

Permit ID: 3-3922-00003/00008 Renewal Number: 2 Modification Number: 1 02/06/2014

## **Facility Identification Data**

Name: BOWLINE GENERATING STATION Address: 140 SAMSONDALE AVE WEST HAVERSTRAW, NY 10993

#### **Owner/Firm**

Name: NRG BOWLINE LLC Address: 140 SAMSONDALE AVE WEST HAVERSTRAW, NY 10993, USA Owner Classification: Corporation/Partnership

#### **Permit Contacts**

Division of Environmental Permits: Name: GEORGE A SWEIKERT Address: NYSDEC 21 S PUTT CORNERS RD NEW PALTZ, NY 12561-1696 Phone:8452563185

Division of Air Resources: Name: GEORGE A SWEIKERT Address: NYSDEC 21 S PUTT CORNERS RD NEW PALTZ, NY 12561-1696 Phone:8452563185

Air Permitting Contact: Name: WILLIAM METZGER Address: GENON BOWLINE, LLC 140 SAMSONDALE AVE WEST HAVERSTRAW, NY 10993 Phone:8457868001

#### Permit Description Introduction

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

## **Summary Description of Proposed Project**

The Boiler 2 tube repair/replacement scope consists of replacing the elements that have removed from the boiler and those remaining elements that have been damaged with replacement elements matching the original boiler design.



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#### **Attainment Status**

BOWLINE GENERATING STATION is located in the town of HAVERSTRAW in the county of ROCKLAND.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

#### **Criteria Pollutant**

#### Attainment Status

Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

\*\* NOx has a separate ambient air quality standard in addition to being an ozone precursor.

#### **Facility Description:**

Bowline Electric Generating Facility

#### **Permit Structure and Description of Operations**

The Title V permit for BOWLINE GENERATING STATION

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types: combustion - devices which burn fuel to generate heat, steam or power

- incinerator devices which burn waste material for disposal
- control emission control devices
- process any device or contrivance which may emit air contaminants that is not included in the above categories.

BOWLINE GENERATING STATION is defined by the following emission unit(s):



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Emission unit 100002 - BOILER NO. 2 - A BABCOCK & WILCOX OPPOSED WALL-FIRED BOILER WITH A MAXIMUM HEAT INPUT OF 5,374 MMBTU/HR. THIS UNIT CAN FIRE NATURAL GAS OR NO. 6 FUEL OIL (0.37% MAX SULFUR CONTENT). THIS EMISSION UNIT ALONG WITH BOILER NO. 1 EMPLOYS SYSTEM-WIDE AVERAGING FOR THE DETERM INATION AND REPORTING OF NOX EMISSIONS.

Emission unit 100002 is associated with the following emission points (EP): 00002

Process: 2GS is located at GROUND, Building BLD01 - A BABCOCK & WILCOX OPPOSED WALL-FIRED BOILER FIRES NATURAL GAS AND HAS A MAXIMUM FIRING RATE OF 5347 MMBTU/HR WITH 32 BURNERS. THIS UNIT PROVIDES STEAM TO GENERATE ELECTRICITY. THIS UNIT USES OFF-STOICHIOMETRIC FIRING, OVERFIRE AIR, AND WINDBOX FLUE GAS RECIRCULATION TO CONTROL NOX.

Process: 20L is located at GROUND, Building BLD01 - A BABCOCK & WILCOX OPPOSED WALL-FIRED BOILER FIRES NO. 6 FUEL OIL AND HAS A MAXIMUM FIRING RATE OF 5347 MMBTU/HR WITH 32 BURNERS. THIS UNIT PROVIDES STEAM TO GENERATE ELECTRICITY. THIS UNIT USES OFF-STOICHIOMETRIC FIRING, OVERFIRE AIR, AND WINDBOX FLUE GAS RECIRCULATION FOR NOX CONTROL.

Process: 2WL is located at GROUND, Building BLD01 - This Babcock and Wilcox opposed wall-fired boiler has a maximum firing rate of 5,374 mmBTU/hr and has 32 burners. This unit uses off-stoichiometric firing, overfire air and windbox flue gas recirculation for NOx control. This emission unit also fires on-site generated waste oil.

Emission unit 100001 - BOILER NO. 1 - A COMBUSTION ENGINEERING TANGENTIALLY-FIRED BOILER WITH A MAXIMUM HEAT INPUT OF 5546 MMBTU/HR. THIS UNIT CAN FIRE NATURAL GAS OR NO. 6 FUEL OIL (0.37% MAXIMUM SULFUR CONTENT). THIS EMISSION UNIT ALONG WITH BOILER NO. 2 EMPLOYS SYSTEM-WIDE AVERAGING FOR THE DETERMINATION AND REPORTING OF NOX EMISSIONS.

Emission unit 100001 is associated with the following emission points (EP): 00001

Process: 1GS is located at GROUND, Building BLD01 - A NATURAL GAS-FIRED STATIONARY COMBUSTION UNIT RATED AT 5546 MMBTU/HR WITH 20 BURNERS AND QUADRUPLE NOZZLE COMBUSTION. UNIT OPERATED TO PRODUCE ELECTRICITY. OFF-STOICHIOMETRIC FIRING IS USED FOR NOX CONTROL.

Process: 10L is located at GROUND, Building BLD01 - A TANGENTIALLY NO. 6 OIL-FIRED STATIONARY COMBUSTION UNIT RATED AT 5546 MMBTU/HR WITH 20 BURNERS. UNIT OPERATED TO PRODUCE ELECTRICITY. OFF-STOICHIOMETRIC FIRING IS USED FOR NOX CONTROL.

Process: 1WL is located at GROUND, Building BLD01 - A TANGENTIALLY-FIRED STATIONARY COMBUSTION UNIT RATED AT 5546 MMBTU/HR WITH 20 BURNERS. UNIT OPERATED TO



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EMISSIONS UNIT ALSO FIRES ON-SITE GENERATED WASTE OIL.

Emission unit 1WAWTP - WASTEWATER TREATMENT PLANT OPERATES TO TREAT RUNOFF FROM PLANT DRAINS. THE PLANT USES ACID AND CAUSTIC TO MODIFY THE PH OF THE WATER AND FERROUS SULFATE TO PRECIPITATE SOLIDS INCLUDING METALS. CLEAN WATER IS DISCHARGED TO THE HUDSON RIVER. OPERATIONS ARE MONITORED THROUGH CONDITIONS WITHIN THE EXISTING SPDES PERMIT NO. 3-3922-3-3. FUGITIVE EMISSIONS WERE DETERMINED FOR OUTFALL 001 WHICH IS THE DISCHARGE POINT FOR THE WASTEWATER TREATMENT PLANT. OTHER DISCHARGE POINTS MUST MONITOR FOR OIL AND GREASE CONTENT, BUT VOC EMISSIONS ARE EXPECTED TO BE NEGLIGIBLE.

Process: W01 OUTFALL 001F OF THE WASTEWATER TREATMENT PLANT.

#### Title V/Major Source Status

BOWLINE GENERATING STATION is subject to Title V requirements. This determination is based on the following information:

Major source

#### **Program Applicability**

The following chart summarizes the applicability of BOWLINE GENERATING STATION with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability	
PSD	NO	
NSR (non-attainment)	NO	
NESHAP (40 CFR Part 61)	NO	
NESHAP (MACT - 40 CFR Part 63)	NO	
NSPS	YES	
TITLE IV	YES	
TITLE V	YES	
TITLE VI	NO	
RACT	YES	
SIP	YES	

NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary



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sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA)

which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to

be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

## **Compliance Status**

Facility is in compliance with all requirements.

## SIC Codes

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the



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#### basis

of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

#### SIC Code

#### Description

Description

4911

# ELECTRIC SERVICES

## SCC Codes

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information.Each SCC represents

a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

#### SCC Code

1-01-004-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC
	GENERATION
	ELECTRIC UTILITY BOILER - RESIDUAL OIL
	Grade 6 Oil: Tangential Firing
1-01-006-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC
	GENERATION
	ELECTRIC UTILITY BOILER - NATURAL GAS
	Tangentially Fired Units
1-01-013-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC
	GENERATION
	ELECTRIC UTILITY BOILER - LIQUID WASTE
	Waste Oil
5-01-007-69	SOLID WASTE DISPOSAL - GOVERNMENT
	SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE
	TREATMENT
	STORAGE BASIN OR OPEN TANK
	DIORAGE DADIN ON OLDN TANK

## **Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own



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specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name		РТЕ	
		lbs/yr		Range
000106-99-0	1,3-BUTADIENE	·	> 0	but < 10 tpy
000075-07-0	ACETALDEHYDE			but < 10 tpy
000107-02-8	ACROLEIN		> 0	but < 10 tpy
007440-36-0	ANTIMONY			but < 10 tpy
007440-38-2	ARSENIC		> 0	but < 10 tpy
000071-43-2	BENZENE		> 0	but < 10 tpy
007440-41-7	BERYLLIUM		> 0	but < 10 tpy
007440-43-9	CADMIUM		>=	
000630-08-0	CARBON MONOXIDE		>=	250 tpy but <
			75,	000 tpy
007440-47-3	CHROMIUM		> 0	but < 10 tpy
007440-48-4	COBALT		> 0	but < 10 tpy
000100-41-4	ETHYLBENZENE		> 0	but < 10 tpy
000050-00-0	FORMALDEHYDE		>=	
000110-54-3	HEXANE		> 0	but < 10 tpy
007439-92-1	LEAD			but < 10 tpy
007439-96-5	MANGANESE			but < 10 tpy
007439-97-6	MERCURY		> 0	but < 10 tpy
001634-04-4	METHYL TERTBUTYL		> 0	but < 10 tpy
	ETHER			
000091-20-3	NAPHTHALENE		> 0	but < 10 tpy
007440-02-0	NICKEL METAL AND		>=	10 tpy
	INSOLUBLE COMPOUNDS			
0NY210-00-0	OXIDES OF NITROGEN		>=	250 tpy but <
				000 tpy
0NY075-00-0	PARTICULATES			250 tpy but <
				000 tpy
000540-84-1	PENTANE, 2,2,4- TRIMETHYL-		> 0	but < 10 tpy
0NY075-00-5	PM-10		>=	250 tpy but <
				000 tpy
001336-36-3	POLYCHLORINATED			but < 10 tpy
	BIPHENYL			
007782-49-2	SELENIUM		> 0	but < 10 tpy
007446-09-5	SULFUR DIOXIDE		>=	250 tpy but <
			75,	000 tpy
000108-88-3	TOLUENE		> 0	but < 10 tpy
0NY100-00-0	TOTAL HAP		>=	100 tpy but < 250
			tpy	
0NY998-00-0	VOC		>=	250 tpy but <
			75,	000 tpy
001330-20-7	XYLENE, M, O & P		> 0	but < 10 tpy
	MIXT.			

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

## 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



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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 Part 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 Part 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 Part 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 Part 201-6.4(a)(3)



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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 Part 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 Part 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 Part 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



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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 2 01-6.7 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.

## NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS



contaminants to the

## New York State Department of Environmental Conservation Permit Review Report

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## 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.

Location Facility/EU/EP/P	Regulation rocess/ES	Condition	Short Description	
 FACILITY	ECL 19-0301	62	Powers and Duties of the Department with respect to air pollution control	
FACILITY	40CFR 60-A.13	52	General provisions - Monitoring requirements	
FACILITY	40CFR 68	20	Chemical accident	
FACILITY	40CFR 72-A.6(a)(2)	53	prevention provisions The Facilities which are in Phase 2 of Title IV and are listed in Table 2 or 3 of 40 CFR Part 73.10.	
FACILITY	40CFR 75-B.10(a)	54	Continuous emission monitoring - general operating requirements	
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction	
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.	
FACILITY	6NYCRR 200.7	10	Maintenance of	
FACILITY	6NYCRR 201-1.4	63, 1 -14	equipment. Unavoidable noncompliance and violations	
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	11, 1 -6 12	Recycling and Salvage Prohibition of reintroduction of collected	

## **Regulatory Analysis**



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FACILITY	6NYCRR 201-3.2(a)	13, 1 -7
FACILITY	6NYCRR 201-3.3(a)	14, 1 -8
FACILITY	6NYCRR 201-6	22, 55, 56
FACILITY	6NYCRR 201-6.4(a)(4)	1 -9
FACILITY	6NYCRR 201-6.4(a)(7)	1 -1
FACILITY	6NYCRR 201-6.4(a)(8)	1 -10
FACILITY	6NYCRR 201-6.4(c)	1 -2
	(MUGDD 201 ( A(z) (2)))	1 7
FACILITY	6NYCRR 201-6.4(c)(2)	1 -3
FACILITY	6NYCRR 201-	1 -4
	6.4(c)(3)(ii	
FACILITY	6NYCRR 201-6.4(d)(4)	1 -12
FACILITY	6NYCRR 201-6.4(e)	1 -5
FACILITY	6NYCRR 201-6.4(f)(6) 6NYCRR 202-1.1	1 -11 19
FACILITY		
FACILITY	6NYCRR 202-2.1 6NYCRR 202-2.5	
FACILITY	6NICRR 202-2.5	0
FACILITY	6NYCRR 211.1	23
FACILITY	6NYCRR 211.2	64
FACILITI	UNICAR 211.2	04
FACILITY	6NYCRR 215.2	9
FACILITY	6NYCRR 225-1.8(a)	26
1-00001/00001	6NYCRR 227-1.2(a)(1)	58
1-00002/00002	6NYCRR 227-1.2(a)(1)	60
FACILITY	6NYCRR 227-1.3(a)	27, 28
1-00001/00001 1-00002/00002	6NYCRR 227-1.4(b) 6NYCRR 227-1.4(b)	59 61
FACILITY	6NYCRR 227-2.5	65 1 -13
1-00002	UNICRR 231-11.2(C)	1 -T2
FACILITY	6NYCRR 243-1.6(a)	29
	51.1CM 215 1.0 (a)	2,2

air Exempt Activities -Proof of eligibility Trivial Activities proof of eligibility Title V Permits and the Associated Permit Conditions General Conditions -Requirement to Provide Information General Conditions -Fees General Conditions -Right to Inspect Recordkeeping and Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement Reporting Requirements -Deviations and Noncompliance Compliance Schedules - Progress Reports Compliance Certification Off Permit Changes Required emissions tests. Emission Statements -Applicability Emission Statements record keeping requirements. General Prohibitions - air pollution prohibited General Prohibitions - visible emissions limited. Open Fires -Prohibitions Reports, sampling and analysis. Particulate Emissions from Liquid Fuels. Particulate Emissions from Liquid Fuels. Smoke Emission Limitations. Stack Monitoring Stack Monitoring Compliance options. Reasonable Possibility requirements for insignificant mods greater than 50% with excluded emissions Permit Requirements -CAIR NOx Ozone Season



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FACILITY	6NYCRR 243-1.6(b)	30	Trading Program Monitoring Requirements - CAIR NOx Ozone Season
FACILITY	6NYCRR 243-1.6(c)	31	Trading Program NOx Ozone Season Emission Requirements - CAIR NOx Ozone
FACILITY	6NYCRR 243-1.6(d)	32	Season Trading Program Excess Emission Requirements - CAIR NOx Ozone Season
FACILITY	6NYCRR 243-1.6(e)	33	Trading Program Recordkeeping and reporting requirements - CAIR
FACILITY	6NYCRR 243-2.1	34	NOx Ozone Season Trading Program Authorization and responsibilities - CAIR Designated
FACILITY	6NYCRR 243-2.4	35	Representative Certificate of representation - CAIR Designated
FACILITY	6NYCRR 243-8.1	36, 37	Representative General Requirements - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5(d)	38	Quarterly reports re: recordkeeping and reporting - Monitoring and
FACILITY	6NYCRR 243-8.5(e)	39	Reporting and Compliance certification re: recordkeeping and reporting - Monitoring and
FACILITY	6NYCRR 244-1	40	Reporting CAIR NOx Ozone Annual Trading Program
FACILITY	6NYCRR 244-2	41	General Provisions CAIR Designated Representative for
FACILITY	6NYCRR 244-8	42	CAIR NOx Sources Monitoring and Reporting CAIR NOx
FACILITY	6NYCRR 245-1	43	Allowances CAIR SO2 Trading Program General
FACILITY	6NYCRR 245-2	44	Provisions CAIR Designated Representative for
FACILITY	6NYCRR 245-8	45	CAIR SO2 Sources Monitoring and Reporting for CAIR
FACILITY	6NYCRR 249.3(a)	46, 47, 48, 49, 50, 51	SO2 Trading Program BART Emission Limitation Requirements for
1-00001	6NYCRR 249.3(f)	57	Sources Each BART



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> determination established by the Department will be submitted to the EPA for approval as a SIP revision.

## **Applicability Discussion:**

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

#### ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

#### 6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

#### 6 NYCRR 200.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

#### 6 NYCRR 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

#### 6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

#### 6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

#### 6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, 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.

#### 6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to 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.

#### 6 NYCRR Subpart 201-6



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This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

#### 6 NYCRR 201-6.4 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

#### 6 NYCRR 201-6.4 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

#### 6 NYCRR 201-6.4 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

#### 6 NYCRR 201-6.4 (c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

## 6 NYCRR 201-6.4 (c) (2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

#### 6 NYCRR 201-6.4 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

#### 6 NYCRR 201-6.4 (d) (5)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.



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#### 6 NYCRR 201-6.4 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

#### 6 NYCRR 201-6.4 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

#### 6 NYCRR 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

#### 6 NYCRR 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

#### 6 NYCRR 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

## 6 NYCRR 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

#### 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

#### 40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

#### 40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

#### **Facility Specific Requirements**

In addition to Title V, BOWLINE GENERATING STATION has been determined to be subject to the following regulations:



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#### 40 CFR 60.13

This regulation specifies how monitoring shall be performed and which methods and appendices are used to determine if the monitoring is adequate and in compliance with the regulated standards.

#### 40 CFR 72.6 (a) (2)

This section references tables containing a list of utilities affected by Phase II of Title IV of the Clean Air Act. It also references the exceptions, or those that are exempt.

#### 40 CFR 75.10 (a)

This section specifies the primary measurement requirements for opacity, and all SO2, NOx, and CO2 emissions form the facility. It details how often measurements are to be made and the general type of systems to be used.

#### 6 NYCRR 211.1

This regulation requires that 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.

## 6 NYCRR 225-1.8 (a)

Upon request the owner or operator of a facility which purchases and fires coal or oil shall submit reports to the commissioner containing a fuel analysis, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1. All records shall be available for a minimum of three years

## 6 NYCRR 227-1.2 (a) (1)

This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units of greater than 250 mmBtu/hr heat input capacity which fire coal, oil, or coal derived fuels.

## 6 NYCRR 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

## 6 NYCRR 227-1.4 (b)

This regulation requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

#### 6 NYCRR 227-2.5

Compliance options for emission sources subject to NOx RACT that are not presumptive



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emission limits.

#### 6 NYCRR 231-11.2 (c)

This citation lists the record keeping requirements for insignificant modifications that are greater than 50% of the threshold including excluded emissions as defined in 231-4.1(b)(40)(i)(c) of this Part.

#### 6 NYCRR 243-1.6 (a)

This condition requires the facility to acknowledge that they are subject to this CAIR regulation and provide owner and contact information. It also requires them to update this information as it changes or provide supplemental information at the Departments request.

#### 6 NYCRR 243-1.6 (b)

This condition obligates the owners and operators of the facility to comply with the monitoring and reporting requirements of the CAIR regulations.

#### 6 NYCRR 243-1.6 (c)

This citation explains the general provisions of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program. This ozone season NOx cap and trade program runs from May 1 through September 30 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NOx Ozone Season allowances that is not less than the total tons of NOx emissions for the ozone season.

#### 6 NYCRR 243-1.6 (d)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains some of the penalties that can be imposed on a CAIR NOx Ozone Season source that does not surrender enough CAIR NOx Ozone Season allowances to cover their NOx Ozone Season emissions.

#### 6 NYCRR 243-1.6 (e)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program requires that all reports be submitted as required by this program, and that copies of all records and submissions made for this program be kept on site for at least five years.

#### 6 NYCRR 243-2.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that an CAIR NOx Ozone Season designated representative must be selected to submit, sign and certify each submission on behalf of the source for the this program.

## 6 NYCRR 243-2.4

This condition describes the required elements of the "Certificate of Representation" for the CAIR program and the certifying language required with submissions to the Department.



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#### 6 NYCRR 243-8.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that CAIR NOx Ozone Season Trading Program sources must install, certify and operate monitoring systems the meet the monitoring, recordkeeping, and reporting requirements in Subpart 6 NYCRR 243-8 and in Subpart H of 40 CFR Part 75.

## 6 NYCRR 243-8.5 (d)

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains what requirements the quarterly reports must meet.

## 6 NYCRR 243-8.5 (e)

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains the compliance certification requirements the source must follow for each quarterly report.

<u>6 NYCRR 249.3 (a)</u>

6 NYCRR 249.3 (f)

## 6 NYCRR Subpart 244-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NOx) Annual Trading Program. The control period for this annual NOx cap and trade program runs from January 1 to December 31each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NOx allowances that is not less than the total tons of NOx emissions for the control period.

## 6 NYCRR Subpart 244-2

Each Clean Air Interstate Rule (CAIR) NOx source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR NOx Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

## 6 NYCRR Subpart 244-8

The owners, operators, and Clean Air Interstate Rule (CAIR) designated representative of a CAIR NOx unit shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 244-8 and in 40 CFR Part 75, Subparts F and G. A certified NOx emission monitoring system must be used to measure NOx emissions. NOx emission reports must be certified and submitted quarterly.

## 6 NYCRR Subpart 245-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) sulfur dioxide (SO2) Trading Program. The control period for this annual SO2 cap and trade program runs from January 1 to December 31, starting in the year 2010. Each source shall hold a tonnage equivalent in



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CAIR SO2 allowances that is not less than the total tons of SO2 emissions for the control period.

## 6 NYCRR Subpart 245-2

Each Clean Air Interstate Rule (CAIR) SO2 source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR SO2 Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

#### 6 NYCRR Subpart 245-8

The owners, operators, and 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. A certified SO2 emission monitoring system must be used to measure SO2 emissions. SO2 emission reports must be certified and submitted quarterly.

## Compliance Certification Summary of monitoring activities at BOWLINE GENERATING STATION:

Location Facility/EU/EP/Process/ES	Cond 1	No. Type of Monitoring
FACILITY	53	record keeping/maintenance procedures
FACILITY	54	record keeping/maintenance procedures
FACILITY	1-4	record keeping/maintenance procedures
FACILITY	1-5	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	26	record keeping/maintenance procedures
1-00001/00001	58	intermittent emission testing
1-00002/00002	60	intermittent emission testing
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	monitoring of process or control device parameters as surrogate
1-00001/00001	59	record keeping/maintenance procedures
1-00002/00002	61	record keeping/maintenance procedures
FACILITY	65	record keeping/maintenance procedures
1-00002	1-13	record keeping/maintenance procedures
FACILITY	42	record keeping/maintenance procedures
FACILITY	45	record keeping/maintenance procedures
FACILITY	46	continuous emission monitoring (cem)
FACILITY	47	continuous emission monitoring (cem)
FACILITY	48	continuous emission monitoring (cem)
FACILITY	49	continuous emission monitoring (cem)
FACILITY	50	work practice involving specific operations
FACILITY	51	work practice involving specific operations
1-00001	57	record keeping/maintenance procedures

**Basis for Monitoring** 



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Tube replacement project considered a modification subjec to Part 231. Past Actuals to Future Actuals evaluation performed and determined that project is only subject to recordkeeping requrements of 231.11.2(c)