1 of 40 CFR Part 60.7(d).

Condition 69: Facility files for subject sources.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.7(f), NSPS Subpart A

Item 69.1:

The following files shall be maintained at the facility for all affected sources: all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations;all continuous monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part, recorded in permanent form suitable for inspections. The file shall be maintained for at least two years following the date of such measurements, reports, and records.

Condition 70: Performance testing timeline.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.8(a), NSPS Subpart A

Item 70.1:

Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the facility, the owner or operator of the facility shall conduct performance testing and provide the results of such tests, in a written report, to the Administrator.

Condition 71: Performance test methods.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.8(b), NSPS Subpart A

Item 71.1:

Performance testing shall be conducted in accordance with the methods and procedures prescribed in 40 CFR 60 or by alternative methods and procedures approved by the Administrator.

Condition 72: Required performance test information.
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.8(c), NSPS Subpart A

Item 72.1:

Performance tests shall be conducted under such conditions specified by the Administrator, based upon representative performance data supplied by the owner or operator of the facility.



1) observations shall be conducted in accordance with Reference Method 9, in Appendix A of 40 CFR Part 60(or an equivalent method approved by the Administrator including continuous opacity monitors);

2) the opacity standards apply at all times except during periods of start up, shutdown, and malfunction; and

3) all other applicable conditions cited in section 60.11 of this part.

Condition 78: Circumvention.

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.12, NSPS Subpart A

Item 78.1:

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Condition 79: Monitoring requirements.

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.13, NSPS Subpart A

Item 79.1:

All continuous monitoring systems and devices shall be installed, calibrated, maintained, and operated in accordance with the requirements of section 60.13.

Condition 80: Modifications.

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.14, NSPS Subpart A

Item 80.1:

Within 180 days of the completion of any physical or operational change (as defined in section 60.14), compliance with the applicable standards must be achieved.

Condition 81: Reconstruction

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.15, NSPS Subpart A

Item 81.1:

The following shall be submitted to the Administrator prior to reconstruction (as defined in section 60.15):

1) a notice of intent to reconstruct 60 days prior to the action;

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



- 2) name and address of the owner or operator;
- 3) the location of the existing facility;
- 4) a brief description of the existing facility and the components to be replaced;
- 5) a description of the existing air pollution control equipment and the proposed air pollution control equipment;
- 6) an estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility;
- 7) the estimated life of the facility after the replacements; and
- 8) a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

Condition 82: Facility Subject to Title IV Acid Rain Regulations and Permitting
Effective between the dates of 10/04/2013 and 10/03/2018
Applicable Federal Requirement:40 CFR Part 72

Item 82.1: This facility is subject to the Title IV Acid Rain Regulations found in 40 CFR Parts 72, 73, 75, 76, 77 and 78. The Acid Rain Permit is an attachment to this permit.

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

Condition 83: Emission Point Definition By Emission Unit
Effective between the dates of 10/04/2013 and 10/03/2018
Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 83.1:

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 83.2:

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 84: Process Definition By Emission Unit
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 84.1:

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 84.2:

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 36.5 MM Btu/hr Nebraska 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: 36.5 million Btu per hour

Item 84.3:

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 until June 30, 2014, and 0.0015% sulfur by weight thereafter) as a back up fuel.) firing in the four (4) identical combustion turbines (Emission Sources OT001, OT002, OT003 & OT004).

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.

The 0.033 % sulfur by weight limit in the distillate fuel oil firing in the four (4) identical combustion turbines (Emission Sources OT001, OT002, OT003 & OT004) will expire on June 30, 2014. Beginning July 1, 2014, the facility is required to combust distillate fuel oil with a maximum sulfur content of 0.0015 percent by weight.

Emission Source/Control: OT001 - Combustion
Design Capacity: 2,047.1 million Btu per hour

Emission Source/Control: OT002 - 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 84.4:

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 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 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 84.5:

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 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) 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: 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 84.6:

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 (maximum of 500 ppm sulfur #2 diesel fuel). 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 85: Emission Unit Permissible Emissions
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 85.1:

The sum of emissions from all regulated processes specified in this permit for the emission unit cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: U-00001
CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 278.4 pounds per hour
291,923 pounds per year

**Condition 86: Process Permissible Emissions
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 86.1:

The sum of emissions from the regulated process cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: U-00001 Process: P01
CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 12.4 pounds per hour
21,278 pounds per year

Emission Unit: U-00001 Process: P10



CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 278.4 pounds per hour
200,448 pounds per year

Emission Unit: U-00001 Process: P11

CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 11.1 pounds per hour
97,236 pounds per year

Emission Unit: U-00001 Process: P12

CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 278.4 pounds per hour
200,448 pounds per year

Condition 87: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.5

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 87.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

LAER emission limit. Records for demonstration of compliance with the CO emission limit shall be maintained on site for five years. These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedances of the allowable annual CO emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 144 tons per year

Monitoring Frequency: CONTINUOUS

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 88: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.5

Item 88.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

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

Item 88.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

LAER emission limit. Records for demonstration of compliance with the NO_x emission limit shall be maintained on site for five years. These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedances of the allowable annual NO_x emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 324 tons per year

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 89: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.5

Item 89.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 89.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

LAER emission limit. Records for demonstration of compliance with the VOC emission limit shall be maintained on site for five years. Any exceedances of the allowable annual VOC emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: VOC's

Upper Permit Limit: 108 tons per year

Monitoring Frequency: ANNUALLY

Averaging Method: ARITHMETIC MEAN

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2014.

Subsequent reports are due every 12 calendar month(s).

Condition 90: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.6

Item 90.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 90.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Records for demonstration of compliance with the CO emission limit shall be maintained on site for five years.

These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



beginning with the start-up of the facility. Any exceedance of the allowable annual CO emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 144 tons per year
Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 91: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.6

Item 91.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 91.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:

Records for demonstration of compliance with the NO_x emission limit shall be maintained on site for five years. These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedance of the allowable annual NO_x emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 324 tons per year
Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).



Condition 92: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.6

Item 92.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 92.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Records for demonstration of compliance with the VOC emission limit shall be maintained on site for five years. Any exceedance of the allowable annual VOC emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: VOC's

Upper Permit Limit: 108 tons per year

Monitoring Frequency: ANNUALLY

Averaging Method: ARITHMETIC MEAN

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2014.

Subsequent reports are due every 12 calendar month(s).

Condition 93: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.9

Item 93.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Item 93.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Use of Emission Reduction Credit:



Astoria Energy LLC has requested a VOC ERC transfer from PG & E Energy Trading- Power L.P. (PGET). Cantor Fitzgerald Brokerage L. P. is authorized to act on behalf of both PG & E Energy Trading-Power L. P. and SCS Energy/Astoria Energy LLC (Astoria Energy) in the processing of the VOC ERC transfer. PG & E Energy Trading (PGET) has transferred 145 tons per year (tpy) of VOC ERCs currently held by PGET to Astoria Energy. These VOC ERCs were originally created at General Motors Corporations's North Tarrytown Plant (Sleepy Hollow), New York facility (DEC ID # 3-5534-00104), and were subsequently transferred, but unused, to PGET. PGET, in turn, subsequently transferred the subject ERCs to Astoria Energy.

In addition to the 145 tpy of VOC ERCs that are being committed to Astoria Energy from PG & E (which were originally transferred from General Motors Corp (DEC ID # 3-5534-00104)), 425 tpy of NOx ERCs have been committed to Astoria Energy from Con Ed. - Astoria, DEC ID # 2-6301-00006 and 145 tpy of CO ERCs have been committed to Astoria Energy from Con Ed. - Astoria, DEC ID # 2-6301-00006.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 94: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 94.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Item 94.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Permittee shall submit a quarterly written CEM report to NYSDEC for every calendar year quarter. All quarterly reports shall be post marked by the 30th day following the end of each calendar quarter and shall include:

1. CEMS down time (40 CFR 60.7(b)) and excess emissions (40 CFR 60.7(c)) in a summary report format, as found in 40 CFR 60.7(d), or equivalent.
2. The results of the quarterly monitoring performance



audit, reported in the format of 40 CFR 60 Appendix F (or equivalent).

3. Excess emissions shall be identified as any one-hour block period during which the average emissions of CO, or any three-hour block period during which the average emission on NOx, as measured by the CEM system, exceeds the corresponding mass or concentration emission limits set forth in this permit.

4. For the purposes of this permit, excess emissions indicated by the CEM system for the appropriate block periods other than start-ups and shutdowns, malfunctions (as stated in 6NYCRR Subpart 201-1.4) emergency, fuel switching, equipment cleaning and CEM calibrations may be considered violations of the applicable emission limits.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 95: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 40CFR 60.48c(a), NSPS Subpart Dc

Item 95.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Item 95.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner and operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR



60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 96: Alternate compliance methods for sulfur dioxide.
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:40CFR 60.44c(g), NSPS Subpart Dc

Item 96.1:

This Condition applies to Emission Unit: U-00001
Process: P10

Item 96.2:

Oil fired facilities demonstrating compliance with the sulfur dioxide standard through sampling and analysis must test every shipment of oil after the initial approval or follow an approved custom schedule.

The facility will use commercially available distillate fuel oil (very low sulfur, 0.033 percent by weight). The permit limits for the sulfur content of the oil are much less than the current legal limits for sale of this product in the New York City area. It is therefore proposed that the oil monitoring plan be amended to require only one sulfur test per barge shipment delivered to the power plant. The oil supplier will provide the required distillate oil analysis (per barge shipment).

**Condition 97: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable Federal Requirement:6 NYCRR 201-6.4 (b)

Item 97.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004

Item 97.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The gas turbine will not operate below 50% load, except during startup/shutdown, combustion tuning and emergency conditions.

Astoria Energy LLC & Astoria Energy II LLC generating



configuration consists of Phase 1 and Phase 2, each include two combustion turbines and HRSGs that produce steam to a single steam turbine generator (commonly referred as 2x1 Operation). A condition may arise in which the combustion turbine operation has been staggered.

Therefore, in order to properly synchronize the steam turbine generator, or match steam turbine temperature requirements, a reduction of unit load on the combustion turbine may be required. During this situation, unit operation could be reduced to less than 50% Load in order to properly bring up the generation of the 2x1 configuration.

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 98: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 201-6.4 (b)

Item 98.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Item 98.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The gas turbine will only fire natural gas and distillate oil.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 99: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

Item 99.1:

The Compliance Certification activity will be performed for:



Emission Unit: U-00001

Emission Point: 00004

Item 99.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test method 9 in Appendix A of 40 CFR 60.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2014.

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

Condition 100: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 100.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Item 100.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In accordance with the requirements set forth in 40 CFR 60.334 and 60.335, Astoria Energy LLC & Astoria Energy II LLC are not required to analyze its natural gas and distillate fuel for nitrogen and sulfur content daily in accordance with 60.334(h)(3) provided that the gaseous fuel combusted in the turbine is demonstrated to meet the definition of natural gas in 60.331(u). The demonstration will be by definition of the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0



grains/100 scf or less. Astoria Energy LLC & Astoria Energy II LLC are proposing a custom schedule for testing the sulfur content and limiting the distillate oil sulfur content to 0.033 percent by weight until June 30, 2014, and 0.0015 percent by weight thereafter. Therefore, once the alternative monitoring plan is approved by USEPA, it will be attached to the permit.

GAS MONITORING:

It is anticipated that natural gas will be delivered to the facility via the New York Facility System. Sulfur analysis from the New York Facility System are available and will be provided to EPA upon request, a copy of the valid purchase contract, tariff sheet, or transportation contract specifying the gas quality characteristics will be kept on site at all times.

In the event that natural gas is provided from a system other than the New York Facility System, the gas quality characteristics of the alternate natural gas source will be kept on site with a copy of the alternate valid purchase contract, tariff sheet or transportation contract and EPA will be notified.

The facility incorporates a continuous emissions monitoring system (CEMS) and meets very strict nitrogen oxides (NO_x) limits. As such, it is proposed that the facility not be required to test for fuel nitrogen content due to continuous stack compliance already in place.

The New York Facility System will provide the natural gas analysis referred to above. In the event that the New York Facility System is unable to provide analysis, the facility will pull a sample and have it analyzed.

OIL MONITORING:

The facility will use commercially available distillate fuel oil (very low sulfur, 0.033 percent by weight until June 30, 2014, and 0.0015 percent by weight thereafter). The permit limits for the sulfur content of the oil are much less than the current legal limits for sale of this product in the New York City area. It is therefore proposed that the oil monitoring plan be amended to require only one sulfur test per barge shipment into the oil terminal for the oil delivered to the facility. The oil supplier will provide the required distillate oil analysis (per barge shipment). Please also see Conditions 51 & 81. Also related Conditions 129 & 152.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 101: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 101.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 101.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with the annual particulate matter emission rate using stack testing results and fuel consumption data. The twelve-month rolling total will be recorded monthly. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: PARTICULATES

Upper Permit Limit: 582,000 pounds per year

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL TOTAL ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2014.

Subsequent reports are due every 12 calendar month(s).

Condition 102: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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



Item 102.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 102.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with the annual PM-10 emission rate using stack testing results and fuel consumption data. The twelve-month rolling total will be recorded monthly. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: PM-10

Upper Permit Limit: 582,000 pounds per year

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL TOTAL ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2014.

Subsequent reports are due every 12 calendar month(s).

Condition 103: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 40CFR 60.47a(c), NSPS Subpart Da

Item 103.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 103.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC has installed, calibrated, maintained, and operates a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.

Astoria Energy LLC & Astoria Energy II LLC will use a continuous emissions monitoring system (CEMS) to measure NOx concentration in pounds per million Btus at Emission Point 00004 and Emission Unit U-00001 (from the combustion turbines and the auxiliary boiler).

Manufacturer Name/Model Number: CEMS

Upper Permit Limit: 0.20 pounds per million Btus

Reference Test Method: 40 CFR 60 App A, Method 7

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 104: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 104.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 104.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.003 lb/MM BTU of VOC emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR part 60, Appendix A, method 18 (for Methane) and method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Upper Permit Limit: 0.003 pounds per million Btus
Reference Test Method: APP A, M 18 & 25A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 105: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 105.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 105.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

1.5 ppm of CO emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 1.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 106: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 106.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Regulated Contaminant(s):

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

Item 106.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

2.0 ppm of NOx emission limit during natural gas firing in the gas turbine with duct firing based upon high heating value (HHV) of fuel. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NOx emission at the stack. LAER is required.

Manufacturer Name/Model Number: CEM

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.0 parts per million by volume (dry, corrected to 15% O2)

Reference Test Method: Part 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 1/30/2014.

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

Condition 107: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 107.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P01

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 107.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

5.92 lbs/hr of VOC emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR part 60, Appendix A, Method 18 (for Methane) and Method 25A (for



total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC
Upper Permit Limit: 5.92 pounds per hour
Reference Test Method: APP A, M 18 & 25A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 108: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 108.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 108.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

7.77 lbs/hr of CO emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Astoria Energy LLC & Astoria Energy II LLC shall, within one year following the commencement of commercial operation, analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x and CO. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.77 pounds per hour
Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 109: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 109.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 109.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

17.0 lbs/hr of NOx emission limit during natural gas firing in the gas turbine with duct firing based upon high heating value (HHV) of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NOx emission at the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching events and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NOx and CO. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 17.0 pounds per hour
Reference Test Method: Part 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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 110: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 110.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 110.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

0.001 lb/MM BTU emission limit of Sulfuric Acid for the gas turbine with duct burner firing natural gas. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 0.001 pounds per million Btus
Reference Test Method: Part 60, App A, M 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 111: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 111.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 111.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0098 lb/MM BTU of Particulates emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.0098 pounds per million Btus
Reference Test Method: 40 CFR PART 60, APP A, M 5
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 112: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 112.1:

The Compliance Certification activity will be performed for:



Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 112.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0098 lb/MM BTU of PM-10 emission limit during natural gas firing in the gas turbine with duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel with distillate fuel oil as a backup fuel. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 0.0098 pounds per million Btus

Reference Test Method: 40 CFR App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 113: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 113.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

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

Item 113.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

15.7 lb/hr of Ammonia emission limit during natural gas firing in the turbine with duct firing based on HHV of fuel. 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. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NH₃ emission in the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching events and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x and CO. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: AMMONIA
Upper Permit Limit: 15.7 pounds per hour
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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 114: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 114.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 114.2:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

18.0 lb/hr of PM-10 emission limit during natural gas firing in the gas turbine with duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel with distillate fuel oil as a backup fuel. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 18.0 pounds per hour

Reference Test Method: 40 CFR 60, App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 115: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 115.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P01

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 115.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

18.0 lbs/hr of Particulates emission limit during natural gas firing in the gas turbine with duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 18.0 pounds per hour

Reference Test Method: PART 60, APP A, M 5

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 116: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 116.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 116.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

2.37 lbs/hr emission limit of Sulfuric Acid for the gas turbine with duct burner firing natural gas. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 2.37 pounds per hour

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 117: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 117.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P01

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

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 117.2:

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: CEMS

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 1/30/2014.

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

Condition 118: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:40CFR 60.334(b), NSPS Subpart GG

Item 118.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P01

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 118.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor the sulfur content and the nitrogen content of the fuel being fired in the turbine. Owners, operators, or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before



they can be used to comply with the requirements of this Section. If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that the fuel is transferred to the storage tank from any other source. In accordance with the custom fuel monitoring schedule established by the USEPA in a letter to Indeck dated 12/19/91, fuel suppliers may be different for each purchase. The oil may not be used at the facility for an extended period of time once delivered to the site, therefore, monitoring would be made for each batch delivered to the site. Each batch may include multiple truck deliveries. If more than one batch is involved, multiple samples would be taken. In addition to monitoring the nitrogen content of the fuel, the facility utilizes a Continuous Emissions Monitoring System (CEMS) to monitor NOx emissions from the gas turbine/Heat Recovery Steam Generator System.

On November 18, 1988, due to a BACT determination required under 40CFR52.21, a limit of 0.3% sulfur by weight was established for fuel utilized at any combustion source at the facility. That limit supersedes the 0.8% sulfur by weight limit required under 40CFR60 Subpart GG.

Astoria Energy LLC & Astoria Energy II LLC are proposing a custom schedule for testing the natural gas Sulfur content. The EPA approved alternative monitoring plan shall be attached to the permit.

Parameter Monitored: SULFUR
Upper Permit Limit: 20 grains
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 119: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 227-2.4 (c) (1) (i)

Item 119.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):



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

Item 119.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC is required to perform testing the mid-size boilers, the 36.5 MM Btu/hr NEBRASKA Model NB-200D-50 boiler (Emission Source BOIL1) to verify the NOx emission limit compliance. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour. This boiler operates on natural gas (Process P05).

Prior to July 1, 2014, the owner/operator of mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers operating on natural gas only have a limit of 0.10 pounds of NOx per million Btus under the NOx RACT plan for mid-size boilers.

Emission test requirements: The owner/operator of a source required to conduct an emission test under subdivision (c) of 6 NYCRR 227-2.6 must:

1. Submit a compliance test protocol to the Department for approval at least 30 days prior to emission testing. The conditions of the testing and the locations of the sampling devices must be acceptable to the Department; and
2. Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the Department and EPA for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and must follow the procedures set forth in Part 202 of this Title.
 - i. For mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the Department.
3. Submit a compliance test report containing the results of the emission test to the Department no later than 60 days after the completion of the emission test.

This condition applies to the mid-size boiler, the 36.5 MM Btu/hr NEBRASKA Model NB-200D-50 boiler (Emission Source BOIL1) to verify the NOx emission limit compliance.



Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: 40 CFR Part 60, Appendix A, Method 7, 7E or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 120: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 227-2.4 (c) (1) (ii)

Item 120.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 120.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC is required to perform testing the mid-size boiler, the 36.5 MM Btu/hr NEBRASKA Model NB-200D-50 boiler (Emission Source BOIL1) to verify the NOx emission limit compliance. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour. This boiler operates on natural gas (Process P05) only.

On or after July 1, 2014, the owner/operator of mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers operating on natural gas only have a new limit of 0.05 pounds of NOx per million Btus under the NOx RACT plan for mid-size boilers.

Emission test requirements: The owner/operator of a source required to conduct an emission test under subdivision (c) of 6 NYCRR 227-2.6 must:

1. Submit a compliance test protocol to the Department for approval at least 30 days prior to emission testing. The conditions of the testing and the locations of the sampling devices must be acceptable to the Department; and



2. Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the Department and EPA for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and must follow the procedures set forth in Part 202 of this Title.

i. For mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the Department.

3. Submit a compliance test report containing the results of the emission test to the Department no later than 60 days after the completion of the emission test.

This condition applies to the mid-size boiler, the 36.5 MM Btu/hr NEBRASKA Model NB-200D-50 boiler (Emission Source BOIL1) to verify the NOx emission limit compliance.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.05 pounds per million Btus
Reference Test Method: 40 CFR Part 60, Appendix A, Method 7, 7E or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 121: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 121.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 121.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
1.09 lb/hr of NOx emission limit during natural gas firing in the auxiliary boiler based upon high heating value (HHV) of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



compliance with NOx emission by stack testing. LAER is required.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 1.09 pounds per hour
Reference Test Method: PART 60 APP A, M 7E
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 122: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 122.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 122.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.020 lb/MM BTU of CO emission limit during natural gas firing in the auxiliary boiler based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with CO emission by stack testing. LAER is required.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 0.020 pounds per million Btus
Reference Test Method: PT 60 APP A, M 10
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 123: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 123.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004



Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 123.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.20 lb/hrof VOC emission limit during natural gas firing in the auxiliary boiler based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 0.20 pounds per hour

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 124: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 124.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 124.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.011 lb/MM BTU of NO_x emission limit during natural gas firing in the auxiliary boiler based upon high heating value (HHV) of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



compliance with NOx emission by stack testing. LAER is required.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.011 pounds per million Btus
Reference Test Method: PART 60 APP A, M 7E
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 125: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 125.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 125.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1.98 lb/hr of CO emission limit during natural gas firing in the auxiliary boiler based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with CO emission by stack testing. LAER is required.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 1.98 pounds per hour
Reference Test Method: PT 60 APP A, M 10
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 126: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 126.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Process: P05

Emission Source: BOIL1

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 126.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.002 lb/MM BTU of VOC emission limit during natural gas firing in the auxiliary boiler based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 0.002 pounds per million Btus

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 127: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 127.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P05

Emission Source: BOIL1

Item 127.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The auxiliary boiler will not operate below 50 % load, except during startup and shutdown.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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



Condition 128: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 128.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 128.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.005 lb/MM BTU of Particulates emission limit during natural gas firing in the auxiliary boiler based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.005 pounds per million Btus
Reference Test Method: PART 60, APP A, M 5
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 129: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 129.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P05 Emission Source: BOIL1

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 129.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Description:

0.005 lb/MM BTU of PM-10 emission limit during natural gas firing in auxiliary boiler based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 0.005 pounds per million Btus

Reference Test Method: APP A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 130: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 130.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P05

Emission Source: BOIL1

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 130.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.495 lb/hr of PM-10 emission limit during natural gas firing in auxiliary boiler based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 0.495 pounds per hour

Reference Test Method: APP A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 131: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 131.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P05

Emission Source: BOIL1

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 131.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.495 lb/hr of Particulates emission limit during natural gas firing in the auxiliary boiler based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn only natural gas in the boiler. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.495 pounds per hour

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 132: Capping Monitoring Condition

Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 132.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

40 CFR 52.21 (j)

Item 132.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 132.3:

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.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 132.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 132.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 132.6:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 132.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Total annual distillate fuel use shall not exceed 41.6448 million gallons per year within any consecutive 365 day period for the gas turbines.

The low-sulfur distillate oil will have a maximum of 0.033 % by weight sulfur until June 30, 2014, and 0.0015% by weight sulfur thereafter) as a back up fuel for the gas turbines.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 41.6448 million gallons

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 133: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 133.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 133.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.007 lb/MM BTU of VOC emission limit during distillate oil firing in the gas turbine based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 0.007 pounds per million Btus

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 134: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 134.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 134.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

6.0 ppm of NOx emission limit during distillate oil firing in the turbine based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NOx emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: Part 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 1/30/2014.

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

Condition 135: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 135.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P10

Regulated Contaminant(s):

CAS No: 000630-08-0

CARBON MONOXIDE

Item 135.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

4.0 ppm of CO emission limit during distillate oil firing in gas turbine based on HHV of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: CARBON MONOXIDE

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Upper Permit Limit: 4.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 136: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 136.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 136.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

19.7 lbs/hr of CO emission limit during distillate oil firing in gas turbine based on HHV of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 19.7 pounds per hour
Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 137: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 137.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 137.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

48.5 lbs/hr of NOx emission limit during distillate oil firing in the turbine based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NOx emission at the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NOx CO, and NH3. Astoria Energy LLC &

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 48.5 pounds per hour
Reference Test Method: Part 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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 138: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 138.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 138.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

14.1 lbs/hr of VOC emission limit during distillate oil firing in the gas turbine based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will



demonstrate compliance with VOC emission by stack testing.

The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 14.1 pounds per hour

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 139: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 139.1:

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 139.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

29.8 lb/hr of Ammonia emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Ammonia emission by stack testing.

Astoria Energy LLC & Astoria Energy II LLC will control Ammonia emission to 29.8 lbs/hr 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. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.



Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: AMMONIA
Upper Permit Limit: 29.8 pounds per hour
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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 140: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 140.1:

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 140.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



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: CEMS
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.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 141: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 141.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 141.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

57.7 lb/hr of PM-10 emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10
Upper Permit Limit: 57.7 pounds per hour
Reference Test Method: App A, M 201A & 202
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE



Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 142: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 142.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 142.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

57.7 lb/hr of Particulates emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 57.7 pounds per hour

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 143: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 143.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 143.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

69.6 lb/hr limit of Sulfur Dioxide for the turbine firing distillate fuel oil. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfur Dioxide emission by stack testing. The stack testing is required once during the term of the permit.

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 69.6 pounds per hour

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 144: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 144.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P10

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 144.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.04 lb/MM BTU of PM-10 emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Parameter Monitored: PM-10

Upper Permit Limit: 0.04 pounds per million Btus

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 145: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 145.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P10

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 145.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0152 lb/MM BTU limit of Sulfuric Acid for the turbine firing distillate fuel oil. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.0152 pounds per million Btus

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 146: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 146.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P10



Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 146.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.04 lb/MM BTU Particulates emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.04 pounds per million Btus

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 147: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 147.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 147.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

21.9 lb/hr limit of Sulfuric Acid for the turbine firing distillate fuel oil. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 21.9 pounds per hour
Reference Test Method: Part 60, App A, M 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 148: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 148.1:

The Compliance Certification activity will be performed for:

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

Item 148.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as a primary fuel and distillate fuel oil as a backup fuel (which has a limit of 0.033 % by weight Sulfur content until June 30, 2014, and 0.0015% by weight Sulfur content thereafter) for up to 720 hours per year per turbine.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 720 hours

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 149: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 149.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Regulated Contaminant(s):

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

Item 149.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

15.6 lbs/hr of NOx emission limit during natural gas firing in the gas turbine without duct firing based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NOx emission at the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NOx, CO, and NH3. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 15.6 pounds per hour

Reference Test Method: Part 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 1/30/2014.

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

Condition 150: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 150.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 150.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

7.15 lbs/hr of CO emission limit during natural gas firing in the gas turbine without duct firing based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC use CEMS to monitor CO emission in the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.15 pounds per hour
Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 151: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 151.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 151.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

5.43 lbs/hr of VOC emission limit during natural gas firing in the gas turbine without duct firing based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Upper Permit Limit: 5.43 pounds per hour
Reference Test Method: APP A, M 18 & 25A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 152: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 152.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11



Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 152.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.003 lb/MM BTU of VOC emission limit during natural gas firing in the gas turbine without duct firing based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 0.003 pounds per million Btus

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 153: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 153.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 153.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

2.0 ppm of NO_x emission limit during natural gas firing in the gas turbine without duct firing based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC &

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Astoria Energy II LLC will use CEMS to monitor NOx emission at the stack. LAER is required.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: Part 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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 154: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 154.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 154.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

1.5 ppm of CO emission limit during natural gas firing in the gas turbine without duct firing based on HHV of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 1.5 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.



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

Condition 155: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 155.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 155.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

12.9 lb/hr of Particulates emission limit during natural gas firing in the gas turbine without duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 12.9 pounds per hour

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 156: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 156.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Item 156.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

12.9 lb/hr of PM-10 emission limit during natural gas firing in the gas turbine without duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 12.9 pounds per hour

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 157: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 157.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P11

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 157.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.90 lbs/hr of Sulfuric Acid emission limit when the turbine is firing natural gas and is without duct firing. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Upper Permit Limit: 0.90 pounds per hour
Reference Test Method: Part 60, App A, M 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 158: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 158.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 158.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0098 lb/MM BTU of Particulates emission limit during natural gas firing in the gas turbine without duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.0098 pounds per million Btus

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 159: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 159.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Process: P11

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 159.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0098 lb/MM BTU of PM-10 emission limit during natural gas firing in the gas turbine without duct firing based upon HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 0.0098 pounds per million Btus

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 160: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 160.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P11

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 160.2:

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.



Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: AMMONIA
Upper Permit Limit: 14.1 pounds per hour
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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 161: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 161.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

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

Item 161.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



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: CEMS

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 1/30/2014.

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

Condition 162: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 162.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00004
Process: P11

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 162.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.001 lb/MM BTU of Sulfuric Acid emission limit when the turbine is firing natural gas and is without duct firing. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.001 pounds per million Btus

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 163: Capping Monitoring Condition
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 163.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

40 CFR 52.21 (j)

Item 163.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 163.3:

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.

Item 163.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 163.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 163.6:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 163.7:

Compliance Certification shall include the following monitoring:

Capping: Yes
Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC



OPERATIONS

Monitoring Description:

Total annual distillate fuel use shall not exceed 41.6448 million gallons per year within any consecutive 365 day period for the gas turbines.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 41.6448 million gallons

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 164: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 164.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 164.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

19.7 lbs/hr of CO emission limit during distillate oil firing with natural gas duct firing in gas turbine based on HHV of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor co emission in the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NOx, CO, and NH3. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS.



The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 19.7 pounds per hour
Reference Test Method: PT 60 APP B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 165: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 165.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 165.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.007 lb/MM BTU of VOC emission limit during distillate oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60,

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 0.007 pounds per million Btus

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 166: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 166.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P12

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 166.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

14.1 lbs/hr of VOC emission limit during distillate oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with VOC emission by stack testing. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 14.1 pounds per hour

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 167: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 167.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 167.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

6.0 ppm of NO_x emission limit during distillate oil firing with natural gas duct firing in the turbine based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NO_x emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: Part 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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 168: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 168.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 168.2:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

48.5 lbs/hr of NO_x emission limit during distillate oil firing with natural gas duct firing in the turbine based upon high heating value (HHV) of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor NO_x emission at the stack. LAER is required.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 48.5 pounds per hour
Reference Test Method: Part 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 1/30/2014.
Subsequent reports are due every 3 calendar month(s).

Condition 169: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 169.1:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 169.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

4.0 ppm of CO emission limit during distillate oil firing with natural gas duct firing in gas turbine based on HHV of fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will use CEMS to monitor CO emission in the stack. LAER is required.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 4.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: PT 60 APP B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 170: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 170.1:

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 170.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)



Monitoring Description:

29.8 lb/hr of Ammonia emission limit during distillate fuel oil firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, excluding start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Ammonia emission by stack testing.

Astoria Energy LLC & Astoria Energy II LLC will control Ammonia emission to 29.8 lbs/hr through proper operation and control of the Selective Catalytic Reduction (SCR). Control of the Ammonia feed rate will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Following the commencement of commercial operation, Astoria Energy LLC & Astoria Energy II LLC shall analyze data obtained from start-up/shutdown and fuel switching and shall submit a permit modification to establish enforceable combustion turbine start-up and shutdown emission rates for NO_x, CO, and NH₃. Astoria Energy LLC & Astoria Energy II LLC shall confirm that such established rates would not result in a violation of applicable NAAQS. The application for permit modification shall be submitted within 120 days of completion of one year of commercial operation when firing natural gas, and/or within 120 days of completion of 15-start-up/shutdown events when burning distillate fuel oil. If 15 such events with oil firing are not completed within the first year of commercial operation, the analysis of data and submission of the permit modification to establish enforceable emission rates with oil firing and/or fuel switching, and to confirm that such emission rates will not result in a violation of applicable NAAQS, shall occur within 120 days of completion of the final (fifteenth) start-up/shutdown event with oil firing.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: AMMONIA
Upper Permit Limit: 29.8 pounds per hour
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 1/30/2014.



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

Condition 171: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 171.1:

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 171.2:

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: CEMS

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.

The initial report is due 1/30/2014.

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

Condition 172: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 172.1:

The Compliance Certification activity will be performed for:

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

Item 172.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as a primary fuel and distillate fuel oil as a backup fuel (which has a limit of 0.033 % by weight Sulfur content until June 30, 2014, and 0.0015 % by weight thereafter) for up to 720 hours per year per turbine.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 720 hours

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

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

Condition 173: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 173.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P12

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 173.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

69.6 lb/hr limit of Sulfur Dioxide for the turbine firing distillate fuel oil with natural gas duct firing. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfur Dioxide emission by stack testing. The stack testing is required once during the term of the permit.

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 69.6 pounds per hour

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE



Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 174: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 174.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 174.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

57.7 lb/hr of PM-10 emission limit during distillate fuel oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4 . Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 57.7 pounds per hour

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 175: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 175.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):



CAS No: 007664-93-9 SULFURIC ACID

Item 175.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

21.9 lb/hr limit of Sulfuric Acid for the turbine firing distillate fuel oil with natural gas duct firing. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 21.9 pounds per hour

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 176: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 176.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P12

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 176.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.04 lb/MM BTU Particulates emission limit during distillate fuel oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.04 pounds per million Btus

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 177: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 177.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00004

Process: P12

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 177.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.04 lb/MM BTU of PM-10 emission limit during distillate fuel oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the primary fuel with distillate fuel oil as a backup fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with PM-10 emission by stack testing.

Parameter Monitored: PM-10

Upper Permit Limit: 0.04 pounds per million Btus

Reference Test Method: App A, M 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 178: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 178.1:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 178.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.0152 lb/MM BTU limit of Sulfuric Acid for the turbine firing distillate fuel oil with natural gas duct firing. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Sulfuric Acid emission by stack testing.

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.0152 pounds per million Btus

Reference Test Method: Part 60, App A, M 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 179: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 179.1:

The Compliance Certification activity will be performed for:

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

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 179.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

57.7 lb/hr of Particulates emission limit during distillate fuel oil firing with natural gas duct firing in the gas turbine based on HHV of fuel. Astoria Energy LLC & Astoria Energy II LLC will burn natural gas as the

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



primary fuel with distillate fuel oil as a backup fuel.
This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Astoria Energy LLC & Astoria Energy II LLC will demonstrate compliance with Particulates emission by stack testing.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 57.7 pounds per hour

Reference Test Method: PART 60, APP A, M 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 180: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 40CFR 60.48c(a), NSPS Subpart Dc

Item 180.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Item 180.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner and operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



Condition 181: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement: 6 NYCRR 231-2.7 (b)

Item 181.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00005
Process: P22 Emission Source: 00DFP

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 181.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

3.44 lb/MM BTU of NO_x emission limit during fuel oil firing in the diesel fire pump based upon high heating value (HHV) of fuel.

The stack testing for Oxides of Nitrogen is an initial stack testing that will be performed only once during the life of this fire pump. This facility can be excused from performing this stack test only if this facility supplies NYSDEC with the make, model and the manufacturer's Oxides of Nitrogen emission guarantee for the fire pump that is acceptable to the Department and will become part of this Title V permit.

As part of the Title V renewal that was received on November 14, 2006, the facility has supplied the Department with the following information for the fire pump (Emission Source 00DFP):

Make: Clarke
Model: JW6H-UF40
NO_x emission guarantee: 1.35 lbs/MMBtu, 2.72 lbs/hr,
4.11 g/bhp-hr

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 3.44 pounds per million Btus
Reference Test Method: PT60, APP A, M7E
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 182: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 182.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00005
Process: P22 Emission Source: 00DFP

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 182.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.18 lb/MM BTU of CO emission limit during oil firing in the diesel fire pump based on HHV of fuel.

The stack testing for Carbon Monoxide is an initial stack testing that will be performed only once during the life of this fire pump. This facility can be excused from performing this stack test only if this facility supplies NYSDEC with the make, model and the manufacture's Carbon Monoxide emission guarantee for the fire pump that is acceptable to the Department and will become part of this Title V permit.

As part of the Title V renewal that was received on November 14, 2006, the facility has supplied the Department with the following information for the fire pump (Emission Source 00DFP):

Make: Clarke
Model: JW6H-UF40
CO emission guarantee: 0.13 lbs/MMBtu, 0.27 lbs/hr,
0.41 g/bhp-hr

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 0.18 pounds per million Btus
Reference Test Method: PT 60, APP A, M10
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 183: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable Federal Requirement:6 NYCRR 231-2.7 (b)

Item 183.1:



The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00005
Process: P22 Emission Source: 00DFP

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 183.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.11 lb/MM BTU of VOC emission limit during oil firing in the diesel fire pump based on HHV of fuel. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for Methane) and Method 25A (for total). The averaging method is for the reference test method is 1-hour average.

The stack testing for VOC is an initial stack testing that will be performed only once during the life of this fire pump. This facility can be excused from performing this stack test only if this facility supplies NYSDEC with the make, model and the manufacturer's VOC emission guarantee for the fire pump that is acceptable to the Department and will become part of this Title V permit.

As part of the Title V renewal that was received on November 14, 2006, the facility has supplied the Department with the following information for the fire pump (Emission Source 00DFP):

Make: Clarke
Model: JW6H-UF40
VOC emission guarantee: 0.11 lbs/MMBtu, 0.222 lbs/hr

Parameter Monitored: VOC

Upper Permit Limit: 0.11 pounds per million Btus

Reference Test Method: APP A, M 18 & 25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 184: Compliance Certification
Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 184.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 2-6301-00072/00014

Facility DEC ID: 2630100072



Emission Unit: U-00002
Process: P22

Emission Point: 00005
Emission Source: 00DFP

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 184.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.06 lb/MM BTU of PM-10 emission limit during fuel oil firing in the diesel fire pump based upon HHV of fuel.

The stack testing for PM-10 is an initial stack testing that will be performed only once during the life of this fire pump. This facility can be excused from performing this stack test only if this facility supplies NYSDEC with the make, model and the manufacture's PM-10 emission guarantee for the fire pump that is acceptable to the Department and will become part of this Title V permit.

As part of the Title V renewal that was received on November 14, 2006, the facility has supplied the Department with the following information for the fire pump (Emission Source 00DFP):

Make: Clarke
Model: JW6H-UF40
PM-10 emission guarantee: 0.05 lbs/MMBtu, 0.11 lbs/hr, 0.16 g/bhp-hr

Parameter Monitored: PM-10

Upper Permit Limit: 0.06 pounds per million Btus

Reference Test Method: METHOD 201A & 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 185: Compliance Certification

Effective between the dates of 10/04/2013 and 10/03/2018

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

Item 185.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002
Process: P22

Emission Point: 00005
Emission Source: 00DFP



Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 185.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

0.06 lb/MM BTU of Particulates emission limit during fuel oil firing in the diesel fire pump based upon HHV of fuel.

The stack testing for Particulates is an initial stack testing that will be performed only once during the life of this fire pump. This facility can be excused from performing this stack test only if this facility supplies NYSDEC with the make, model and the manufacture's Particulates emission guarantee for the fire pump that is acceptable to the Department and will become part of this Title V permit.

As part of the Title V renewal that was received on November 14, 2006, the facility has supplied the Department with the following information for the fire pump (Emission Source 00DFP):

Make: Clarke
Model: JW6H-UF40
Particulates emission guarrantee: 0.05 lbs/MMBtu,
0.11 lbs/hr, 0.16 g/bhp-hr

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.06 pounds per million Btus

Reference Test Method: PT 60, APP A, M5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



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 186: Contaminant List
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable State Requirement:ECL 19-0301

Item 186.1:
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 187: Malfunctions and start-up/shutdown activities
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable State Requirement:6 NYCRR 201-1.4

Item 187.1:

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, 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 department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.



(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 188: Unavoidable noncompliance and violations
Effective between the dates of 10/04/2013 and 10/03/2018

Applicable State Requirement: 6 NYCRR 201-1.4

Item 188.1:

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 189: CO2 Budget Trading Program - Excess emission requirements
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable State Requirement:6 NYCRR 242-1.5

Item 189.1:

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 190: Compliance Demonstration
Effective between the dates of 10/04/2013 and 10/03/2018**

Applicable State Requirement:6 NYCRR 242-1.5

Item 190.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 190.2:

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.

The initial report is due 4/30/2014.

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

Condition 191: Compliance Demonstration
Effective between the dates of 10/04/2013 and 10/03/2018



Applicable State Requirement:6 NYCRR 242-1.5

Item 191.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 191.2:

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.

The initial report is due 4/30/2014.

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



