



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-0603-00021/00042
Effective Date: 07/24/2015 Expiration Date: 07/23/2020

Permit Issued To: DUNKIRK POWER LLC
106 POINT DR N
DUNKIRK, NY 14048

Contact: THOMAS F COATES
NRG ENERGY INC
261 WASHINGTON BLVD
OSWEGO, NY 13126
(315) 349-2231

Facility: DUNKIRK STEAM GENERATING STATION
106 POINT DR NORTH
DUNKIRK, NY 14048

Contact: KEVIN SCHROEDER
DUNKIRK POWER LLC
106 POINT DR NORTH
DUNKIRK, NY 14048
(609) 524-5374

Description:

The Dunkirk Steam Generating Station is an electric utility, which can produce a total of 600 megawatts of electricity during maximum production. The station consists of four pulverized coal, dry-bottom, tangential-fired boilers that primarily fire subbituminous coal and fire distillate oil during startup. The boilers are permitted under Title V Air Permit ID 9-0603-00021/00030. The station is located on the shore of Lake Erie in the City of Dunkirk in Chautauqua County.

This permit is for the modification of Boiler 2 (Emission Unit U-00002) and Boilers 3 and 4 (Emission Unit U-00003) to allow for the capability of burning 100% natural gas in each boiler. Boiler 1 (Emission Unit U-00001) is currently mothballed and not part of this project. The capabilities of firing coal will remain, with the intent of the units being fired on either coal or natural gas as primary fuels. Coal firing capacities will not change. The ability to start up on natural gas will be added for both coal and natural gas as primary fuels, as well as maintaining the ability to startup with distillate oil for both natural gas and coal as primary fuels.

All three boilers are tangentially fired, meaning that there are burners in the four corners of each furnace. The currently existing coal burners and fuel oil guns will remain in place with the addition of natural gas spuds. After the initial addition of the gas spuds, the boiler burner configuration will not be required to be altered during a primary fuel switch. It has been determined that the maintenance procedures performed to switch fuels does not constitute a modification of the boilers for New Source Review or Prevention of Significant Deterioration purposes.



Compliance with NOx RACT for the boilers will be met through a two plant (Dunkirk and Huntley) averaging plan as approved by the Department on May 14, 2013. The NOx RACT Compliance Plan for the Dunkirk Station and Huntley Station was dated December 2011 and updated May 2013. This averaging plan applies when coal or natural gas is fired.

NOx RACT, 6NYCRR Part 227-2.4(a)(1)(ii), does not include a NOx RACT emission limit for very large coal/natural gas boilers so a NOx RACT Analysis was completed. It is dated November 2014. It concluded that NOx RACT for burning natural gas in these tangentially fired coal boilers is to use good combustion controls and the existing over fired air systems. Operating as described here, Dunkirk's vendors have guaranteed a NOx emission rate of 0.12 lb/mmBtu which has been accepted as NOx RACT while burning natural gas. This is also the NOx RACT limit for the boilers burning coal only.

The boilers are subject to the requirements of 40CFR63 subpart UUUUU, the National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units when they fire coal. Subpart UUUUU is commonly referred to as MATS (Mercury and Toxics Standards) and the Utility MACT (Maximum Available Control Technologies). They are not subject to subpart UUUUU if they do not fire coal or oil for more than 10.0 percent of the average annual heat input during any 3 calendar years or for more than 15.0 percent of the annual heat input during any calendar year, per 40CFR63.9983(c). Conditions in the permit require that the heat input from coal and oil, along with the total heat input to each boiler be monitored and evaluated against these applicability requirements.

A Prevention of Significant Deterioration (PSD) evaluation concluded that the only contaminate that increases after the modification is carbon monoxide (CO). The project emission potential for CO is 57.0 tons a year, which is less than the 100 ton per year significant project threshold in 6NYCRR part 231-13.6. Therefore, the permit requires CO emissions to be monitored, recorded and reported annually to the department, along with a comparison of the actual annual emissions against the projected annual emissions, per 6NYCRR 231-11.2(c).

The conditions in this permit will be incorporated into the Title V Air Permit renewal.

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: MICHAEL T HIGGINS
NYSDEC - HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233-1750

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 9 HEADQUARTERS



DEC GENERAL CONDITIONS
****** General Provisions ******
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 prior to actual transfer of ownership.



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 9 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 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2915
(716) 851-7165

New York State Department of Environmental Conservation

Permit ID: 9-0603-00021/00042

Facility DEC ID: 9060300021



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

Permit Issued To: DUNKIRK POWER LLC
106 POINT DR N
DUNKIRK, NY 14048

Facility: DUNKIRK STEAM GENERATING STATION
106 POINT DR NORTH
DUNKIRK, NY 14048

Authorized Activity By Standard Industrial Classification Code:
4911 - ELECTRIC SERVICES

Permit Effective Date: 07/24/2015

Permit Expiration Date: 07/23/2020



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 211.1: Air pollution prohibited
- 2 6 NYCRR 227-2.4 (a): Compliance Demonstration
- 3 6 NYCRR 227-2.4 (a): Compliance Demonstration
- 4 6 NYCRR 227-2.5 (b): Compliance Demonstration
- 5 6 NYCRR 231-11.2 (c): Compliance Demonstration
- 6 40CFR 63, Subpart UUUUU: Compliance Demonstration
- 7 40CFR 63, Subpart UUUUU: Compliance Demonstration

Emission Unit Level

EU=U-00002,EP=00002

- 8 6 NYCRR 227-2.5 (b): Compliance Demonstration

EU=U-00003,EP=00003

- 9 6 NYCRR 227-2.5 (b): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 10 ECL 19-0301: Contaminant List
- 11 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 12 6 NYCRR Subpart 201-5: Emission Unit Definition
- 13 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 14 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 15 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 16 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 17 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



FEDERALLY ENFORCEABLE CONDITIONS

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

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.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

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.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6 NYCRR 201-1.5

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

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

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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



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

Item F: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

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.

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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 I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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 J: Required Emission Tests - 6 NYCRR 202-1.1



An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item K: Open Fires Prohibitions - 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.

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.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Air pollution prohibited



Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement:6 NYCRR 211.1

Item 1.1:

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 2: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement:6 NYCRR 227-2.4 (a)

Item 2.1:

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

| | |
|--|-----------------------|
| Emission Unit: U-00002 | Emission Point: 00002 |
| Emission Unit: U-00003 | Emission Point: 00003 |
| Regulated Contaminant(s): CAS No: 0NY210-00-0 | OXIDES OF NITROGEN |

Item 2.2:

Compliance Demonstration shall include the following monitoring:

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

NOx RACT during the Ozone Season:

Compliance with NOx RACT will be met through a two plant averaging plan as approved by the Department on May 14, 2013. The NOx RACT Compliance Plan for the Dunkirk Station and Huntley Station was dated December 2011 and updated May 2013. A 6 NYCRR 227-2.5(b) Compliance Certification monitoring condition at the facility level provides a general description of the averaging plan.

NOx RACT, 6NYCRR Part 227-2.4(a)(1)(ii), does not include a NOx RACT emission limit for very large coal/natural gas boilers so a NOx RACT Analysis was completed. It is dated November 2014. It concluded that NOx RACT for burning natural gas in these tangentially fired coal boilers is to use good combustion controls and the existing over fired



air systems. Operating as described here, Dunkirk's vendors have guaranteed a NOx emission rate of 0.12 lb/mmBtu which has been accepted as NOx RACT while burning natural gas. This is also the NOx RACT limit for the boilers burning coal only.

1.) The 24 hour daily average NOx emissions from the two plants shall not exceed 0.12 pounds per million Btu during the ozone season, May 1 through September 30, burning coal or natural gas.

2.) NOx emissions shall be monitored with Continuous Emission Monitoring Systems (CEMS) as required by 6NYCRR Part 227-2 by using CEMS that are 40CFR Part 75 certified. The plant is subject to 40 CFR Part 75 emission monitoring because it is an Acid Rain facility.

3.) NOx emissions and calculations for the NOx averaging plan shall be kept as required by 6NYCRR Part 227-2 and the Compliance Plan.

4.) On a quarterly basis the NOx emissions, the calculated NOx average for Dunkirk and Huntley, and information required by 6NYCRR Part 227-2 shall be submitted to the department.

Manufacturer Name/Model Number: Teledyne API model TML-200
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.12 pounds per million Btus
Reference Test Method: 40 CFR 75 Appendix A
Monitoring Frequency: CONTINUOUS
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2015.
Subsequent reports are due every 3 calendar month(s).

Condition 3: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 3.1:

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

Emission Unit: U-00002

Emission Point: 00002

Emission Unit: U-00003

Emission Point: 00003



Regulated Contaminant(s):

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

Item 3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOx RACT during Non-Ozone Season

Compliance with NOx RACT will be met through a two plant averaging plan as approved by the Department on May 14, 2013. The NOx RACT Compliance Plan for the Dunkirk Station and Huntley Station was dated December 2011 and updated May 2013. A 6 NYCRR 227-2.5(b) Compliance Certification monitoring condition at the facility level provides a general description of the averaging plan.

NOx RACT, 6NYCRR Part 227-2.4(a)(1)(ii), does not include a NOx RACT emission limit for very large coal/natural gas boilers so a NOx RACT Analysis was completed. It is dated November 2014. It concluded that NOx RACT for burning natural gas in these tangentially fired coal boilers is to use good combustion controls and the existing over fired air systems. Operating as described here, Dunkirk's vendors have guaranteed a NOx emission rate of 0.12 lb/mmBtu which has been accepted as NOx RACT while burning natural gas. This is also the NOx RACT limit for the boilers burning coal only.

1.) The 30-day average NOx emissions from the two plants shall not exceed 0.12 pounds per million Btu during the non-ozone season, October 1 through April 30, burning coal or natural gas.

2.) NOx emissions shall be monitored with Continuous Emission Monitoring Systems (CEMS) as required by 6NYCRR Part 227-2 by using CEMS that are 40CFR Part 75 certified. The plant is subject to 40 CFR Part 75 emission monitoring because it is an Acid Rain facility.

3.) NOx emissions and calculations for the NOx averaging plan shall be kept as required by 6NYCRR Part 227-2 and the Compliance Plan.

4.) On a quarterly basis the NOx emissions, the calculated NOx average for Dunkirk and Huntley, and information required by 6NYCRR Part 227-2 shall be submitted to the department.

New York State Department of Environmental Conservation

Permit ID: 9-0603-00021/00042

Facility DEC ID: 9060300021



Manufacturer Name/Model Number: Teledyne API model TML-200
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.12 pounds per million Btus
Reference Test Method: 40 CFR 75 Appendix A
Monitoring Frequency: CONTINUOUS
Averaging Method: 30-DAY ROLLING AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2015.
Subsequent reports are due every 3 calendar month(s).

Condition 4: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement: 6 NYCRR 227-2.5 (b)

Item 4.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

As a compliance option for NO_x RACT, NRG has been approved to use a BTU-weighted NO_x emissions averaging plan. For each unit in the plan, NRG calculates (1) the amount of NO_x that is actually emitted during each averaging period and (2) the maximum amount of NO_x that would be allowed to be emitted if each unit were required to comply on an individual basis with the limits contained in 6 NYCRR Part 227-2.4(a)1 based on the unit's actual heat input during the averaging period. Both the actual NO_x emitted and the allowable NO_x are summed for all units in the plan, and compliance is achieved if the actual emissions are less than the allowable emissions.

The approved NRG Energy, Inc. Dunkirk and Huntley NO_x RACT Compliance Plan was dated December 2011 and updated May 2013 covers the following NRG facilities: Dunkirk Station, Huntley Station. This plan was approved with a letter dated May 14, 2013.

Monitoring, Recordkeeping and Reporting shall comply with the requirements of 6 NYCRR Part 227-2.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.



The initial report is due 10/30/2015.
Subsequent reports are due every 3 calendar month(s).

Condition 5: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement:6 NYCRR 231-11.2 (c)

Item 5.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For a modification with a project emission potential which is less than 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of Subpart 231-13 of this Part, but equals or exceeds 50 percent of the applicable significant project threshold when emissions excluded in accordance with clause 231-4.1(b)(41)(i)(c) of this Part are added and is less than the applicable significant project threshold, or for a modification with a project emission potential which equals or exceeds 50 percent of the applicable significant project threshold in Table 3, Table 4 or Table 6 of Subpart 231-13 of this Part and is less than the applicable significant project threshold, the facility owner or operator must submit an application to modify the facility permit under the minor permit provisions of Subpart 201-6 of this Title or obtain a preconstruction permit under the provisions of Subpart 201-6 of this Title, and must:

(1) maintain the following information for a minimum of five years:

(i) a description of the modification.

(ii) an identification of each new or modified emission source(s) including the associated processes and emission unit.

(iii) the calculation of the project emission potential for each modified emission source(s) including supporting documentation.

(iv) the date the modification commenced operation.

(2) monitor the emissions of each regulated NSR contaminant from the emission source(s) that will increase



as a result of the modification, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the modification, or for a period of 10 years following resumption of regular operations after the change if the modification increases the design capacity of or potential to emit the regulated NSR contaminant at such emission source(s); and

(3) submit a report to the department within 30 days after the end of each year during which records must be generated in accordance with Paragraph 231-11.2(c)(2) of this Part. The report must contain:

(i) the name, address, and telephone number of the major facility.

(ii) the annual emissions as calculated pursuant to Paragraph (c)(2) of this Section.

(iii) a comparison of actual annual emissions to the projected actual emissions and, if applicable, an explanation as to why the actual annual emissions exceeded the projected actual emissions.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2015.
Subsequent reports are due every 12 calendar month(s).

Condition 6: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement: 40CFR 63, Subpart UUUUU

Item 6.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 6.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

1.) If coal or oil is fired for more than 15.0 percent of the average annual heat input during any calendar year then the unit must comply with the requirements of 40CFR63 subpart UUUUU the National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units on the date the unit meets the definition of an EGU subject to this subpart.



[63.9983(c), 63.8894(d)]

2.) Monitoring:

- a. Track the annual heat input from coal and oil.
- b. Calculate the average annual heat input for each calendar year.
- c. Calculate the percent of the annual heat input that is from coal or oil.

3.) Record:

- a. The annual heat input from coal and oil,
- b. The average annual heat input for each calendar year, and
- c. The percent of the annual heat input that is from coal or oil.

4.) On an annual basis report:

- a. The annual heat input from coal and oil
- b. The average annual heat input for each calendar year, and
- c. The percent of the annual heat input that is from coal or oil.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2015.
Subsequent reports are due every 12 calendar month(s).

Condition 7: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement:40CFR 63, Subpart UUUUU

Item 7.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

- 1.) If coal or oil is fired for more than 10.0 percent of the average annual heat input during any 3 calendar years then the unit must comply with the requirements of, 40CFR63 subpart UUUUU the National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units on the date the unit meets the definition of an EGU subject to this subpart.
[63.9983(c), 63.8894(d)]

2.) Monitoring:

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- a. Track the annual heat input from coal and oil.
 - b. Calculate the average annual heat input for each 3 calendar year period.
 - c. Calculate the percent of the annual heat input that is from coal or oil.
- 3.) Record:
- a. The annual heat input from coal and oil,
 - b. The average annual heat input for each 3 calendar year period, and
 - c. The percent of the annual heat input that is from coal or oil.
- 4.) On an annual basis report the:
- a. Annual heat input from coal and oil,
 - b. The average annual heat input for each 3 calendar year period, and
 - c. The percent of the annual heat input that is from coal or oil.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2015.
Subsequent reports are due every 12 calendar month(s).

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

Condition 8: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement: 6 NYCRR 227-2.5 (b)

Item 8.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002

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

Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Every system averaging plan must have the following characteristics:

- (1) The system averaging plan must employ a weighted



average permissible emission rate.

(2) Averaging of emissions from sources within the severe ozone nonattainment area with those outside the severe ozone nonattainment area is not allowed.

(3) In the event of a forced outage, the weighted average permissible emission rate must be adjusted to account for the emission source or major electrical inter-tie (345 kV or greater) not in operation as a result of the forced outage. The adjusted emission rate will be deemed in compliance for the period of the forced outage. In the event of a forced outage, the facility owner or operator must, within 30 days thereafter, submit a written report to the department which describes why the outage was unavoidable and includes the following:

(i) a contemporaneous operating log signed by the responsible official identifying the location of the emission source which was subject to the forced outage and the cause of such outage;

(ii) a demonstration that the emission source was being properly operated at the time the outage occurred;

(iii) a demonstration that, during the outage, the facility owner or operator took all reasonable steps to minimize emissions from the operating emission sources included in the system averaging plan, or other requirements of the permit; and

(iv) a proposed repair or replacement schedule for the subject emission source or a proposed revised system averaging plan.

(4) Every owner or operator of an emission source participating in the system averaging plan is liable for any and all violations of the provisions of this Subpart by any owner or operator of any emission source participating in the system averaging plan.

The system averaging plan must be approved by the Department and attached to each facility's permit that is part of the plan. Each plan will address monitoring frequency, averaging methods, and reference test methods.

All records associated with the system averaging plan must be kept at each facility that participates in the plan for a minimum of five years.



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 10/30/2015.

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

Condition 9: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable Federal Requirement: 6 NYCRR 227-2.5 (b)

Item 9.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Regulated Contaminant(s):

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

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Every system averaging plan must have the following characteristics:

(1) The system averaging plan must employ a weighted average permissible emission rate.

(2) Averaging of emissions from sources within the severe ozone nonattainment area with those outside the severe ozone nonattainment area is not allowed.

(3) In the event of a forced outage, the weighted average permissible emission rate must be adjusted to account for the emission source or major electrical inter-tie (345 kV or greater) not in operation as a result of the forced outage. The adjusted emission rate will be deemed in compliance for the period of the forced outage. In the event of a forced outage, the facility owner or operator must, within 30 days thereafter, submit a written report to the department which describes why the outage was unavoidable and includes the following:

(i) a contemporaneous operating log signed by the responsible official identifying the location of the emission source which was subject to the forced outage and the cause of such outage;

(ii) a demonstration that the emission source was being



properly operated at the time the outage occurred;

(iii) a demonstration that, during the outage, the facility owner or operator took all reasonable steps to minimize emissions from the operating emission sources included in the system averaging plan, or other requirements of the permit; and

(iv) a proposed repair or replacement schedule for the subject emission source or a proposed revised system averaging plan.

(4) Every owner or operator of an emission source participating in the system averaging plan is liable for any and all violations of the provisions of this Subpart by any owner or operator of any emission source participating in the system averaging plan.

The system averaging plan must be approved by the Department and attached to each facility's permit that is part of the plan. Each plan will address monitoring frequency, averaging methods, and reference test methods.

All records associated with the system averaging plan must be kept at each facility that participates in the plan for a minimum of five years.

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 10/30/2015.

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



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

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

Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item B: 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 only enforceable.

Condition 10: Contaminant List
Effective between the dates of 07/24/2015 and 07/23/2020



Applicable State Requirement:ECL 19-0301

Item 10.1:

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

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

**Condition 11: Malfunctions and start-up/shutdown activities
Effective between the dates of 07/24/2015 and 07/23/2020**

Applicable State Requirement:6 NYCRR 201-1.4

Item 11.1:

(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 12: Emission Unit Definition
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 12.1:

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

Emission Unit: U-00002

Emission Unit Description:

Emission unit U-00002 consists of a nominal 922.2 mmBtu/hr steam boiler (boiler 2) and steam turbine generator set which generates approximately 100 megawatts of electricity. The boiler primarily fires coal as described in process P22 and P23 of the Title V permit or natural gas as described in process P24 of this permit. Distillate oil is used to bring the boiler up to temperature during startup and other conditions when necessary, as described in process P21 of the Title V permit. Natural gas may also be used in place of distillate oil during startup.

There are 4 processes associated with this emission unit. They are numbered P21, P22, P23, and P24. Emission Unit 2 consists of emission point 00002 (the stack), emission source S0002 (boiler 2), emission source S03C0 (over fired air for boiler 2), emission sources S2DB1 and S2DB2 (duct burners), S02C1 (fabric filter), and S02C2 (SNCR - selective non-catalytic reduction). Trona and powder activated carbon will be injected to the exhaust gases before the baghouse.

Building(s): Main Plant

Item 12.2:

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

Emission Unit: U-00003

Emission Unit Description:

Emission unit U-00003 consists of two (2) nominal 1,836 mmBtu/hr steam boilers (boiler 3 and 4) and steam turbine-generator sets which generate approximately 200 megawatts of electricity each - 400 MW in total. The boilers primarily fire coal as described in process P32 and P33 of the Title V permit or natural gas as described in process P34 of this permit. Distillate oil is used to bring the boilers up to temperature during start up, and other conditions when necessary, as described in process P31 of the Title V permit. Natural gas may also be used in place of distillate oil during startup.

There are 3 processes associated with this emission unit. They are numbered P31, P32 & P33. Emission Unit 3 consists of emission point 00003 (the stack), emission



source S0003 (boiler 3), emission source S03C0 (over fired air for boiler 3), emission sources S3DB1 and S3DB2 (duct burners for boiler 3), emission source S03C1 (fabric filter for boiler 3), emission source S03C2 (SNCR - selective non-catalytic reduction for unit 3), emission source S0004 (boiler 4), emission source S04C0 (over fired air for boiler 4), emission sources S4DB1 and S4DB2 (duct burners for boiler 4), emission source S04C1 (fabric filter for boiler 4), and emission source S04C2 (SNCR for boiler 4).

Building(s): Main Plant

Condition 13: Renewal deadlines for state facility permits
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 13.1:

The owner or operator of a facility having an issued state facility 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.

Condition 14: Compliance Demonstration
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 14.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 9
270 Michigan Ave.
Buffalo, NY 14203

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 15: Visible Emissions Limited



Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR 211.2

Item 15.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

**** Emission Unit Level ****

Condition 16: Emission Point Definition By Emission Unit
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 16.1:

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

Emission Unit: U-00002

Emission Point: 00002
Height (ft.): 312 Diameter (in.): 162
NYTMN (km.): 4713.514 NYTME (km.): 142.762 Building: Main Plant

Item 16.2:

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

Emission Unit: U-00003

Emission Point: 00003
Height (ft.): 310 Diameter (in.): 258
NYTMN (km.): 4713.554 NYTME (km.): 142.691 Building: Main Plant

Condition 17: Process Definition By Emission Unit
Effective between the dates of 07/24/2015 and 07/23/2020

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 17.1:

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

Emission Unit: U-00002
Process: P24 Source Classification Code: 1-01-006-04
Process Description:
This process allows the firing of natural gas in Unit 2. Coal and natural gas are not proposed to be co-fired as primary fuels simultaneously. The existing closed-coupled overfired air will be used (ES/C S02C0). Trona injection,

New York State Department of Environmental Conservation

Permit ID: 9-0603-00021/00042

Facility DEC ID: 9060300021



SNCR, PAC injection and the fabric filter are not expected to operate when natural gas is fired as a primary fuel. Exhaust gases will pass through the fabric filters until the dust collection system reaches equilibrium, indicating that no more dust is being removed, and then the baghouse bypasses may be opened. The continuous opacity monitoring system will continue to operate.

Emission Source/Control: S0002 - Combustion
Design Capacity: 922 million BTUs per hour

Emission Source/Control: S02C0 - Control
Control Type: OVERFIRE AIR

Item 17.2:

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

Emission Unit: U-00003

Process: P34

Source Classification Code: 1-01-006-04

Process Description:

This process allows the firing of natural gas in Units 3 and 4. Coal and natural gas are not proposed to be co-fired as primary fuels simultaneously. The existing separated overfired air will be used (ES/C S03C0 and S04C0). Trona injection, SNCR, PAC injection and the fabric filter are not expected to operate when natural gas is fired as a primary fuel. Exhaust gases will pass through the fabric filters until the dust collection system reaches equilibrium, indicating that no more dust is being removed, and then the baghouse bypasses may be opened. The continuous opacity monitoring system will continue to operate.

Emission Source/Control: S0003 - Combustion
Design Capacity: 1,836 million Btu per hour

Emission Source/Control: S0004 - Combustion
Design Capacity: 1,836 million Btu per hour

Emission Source/Control: S03C0 - Control
Control Type: OVERFIRE AIR

Emission Source/Control: S04C0 - Control
Control Type: OVERFIRE AIR

