Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

Mr. Jeffrey Perry, Plant Manager
Parkway Generation Keys Energy Center, LLC.
10322 North Keys Road
Brandywine, MD 20613-8200

JAN 1 4 2025

Dear Mr. Perry:

Re: Renewal Part 70/ Title V Operating Permit #24-033-2737

Enclosed, please find the Amended Part 70/Title V Operating Permit with minor modification and Fact Sheet for the Keys Energy Center located in Prince George's County, MD. The Permit will expire on November 30, 2027.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit 12 months before the expiration of the permit. Upon submitting a complete application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

If you have any questions, please feel free to contact Ms. Marcie Gurley, Chief, Technical Support Division, at Marcie.gurley@maryland.gov, or (410) 537-3230.

Sincerely,

Suna Yi Sariseak, Manager
Air Quality Permits Program
Air & Radiation Administration

SYS/jm

Enclosures

cc: EPA Region III (w/encl)

KEEP PERMIT AT SITE **CONTROL NO. B - 07806**

Wes Moore
Governor

State of Maryland

Serena McIlwain
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

Part 70
[X] Operating Permit

PERMIT NO. 24-033-2737

DATE ISSUED JAN 14 2025

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE November 30, 2027

LEGAL OWNER & ADDRESS

Parkway Generation Keys Energy Center, LLC
10322 N. Keys Road
Brandywine, MD 20613-8200
Attn: Mr. Jeffrey Perry, Plant Manager

SITE

Parkway Generation Keys Energy Center
10322 N. Keys Road
Brandywine, MD 20613-8200
Prince George's County
AI#93478

SOURCE DESCRIPTION

A 755 MW, two on one combined-cycle, natural gas fired combustion turbine electrical generating facility.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

PARKWAY GENERATION KEYS ENERGY CENTER LLC
KEYS ENERGY CENTER
10322 NORTH KEYS ROAD
BRANDYWINE, MARYLAND 20613
PART 70 OPERATING PERMIT NO. 24-033-2737

PARKWAY GENERATION KEYS ENERGY CENTER LLC
KEYS ENERGY CENTER
10322 NORTH KEYS ROAD
BRANDYWINE, MARYLAND 20613
PART 70 OPERATING PERMIT NO. 24-033-2737

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Keys Energy Center is a 755 MW, two-on-one combined-cycle, natural gas-fired combustion turbine electric generating facility. The main sources of emissions are two (2) Siemens Model SGT6-5000Fee combustion turbines (CTs), each rated at 2,330 MMBtu/hr. The CTs fire natural gas only. Each CT exhaust to its own heat recovery steam generator (HRSG) which includes a Forney natural gas duct burner rated at 443 MMBtu/hr. Emissions from the CTs and duct burners are controlled by an SCR and an oxidation catalyst system. Steam from the HRSGs is routed to a single steam turbine generator. Ancillary equipment includes a natural gas-fired Cleaver Brooks auxiliary boiler rated at 87.1 MMBtu/hr., a diesel-fired emergency generator rated at 1,500 kW, a Cummins diesel-fired fire water pump engine rated at 260 brake horsepower and several sources of fugitive emissions.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU1	033-2737-5-1578 & 5-1580	**CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. Controls: Selective Catalyst Reduction and oxidation catalyst.	December 2017
EU2	033-2737-5-1579 & 5-1581	**CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. Controls: Selective Catalyst Reduction and oxidation catalyst.	December 2017
EU3	033-2737-5-1582	Cleaver Brooks natural gas-fired auxiliary boiler rated at 87.1 MMBtu/hr.	January 2018

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU4	033-2737-9-1485	MTU-Onsite Energy diesel-fired power block emergency generator rated at 1,500 Kw.	November 2017
EU5	033-2737-9-1484	Cummins diesel-fired water pump engine rated at 260 brake horsepower.	October 2017
EU6	N/A	Natural gas pipeline components, including valves, flanges, pump seals, pressure relief valves, and six (6) catalytic heaters – all within the facility boundary.	September 2017
EU7	N/A	Circuit breakers containing sulfur hexafluoride (SF6).	October 2017
EU8	N/A	Two (2) fuel oil storage tanks: 900 gallons (emergency generator) and 350 gallons (fire pump).	October & November 2017
EU9	N/A	On-site paved and unpaved roads.	N/A

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification

SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This

information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the

application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the

pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a. — e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required by (c. — g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located,

emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log

maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

The initial Phase II Acid Rain Permit is attached as Appendix A. The Permittee shall comply with all applicable requirements contained in the Phase II Acid Rain Permit.

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping, and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[Reference: COMAR 26.11.03.06C(5)(g)]**

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1.0	**Emissions Unit Number(s): EU1 & EU2** **EU1**: **CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [033-2737-5-1578 & 5-1580] *Controls: Selective Catalyst Reduction and oxidation catalyst.* **EU2**: **CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [033-2737-5-1579 & 5-1581] *Controls: Selective Catalyst Reduction and oxidation catalyst*
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05A** - Visible Emissions. (2) Areas III and IV. "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of

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demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

(3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period."

B. Control of Particulate Matter

(1) **COMAR 26.11.06.03B(2)(a)** - Particulate Matter from Confined Sources. "A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

(2) **PM (filtrable) BACT**: 8.8 lb./hr. without duct firing and 12.2 lb./hr. with duct firing at all times. (3-hour block average)
PM_{10} (filterable and condensable) BACT: 11.0 lb./hr. without duct firing and 15.0 lb./hr. with duct firing at all times.
[Reference: CPCN 9297, Conditions B-IV-5 & B-IV-6 & Table B-1]

C. Control of Sulfur Oxides

The Permittee must not burn in the stationary CT any fuel which contains total potential sulfur emissions in excess of 26 ng/J (0.060 lb. SO_2/MMBtu) heat input. **[Reference: CPCN 9297, Table B-1 & 40 CFR §60.4330(a)(2)]**

See Cross State Air Pollutant Rule (CSAPR) in Table IV-1a and Acid Rain Permit attached as Appendix A.

D. Control of Nitrogen Oxides

(1) **COMAR 26.11.09.08G.** - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
"(**2**) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than **42 ppm when burning gas** or 65 ppm when burning fuel oil (dry volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive. "

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Per CPCN Case 9297, Table B-1 - The NO_X emission limit not to exceed **42-ppm at 15% O_2** is based on a **3-hour block average**.

(2) **40 CFR Part 60, Subpart KKKK** - Standards of Performance for Stationary Combustion Turbines for which Construction, Modification or Reconstruction commenced after February 18, 2005.
Emission Limits
§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide (NO_X) and sulfur dioxide (SO_2).
§60.4320 - What emission limits must I meet for nitrogen oxides (NO_X)?
You must meet the emission limits for NO_X specified in Table 1 to this subpart.

Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines

Combustion turbine type	Combustion turbine heat input at peak load (HHV)	NO_X emission standard (30 day rolling average)
New, modified, or reconstructed turbine firing natural gas	> 850 MMBtu/h	15 ppm at 15 percent O_2 or 54 ng/J of useful output (0.43 lb./MWh)

(3) **NO_X LAER** requirements and the **NO_X BACT** requirements listed in the CPCN 9297: NO_X emission limit of 2.0 ppmvd at 15% O_2 with and without duct firing, except during periods of startup and shutdown. (3-hour block average); NO_X During Startup/Shutdown: 245.2 lb./event (cold startup); 82.9 lb./event (warm startup); 71.4 lb./event (hot startup); 60 lb./event (shutdown).
[Reference: CPCN 9297, Conditions B-IV-5 & B-IV-6 & Table B-1]

E. Control of VOC
VOC LAER requirements listed in the CPCN 9297: VOC emission limit: 1.0 ppmvd at 15% O_2 without duct firing and 2.0 ppmvd at 15% O_2 with duct firing, except during periods of startup and shutdown. (3-hour block average); 164 lb./event (cold startup); 63 lb./event (warm startup); 52.6 lb./event (hot startup; 12 lb./event (shutdown).
[Reference: CPCN 9297, Conditions B-IV-6 & Table B-1]

See CAM Requirements in Table IV-1b.

F. Control of Ammonia
The Permittee shall limit emissions of ammonia resulting from un-reacted ammonia (ammonia slip) from each of the SCRs installed on the

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CTs/HTSGs as specified in Table B-1. Emission Limit (not to exceed) 5 ppmvd at 15% O_2. **[Reference: CPCN 9297, Condition B-IV-7 & Table B-1]**

G. Control of CO_2

(1) **40 CFR Part 60 Subpart TTTT** for Greenhouse Gas Emissions for Electric Generating Units.

§60.5520 - What CO_2 emissions standard must I meet?

(a) For each affected EGU subject to this subpart, you must not discharge from the affected EGU any gases that contain CO_2 in excess of the applicable CO_2 emission standard specified in table 1 or **2** of this subpart, consistent with paragraphs (b), (c), and (d) of this section, as applicable.

(b) Except as specified in paragraphs (c) and (d) of this section, you must comply with the applicable gross energy output standard, and your operating permit must include monitoring, recordkeeping, and reporting methodologies based on the applicable gross energy output standard. For the remainder of this subpart (for sources that do not qualify under paragraphs (c) and (d) of this section), where the term "gross or net energy output" is used, the term that applies to you is "gross energy output."

Table 2 of Subpart TTTT of Part 60—CO_2 Emission Standards for Affected Stationary Combustion Turbines That Commenced Construction After January 8, 2014, and Reconstruction After June 18, 2014 (Net Energy Output-Based Standards Applicable as Approved by the Administrator)

[Note: Numerical values of 1,000 or greater have a minimum of 3 significant figures and numerical values of less than 1,000 have a minimum of 2 significant figures]

Affected EGU	CO_2 Emission standard
Newly constructed or reconstructed stationary combustion turbine that supplies more than its design efficiency or 50 percent, whichever is less, times its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis	450 kg of CO_2 per MWh of gross energy output (1,000 lb. CO_2/MWh); or 470 kilograms (kg) of CO_2 per megawatt-hour (MWh) of net energy output (1,030 lb./MWh).

(2) **GHG (as CO_2) BACT** requirements listed in the CPCN 9297: 869 lb./CO_2/MW-hr. with and without duct firing (gross). (12-month rolling average).

See CO_2 Budget Permit attached as Appendix B.

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H. Control of CO
CO BACT requirements listed in the CPCN 9297: **CO emission limit**: 2.0 ppmvd at 15% O_2 with and without duct firing, except during periods of startup and shutdown (based on 3-hour block average); **CO During Startup/Shutdown**: 1,064 lb./event (cold startup); 759 lb./event (warm startup); 269 lb./event (hot startup); 60 lb./event (shutdown). **[Reference: CPCN 9297, Conditions B-IV-5 & Table B-1]**

I. Operational Limits
(1) The Permittee shall use only pipeline quality natural gas in the combustion turbines and duct burners. **[Reference: CPCN Case 9297 Condition B-IV-1]**

(2) The Permittee shall install a fuel flow meter and continuously monitor the fuel flow for each CT/HRSG and duct burner. The total fuel usage per month shall be recorded. **[Reference: CPCN Case 9297 Condition B-IV-10]**

J. BACT Requirements
Heat Rate: Emission Limit (not to exceed) - 6,802 Btu/kWh (net)(LHV).

Definitions ***[Reference: CPCN Case 9297 B-II-2 thru B-II-8]***

"Excess emissions" means an emission rate which exceeds any applicable emission standard unless the emission rate is in compliance with an approved plan for compliance, departmental order, consent order, or condition of a permit.

"Malfunction" is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process that operates in an abnormal or unusual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

"Startup" as it relates to the CTs is defined as the period of time from initiation of combustion firing until the unit reaches a steady state operating condition which could take up to 2-hours in duration.

"Cold Startup" is defined as a startup event prior to which the CT has not been operating for at least 48-hours. A cold startup could take up to 2 hours to bring the CT up to a steady state operating condition.

"Warm Startup" is defined as a startup event prior to which the CT has not been operating for at least 8-hours but no more than 48-hours. A warm startup could take up to 1-hours to bring the CT up to a steady state operating condition.

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	"Hot Startup" is defined as a startup event prior to which the CT has been operating within the last 8-hours. A hot startup could take up to 0.9-hours to bring the CT up to a steady state operating condition. *"Shutdown" as it relates to the CT is defined as the period of time from which the turbine output is lowered with the intent to shut down, beginning at the point at which the load drops below 50%.*
1.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Particulate Matter (1) The Permittee shall conduct stack tests shall be conducted **annually** for **PM, PM_{10}, $PM_{2.5}$** … After three continuous years of conducting annual stack tests, the Permittee may request the Department to reduce the frequency of the stack tests. **[Reference: CPCN 9297, Condition B-IV-8]** (2) The Permittee shall conduct annual performance test using EPA Method 5, 201A/202 or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]** C. Control of Sulfur Oxides The Permittee shall conduct stack tests shall be conducted **annually** for … **SO_2** (unless fuel sulfur content is determined through fuel sampling in lieu of stack testing in accordance with 40 CFR §60.4415 as noted in Table B-1)… After three continuous years of conducting annual stack tests, the Permittee may request the Department to reduce the frequency of the stack tests. **[Reference: CPCN 9297, Condition B-IV-8]** See Cross State Air Pollutant Rule (CSAPR) in Table IV-1a and Acid Rain Permit. D. Control of Nitrogen Oxides (1) **COMAR**: See Monitoring Requirements . (2) **NSPS:** The Permittee shall conduct annual performance test as required by 40 CFR §60.4400(a). **[Reference: CPCN 9297 Table B-I]** (3) **NO_x LAER**: The Permittee shall conduct an annual performance test using EPA Method 7E or equivalent method approved by MDE-ARA. (3-hour block average).

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	[Reference: CPCN 9297 Table B-I] E. Control of VOC The Permittee shall conduct an annual performance test using Method 18/25A or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]** F. Control of Ammonia The Permittee shall conduct performance stack tests at least once every five years using EPA Method CTM-027 or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]** G. Control of CO_2 (1) See Monitoring Requirements. (2) The Permittee shall conduct an annual performance test for CO_2 using EPA Method 3A or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]** H. Control of CO The Permittee shall conduct an annual performance test using EPA Method 10, or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297, Table B-1]** I. Operational Limits (1) See Record Keeping Requirements. (2) See Monitoring Requirements. J. BACT Requirements The Permittee shall conduct an annual thermal efficiency test in accordance with ASME PTC-46, or another methodology approved by MDE-ARA, and compare results to design thermal efficiency value. An exceedance of the heat rate limit is not considered a violation of this permit but triggers a requirement for PSEG Keys to submit a maintenance plan to MDE-ARA which specifies the actions PSEG Keys plans to take in order to achieve the heat rate limit. The plan shall include a timeframe that the heat rate limit will be met not to exceed 60 days unless agreed to by MDE-ARA. **[Reference: CPCN 9297 Table B-I]**
1.3	**Monitoring Requirements:** A. Control of Visible Emissions

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	The Permittee shall conduct visible observations in accordance with EPA Reference Method 22 at least once each calendar quarter to verify that there are no visible emissions during operation. If visible emissions are observed, PSEG Keys shall inspect the combustion control system, perform necessary adjustments and/or repairs within 48 hours, and document in writing the results of inspection, adjustments, and/or repair. After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, PSEG Keys shall perform Method 9 observations once daily for at least one hour until corrective actions have reduced the visible emissions to less than 20 percent opacity. **[Reference: COMAR 26.11.02.02(H)]** B. Control of Particulate Matter See Record Keeping Requirements. C. Control of Sulfur Oxides "You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb. SO_2/MMBtu) heat input for units located in continental areas.... You must use one of the following sources of information to make the required demonstration: (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less." **[Reference: 40 CFR §60.4365(a)]** D. Control of Nitrogen Oxides (1) **COMAR** & (2) **NSPS**: Emissions shall be continuously monitored via NOx CEMS. [40 CFR §60.4340(a)-(b)]. **[Reference: CPCN 9297, Condition B-IV-3]** (3) **NOx LAER**: Emissions shall be continuously monitored via NOx CEMS. **[Reference: 40 CFR §60.4340(a)-(b)]**. PSEG Keys shall calculate monthly emissions (during startup/shutdown events) from the CTs/HRSGs, based on emissions measured using the CEMS to demonstrate compliance with the facility-wide emissions limit in Condition B-III-3. E. Control of VOC CO CEMS data shall be used as a surrogate for VOC emissions. A correlation shall be developed between CO and VOC emissions based on an initial stack test. The emission correlation shall be verified annually by stack test, or a new correlation established. Monthly emissions during

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normal operation shall be calculated using the VOC emission rates and monthly fuel throughput rates to the CTs/HRSGs.
The VOC emissions factors during startup and shutdown provided by the vendor and number and type of startup and shutdown events shall be used to calculate the monthly emissions during startup and shutdown events. The monthly emissions shall be used to demonstrate compliance with the facility-wide VOC emissions limit in Condition B-III-3. **[Reference: CPCN 9297 Table B-I]**

F. Control of Ammonia
See Reporting Requirements.

G. Control of CO_2
(1) **§60.5535** - How do I monitor and collect data to demonstrate compliance?
"(c) If your affected EGU exclusively combusts liquid fuel and/or gaseous fuel, as an alternative to complying with paragraph (b) of this section, you may determine the hourly CO_2 mass emissions according to paragraphs (c)(1) through (4) of this section. If you use non-uniform fuels as specified in §60.5520(d)(2), you may determine CO_2 mass emissions during the compliance period according to paragraph (c)(5) of this section.
(2) For each measured hourly heat input rate, use Equation G-4 in appendix G to part 75 of this chapter to calculate the hourly CO_2 mass emission rate (tons/h). You may determine site-specific carbon-based F-factors (F_c) using Equation F-7b in section 3.3.6 of appendix F to part 75 of this chapter, and you may use these F_c values in the emissions calculations instead of using the default F_c values in the Equation G-4 nomenclature.
(3) For each "valid operating hour" (as defined in §60.5540(a)(1), multiply the hourly tons/h CO_2 mass emission rate from paragraph (c)(2) of this section by the EGU or stack operating time in hours (as defined in §72.2 of this chapter), to convert it to tons of CO_2. Then, multiply the result by 909.1 to convert from tons of CO_2 to kg. Round off to the nearest two significant figures.
(4) The hourly CO_2 tons/h values and EGU (or stack) operating times used to calculate CO_2 mass emissions are required to be recorded under §75.57(e) of this chapter and must be reported electronically under §75.64(a)(6) of this chapter. You must use these data to calculate the hourly CO_2 mass emissions.
(5) If you operate a combustion turbine firing non-uniform fuels, as an alternative to following paragraphs (c)(1) through (4) of this section, you

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	may determine CO_2 emissions during the compliance period using one of the following methods: (i) Units firing fuel gas may determine the heat input during the compliance period following the procedure under §60.107a(d) and convert this heat input to CO_2 emissions using Equation G-4 in appendix G to Part 75 of this chapter. (ii) You may use the procedure for determining CO_2 emissions during the compliance period based on the use of the Tier 3 methodology under §98.33(a)(3) of this chapter. (d) Consistent with §60.5520, you must determine the basis of the emissions standard that applies to your affected source in accordance with either paragraph (d)(1) or (2) of this section, as applicable: (1) If you operate a source subject to an emissions standard established on an output basis (*e.g.,* lb. of CO_2 per gross or net MWh of energy output), you must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output or net electric output, as applicable, from the affected EGU(s). These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20 (incorporated by reference, see §60.17). For a combined heat and power (CHP) EGU, as defined in §60.5580, you must also install, calibrate, maintain, and operate meters to continuously (*i.e.,* hour-by-hour) determine and record the total useful thermal output. For process steam applications, you will need to install, calibrate, maintain, and operate meters to continuously determine and record the hourly steam flow rate, temperature, and pressure. Your plan shall ensure that you install, calibrate, maintain, and operate meters to record each component of the determination, hour-by-hour. (2) If you operate a source subject to an emissions standard established on a heat-input basis (*e.g.,* lb. CO_2/MMBtu) and your affected source uses non-uniform heating value fuels as delineated under §60.5520(d), you must determine the total heat input for each fuel fired during the compliance period in accordance with one of the following procedures: (i) Appendix D to part 75 of this chapter; (ii) The procedures for monitoring heat input under §60.107a(d); (iii) If you monitor CO_2 emissions in accordance with the Tier 3 methodology under §98.33(a)(3) of this chapter, you may convert your CO_2 emissions to heat input using the appropriate emission factor in table C-1 of part 98 of this chapter. If your fuel is not listed in table C-1, you must determine a fuel-specific carbon-based F-factor (F_c) in accordance with section 12.3.2 of EPA Method 19 of appendix A-7 to this part, and

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	you must convert your CO_2 emissions to heat input using **Equation G-4** in Appendix G to Part 75 of this chapter." (2) Monitor CO_2 emissions from each CTs/HRSGs using Equation G-4 in Appendix G to Part 75 of this chapter. The total generation (MW) shall be monitored to calculate the emission rate of CO_2 (lb./MW-hr.), determined each month by summing the CO_2 emissions for all hours in which power is being generated to the grid during the previous 12 months and dividing that value by the sum of the electrical energy output over that same period. **[Reference: CPCN 9297 Table B-I]** H. Control of CO Emissions shall be continuously monitored via CO CEMS. [COMAR 26.11.01.11]. PSEG Keys shall calculate monthly emissions from the CTs/HRSGs based on emissions measured using the CEMS to demonstrate compliance with the facility-wide emissions limit in Condition B-III-3. **[Reference: CPCN 9297, Condition B-IV-5 & Table B-1]** I. Operational Limits (1) See Record Keeping Requirements. (2) The Permittee shall continuously monitor the fuel flow to each CT/HRSG and duct burner. **[Reference: CPCN 9297 Condition B-IV-10]** J. BACT Requirements See Testing Requirements.
1.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN Case 9297 Condition B-I-7]** B. Control of Particulate Matter All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for

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	inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** C. Control of Sulfur Oxides All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN Case 9297 Condition B-I-7]** D. Control of Nitrogen Oxides (1) The Permittee shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08K(3)]** (2) & (3) See Reporting Requirements. E. Control of VOC See Reporting Requirements. F. Control of Ammonia See Reporting Requirements. G. Control of CO_2 (1) **§60.5560** - What records must I maintain? "(a) You must maintain records of the information you used to demonstrate compliance with this subpart as specified in §60.7(b) and (f)." **§60.5565** - In what form and how long must I keep my records? "(a) Your records must be in a form suitable and readily available for expeditious review. (b) You must maintain each record for 3 years after the date of conclusion of each compliance period. (c) You must maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. You may maintain the records off site for the remaining year(s) as required by this subpart." (2) All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year

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	in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** H. Control of CO See Reporting Requirements. I. Operational Limits (1) All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** (2) The Permittee shall keep records of summary of the monthly and consecutive 12-month total fuel use and hour of operation for each CT and duct burner. **[Reference: COMAR 26.11.03.06C]**. J. BACT Requirements All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of excess emissions in accordance with Section III Condition 4 "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C(7)]** B. Control of Particulate Matter Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]** C. Control of Sulfur Oxides If the Permittee elects to demonstrate compliance with the SO_2 emission limit in 40 CFR §60.4330 using methods described in §60.4415(a) as described in CPCN Case 9297 Table B-1, the Permittee shall submit periodic representative fuel sampling records. **[Reference: CPCN Case 9297 Condition B-IV-18]**

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	D. Control of Nitrogen Oxides (1) "When demonstration of compliance with the NO_x emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter." **[Reference: COMAR 26.11.09.08K(1)]** (2) & (3) Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: COMAR 26.11.01.05B and CPCN 9297 Condition B-IV-13]** The Permittee shall submit electronic quarterly reports from the DHAS to the EPA Clean Air Markets Division System as specified in 40 CFR §75.64. **[Reference: 40 CFR §75.64 and CPCN 9297 Condition B-IV-14]** The Permittee shall submit the following CEMS reports to the Department for all CEMS required to be operated with the CTs: (a) CEMS Systems Downtime Reports as required by COMAR 26.11.01.11E(1); (b) Quarterly CEMS Summary Reports as required by COMAR 26.11.01.11E(2)(c). **[Reference: COMAR 26.11.01.11E and CPCN 9297 Condition B-IV-15]** The Permittee shall submit reports of excess emissions and monitor downtime associated with the CTs/HRSGs in accordance with 40 CFR §60.7(c). Excess emissions as defined in 40 CFR §60.4380 (NO_x) and 40 CFR §60.4385 (SO_2) shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: 40 CFR §60.4375 and CPCN 9297 Condition B-IV-16]** E. Control of VOC Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]** F. Control of Ammonia Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: COMAR 26.11.01.05B and CPCN 9297 Condition B-IV-13]** G. Control of CO_2 (1) **§60.5555** - What reports must I submit and when?

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	"(a) You must prepare and submit reports according to paragraphs (a) through (d) of this section, as applicable. (1) For affected EGUs that are required by §60.5525 to conduct initial and on-going compliance determinations on a 12-operating-month rolling average basis, you must submit electronic quarterly reports as follows. After you have accumulated the first 12-operating months for the affected EGU, you must submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, you must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter. (2) In each quarterly report you must include the following information, as applicable: (i) Each rolling average CO_2 mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. You must calculate each average CO_2 mass emissions rate for the compliance period according to the procedures in §60.5540. You must report the dates (month and year) of the first and twelfth operating months in each compliance period for which you performed a CO_2 mass emissions rate calculation. If there are no compliance periods that end in the quarter, you must include a statement to that effect; (ii) If one or more compliance periods end in the quarter, you must identify each operating month in the calendar quarter where your EGU violated the applicable CO_2 emission standard; (iii) If one or more compliance periods end in the quarter and there are no violations for the affected EGU, you must include a statement indicating this in the report; (iv) The percentage of valid operating hours in each 12-operating-month compliance period described in paragraph (a)(1)(i) of this section (*i.e.,* the total number of valid operating hours (as defined in §60.5540(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent); (v) Consistent with §60.5520, the CO_2 emissions standard (as identified in table 1 or 2 of this part) with which your affected EGU must comply; and (vi) Consistent with §60.5520, an indication whether or not the hourly gross or net energy output ($P_{gross/net}$) values used in the compliance determinations are based solely upon gross electrical load. (3) In the final quarterly report of each calendar year, you must include the following: (i) Consistent with §60.5520, gross energy output or net energy output sold to an electric grid, as applicable to the units of your emission

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	standard, over the four quarters of the calendar year; and (*January 30th of each year; include a hard copy to the MDE-ARA*) (ii) The potential electric output of the EGU. (**b**) You must submit all electronic reports required under paragraph (a) of this section using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA. (**c**)(1) For affected EGUs under this subpart that are also subject to the Acid Rain Program, you must meet all applicable reporting requirements and submit reports as required under subpart G of part 75 of this chapter. (2) For affected EGUs under this subpart that are not in the Acid Rain Program, you must also meet the reporting requirements and submit reports as required under subpart G of part 75 of this chapter, to the extent that those requirements and reports provide applicable data for the compliance demonstrations required under this subpart. (3)(i) For all newly constructed affected EGUs under this subpart that are also subject to the Acid Rain Program, you must begin submitting the quarterly electronic emissions reports described in paragraph (c)(1) of this section in accordance with §75.64(a) of this chapter, *i.e.*, beginning with data recorded on and after the earlier of: (A) The date of provisional certification, as defined in §75.20(a)(3) of this chapter; or (B) 180 days after the date on which the EGU commences commercial operation (as defined in §72.2 of this chapter). (ii) For newly constructed affected EGUs under this subpart that are not subject to the Acid Rain Program, you must begin submitting the quarterly electronic reports described in paragraph (c)(2) of this section, beginning with data recorded on and after: (A) The date on which reporting is required to begin under §75.64(a) of this chapter, if that date occurs on or after October 23, 2015; or (B) October 23, 2015, if the date on which reporting would ordinarily be required to begin under §75.64(a) of this chapter has passed prior to October 23, 2015. (iii) For reconstructed or modified units, reporting of emissions data shall begin at the date on which the EGU becomes an affected unit under this subpart, provided that the ECMPS Client Tool is able to receive and process net energy output data on that date. Otherwise, emissions data reporting shall be on a gross energy output basis until the date that the Client Tool is first able to receive and process net energy output data. (4) If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph (c)(3) of this section, the maximum (or in some

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	cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with §75.4(j) of this chapter, §75.37(b) of this chapter, or section 2.4 of appendix D to part 75 of this chapter (as applicable). Operating hours in which CO_2 mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in §60.5540(a)(1)) and shall not be used in the compliance determinations under §60.5540. (d) For affected EGUs subject to the Acid Rain Program, the reports required under paragraphs (a) and (c)(1) of this section shall be submitted by: (1) The person appointed as the Designated Representative (DR) under §72.20 of this chapter; or (2) The person appointed as the Alternate Designated Representative (ADR) under §72.22 of this chapter; or (3) A person (or persons) authorized by the DR or ADR under §72.26 of this chapter to make the required submissions." (2) Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]** H. Control of CO Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]** The Permittee shall submit electronic quarterly reports from the DHAS to the EPA Clean Air Markets Division System as specified in 40 CFR §75.64. **[Reference: CPCN 9297 Condition B-IV-14]** The Permittee shall submit the following CEMS reports to the Department for all CEMS required to be operated with the CTs: (a) CEMS Systems Downtime Reports as required by COMAR 26.11.01.11E(1); (b) Quarterly CEMS Summary Reports as required by COMAR 26.11.01.11E(2)(c). **[Reference: COMAR 26.11.01.11E and CPCN 9297 Condition B-IV-15]** The Permittee shall submit reports of excess emissions and monitor downtime associated with the CTs/HRSGs in accordance with 40 CFR §60.7(c). Excess emissions as defined in 40 CFR §60.4380 (NO_x) and 40 CFR §60.4385 (SO_2) shall be reported for all periods of unit operation,

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	including startup, shutdown, and malfunction. **[Reference: CPCN 9297 Condition B-IV-16]** I. Operational Limits (1) & (2) The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes summary of the monthly and consecutive rolling 12-month total fuel use and hours of operation for each CT and duct burner. **[Reference: CPCN 9297 Condition B-III-4 & Condition B-IV-18]** J. BACT Requirements See Testing Requirements.

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
1a.0	**Emissions Unit Number: EU1 & EU2 Cont'd** **EU1**: **CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [033-2737-5-1578 & 5-1580] *Controls: Selective Catalyst Reduction and oxidation catalyst.* **EU2**: **CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [033-2737-5-1579 & 5-1581] *Controls: Selective Catalyst Reduction and oxidation catalyst*
1a.1	**Applicable Standards/Limits**: A. **40 CFR Part 97 Subpart AAAAA - CSAPR NO_x Annual Trading Program** **CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)**

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	(1) **Designated representative requirements.** The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418. (2) **Emissions monitoring, reporting, and recordkeeping requirements.** (a) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 through 97.435. §97.430 (general monitoring, including requirements for installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions and long-term cold storage); §97.431 (initial monitoring system certification and recertification procedures); §97.432 (monitoring system out-of-control periods); §97.433 (notifications concerning monitoring), §97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements) (b) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (3) **NO_x emissions requirements.** (a) CSAPR NO_x Annual emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under §97.424(a) in an amount not less

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	than the tons of total NOx emissions for such control period from all CSAPR NOx Annual units at the source. (ii) If total NOx emissions during a control period in a given year from the CSAPR NOx Annual units at a CSAPR NOx Annual source are in excess of the CSAPR NOx Annual emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR NOx Annual unit at the source shall hold the CSAPR NOx Annual allowances required for deduction under §97.424(d); and (B) The owners and operators of the source and each CSAPR NOx Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.. (b) CSAPR NOx Annual assurance provisions. (i) If total NOx emissions during a control period in a given year from all CSAPR NOx Annual units at CSAPR NOx Annual sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOx emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOx Annual allowances available for deduction for such control period under §97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.425(b), of multiplying—(**A**) The quotient of the amount by which the common designated representative's share of such NOx emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State)

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	for such control period, by which each common designated representative's share of such NOx emissions exceeds the respective common designated representative's assurance level; and (**B**) The amount by which total NOx emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR NOx Annual allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total NOx emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NOx emissions exceed the sum, for such control period, of the State NOx Annual trading budget under §97.410(a) and the State's variability limit under §97.410(b) (iv) It shall not be a violation of this subpart or of the Clean Air Act if total NOx emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NOx emissions from the CSAPR NOx Annual units at CSAPR NOx Annual sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.. (v) To the extent the owners and operators fail to hold CSAPR NOx Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section' (A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR NOx Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	constitute a separate violation of this subpart and the Clean Air Act. (c) Compliance periods. (i) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. (ii) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter.. (d) Vintage of CSAPR NO_x Annual allowances held for compliance. (i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. (e) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA. (f) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and (ii) Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	(g) Property right. A CSAPR NO_x Annual allowance does not constitute a property right. (4) **Title V permit requirements.** (a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA. (b) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with 40 CFR 97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (5) **Additional recordkeeping and reporting requirements.** (a) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under §97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)

certificate of representation under §97.416 changing the designated representative..

(ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.

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

(b) The designated representative of a CSAPR NOx Annual source and each CSAPR NOx Annual unit at the source shall make all submissions required under the CSAPR NOx Annual Trading Program, except as provided in §97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(6) **Liability.**

(a) Any provision of the CSAPR NOx Annual Trading Program that applies to a CSAPR NOx Annual source or the designated representative of a CSAPR NOx Annual source shall also apply to the owners and operators of such source and of the CSAPR NOx Annual units at the source.

(b) Any provision of the CSAPR NOx Annual Trading Program that applies to a CSAPR NOx Annual unit or the designated representative of a CSAPR NOx Annual unit shall also apply to the owners and operators of such unit.

(7) **Effect on other authorities.**

No provision of the CSAPR NOx Annual Trading Program or exemption under §97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOx Annual source or CSAPR NOx Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

B. **40 CFR Part 97 Subpart BBBBB - CSAPR NOx Ozone Season Trading Program**

CSAPR NOx Ozone Season Trading Program Requirements (40 CFR 97.506)

(1) **Designated representative requirements.**

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	The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518. (2) **Emissions monitoring, reporting, and recordkeeping requirements.** (a) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 1 source and each CSAPR NO_X Ozone Season Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CF R 97.530 through 97.535. §97.530 (general monitoring, recordkeeping and reporting requirements, including requirements for installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), §97.531 (initial monitoring system certification and recertification procedures), §97.532 (monitoring system out-of-control periods), §97.533 (notifications concerning monitoring), §97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). (b) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of CSAPR NO_X Ozone Season Group 1 allowances under §§97.511(a)(2) and (b) and 97.512 and to determine compliance with the CSAPR NO_X Ozone Season Group 1 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (3) **NO_X emissions requirements.** (a) CSAPR NO_X Ozone Season Group 1 emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Ozone Season Group 1 source and each CSAPR NO_X Ozone Season Group 1 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season

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	Group 1 allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NOx emissions for such control period from all CSAPR NOx Ozone Season Group 1 units at the source.. (ii) If total NOx emissions during a control period in a given year from the CSAPR NOx Ozone Season Group 1 units at a CSAPR NOx Ozone Season Group 1 source are in excess of the CSAPR NOx Ozone Season Group 1 emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR NOx Ozone Season Group 1 unit at the source shall hold the CSAPR NOx Ozone Season Group 1 allowances required for deduction under §97.524(d); and (B) The owners and operators of the source and each CSAPR NOx Ozone Season Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (b) CSAPR NOx Ozone Season Group 1 assurance provisions. (i) If total NOx emissions during a control period in a given year from all CSAPR NOx Ozone Season Group 1 units at CSAPR NOx Ozone Season Group 1 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOx emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOx Ozone Season Group 1 allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying— (**A**) The quotient of the amount by which the common designated

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	representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (**B**) The amount by which total NO_X emissions from all CSAPR NO_X Ozone Season Group 1 units at CSAPR NO_X Ozone Season Group 1 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR NO_X Ozone Season Group 1 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total NO_X emissions from all CSAPR NO_X Ozone Season Group 1 units at CSAPR NO_X Ozone Season Group 1 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season Group 1 trading budget under §97.510(a) and the State's variability limit under 40 CFR 97.510(b).. (iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO_X emissions from all CSAPR NO_X Ozone Season Group 1 units at CSAPR NO_X Ozone Season Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO_X emissions from the CSAPR NO_X Ozone Season Group 1 units at CSAPR NO_X Ozone Season Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level. (v) To the extent the owners and operators fail to hold CSAPR NO_X Ozone Season Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

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	(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR NO_x Ozone Season Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (c) Compliance periods. (i) A CSAPR NO_x Ozone Season Group 1 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter. (ii) A CSAPR NO_x Ozone Season Group 1 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of May 1, 2017, or the deadline for meeting the unit's monitor certification requirements under §97.530(b) and for each control period thereafter. (d) Vintage of CSAPR NO_x Ozone Season Group 1 allowances held for compliance. (i) A CSAPR NO_x Ozone Season Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NO_x Ozone Season Group 1 allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR NO_x Ozone Season Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_x Ozone Season Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. (e) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.

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	(f) Limited authorization. A CSAPR NO_x Ozone Season Group 1 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 1 Trading Program; and (ii) Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. (g) Property right. A CSAPR NO_x Ozone Season Group 1 allowance does not constitute a property right. (4) **Title V permit requirements.** (a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 1 allowances in accordance with 40 CFR part 97, subpart BBBBB. (b) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with 40 CFR 97.530 through 97.535 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with40 CFR 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (5) **Additional recordkeeping and reporting requirements.** (a) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 1 source and each CSAPR NO_x Ozone Season Group 1 unit at the source shall keep on site

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	at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each CSAPR NO_X Ozone Season Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.516 changing the designated representative. (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_X Ozone Season Group 1 Trading Program. (b) The designated representative of a CSAPR NO_X Ozone Season Group 1 source and each CSAPR NO_X Ozone Season Group 1 unit at the source shall make all submissions required under the CSAPR NO_X Ozone Season Group 1 Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter. (6) **Liability.** (a) Any provision of the CSAPR NO_X Ozone Season Group 1 Trading Program that applies to a CSAPR NO_X Ozone Season Group 1 source or the designated representative of a CSAPR NO_X Ozone Season Group 1 source shall also apply to the owners and operators of such source and of the CSAPR NO_X Ozone Season Group 1 units at the source. (b) Any provision of the CSAPR NO_X Ozone Season Group 1 Trading Program that applies to a CSAPR NO_X Ozone Season Group 1 unit or the designated representative of a CSAPR NO_X Ozone Season Group 1 unit shall also apply to the owners and operators of such unit.

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	(7) **Effect on other authorities.** No provision of the CSAPR NOx Ozone Season Group 1 Trading Program or exemption under §97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOx Ozone Season Group 1 source or CSAPR NOx Ozone Season Group 1 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act. C. **40 CFR Part 97 Subpart CCCCC- CSAPR SO_2 Group 1 Trading Program** **CSAPR SO_2 Group 1 Trading Program requirements (40 CFR 97.606)** (1) **Designated representative requirements.** The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618. (2) **Emissions monitoring, reporting, and recordkeeping requirements.** (a) The owners and operators, and the designated representative, of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 through 97.635. §97.630 (general monitoring, recordkeeping and reporting requirements, including requirements for installation, certification, and data accounting; compliance deadlines, reporting data; prohibitions; and long-term cold storage), §97.631 (initial monitoring system certification and recertification procedures), §97.632 (monitoring system out-of-control periods), §97.633 (notifications concerning monitoring), §97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). (b) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and

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	determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (3) **SO_2 emissions requirements.** (a) CSAPR SO_2 Group 1 emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source. (ii) If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 1 units at a CSAPR SO_2 Group 1 source are in excess of the CSAPR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall hold the CSAPR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and (B) The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act. (b) CSAPR SO_2 Group 1 assurance provisions. (i) If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the

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	common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO_2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying— (**A**) The quotient of the amount by which the common designated representative's share of such SO2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and (**B**) The amount by which total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR SO_2 Group 1 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total SO_2 emissions exceed the sum, for such control period, of the State SO_2 Group 1 trading budget under §97.610(a) and the State's variability limit under §97.610(b). (iv) It shall not be a violation of 40 CFR part 97 subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total SO_2 emissions from the CSAPR SO_2 Group 1 units at CSAPR

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.. (v) To the extent the owners and operators fail to hold CSAPR SO_2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section, (A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act. (c) Compliance periods. (i) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter. (ii) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter. (d) Vintage of CSAPR SO_2 Group 1 allowances held for compliance. (i) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	(e) Allowance Management System requirements. Each CSAPR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC. (f) Limited authorization. A CSAPR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR SO_2 Group 1 Trading Program; and (ii) Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. (g) Property right. A CSAPR SO_2 Group 1 allowance does not constitute a property right. (4) **Title V permit requirements.** (a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO_2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC. (b) A description of whether a unit is required to monitor and report SO_2 emissions using a continuous emission monitoring system (under subpart B of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under40 CFR 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with 40 CFR 97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (5) **Additional recordkeeping and reporting requirements.**

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	(a) Unless otherwise provided, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.616 changing the designated representative. (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO_2 Group 1 Trading Program. (b) The designated representative of a CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall make all submissions required under the CSAPR SO_2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter. (6) **Liability.** (a) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 source or the designated representative of a CSAPR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO_2 Group 1 units at the source. (b) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 unit or the designated representative of a CSAPR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
	(7) **Effect on other authorities.** No provision of the CSAPR SO_2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO_2 Group 1 source or CSAPR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.
1a.2	**Testing Requirements:** A. 40 CFR Part 97 Subpart AAAAA- CSAPR NO_X Annual Trading Program See Monitoring Requirements. B. 40 CFR Part 97 Subpart BBBBB- CSAPR NO_X Ozone Season Trading Program See Monitoring Requirements. C. 40 CFR Part 97 Subpart CCCCC- CSAPR SO_2 Group 1 Trading Program See Monitoring Requirements.
1a.3	**Monitoring Requirements:** A. 40 CFR Part 97 Subpart AAAAA- CSAPR NO_X Annual Trading Program The Permittee shall comply with the monitoring requirements found in §97.406, §97.430, and §97.434 for the NO_X Annual Trading Program. B. 40 CFR Part 97 Subpart BBBBB- CSAPR NO_X Ozone Season Trading Program The Permittee shall comply with the monitoring requirements found in §97.506, §97.530, and §97.534 for the NO_X Ozone Season Trading Program. C. 40 CFR Part 97 Subpart CCCCC- CSAPR SO_2 Group 1 Trading Program The Permittee shall comply with the monitoring requirements found in §97.606, §97.630, §97.631, §97.632, and §97.633.

Table IV – 1a: Cross State Air Pollution Rule (CSAPR)	
1a.4	**Record Keeping Requirements:** A. 40 CFR Part 97 Subpart AAAAA- CSAPR NO_X Annual Trading Program The Permittee shall comply with the recordkeeping requirements found in §97.406, §97.430, and §97.434 for the NO_X Annual Trading Program. B. 40 CFR Part 97 Subpart BBBBB- CSAPR NO_X Ozone Season Trading Program The Permittee shall comply with the recordkeeping requirements found in §97.506, §97.530, and §97.534 for the NO_X Ozone Season Trading Program. C. 40 CFR Part 97 Subpart CCCCC- CSAPR SO_2 Group 1 Trading Program The Permittee shall comply with the recordkeeping requirements found in §97.606, §97.630, and §97.634.
1a.5	**Reporting Requirements:** A. 40 CFR Part 97 Subpart AAAAA- CSAPR NO_X Annual Trading Program The Permittee shall comply with the reporting requirements found in §97.406, §97.430, §97.433 and §97.434 for the NO_X Annual Trading Program. B. 40 CFR Part 97 Subpart BBBBB- CSAPR NO_X Ozone Season Trading Program The Permittee shall comply with the reporting requirements found in §97.506, §97.530, §97.533, and §97.534 for the NO_X Ozone Season Trading Program. C. 40 CFR Part 97 Subpart CCCCC- CSAPR SO_2 Group 1 Trading Program The Permittee shall comply with the reporting requirements found in §97.606, §97.630, §97.633 and §97.634.

Table IV-1b	
COMPLIANCE ASSURANCE MONITORING (CAM) Plan	
Emission Units: EU1 & EU2	
Applicable Requirement	**VOC:** Emission limit: <=1.0 ppmvd at 15% O_2 without duct firing and <=2.0 ppmvd at 15% O_2 with duct firing, except during periods of startup and shutdown.
I. Indicator	CO emission rate (ppmvd at 15% O_2)
Measurement Approach	CO is measured and recorded using a certified CEMs
II. Indicator Range	CO emissions less than or equal to the CO emission limitation prescribed in the permit (i.e., <= 2.0 ppmvd @ 15% O_2).
III. Performance Criteria: The CO CEMs meet the performance criteria for installation and operation as prescribed in the equipment protocol and Performance Specification Test protocol prepared in accordance with applicable EPA and MDE requirements.	
1. Data Representativeness	The indicator is based on the CO BACT emission level prescribed by the Department. CO data will be collected and validated in accordance with applicable EPA and MDE requirements.
2. Verification of Operational Status	CO CEMs data availability is in accordance with applicable EPA and MDE requirements.
3. AQ/QC Practices and Criteria	CO QA/QC procedures are consistent with the applicable EPA and MDE requirements.
4. Monitoring Frequency	CO is measured on a continuous basis with the exception of QA/QC periods, monitor malfunction periods and periods where the module is not combusting fuel.
5. Data Collection Procedures	CO data is collected by a computerized Data Acquisition System meeting applicable EPA and MDE requirements.
6. Averaging Period	CO emission rate is a 3-hour block average pursuant to Table B-1 in the CPCN 9297.

Table IV – 2	
2.0	**Emissions Unit Number(s): EU3** **EU3**: Cleaver Brooks natural gas-fired auxiliary boiler rated at 87.1 MMBtu/hr. [033-2737-5-1582]

Table IV – 2	
2.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05A** - Visible Emissions. (2) Areas III and IV. "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity." (3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period." B. Control of Particulate Matter **COMAR 26.11.06.03B(2)(a)** - Particulate Matter from Confined Sources. "A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)." C. Control of Nitrogen Oxides **COMAR 26.11.09.08E**. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall: (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis; (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request; (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

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	(5) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request." D. Operational Limit (1) The auxiliary boiler shall be fueled exclusively on pipeline quality natural gas at all times when operating. **[Reference: CPCN Case 9297 Condition B-V-3]** (2) The heat input to the auxiliary boiler shall not exceed 372,000 MMBtu in any 12-month rolling period. **[Reference: CPCN Case 9297 Condition B-V-4]** E. BACT Requirements Emissions from the auxiliary boiler shall meet the following BACT limits, through the use of efficient boiler design, exclusive use of pipeline quality natural gas, the use of ultra-low NO_X burners, and application of good combustion practices: (a) Emissions of NO_X shall not exceed 0.01 lbs./MMBtu on a 3-hr block average basis; (b) Emissions of CO shall not exceed 0.080 lbs./MMBtu on a 3-hr block average basis; (c) Emissions of PM shall not exceed 0.0075 lbs./MMBtu on a 3-hr block average basis; (d) Emissions of PM 10 shall not exceed 0.0075 lbs./MMBtu on a 3-hr block average basis; (e) Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period. **[Reference: CPCN Case 9297 Condition B-V-5]** F. LAER Requirements Emissions from the auxiliary boiler shall meet the following LAER limits, through the use of efficient boiler design, exclusive use of pipeline quality natural gas, the use of ultra-low NO_X burners, and application of good combustion practices: (a) NO_X emissions shall not exceed 0.01 lb./MMBtu on a 3-hr block average basis; and (b) VOC emissions shall not exceed 0.002 lb./MMBtu on a 3-hr block average basis. **[Reference: CPCN Case 9297 Condition B-V-6]**
2.2	**Testing Requirements:**

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	A. Control of Visible Emissions See Monitoring Requirements. B. Control of Particulate Matter See Monitoring Requirements. C. Control of Nitrogen Oxides See Record Keeping Requirements. D. Operational Limit (1) See Record Keeping Requirements. (2) See Monitoring Requirements E. BACT Requirements See Monitoring Requirements. F. LAER Requirements See Monitoring Requirements.
2.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall conduct visible emissions observation in accordance with EPA Reference Method 22 at least once each calendar quarter to verify that there are no visible emissions during operation. If the auxilary boiler is not operated in a calendar quarter, the Permittee shall document this and no visible emission observation is required. If visible emissions are observed, the Permittee shall inspect the combustion control system, perform necessary adjustments and/or repairs within 48 hours, and document in writing the results of the inspection, adjustments and/or repairs. After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, the Permittee shall perform EPA Reference Method 9 observations once daily for at least one hour until corrective action have reduced the visible emissions to less than 20 percent opacity. **[Reference : CPCN 9297 Condition B-V-8]** B. Control of Particulate Matter Emissions of PM and PM_{10} shall be calculated using fuel measurements and vendor guaranteed emission rates. **[Reference: CPCN 9297 Condition B-V-7(b)]** C. Control of Nitrogen Oxides

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	See Record Keeping Requirements. D. Operational Limit (1) See Record Keeping Requirements. (2) The Permittee shall install a fuel flow meter on the auxiliary boiler to continuously monitor the fuel flow. The fuel usage shall be recorded at least on a monthly basis. **[Reference: CPCN Case 9297 Condition B-V-9]** E. BACT Requirements Compliance with the BACT emission limits shall be demonstrated as follows: Emissions of NO_X, VOC, CO, PM, and PM_{10} shall be calculated using fuel measurements and vendor guaranteed emission rates. To demonstrate compliance with BACT for GHG pollutants, the Permittee shall conduct an annual combustion analysis on the auxiliary boiler. The results of the combustion analysis shall be provided to MDE-ARA within 45 days of its completion. Methane (CH_4) and nitrous oxide (N_2O) emissions from the auxiliary boiler shall be calculated in accordance with the methodology and emission factors noted in 40 CFR 98, Subpart C. On a monthly basis, fuel consumption, coupled with the appropriate emission factors and global warming potentials (25 for CH_4 and 298 for N_2O) shall be used to calculate the CH_4 and N_2O emissions on a CO_2e basis. These emission rates, summed with the monthly CO_2 emissions based on 40 CFR §98, Subpart C or other methods approved by MDE-ARA shall be used to calculate GHG emissions from the auxiliary boiler on a CO_2e basis. **[Reference: CPCN Case 9297 Condition B-V-7(b), (c) & (d)]** F. LAER Requirements Compliance with the LAER emission limits shall be demonstrated as follows: Emissions of NO_X, and VOC, shall be calculated using fuel measurements and vendor guaranteed emission rates. **[Reference: CPCN Case 9297 Condition B-V-7(b)]**
2.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]**

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A. Control of Visible Emissions
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN 9297 Condition B-I-7]**

B. Control of Particulate Matter
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN 9297 Condition B-I-7]**

C. Control of Nitrogen Oxides
The Permittee shall:
(1) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the MDE-ARA and the EPA upon request.
(2) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to MDE-ARA upon request.
[Reference: CPCN 9297 Condition B-V-14(b) & B-V-14(c)]

D. Operational Limit
(1) All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
(2) The Permittee shall maintain records of natural gas fuel usage in the auxiliary boiler on a monthly basis. **[Reference: 40 CFR §60.48c(g)(1)-(3) and CPCN Case 9297 Condition B-V-12]**
The Permittee shall maintain records of any maintenance performed on the auxiliary boiler for two years from the date of the record. **[Reference: 40 CFR §60.48c(i) and CPCN Case 9297 Condition B-V-16]**

E. BACT Requirements
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for

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	inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** F. LAER Requirements All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
2.5	**Reporting Requirements:** A. Control of Visible Emissions See Record Keeping Requirements. B. Control of Particulate Matter See Record Keeping Requirements C. Control of Nitrogen Oxides See Record Keeping Requirements. D. Operational Limit (1) The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]** (2) The Permittee shall submit a quarterly report of the monthly fuel usage to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4(a)]** E. BACT Requirements The results of the combustion analysis shall be provided to MDE-ARA within 45 days of its completion. **[Reference: CPCN 9297 Condition B-III-4 & B-V-7(c)]** F. LAER Requirements See Record Keeping Requirements.

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3.0	**Emissions Unit Number(s): EU4 & EU5**

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	EU4: MTU-Onsite Energy diesel-fired power block emergency generator rated at 1500 kW. [033-2737-9-1485] **EU5**: Cummins diesel-fired water pump engine rated at 260 brake horsepower. [033-2737-9-1484]
3.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05E** - Stationary Internal Combustion Engine Powered Equipment. "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. (4) Exceptions. (a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system. (b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods: (i) Engines that are idled continuously when not in service: 30 minutes; (ii) All other engines: 15 minutes. (c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics." B. Control of Sulfur Oxides **COMAR 26.11.09.07A(2)** - Sulfur Content Limitations for Fuel. " A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent." C. Control of Nitrogen Oxides **COMAR 26.11.09.08E**. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

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	(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis; (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request; (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (5) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request." D. Operational Limit The emergency diesel generator and the fire water pump engine shall be fired with diesel fuel only. . **[Reference: CPCN Case 9297 Condition B-VI-5]**
3.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements. B. Control of Sulfur Oxides See Monitoring Requirements. C. Control of Nitrogen Oxides See Record Keeping Requirements. D. Operational Limit See Record Keeping Requirements.
3.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the engines in a manner to minimize visible emissions. **[Reference: COMAR 26.11.03.06C]**

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	B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. **[Reference: COMAR 26.11.03.06C].** C. Control of Nitrogen Oxides See Record Keeping Requirements. D. Operational Limit See Record Keeping Requirements.
3.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. Control of Visible Emissions The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall retain fuel supplier certifications for each fuel delivery that documents the sulfur content of the ultra-low sulfur diesel (ULSD) is 15 ppm sulfur by weight or less. Fuel supplier certification shall include the following information: (1) The name of the oil supplier; (2) The sulfur content of the oil; (3) The method used to determine the sulfur content of the oil. ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 may be used; and (4) A statement that the sampling was performed according to either the single tank composite sampling procedure of the all-levels sampling procedure in ASTM D4057-88, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products" and that no additions have been made to the supplier's tank since sampling. [40 CFR 60.17]. **[Reference: CPCN 9297 Condition B-VI-12]** Note: The Permittee shall use fuel that meets specifications approved by the Department. C. Control of Nitrogen Oxides

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	The Permittee shall: (1) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the MDE-ARA and the EPA upon request. (2) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to MDE-ARA upon request. **[Reference: CPCN 9297 Condition B-V-13(b) & B-V-13(c)]** D. Operational Limit All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
3.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4,Section III, Plant Wide Condition, "Report of Excess Emissions and Deviations." B. Control of Sulfur Oxides The Permittee shall report fuel supplier certification to the Department upon request. **[Reference: COMAR 26.11.09.07C].** C. Control of Nitrogen Oxides The Permittee shall submit: (1)The results of combustion analysis to the department and the EPA upon request. **[Reference: COMAR 26.11.09.08E(3)]** (2) A record of training program attendance for each operator to the Department upon request. **[Reference: COMAR 26.11.09.08E(5)].** D. Operational Limit The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

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3a.0	**Emissions Unit Number(s): EU4 & EU5 Cont'd** **EU4**: MTU-Onsite Energy diesel-fired power block emergency generator rated at 1500 kW. [033-2737-9-1485] **EU5**: Cummins diesel-fired water pump engine rated at 260 brake horsepower. [033-2737-9-1484]
3a.1	**Applicable Standards/Limits:** A. NSPS Requirements **For EU4 only (1500 kW)** (1) The diesel-fired emergency generator shall be equipped with a non-resettable hour meter prior to startup of the engine. **[Reference: 40 CFR §60.4209(a) & CPCN Case 9297 Condition B-VI-8(e)]** (2) Exhaust emissions from the diesel fired emergency generator must not exceed: Non-methane hydrocarbons (NMHC) + NO_X: 6.4 grams per kilowatt hour (g/kW-hr) (4.8 g/hp-hr.); CO: 3.5 g/kW-hr (2.6 g/hp-hr.); and PM: 0.2 g/kW-hr (0.15 g/hp-hr.). **[Reference: 40 CFR §60.4205(b), 40 CFR §60.4202(a)(2), 40 CFR §89.112(a) and Table 1, CPCN Case 9297 ConditionB-VI-3(a)]** (3) Exhaust opacity from the emergency generator must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes. **[Reference: 40 CFR §60.4205(b) 40 CFR §60.4202(a)(2), and 40 CFR §89.113(a)]** (4) There is no time limit on the use of the emergency generator in emergency situations. **[Reference: 40 CFR §60.4211(f)(1)]** The Permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for

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	maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **[Reference: 40 CFR §60.4211(f)(2)(i)]** ***Note:*** *Effective May 2, 2016, emergency generators are no longer allowed to participate for emergency demand response operation unless they meet the requirements of a non-emergency generator of the same model year. This engine does not meet the standards for a non-emergency generator, therefore, operation for emergency demand response or during periods of voltage deviation are not permitted.* **For EU5 only (260 bhp)** (1) The diesel fired fire water pump must meet the following emissions standards: NMHC + NO_x: 4.0 g/kW-hr (3.0 g/hp-hr.); CO: 3.5 g/kW-hr (2.6 g/hp-hr.) PM: 0.20 g/kW-hr (0.15 g/hp-hr.). **[Reference: 40 CFR §60.4205(c), 40 CFR Part 60, Subpart IIII, Table 4, and CPCN Case 9297 Condition B-VI-3(b)]** (2) The fire water pump shall be equipped with a non-resettable hour meter prior to startup of the engine. **[Reference: 40 CFR §60.4209(a) & CPCN Case 9297 Condition B-VI-8(e)]** **For EU4 & EU5 only** The diesel fuel used in the emergency generator and the fire water pump must meet the following specifications: Sulfur content – 15 ppm maximum Cetane index or aromatic content as follows: A minimum cetane index of 40; or A maximum aromatic content of 35 volume percent. **[Reference: 40 CFR §60.4207(b) and 40 CFR §80.510(b)]** The diesel-fired emergency generator and the fire water pump shall be certified to the emissions standards in §60.4205(b), as applicable. The generator must be installed and configured according to the manufacturer's specifications. **[Reference: 40 CFR §60.4211(c)]** B. BACT Requirements (1) The auxiliary diesel generator shall be designed to meet the following BACT emission limits through the exclusive use of ultra-low sulfur diesel (ULSD) fuel and good combustion practices:

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	NO_X+NMHC, CO, and PM (filterable) emissions shall not exceed the applicable NSPS Subpart IIII emission limitations; PM_{10} (filterable and condensable) emissions shall not exceed 0.18 g/hp-hour; and Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period. **[Reference: CPCN Case 9297 Condition B-VI-6(a)]** (2) The fire water pump engine shall be designed to meet the following BACT limits through the exclusive use of ULSD fuel and good combustion practices: NO_X+NMHC, CO, and PM (filterable) emissions shall not exceed the applicable NSPS Subpart IIII emission limitations; PM_{10} (filterable and condensable) emissions shall not exceed 0.18 g/hp-hour; and Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period. **[Reference: CPCN Case 9297 Condition B-VI-6(b)]** C. LAER Requirements The emergency generator and fire water pump engine shall each be designed such that emissions shall not exceed the applicable limits in NSPS Subpart IIII for NO_X+NMHC through the use of ULSD fuel and good combustion practices at all times. **[Reference: CPCN Case 9297 Condition B-VI-7]**
3a.2	**Testing Requirements:** A. NSPS Requirements **For EU4 only** (1) See Record Keeping Requirements. (2) The stationary CI internal combustion engine must comply with the emission standards specified in §60.4205(b) as applicable. The engine must be installed and configured according to the manufacturer's emission-related specifications. **[Reference: 40 CFR §60.4211(c)]** (3) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. **[Reference: 40 CFR §89. 113(b)]** (4) See Record Keeping Requirements. **For EU5 only** (1) See Monitoring Requirements. (2) See Record Keeping Requirements.

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	For EU4 & EU5 only See Monitoring Requirements. B. BACT Requirements See Monitoring Requirements. C. LAER Requirements See Monitoring Requirements.
3a.3	**Monitoring Requirements:** A. NSPS Requirements **For EU4 only** (1) See Record Keeping Requirements. (2) Emissions of NO_X +NMHC, CO PM and PM_{10} shall be calculated using vendor guaranteed emission rates and used to calculate 12-month rolling emissions. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]** (3) See Testing Requirements. (4) See Record Keeping Requirements. **For EU5 only** (1) Emissions of NO_X +NMHC, CO PM and PM_{10} shall be calculated using vendor guaranteed emission rates and used to calculate 12-month rolling emissions. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]** (2) See Record Keeping Requirements. **For EU4 & EU5 only** The Permittee must operate and maintain the diesel fired emergency generator and the diesel fired fire water pump according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The Permittee may only change those settings that are permitted by the manufacturer. The Permittee must meet the requirements of 40 CFR Part 89, as applicable. **[Reference: 40 CFR §60.4211(a)]** B. BACT Requirements The Permittee shall calculate PM_{10} emissions using vendor guaranteed emission rates. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]** Methane (CH_4) and nitrous oxide (N_2O) emissions from the auxiliary generator and fire water pump engine shall be calculated in accordance with the methodology and emissions factors noted in 40 CFR 98,

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	Subpart C. On a monthly basis, fuel consumption, coupled with the appropriate emission factors and global warming potentials (25 for CH_4 and 298 for N_2O) shall be used to calculate the CH_4 and N_2O emissions on a CO_2e basis. These emission rates, summed with the monthly CO_2 emissions based on 40 CFR 98, Subpart C or other methods approved by MDE-ARA shall be used to establish GHG emissions from the auxiliary generator and fire water pump engine on a CO_2e basis. **[Reference: CPCN Case 9297 Condition B-VI-9(b)]** C. LAER Requirements The Permittee shall operate and maintain the engines in accordance with the manufacturers' written instructions and procedures approved by the engines manufacturer, over the entire life of the engine. **[Reference: 40 CFR §60.4206]**
3a.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** A. NSPS Requirements **For EU4 only** (1), (2) & (4) All records, and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** (3) See Testing Requirements. **For EU5 only** (1) & (2) All records, and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** **For EU4 & EU5 only** The Permittee shall provide fuel supplier certifications for each fuel delivery that documents the sulfur content of the ultra-low sulfur diesel (ULSD) is 15 ppm sulfur by weight or less. Fuel supplier certification shall include the following information: (a) The name of the fuel oil supplier;

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	(b) The sulfur content of the fuel oil; (c) The method used to determine the sulfur content of the fuel oil. ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 may be used; and (d) A statement that the sampling was performed according to either the single tank composite sampling procedures or the all-levels sampling procedure in ASTM D4057-88, "Standard Practice for Manual Sampling of Petroleum Products" and that no additions have been made to the supplier's tank since sampling. **[Reference: 40 CFR §60.17 and CPCN Case 9297 Condition B-VI-12]** Note: The Permittee shall use fuel that meets specifications approved by the Department. B. BACT Requirements All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** C. LAER Requirements All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
3a.5	**Reporting Requirements:** A. NSPS Requirements **For EU4 only** (1) & (4) The Permittee shall submit a quarterly report of the monthly fuel usage and hours of operation of emergency generator to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4(d)]** (2) The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]** (3) See Testing Requirements. **For EU5 only**

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	(1) & (2) The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]** **For EU4 & EU5 only** See Record Keeping Requirements. B. BACT Requirements The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]** C. LAER Requirements The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

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4.0	**Emissions Unit Number(s): EU6, EU7, EU8, & EU9** **EU6**: Natural gas pipeline components, including valves, flanges, pump seals, pressure relief valves, and six (6) catalytic heaters – all within the facility boundary. **EU7**: Circuit breakers containing sulfur hexafluoride (SF6). **EU8:** Two (2) fuel oil storage tanks: 900 gallons (emergency generator) and 350 gallons (fire pump). **EU9**: On-site paved and unpaved roads.
4.1	**Applicable Standards/Limits:** A. BACT Requirements: **EU6** Greenhouse Gas (GHG) Best Available Control Technology (BACT) for the natural gas pipeline components associated with the pipeline shall be the implementation of an Audio, Visual, and Olfactory (AVO) Program on file at power plant site for review upon request by the agency. In accordance with the AVO program Plan, the AVO inspections shall be documented, leaks identified from the AVO assessment shall be repaired within five days of discovery, repairs documented, and associated repair records maintained. **[Reference: CPCN Case 9297 Condition B-VII-1]** B. Control of GHG Emissions: **EU6** The GHG emissions from the natural gas pipeline components shall be limited to meet the facility-wide GHG emissions limit listed in CPCN Case 9297 Condition B-III-3. The emissions from the natural gas pipeline components shall be calculated as follows: (a) The GHG emissions from the natural gas pipeline components shall be based on EPA AP-42 emission factors, methodology described in 40 CFR Part §98 Subpart W, or other MDE-approved emission factors; (b) The total GHG emissions from the natural gas pipeline components shall be presented on a CO_2e basis. **[Reference: CPCN Case 9297 Condition B-VII-2]** C. BACT Requirements: **EU7** GHG BACT for the circuit breakers shall be installation of circuit breakers that are designed to meet ANSI C37.013 or equivalent to detect and

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	minimize SF6 leaks. Leaks detected shall be repaired within five days of discovery; repairs documented, and associated repair records maintained. **[Reference: CPCN Case 9297 Condition B-VIII-1]** D. Control of GHG Emissions: **EU7** The GHG emissions from the circuit breakers shall be limited to meet the facility-wide GHG emissions limit listed in CPCN Case 9297 Condition B-III-3. The emissions from the circuit breakers shall be calculated as follows: (a) SF6 emissions from the circuit breakers shall be calculated using a manufacturer provided leak rate, the methodology in 40 CFR §98, Subpart DD, and assuming 8,760 hours per year of operation; (b) The total GHG emissions from the circuit breakers shall be presented on a CO_2e basis. **[Reference: CPCN Case 9297 Condition B-VIII-2]** E. Control of VOC: **EU8** Lowest Achievable Emission Rate (LAER): The VOC emissions from the storage tanks (combined) shall not exceed 0.1 tons in any 12-month rolling period, through periodic maintenance on the tanks to minimize fugitive emissions. **[Reference: CPCN Case 9297 Condition B-IX-2]** F. Control of PM and PM_{10} Emissions: **EU9** Best Available Control Technology (BACT): The Permittee shall minimize PM and PM_{10} emissions from onsite roadways by taking reasonable precautions to prevent particulate matter from becoming airborne by sweeping or water application dust control, as needed. **[Reference: COMAR 26.11.06.03D and CPCN Case 9297 Condition B-X-1]**
4.2	**Testing Requirements:** A. BACT Requirements: **EU6** See Record Keeping Requirements. B. Control of GHG Emissions: **EU6** See Record Keeping Requirements. C. BACT Requirements: **EU7** See Record Keeping Requirements. D. Control of GHG Emissions: **EU7** See Record Keeping Requirements.

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	E. Control of VOC: **EU8** See Record Keeping Requirements. F. Control of PM and PM_{10} Emissions: **EU9** See Monitoring Requirements.
4.3	**Monitoring Requirements:** A. BACT Requirements: **EU6** See Record Keeping Requirements. B. Control of GHG Emissions: **EU6** See Record Keeping Requirements. C. BACT Requirements: **EU7** See Record Keeping Requirements. D. Control of GHG Emissions: **EU7** See Record Keeping Requirements. E. Control of VOC: **EU8** See Record Keeping Requirements. F. Control of PM and PM_{10} Emissions: **EU9** The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions or best management practices (BMP) Plan that will be used to prevent particulate matter from becoming airborne. The Permittee shall update the BMP Plan, as required by the initial Part 70 permit for this facility when a revision is needed to ensure that reasonable precautions will be used to prevent particulate matter from this equipment from becoming airborne and that adequate inspection will be conducted and documented. The BMP shall include provisions for routine inspections of emission sources and controls, corrective measures, and recordkeeping for such. **[Reference: COMAR 26.11.03.06C.]**
4.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]**

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A. BACT Requirements: **EU6**
The Permittee shall maintain all records of monitoring and repair associated with the natural gas pipeline components at the facility in accordance with the AVO Program Plan for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VII-3]**

B. Control of GHG Emissions: **EU6**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

C. BACT Requirements: **EU7**
The Permittee shall maintain all records of monitoring and repair associated with the circuit breakers at the Facility for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VIII-3]**

D. Control of GHG Emissions: **EU7**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

E. Control of VOC: **EU8**
The Permittee shall maintain records of periodic maintenance performed on the tanks to minimize fugitive emissions for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-IX-3]**

F. Control of PM and PM_{10} Emissions: **EU9**
The Permittee shall maintain the written reasonable precautions (BMP) at the facility and make it available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Table IV – 4	
4.5	**Reporting Requirements:** A. BACT Requirements: **EU6** This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VII-3]** B. Control of GHG Emissions: **EU6** See Record Keeping Requirements. C. BACT Requirements: **EU7** This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VIII-3]** D. Control of GHG Emissions: **EU7** See Record Keeping Requirements. E. Control of VOC: **EU8** This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-IX-3]** F. Control of PM and PM_{10} Emissions: **EU9** The Permittee shall report the results of the inspections and provide a copy of the current BMP plan upon request by the Department. **[Reference: COMAR 26.11.03.06C]**

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5.0	**Emissions Unit Number(s): Facility-wide/Plant-wide** **Facility-wide/Plant-wide**
5.1	**Applicable Standards/Limits:** Operational Limits (1) Plant-wide emissions, including emissions during periods of startup and shutdown, shall be limited to the following in any consecutive 12-month rolling period:

Pollutant	Emission Limit (tons per year)
Particulate Matter (PM) – Filterable	77.2

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Particulate Matter (PM_{10}) – Filterable and Condensable	94.4
Nitrogen Oxides (NO_X)	156.0
Carbon Monoxide (CO)	203.4
Volatile Organic Compounds (VOCs)	56.2
Greenhouse Gas (GHG) as Carbon Dioxide Equivalent (CO_2e)	2,467,793

[Reference: CPCN Case 9297 Condition B-III-3]

Startup defined as the period of time from initiation of combustion firing until the unit reaches a steady state operating condition which could take up to 2-hours in duration. **[Reference: CPCN Case 9297 Condition B-II-4]**

Shutdown defined as the period of time from which the turbine output is lowered with the intent to shut down, beginning at the point at which the drops below 50%. **[Reference: CPCN Case 9297 Condition B-II-8]**

(2) Facility-wide emissions of Particulate Matter less than 2.5 microns ($PM_{2.5}$) (Filterable and Condensable) shall not exceed 100 tons per 12-month rolling period. **[Reference: CPCN Case 9297 Condition B-III-1(k)]**

5.2 **Testing Requirements:**

Operational Limits
(1) See Record Keeping Requirements.

(2) See Monitoring Requirements.

5.3 **Monitoring Requirements:**

Operational Limits
(1) See Record Keeping Requirements

(2) For CTs/HRSGs and Duct Burners: The Permittee shall monitor the fuel usage in million standard cubic feet (MMSCF) continuously and record the heat input (MMBtu) per month to the CTs and duct burners. **[Reference: CPCN Case 9297 Condition B-III-8(a)(ii)]**

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	For Aux Boiler: $PM_{2.5}$ emissions from the auxiliary boiler shall be calculated based on the monthly heat input (MMBtu/month) to the auxiliary boiler and an emission factor of 0.0075 lb./MMBtu) or any lower emission factor established by performance tests. **[Reference: CPCN Case 9297 Condition B-III-8(b)]** Emergency generator and fire pump engine: $PM_{2.5}$ emissions from the auxiliary generators and the firewater pump engine shall be calculated based on the monthly hours of operation and an emission factor provided by vendor which the engine is designed to meet. In the absence of an emission factor provided by the vendor, $PM_{2.5}$ emissions shall be calculated based on the monthly hours of operation and the appropriate AP-42 or other MDE-approved emission factor for $PM_{2.5}$. **[Reference: CPCN Case 9297 Condition B-III-8(c)]**
5.4	**Record Keeping Requirements**: **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** Operational Limits All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
5.5	**Reporting Requirements**: Operational Limits The Permittee shall submit quarterly reports to MDE-ARA to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following information: summarizes the monthly and consecutive rolling 12-month total emissions (in tons per month and tons per year) of PM, PM_{10}, NO_X, CO, VOC, and GHG (as CO_2e) separately for each emission unit and total emissions of those pollutants for all the facility's sources. **[Reference: CPCN 9297 Condition B-III-4(e)** The Permittee shall certify the actual emissions of regulated air pollutants from all installations at the facility. Certification shall be on a form obtained from MDE-ARA and shall be submitted to MDE-ARA not later than April 1 of the year following the year for which the certification is

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	required. All emission certification submitted pursuant to this section, and which contains all information required by COMAR 26.11.01.05-1 for NO_x and VOC, satisfies the requirements of COMAR 26.11.01.05-1. [COMAR 26.11.02.19D]. **[Reference: CPCN 9297 Condition B-III-2(d)]**

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 5 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas III and IV]

The *affected fuel burning units* are subject to the following requirements:

COMAR 26.11.09.05A(2). "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

COMAR 26.11.09.05A(3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period."

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(2)(b), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(3) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planning, spindle sanding, or disc sanding of wood or wood products;

(4) Containers, reservoirs, or tanks used exclusively for:

(a) No. 26 Storage of lubricating oils;
Includes an average of five (5) storage totes of lubricating oils used to fill the twenty-one (21) dedicated lube oil tanks/containers.

(b) No. 1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(5) ✓ Laboratory fume hoods and vents;

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   COMAR 26.11.06.08 - Nuisance.
   "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   COMAR 26.11.06.09 - Odors.
   "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

   CO_2 Budget Permit
   The Permittee shall comply with the requirements of the CO_2 Budget Permit issued for Keys Energy Center. Note: A CO_2 Budget Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix B.

2. Record Keeping and Reporting:

   The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

   (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

   (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

Maryland Department of the Environment
Air and Radiation Administration

PHASE II ACID RAIN PERMIT

Plant Name: Keys Energy Center	
Affected Units: 11 (EU1) & 12 (EU2)	
Owner: Parkway Generation Keys Energy Center LLC.	ORIS Code **60302**
Effective Date From: October 18, 2023 To: November 30, 2027	

Contents:

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1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Environmental Article§2-401, Annotated Code of Maryland and Titles IV and V of the Clean Air Act, the Maryland Department of the Environment, Air and Radiation Administration issues this permit pursuant to COMAR 26.11.02 and COMAR 26.11.03.

2. SO_2 and NO_X Requirements for Each Affected Unit

Sulfur Dioxide Requirements

Units No. 11 (EU1) & 12 (EU2)

SO_X Requirements	
SO_X Allowances	PSEG Keys Energy Center LLC will hold allowances for Units 11 (EU1) & 12 (EU2) in accordance with 40 CFR 72.9(c)(1).

(1) The owners and operators of each source and each affected unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

Units No. 11 (EU1) & 12 (EU2)

NO_X Requirements	
NO_X Limit	None

3. Comments, notes, and justifications regarding decisions; and changes made to the permit application forms during the review process:

The allowances allocated by the United States Environmental Protection Agency (US EPA) to the unit are listed in Table 2 of 40 CFR Part 73. However, the number of allowances actually held by an affected source's account may differ from the number allocated by the US EPA.

Initial Permit Approval

Angelo Bianca Date of Issuance: OCT 18 2023

for Christopher Hoagland, Director
Air and Radiation Administration

Maryland Department of the Environment
Air and Radiation Administration

CO_2 BUDGET TRADING PROGRAM PERMIT

Plant Name: Keys Energy Center	
Affected Trading Units: 11 (EU1) & 12 (EU2)	
Owner: Parkway Generation Keys Energy Center LLC	**ORIS Code** 60302
Effective Date From: October 18, 2023 To: November 30, 2027	

Contents:

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Environmental Article §2-401, Annotated Code of Maryland, the Maryland Department of the Environment, Air and Radiation Administration issues this permit pursuant to COMAR 26.09.01 thru COMAR 26.09.04.

Initial Permit Approval

Angela Bramer

for Christopher Hoagland., Director
Air and Radiation Administration

OCT 18 2023

Date of Issue

2. Affected Units

Unit ID #	ARA ID #	Unit Description
11	5-1578	Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with heat recovery generator rated at 443 MMBtu/hr.
12	5-1579	Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with heat recovery generator rated at 443 MMBtu/hr.

3. Standard Requirements:

A. Selection and Responsibilities of CO_2 Budget Source Compliance Account Authorized Account Representatives.

(1) Each CO_2 budget source shall have a CO_2 authorized account representative and an alternate CO_2 authorized account representative. (COMAR 26.09.01.04B)

(2) Upon receipt of a complete account certificate of representation:

(a) The CO_2 authorized account representative and alternate CO_2 authorized account representative shall represent and, by representations, actions, inactions, or submissions, legally bind each owner or operator of the CO_2 budget source represented and each CO_2 budget unit at the source in all matters pertaining to this subtitle, notwithstanding any agreement between the CO_2 authorized account representative, alternate CO_2 authorized account representative, and the owners or operators; and

(b) The owners or operators shall be bound by any decision or order issued to the CO_2 authorized account representative or alternate CO_2 authorized account representative by the Department or a court regarding the CO_2 budget source or unit.
(COMAR 26.09.01.04E (1) & (2))

(3) A CO_2 budget permit may not be issued, or a compliance account established for a CO_2 budget source until the Department has received a complete account certificate of representation for a CO_2 authorized account representative and alternate CO_2 authorized account representative of the source and the CO_2 budget units at the source. (COMAR 26.09.01.04F)

(4) Each submission shall be signed and certified by the CO_2 authorized account representative or alternate CO_2 authorized account representative on behalf of each CO_2 budget source and shall include the following statement by the CO_2 authorized account representative or alternate CO_2 authorized account representative: "I am authorized to make the submission on behalf of the owners or operators of the CO_2 budget sources or CO_2 budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements

and information submitted in the document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." (COMAR 26.09.01.04G)

B. Distribution Of CO_2 Allowances And Compliance

(1) Unless otherwise specified in this chapter, a CO_2 budget source shall demonstrate compliance with its CO_2 budget emissions limitation by holding one CO_2 allowance in its compliance account for every ton of CO_2 that it emits in a control period, by the allowance transfer deadline for that control period. (COMAR 26.09.02.03I(1))

(2) As of the CO_2 allowance transfer deadline for an interim control period, the owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold, in the source's compliance account for deduction under §I of this regulation, CO_2 allowances for no less than 50 percent of the total CO_2 emissions for the interim control period from all CO_2 budget units at the source. (COMAR 26.09.02.03I(2))

(3) Allowances Available for Compliance Deduction. The following CO_2 allowances may be deducted from a compliance account for purposes of complying with a budget source's CO_2 budget emissions limitation for a control period or an interim control period:

(a) CO_2 allowances that are not CO_2 offset allowances and are identified as allowances falling within a prior control period, the same control period, or the same interim control period for which the allowances are deducted;

(b) CO_2 allowances that are held or transferred into the CO_2 budget source's compliance account as of the CO_2 allowance transfer deadline for that control period or for the interim control period contained within that control period;

(c) CO_2 offset allowances that are available to be deducted for compliance during a control period or an interim control period where the quantity of allowances is limited to:

(i) 3.3 percent of the CO_2 budget source's CO_2 emissions for that control period; or

(ii) 3.3 percent of the CO_2 budget source's CO_2 emissions for an interim control period multiplied by 0.50.
(COMAR 26.09.02.03I(3)(a)-(c))

(4) Deduction of CO_2 allowances:
(a) The Department shall deduct allowances from the CO_2 budget source's compliance account until:

(i) The number of CO_2 allowances deducted equals 50 percent of the total CO_2 emissions for an interim control period; or

(ii) The number of CO_2 allowances deducted equals the total CO_2 emissions for the control period.

(b) No deduction shall be made for CO_2 emissions attributable to the burning of eligible biomass. (COMAR 26.09.02.03I(4)(a) & (b))

(5) The identification of available CO_2 allowances for compliance deduction by serial number or by default is as follows:

(a) The CO_2 authorized account representative for a source's compliance account may request that specific CO_2 allowances, identified by serial number for a control period or interim control period, be deducted; and

(b) In the absence of an identification or in the case of a partial identification of available CO_2 allowances by serial number, the Department shall deduct CO_2 allowances for a control period or interim control period in the following descending order:

(i) For the first control period, all CO_2 allowances purchased by direct sale from the Department during years 2009, 2010, and 2011 resulting from the occurrence of the $7 auction clearing price;

(ii) All CO_2 allowances for a control period allocated to a CO_2 budget unit from the Long Term Contract Set-aside Account or the Clean Generation Set-aside Account;

(iii) Subject to the relevant compliance deduction limitations identified in §I(3)(c) of this regulation, any CO_2 offset allowances transferred and recorded in the compliance account, in chronological order; and

(iv) Any CO_2 allowances, other than those identified in §I(5)(b)(i)—(iii) of this regulation, that are available for deduction in the order they were recorded.
(COMAR 26.09.02.03I(5)(a)-(b))

(6) Deductions for Excess Emissions.

(a) If a CO_2 budget source has excess emissions, the Department shall deduct, from the CO_2 budget source's compliance account, CO_2 allowances from allocation years that occur after the control period or interim control period in which the excess emissions or excess interim emissions occurred, equal to three times the excess emissions.

(b) If a source's compliance account holds insufficient CO_2 allowances to cover the excess emissions, the source shall immediately transfer sufficient allowances into its compliance account.

(c) CO_2 offset allowances may not be deducted to account for the source's excess emissions.

(d) No CO_2 allowance deduction shall relieve the owners or operators of the CO_2 budget units at the source of liability for any fine, penalty, assessment or obligation to comply with any other

remedy, for the same violation, as ordered under applicable State law.
(COMAR 26.09.02.03I(6)(a)-(d))

(7) Guidelines.

(a) The following guidelines apply in assessing fines, penalties, or other obligations:

(i) For purposes of determining the number of days of violation, if a CO_2 budget unit has excess emissions for a control period or interim control period, each day in the control period or interim control period, as applicable, constitutes a separate day of violation unless the owners or operators of the unit can demonstrate to the satisfaction of the Department that a lesser number of days should be considered; and

(ii) The Department shall consider the amount of excess emissions in determining the severity of the violation.

(b) Each ton of excess interim emissions is a separate violation.
(COMAR 26.09.02.03I(7)(a)-(b))

(8) If the CO_2 budget source's compliance account no longer exists, the CO_2 allowances shall be deposited in a general account selected by the owner or operator of the CO_2 budget source.
(COMAR 26.09.02.03I(8))

(9) Adjustments and Errors.

(a) The Department may review and conduct independent audits concerning any submission under this subtitle and make appropriate adjustments to the information, if necessary.

(b) The Department may correct any error in any account and, within 10 business days of making any correction, notify the CO_2 authorized account representative for the account.
(COMAR 26.09.02.03I(9)(a)-(b))

C. Applicability and Administration

(1) The requirements of this permit apply to the owner or operator of a CO_2 budget unit. When this permit establishes a requirement such as the submittal of a permit application, a report, a request for allowances or transfer of allowances, or general information, these actions shall be achieved through the authorized account representative on behalf of the owner or operator of the affected CO_2 budget source or unit.
(COMAR 26.09.02.02A)

(2) The requirements of this subtitle are effective on January 1, 2009 or, for new CO_2 budget units, on the day on which the unit commences operation.
(COMAR 26.09.02.02C).

(3) The provisions of this permit do not exempt or otherwise relieve the owners or operators of a CO_2 budget source from achieving compliance with any other provision of applicable State and federal laws and regulations.
(COMAR 26.09.02.02D).

(4) Unless otherwise stated under this subtitle, any time period scheduled to begin:

(a) On the occurrence of an act or event, begins on the day the act or event occurs; and

(b) Before the occurrence of an act or event, is computed so that the period ends the day before the act or event occurs.
(COMAR 26.09.02.02E)

(5) Unless otherwise stated, if the final day of any time period for performing an act required by this subtitle falls on a weekend or on a State or federal holiday, the time period is extended until or to the next business day.
(COMAR 26.09.02.02F)

D. Permit Requirements

(1) The account representative or designate alternate account representative) of each affected unit at a source, (every fossil fuel fired unit with a nameplate capacity of 25 MW or greater) for that source shall comply with the following:

(a) The CO_2 authorized account representative for the source shall submit an initial CO_2 budget permit application by October 1, 2008, or 12 months before the date on which the CO_2 budget source, or a new unit at the source, commences operation.
(COMAR 26.09.02.04A(2));

(b) The CO_2 budget permit application shall include the following in a format prescribed by the Department: 1) the identification of the CO_2 budget source; 2) plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration of the U. S. Department of Energy, if applicable; 3) each CO_2 budget unit at the source; and 4) other information required by the Department.
(COMAR 26.09.02.04A(3))

(c) A CO_2 authorized account representative for the source shall submit a complete application for the renewal of an existing CO_2 budget permit on forms provided by the Department not later than 90 days before the expiration of the current CO_2 budget permit and in accordance with this regulation.
(COMAR 26.09.02.04E)

(2) Each CO_2 budget source shall apply for and have in effect a CO_2 budget permit that contains all applicable requirements.
(COMAR 26.09.02.04A(1)).

(3) The CO_2 budget permit issued by the Department shall be separate but attached to the budget source's Part 70 permit.
(COMAR 26.09.02.04B)

(4) A CO_2 budget permit expires 5 years from the date of issuance by the Department, unless an earlier expiration date is specified in the permit.
(COMAR 26.09.02.04D)

E. Monitoring, Initial Certification and Recertification Requirements

(1) For each control period in which a CO_2 budget source is subject to the CO_2 budget emissions limitation, the CO_2 authorized account representative of the source shall submit a compliance certification report by the March 1 following the relevant control period. A compliance certification report is not required as part of the compliance obligation during an interim control period. (COMAR 26.09.02.05A(1))

(2) The CO_2 authorized account representative shall include in the compliance certification report the following:

(a) Identification of the source and each CO_2 budget unit at the source;

(b) At the CO_2 authorized account representative's option, the serial numbers of the CO_2 allowances that are to be deducted from the source's compliance account for the control period, including the serial numbers of any CO_2 offset allowances that are to be deducted subject to applicable limitations; and

(c) The compliance certification required by §A(3) of COMAR 26.09.02.05. (COMAR 26.09.02.05A(2))

(3) In the compliance certification report, the CO_2 authorized account representative shall certify whether the source and each CO_2 budget unit at the source for which the compliance certification is submitted was operated during the control period in compliance with the requirements of this subtitle, including:

(a) Whether each CO_2 budget unit at the source was operated in compliance with the CO_2 budget emissions limitation;

(b) Whether the monitoring plan applicable to each unit at the source: (i) has been maintained to reflect the actual operation and monitoring of the unit; and (ii) contains all information necessary to track CO_2 emissions from the unit;

(c) Whether all CO_2 emissions from each unit at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including: (i) whether all conditional data was reported in the quarterly reports; or (ii) if conditional data were reported, whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

(d) Whether the basis for certification or for using an excepted monitoring method or approved alternative monitoring method has changed; and

(e) If a change is required to be reported, include: (i) the nature and reasons for the change; (ii) when the change occurred; and (iii) how the unit's compliance status was determined after the change, including the method used to determine emissions when a change mandated the need for monitor recertification.
(COMAR 26.09.02.05A (3) (a)-(e))

(4) The Department, at its discretion, may review and conduct independent audits of any compliance certification or other submission required by this permit.
(COMAR 26.09.02.05B(1))

(5) The Department may deduct CO_2 allowances from, or transfer CO_2 allowances to, a compliance account to correct errors in the account or to accurately reflect CO_2 emissions, based on the information in the compliance certification or other submissions.
(COMAR 26.09.02.05B(2))

(6) The owner or operator of a CO_2 budget unit shall:

(a) Install monitoring systems to monitor CO_2 concentration, stack gas flow rate, oxygen concentration, heat input, and fuel flow rate;

(b) Install all monitoring systems in accordance with 40 CFR Part 75, except for equation G-1 in Appendix G (see below); and

$$W_{CO_2} = \frac{\left(MW_C + MW_{O_2}\right) \times W_C}{2,000\, MW_C} \quad (Eq.\ G\text{-}1)$$

Where:
Wco_2=CO_2 emitted from combustion, tons/day.
MW_c=Molecular weight of carbon (12.0).
MW_{o2}=Molecular weight of oxygen (32.0)
W_c= Carbon burned, lb/day, determined using fuel sampling and analysis and fuel feed rates.

(c) Record, report, and verify the data from the monitoring systems.
(COMAR 26.09.02.10A(1)(a)-(c))

(7) Install and certify the monitoring system on or before the following dates:

(a) For a CO_2 budget unit that commences commercial operation before July 1, 2008, the owner or operator shall comply on or before January 1, 2009; and

(b) For a CO_2 budget unit that commences commercial operation or constructs a new stack or flue on or after July 1, 2008, the owner or operator shall comply by January 1, 2009, or 90 operating days after the date on which the unit commences commercial operation.
(COMAR 26.09.02.10A(1)(d))

(8) The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date shall, in accordance with the provisions in 40 CFR §75.31(b)(2) or (c)(3), or §2.4 of Appendix D, determine, record, and report maximum potential or, as appropriate, minimum potential for the following:

(a) CO_2 concentration;

(b) CO_2 emissions rate;

(c) Stack gas moisture content;

(d) Fuel flow rate; and

(e) Any other parameter required to determine CO_2 mass emissions.
(COMAR 26.09.02.10A(2)(a)-(e))

(9) The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date for any monitoring system shall determine, record, and report substitute data using the applicable missing data procedures in 40 CFR Part 75 Subpart D, or Appendix D, instead of the maximum potential values or, as appropriate, minimum potential values for a parameter, if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction or installation.
(COMAR 26.09.02.10A(3))

(10) An owner or operator of a CO_2 budget unit or a non-CO_2 budget unit monitored under 40 CFR §75.72 (b) (2) (ii) may not:

(a) Use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emissions monitoring system without having obtained prior written approval from the Department;

(b) Operate the unit so as to discharge, or allow to be discharged, CO_2 emissions to the atmosphere without accounting for all emissions in accordance with the applicable provisions of this chapter and 40 CFR Part 75;

(c) Disrupt the operation of the CEMS, any portion of the CEMS, or any other approved emissions monitoring method, and thereby avoid monitoring and recording CO_2 mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed; or

(d) Permanently discontinue use of the approved CEMS unless the owner or operator monitors emissions with a system approved in accordance with this chapter and 40 CFR Part 75.
(COMAR 26.09.02.10A(4)(a)-(d))

(11) For purposes of this subtitle only, the owner or operator of a CO_2 budget unit is exempt from demonstrating compliance with the initial certification requirements of 40 CFR §75.20 for a monitoring system if the following conditions are met:

(a) The monitoring system has been previously certified in accordance with 40 CFR §75.20; and

(b) The applicable quality assurance and quality-control requirements of 40 CFR §75.21 and Appendix B and Appendix D of 40 CFR Part 75 are fully met for the certified monitoring system.
(COMAR 26.09.02.10B(1)(a)-(b))

(12) The recertification provisions of this regulation apply to a monitoring system exempt from the initial certification requirements of this regulation.

(COMAR 26.09.02.10B(2))

(13) If the Department has previously approved a petition under 40 CFR §75.72(b)(2)(ii) or 40 CFR §75.16(b)(2)(ii)(B) pursuant to 40 CFR §75.13 for apportioning the CO_2 emissions rate measured in a common stack or a petition under 40 CFR §75.66 for an alternative requirement in 40 CFR Part 75, the CO_2 authorized account representative shall resubmit the petition to the Department to determine whether the approval applies under this chapter.
(COMAR 26.09.02.10B(3))

(14) The owner or operator of a CO_2 budget unit shall comply with the initial certification and recertification procedures for a CEMS and an excepted monitoring system under 40 CFR Part 75, Appendix D.
(COMAR 26.09.02.10B(4))

(15) The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR §75.19 or that qualifies to use an alternative monitoring system under 40 CFR Part 75, Subpart E, shall comply with this regulation.
(COMAR 26.09.02.10 B(5))

(16) When the owner or operator replaces, modifies, or changes a CEMS that the Department determines significantly affects the ability of the system to accurately measure or record CO_2 mass emissions or to meet the quality assurance and quality control requirements of 40 CFR §75.21 or Appendix B, the owner or operator shall recertify the monitoring system according to 40 CFR §75.20(b).
(COMAR 26.09.02.10C(1))

(17) When the owner or operator replaces, modifies, or changes the flue gas handling system or the unit's operation in a manner that the Department determines has significantly changed the flow or concentration profile, the owner or operator shall recertify the CEMS according to 40 CFR §75.20(b).
(COMAR 26.09.02.10C(2))

(18) Approval Process for Initial Certifications and Recertification. The procedures in 40 CFR §75.20(b)(5) and (g)(7) apply for recertification. The CO_2 authorized account representative shall submit to the Department:

(a) A written notice of the dates of certification; and

(b) A recertification application for each monitoring system, including the information specified in 40 CFR §75.63.
(COMAR 26.09.02.10C(3)(a)-(b))

(19) Provisional certification data for a monitor shall be:

(a) Determined in accordance with 40 CFR §75.20(a)(3);

(b) A provisionally certified monitor may be used for a period not to exceed 120 days after receipt of the complete certification application for the monitoring system or component; and

(c) Data measured and recorded by the provisionally certified monitoring system or component is considered valid quality assured data, retroactive to the date and time of provisional certification, if the Department does not issue a notice of disapproval within 120 days of receipt of the complete certification application.
(COMAR 26.09.02.10C(4)(a)-(c))

(20) The Department shall issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application.
(COMAR 26.09.02.10D(1))

(21) If the Department does not issue the notice within the 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application shall be deemed certified for use.
(COMAR 26.09.02.10D(2))

(22) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, the Department shall issue a written notice of approval of the certification application within 120 days of receipt.
(COMAR 26.09.02.10D(3))

(23) If the certification application is not complete, the Department shall issue a written notice of incompleteness that sets a reasonable date by which the CO_2 authorized account representative is to submit the additional information required to complete the certification application.
(COMAR 26.09.02.10D(4))

(24) If the CO_2 authorized account representative does not comply with the notice of incompleteness by the specified date, the Department may issue a notice of disapproval.
(COMAR 26.09.02.10D(5))

(25) If the Department issues a notice of disapproval of a certification application or a notice of disapproval of certification status, the owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR §75.20(a)(5)(i) or 75.20(g)(7):

(a) For units using or intending to monitor for CO_2 mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 CFR §75.19, the maximum potential hourly heat input of the unit; or

(b) For units intending to monitor for CO_2 mass emissions using a CO_2 pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO_2 and the maximum potential flow rate of the unit under 40 CFR Part 75, Appendix A, §2.1.
(COMAR 26.09.02.10 D(6)(a)-(b))

(26) The CO_2 authorized account representative shall submit a notification of certification retest dates and a new certification application. The owner or operator shall repeat all certification tests or other

requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, not later than 30 operating days after the date of issuance of the notice of disapproval.
(COMAR 26.09.02.10D(7))

(27) The owner or operator of a unit qualified to use the low mass emissions excepted methodology under 40 CFR §75.19 shall meet the applicable certification and recertification requirements of 40 CFR §§75.19(a) (2) and 75.20(h).
(COMAR 26.09.02.10E(1))

(28) If the owner or operator of this unit elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the certification and recertification requirements in 40 CFR §75.20(g).
(COMAR 26.09.02.10E(2))

(29) Certification and Recertification Procedures for Alternative Monitoring Systems. For each unit for which the owner or operator intends to use an alternative monitoring system approved by the Department, 40 CFR Part 75, Subpart E, shall be used to comply with the applicable notification and application procedures of 40 CFR §75.20(f).
(COMAR 26.09.02.10F)

(30) When any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in 40 CFR Part 75, Subpart D, Appendix D.
(COMAR 26.09.02.10G(1))

(31) Audit Decertification.

(a) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of the monitoring system.

(b) By issuing the notice of disapproval, the certification status of the monitoring system is prospectively revoked.
(COMAR 26.09.02.10G(2))

(32) The data measured and recorded by the monitoring system may not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status.
(COMAR 26.09.02.10G(3))

F. Record Keeping and Reporting Requirements

(1) The CO_2 authorized account representative shall comply with all record-keeping and reporting requirements in COMAR 26.09.02.10 and the applicable record-keeping and reporting requirements under 40 CFR §75.73.
(COMAR 26.09.02.11A)

(2) The CO_2 authorized account representative shall submit quarterly reports as described below in this section.
(COMAR 26.09.02.11B(1))

(3) The report shall contain the CO_2 mass emissions data for the CO_2 budget unit in an electronic format, unless otherwise required by the Department, for each calendar quarter beginning with:

(a) The calendar quarter covering January 1, 2009 — March 31, 2009, for a unit that commences commercial operation before July 1, 2008; or

(b) For a unit commencing commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the: (i) date of provisional certification; or (ii) applicable deadline for initial certification.
(COMAR 26.09.02.11B(2)(a)-(b))

(c) If the quarter is the third or fourth quarter of 2008, reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009.
(COMAR 26.09.02.11B(3))

(4) The CO_2 authorized account representative shall submit each quarterly report within 30 days following the end of the calendar quarter covered by the report and in accordance with 40 CFR Part 75, Subpart H, §75.64 and 40 CFR Part 75, Subpart G except for the opacity, NO_x and SO_2 provisions.
(COMAR 26.09.02.11B(4))

(5) The CO_2 authorized account representative shall submit a compliance certification in support of each quarterly report. The certification shall state that:

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

(b) For a unit with add-on CO_2 emissions controls and for all hours where data are substituted in accordance with 40 CFR §75.34(a)(1) , the add-on emissions controls were operating within the range of parameters listed in the quality assurance and quality control program under 40 CFR Part 75, Appendix B, and the substitute values do not systematically underestimate CO_2 emissions; and

(c) The CO_2 concentration values substituted for missing data under 40 CFR Part 75, Subpart D, do not systematically underestimate CO_2 emissions.
(COMAR 26.09.02.11B(5)(a)-(c))

(6) The CO_2 authorized account representative of a CO_2 budget unit may submit a petition to the Department under 40 CFR §75.66 requesting approval to apply an alternative to any requirement of this chapter.
(COMAR 26.09.02.11C)

(7) The CO_2 authorized account representative or alternate CO_2 authorized account representative of a

CO_2 budget unit that burns eligible biomass as a compliance mechanism under this chapter shall report the following information for each calendar quarter:

(a) For each shipment of solid eligible biomass fuel fired at the CO_2 budget unit:

(i) Total eligible biomass fuel input, on an as-fired basis, in pounds; and

(ii) The moisture content, on an as-fired basis, as a fraction of weight;

(b) For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit:

(i) The density of the biogas, on an as-fired basis, in pounds per standard cubic foot; and

(ii) The moisture content of the biogas, as a fraction by total weight;

(c) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit:

(i) The dry basis carbon content of the fuel type, as a fraction by dry weight;

(ii) The dry basis higher heating value, in MMBtu per dry pound;

(iii) The total dry basis eligible biomass fuel input, in pounds;

(iv) The total eligible biomass fuel heat input; and

(v) Chemical analysis, including heat value and carbon content;

(d) The total amount of CO_2 emitted from the CO_2 budget unit due to firing eligible biomass fuel, in tons, calculated as in §D(2)(b) of this regulation;

(e) The total heat input to the CO_2 budget unit due to firing eligible biomass fuel, in MMBtu, calculated below; and

(f) Description and documentation of monitoring technology and fuel sampling methodology employed, including sampling frequency.
(COMAR 26.09.02.11 D(1)(a)-(f))

(8) An owner or operator of a CO_2 budget unit shall calculate and submit on a quarterly basis the total dry weight for each distinct type of eligible biomass fired by the CO_2 budget unit during the reporting quarter:

(a) For solid eligible biomass fuel, determined as follows:

$$F_j = \sum_{i=1}^{m} (1 - M_i) x F_i$$

where:
(i) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(ii) F_i = Eligible biomass as fired fuel input (pounds) for fired shipment i;

(iii) M_i = Moisture content (fraction) for fired shipment i:
(iv) i = fired fuel shipment;
(v) j = fuel type; and
(vi) m = number of shipments.

(b) For gaseous eligible biomass fuel, as determined as follows:

$$F_j = D_j x V_j x (1 - M_j)$$

where:
(i) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(ii) D_j = Density of biogas (pounds/scf) for fuel type j;
(iii) Vj = Total volume (scf) for fuel type j;
(iv) Mj = Moisture content (fraction) for fuel type j; and
(v) j = fuel type
(COMAR 26.09.02.11D(2)(a)-(b))

(9) The amount of CO_2 emissions that is produced from the firing of eligible biomass for any full calendar quarter, during which either no fuel other than eligible biomass is combusted or during which fuels other than eligible biomass are combusted, is determined as follows:

$$CO_2 tons = \sum_{j=1}^{n} F_j x C_j x O_j \left(\frac{44\left(\frac{g}{molCO_2}\right)}{12\left(\frac{g}{molC}\right)} \right) (0.0005)$$

where:
(a) CO_2 tons = CO_2 emissions due to firing of eligible biomass for the reporting quarter;
(b) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j, as calculated in §D(2)(a) of this regulation;
(c) C_j = Carbon fraction (dry basis) for fuel type j;
(d) Oj = Oxidation factor for eligible biomass fuel type j, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash or for gaseous eligible biomass fuels, a default oxidation factor of 0.995 may be used;

(e) $\frac{44\left(\frac{g}{molCO_2}\right)}{12\left(\frac{g}{molC}\right)}$

= The number of tons of carbon dioxide that are created when one ton of carbon is combusted;
(f) 0.0005 = The number of short tons which is equal to one pound;
(g) j = Fuel type; and

(h) n = number of distinct fuel types.
(COMAR 26.09.02.11D(3))

(10) Heat input due to firing of eligible biomass for each quarter shall be determined as follows:

(a) For each distinct fuel type:

$$H_j = F_j x HHV_j$$

where:
(i) H_j = Heat input (MMBtu) for fuel type j;
(ii) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(iii) HHV_j = Higher heating value (MMBtu/pound), dry basis, for fuel type j, as determined through chemical analysis;
(iv) j = Fuel type.

(b) For all fuel types:

$$HeatInputMMBtu = \sum_{j=1}^{n} H_j$$

where:
(i) H_j = Heat input (MMBtu) for fuel type j;
(ii) j = fuel type; and
(iii) n = number of distinct fuel types.

Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, September 2011.
(COMAR 26.09.02.11D(4)& D(5))

(11) A CO_2 budget unit shall submit to the Department the megawatt-hour value and a statement certifying that the megawatt-hour of electrical output reported reflects the total actual electrical output for all CO_2 budget units at the facility used by the independent system operator (ISO) to determine settlement resources of energy market participants.
(COMAR 26.09.02.11E(1))

(12) A CO_2 budget unit shall report gross hourly megawatts to the Department in the same electronic data report (EDR) for gross output as submitted to the EPA Administrator, for the operating time in the hour, added for all hours in a year.
(COMAR 26.09.02.11E(2))

(13) A CO_2 budget unit shall submit the net electrical output to the Department in accordance with this regulation. A CO_2 budget source whose electrical output is not used in the independent system operator (ISO) energy market settlement determinations shall propose a method for quantification of net electrical output.
(COMAR 26.09.02.11E(3))

(14) Report of net Steam Output.

(a) CO_2 budget sources selling steam shall use billing meters to determine net steam output or an alternative method to measure net steam output approved by the Department.

(b) If data for steam output is not available, the CO_2 budget source may report heat input, substituting useful steam output for steam output.
(COMAR 26.09.02.11E(4)(a)-(b))

(15) Each CO_2 budget source shall submit an output monitoring plan with a description and diagram that include the following:

(a) If the CO_2 budget unit monitors net electric output, the diagram shall contain all CO_2 budget units and all generators served by each CO_2 budget unit and the relationship between CO_2 budget units and generators;

(b) If a generator served by a CO_2 budget unit is also served by a nonaffected unit, the nonaffected unit and its relationship to each generator shall be indicated on the diagram;

(c) The diagram shall indicate where the net electric output is measured and include all electrical inputs and outputs to and from the plant;

(d) If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and show that all electricity measured at the point of sale is generated by the CO_2 budget units;

(e) If the CO_2 budget unit monitors net thermal output, the diagram shall indicate all steam or hot water coming into the net steam system, including steam from CO_2 budget units and nonaffected units, and all exit points of steam or hot water from the net steam system;

(f) Each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu per pound;

(g) The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads, and all boiler feedwater returns;

(h) The diagram shall represent all energy losses in the system as either usable or unusable losses;

(i) The diagram shall indicate all flow meters, temperature or pressure sensors, or other equipment used to calculate gross thermal output; and

(j) If a sales agreement is used to determine net thermal output, the diagram shall show the monitoring equipment used to determine the sales of steam.
(COMAR 26.09.02.11F(2)(a)-(j))

(16) The description of the output monitoring system shall include:

(a) A written description of the output system and the equations used to calculate output, and, for net thermal output systems, descriptions and justifications of each useful load;

(b) A detailed description of all quality assurance and quality control activities that will be performed to maintain the output system; and

(c) Documentation supporting any output value to be used as a missing data value if there are periods of invalid output data.

(d) The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and approved as part of the required monitoring plan.
(COMAR 26.09.02.11F(3)(a)-(b))

(17) A certification statement shall be submitted by the CO_2 authorized account representative stating that either:

(a) The output monitoring system consists entirely of billing meters; or

(b) The output monitoring system meets one of the accuracy requirements for nonbilling meters.
(COMAR 26.09.02.11G(1)(a)-(b))

(18) The billing meter shall record the electric or thermal output. Any electric or thermal output values reported shall be the same as the values used in billing for the output.
(COMAR 26.09.02.11G(2))

(19) For nonbilling meters, either the output monitoring system shall meet an accuracy of within 10 percent of the reference value, or each component monitor for the output system shall meet an accuracy of within 3 percent of the full scale value, whichever is less stringent.
(COMAR 26.09.02.11G(3))

(20) The system approach to accuracy shall include:

(a) A determination of how the system accuracy of 10 percent is achieved using the individual components in the system; and

(b) Data loggers and any wattmeters used to calculate the final net electric output data or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.
(COMAR 26.09.02.11G(4) (a)-(b))

(21) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to within 3 percent of the full scale value, then the equipment shall be repaired or replaced to meet that requirement.
(COMAR 26.09.02.11G(5))

(22) Data is invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.
(COMAR 26.09.02.11G(6))

(23) Ongoing quality assurance and quality control activities shall be performed in order to maintain the output system.

(COMAR 26.09.02.11H(1))

(24) If billing meters are used to determine output, quality assurance and quality control activities are not required beyond what are already performed.
(COMAR 26.09.02.11H(2))

(25) Certain types of equipment such as potential transformers, current transformers, nozzle and venture type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed.

(a) Pressure and temperature transmitters accompanying an orifice plate will require periodic retesting.

(b) For other types of equipment, the meter accuracy shall be recalibrated or verified at least once every 2 years, unless a consensus standard allows for less frequent calibrations or accuracy tests.

(c) For nonbilling meters, either the output monitoring system shall meet an accuracy of within 10 percent of the reference value, or each component monitor for the output system shall meet an accuracy of within 3 percent of the full scale value, whichever is less stringent.

(d) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to within 3 percent of the full scale value, then the equipment shall be repaired or replaced to meet that requirement.
(COMAR 26.09.02.11 H(3)(a)-(e))

(26) Out-of-Control Periods.

(a) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to the certification value, data is invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

(b) All invalid data shall be replaced by either zero or an output value that is likely to be lower than a measured value and that is approved as part of the required monitoring plan.
(COMAR 26.09.02.11 H(4)(a)-(b))

(27) The CO_2 authorized account representative shall submit annual output reports, as follows:

(a) Data shall be sent both electronically and in hardcopy by March 1 for the immediately preceding calendar year; and
(COMAR 26.09.02.11I 1))

(28) The annual report shall include unit level megawatt hours, all useful steam output, and a certification statement from the CO_2 authorized account representative stating the following, "I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary

responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
(COMAR 26.09.02.11I(2))

G. CO_2 Emission Offset Projects

(1) In order to qualify for the award of CO_2 offset allowances, the following offset projects shall satisfy all applicable requirements identified in COMAR 26.09.03 and initially commence on or after December 20, 2005:

(a) Landfill methane capture and destruction;

(b) Reduction in emissions of sulfur hexafluoride (SF_6);

(c) Sequestration of carbon due to afforestation;

(d) Reduction or avoidance of CO_2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency; and

(e) Avoided methane emissions from agricultural manure management operations.
(COMAR 26.09.03.02A(1)-(5))

4. Permit Application (See Attachment)

PARKWAY GENERATION KEYS ENERGY CENTER LLC.
KEYS ENERGY CENTER
10322 NORTH KEYS ROAD
BRANDYWINE, MARYLAND 20613
PERMIT NO. 24-033-2737
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

Keys Energy Center is a 755 MW, two-on-one combined-cycle, natural gas-fired combustion turbine electric generating facility located near Brandywine, Maryland in Prince George's County. The SIC code for this facility is 4911. The main sources of emissions are two (2) Siemens Model SGT6-5000Fee combustion turbines (CTs), each rated at 2,330 MMBtu/hr. The CTs fire natural gas only. Each CT exhaust to its own heat recovery steam generator (HRSG) which includes a Forney natural gas duct burner rated at 443 MMBtu/hr. Emissions from the CTs and duct burners are controlled by an SCR and an oxidation catalyst system. Steam from the HRSGs is routed to a single steam turbine generator. Ancillary equipment includes a natural gas-fired Cleaver Brooks auxiliary boiler rated at 87.1 MMBtu/hr., a diesel-fired emergency generator rated at 1,500 kW, a Cummins diesel-fired fire water pump engine rated at 260 brake horsepower and several sources of fugitive emissions.

On October 31, 2014, the Maryland Public Service Commission (PSC) issued a Certificate of Public Convenience and Necessity (CPCN) for Keys Energy Center (KEC). Subsequently PSEG acquired the project and on October 11, 2017, the PSC approved amendments to the KEC CPCN 9297 to reflect several minor design changes. KEC began commercial operations in 2018.

New Source Performance Standards (NSPS) – 40 CFR Part 60

Several emission units at the KEC are subject to the following NSPS:

Subpart IIII for Stationary Compression Ignition Internal Combustion Engines applies to stationary compression ignition (CI) internal combustion engines (ICE) constructed after July 11, 2005, and either manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005.

Subpart KKKK for Combustion Turbines: Standards of Performance for Stationary Combustion Turbines apply to stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005.

National Emission Standard for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63

KEC is not a major HAP Emissions Source. Instead, it is an area HAP emission source and is subject to the following MACTs:

Subpart ZZZZ — Stationary Reciprocating Internal Combustion Engines. Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions: 1500 kW emergency generator and 275 hp fire pump engine is subject to this subpart.

CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

The following changes and/or modifications have been incorporated into the initial Title V – Part 70 Operating Permit for the Keys Energy Center:

On January 4, 2022, the Department received an administrative amendment application for ownership change. PSEG Keys Energy Center now changes to Parkway Generation Keys Energy Center (owner of the facility) and facility to Keys Energy Center.

Minor Modification

On September 25, 2024, the Public Service Commission (PSC) granted the motion to administratively amend Keys Energy Center's CPCN Case No. 9297, Table IV-1, Condition 1.1H to change the warm start emission limit of 311-lb./event for CO to ***759-lb./event***. The limit remains a 3-hour block average. Revising the Warm Startup emission limit for CO will allow the facility generating units more flexibility during peak demand conditions. The change appears in Table IV-1, 1.1H of the modified permit.

On October 15, 2024, the Department received an application for minor modification to the Part 70 permit for Keys Energy Center. An administrative completeness review was conducted, and the application was deemed to be administratively complete. A completeness determination letter was sent to Keys Energy Center on October 18, 2024, granting Parkway Keys Energy Center an application shield.

The following table summarizes the actual emissions from Keys Energy Center based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_X (TPY)	SO_X (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2023	95.9	10.0	11.07	15.45	6.65	0.0
2022	88	9.2	10.24	10.98	5	0.0
2021	102.81	10.82	8.63	8.07	3.26	5.69
2020	102.78	10.84	8.86	7.04	3.68	
2019	97	10.18	28	8.28	9.35	5.16

The major source threshold for triggering Title V permitting requirements in Prince George's County is 25 tons per year for VOC, 25 tons for NO_X, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAPs. Since the actual NO_X emission from the facility are greater than the major source threshold, Keys Energy Center is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

As a major source of NO_X, this facility is also subject to the requirements of Reasonably Available Control Technology (RACT) for NO_X found in COMAR 26.11.09.08. KEC is also subject to the Cross-State Air Pollution Rule (CSAPR) which replaced the Clean Air Interstate Rule (CAIR).

The Department on May 09, 2019 received KEC's (formerly PSEG Keys) Part 70 initial permit application. An administrative completeness review was conducted, and the application was deemed to be administratively complete. A completeness determination letter was sent to KEC (formerly PSEG Keys) on May 17, 2019, granting KEC (formerly PSEG Keys) an application shield.

COMPLIANCE ASSURANCE MONITORING (CAM)

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a

control device to achieve compliance; have post-control emissions of at least 100% of the major source amount (for initial CAM submittals); and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

KEC conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that EU1 and EU2 are subject to the (CAM) Rule 40 CFR Subpart 64 for VOC emissions.

ACID RAIN PERMIT

Title IV of the Clean Air Act set a goal of reducing annual SO_2 emissions by 10 million tons below 1980 levels. To achieve these reductions, the law required a two-phase tightening of the restrictions placed on fossil fuel-fired power plants.

Phase I began in 1995 and affected 263 units at 110 mostly coal-burning electric utility plants located in 21 eastern and Midwestern states. An additional 182 units joined Phase I of the program as substitution or compensating units, bringing the total of Phase I affected units to 445. Emissions data indicate that 1995 SO_2 emissions at these units nationwide were reduced by almost 40 percent below their required level.

Phase II, which began in the year 2000, tightened the annual emissions limits imposed on these large, higher emitting plants and also set restrictions on smaller, cleaner plants fired by coal, oil, and gas, encompassing over 2,000 units in all. The program affects existing utility units serving generators with an output capacity of greater than 25 megawatts and **all new utility** units.

An Acid Rain Permit is attached to the Part 70 Permit as Appendix A

CROSS-STATE AIR POLLUTION RULE (CSAPR)

The U.S. Environmental Protection Agency (EPA) issued the Cross-State Air Pollution Rule (CSAPR) in July 2011 to address Clean Air Act requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR) which the D.C. Circuit remanded to the EPA for replacement. Following the original rulemaking, CSAPR was amended by three further rules known as the Supplemental Rule, the First Revisions Rule, and the Second Revisions Rule. As amended, CSAPR requires 28 states to limit their state-wide emissions of sulfur dioxide (SO_2) and/or nitrogen oxides (NO_X) in order to reduce or eliminate the states' contributions to fine particulate matter

and/or ground-level ozone pollution in other states. The emissions limitations are defined in terms of maximum state-wide "budgets" for emissions of annual SO_2, annual NO_X, and/or ozone season NO_X by each state's large electricity generating units (EGUs). The emissions budgets are implemented in two phases of generally increasing stringency. As the mechanism for achieving compliance with the emissions limitations, CSAPR establishes federal implementation plans (FIPs) that require large EGUs in each affected state to participate in one or more new emission trading programs that supersede the existing CAIR emissions trading programs. On December 30, 2011, in response to petitions challenging CSAPR, the D.C. Circuit granted a stay of the rule, ordering the EPA to continue administering CAIR on an interim basis. In a subsequent decision, the Court vacated CSAPR but on April 29, 2014, the U.S. Supreme Court reversed that decision and remanded the case to the D.C. Circuit Court for further proceedings. In order to allow CSAPR to replace CAIR in an orderly manner, EPA filed a motion asking the D.C. Circuit to lift the stay and to toll, by three years, all CSAPR compliance deadlines that had not yet passed. On October 23, 2014, the Court granted the EPA's motion.

Consistent with the Court's order, compliance with CSAPR's Phase 1 emissions budgets is now required in 2015 and 2016 and compliance with the rule's Phase 2 emissions budgets and assurance provisions is now required in 2017 and beyond.

This initial Part 70 permit identifies the applicable regulations of the CSAPR rule as found in 40 CFR Part 97 subparts AAAAA- NO_X Annual Trading Program, subparts BBBBB- NO_X Ozone Season Trading Program, and subpart CCCCC SO_2 Group 1 Trading Program.

REGIONAL GREENHOUSE GAS INITIATIVE

The Regional Greenhouse Gas Initiative (RGGI) is a market-based carbon dioxide (CO_2) cap and trade program designed to reduce CO_2 emissions from fossil fuel-fired power plants. The Healthy Air Act required Maryland to join RGGI by July 2007. Maryland joined RGGI by signing RGGI's multi-state Memorandum of Understanding (MOU) on April 20, 2007. The MOU requires Maryland to adopt regulations by December 31, 2008, implementing the RGGI program. The Maryland CO_2 Budget Trading Program, Code of Maryland Regulations (COMAR) 26.09.01 to .03, became effective on July 17, 2008. COMAR 26.09.04 became effective as an emergency action on April 4, 2008 and as a permanent action on August 25, 2008.

The regulations require the following:

1) Implement a cap-and-trade program for CO_2 emissions from fossil fuel-fired electric generating units located in Maryland having a capacity of at least 25 megawatts;
2) Distribute CO_2 allowances to stakeholders through auction, sale and/or allocation;
3) Require each affected source to have a CO_2 budget account representative and a compliance account;
4) Require each budget unit to hold in its source's compliance account at the end of each 3-year control period one allowance for each ton of CO_2 emissions emitted in that period;
5) Require sources to monitor emissions and submit quarterly and annual emission reports;
6) Establish set-aside accounts for voluntary renewable purchase, limited industrial generator exemptions, and long-term contract generators;
7) Establish a consumer benefit or strategic energy purpose fund to support energy efficiency, directly mitigate electricity ratepayer impacts, promote renewable or non-carbon emitting energy technologies, stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and fund administration of the program; and
8) Establish procedures to evaluate and award allowances to persons who undertake offset projects that will reduce CO_2 emissions.
9) Require affected sources to submit an application for a CO_2 Budget Permit. A CO_2 Budget Permit is an attachment to the Part 70 permit. This permit is state-only enforceable.

GREENHOUSE GAS (GHG) EMISSIONS

KEC emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., CTs, and engines) contained within the facility premises applicable to KEC. The facility triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions as part of the CPCN; therefore, there are facility-wide GHG emissions limit. Emission certification reports for 2020, 2021 & 2022 showed that KEC is a major source (threshold: 100,000tpy CO_2e) for GHG's (see Table 2 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from KEC based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2020 tpy CO_2e	2021 tpy CO_2e	2022 tpy CO_2e
Carbon dioxide CO_2	1	2,148,229	2,143,697	1,985,464
Methane CH_4	25	43.10	43.08	40.12
Nitrous Oxide N_2O	298	3.98	3.97	3.68
Total GHG CO_{2eq}		**2,148,276.08**	**2,143,744.05**	**1,985,507.80**

EMISSION UNIT IDENTIFICATION

KEC has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU1	033-2737-5-1578 & 5-1580	**CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. Controls: Selective Catalyst Reduction and oxidation catalyst.	December 2017
EU2	033-2737-5-1579 & 5-1581	**CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. Controls: Selective Catalyst Reduction and oxidation catalyst.	December 2017

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU3	033-2737-5-1582	Cleaver Brooks natural gas-fired auxiliary boiler rated at 87.1 MMBtu/hr.	January 2018
EU4	033-2737-9-1485	MTU-Onsite Energy diesel-fired power block emergency generator rated at 1,500 kW.	November 2017
EU5	033-2737-9-1484	Cummins diesel-fired water pump engine rated at 260 brake horsepower.	October 2017
EU6	N/A	Natural gas pipeline components, including valves, flanges, pump seals, pressure relief valves, and six (6) catalytic heaters – all within the facility boundary.	September 2017
EU7	N/A	Circuit breakers containing sulfur hexafluoride (SF6).	October 2017
EU8	N/A	Two (2) fuel oil storage tanks: 900 gallons (emergency generator) and 350 gallons (fire pump).	October & November 2017
EU9	N/A	On-site paved and unpaved roads.	N/A

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

PARKWAY GENERATION KEYS ENERGY CENTER LLC.
KEYS ENERGY CENTER
10322 NORTH KEYS ROAD
BRANDYWINE, MARYLAND 20613
PERMIT NO. 24-033-2737
PART 70 OPERATING PERMIT FACT SHEET

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Upon issuance of the Part 70 Permit, the Part 70 permit supersedes the facility's current State Permit to Operate. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emission Unit – EU1 & EU2

EU1: **CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [**Reg. # 033-2737-5-1578 & 5-1580**]
Controls: Selective Catalyst Reduction and oxidation catalyst.

EU2: **CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. [**Reg. # 033-2737-5-1579 & 5-1581**]
Controls: Selective Catalyst Reduction and oxidation catalyst

Compliance Status
In 2022 annual stack testing for the combustion turbines were conducted as follows: **CTG11**'s test was performed April 25-27, and **CTG12** testing was performed April 28-30. Note this year a 5-year testing on ammonia slip is required. The test results are as follows:

Pollutant	CTG11 – duct burner On	CTG11 - duct burner Off	CTG12 – duct burner On	CTG12- duct burner Off	Limit
NO_X	1.29 ppm	1.33 ppm	1.22 ppm	1.36 ppm	2 ppm
CO	0.01	0.00	0	0	2 ppm
VOC	0.02 ppm	0.25 ppm	0.03 ppm	0.00 ppm	**On**: 2 ppm **Off**: 1 ppm
SO_2	8.30E-06 lb./MMBtu	2.49E-05 lb./MMBtu	8.32E-06 lb./MMBtu	1.38E-05 lb./MMBtu	0.060 lb./MMBtu
PM_{10}	3.98 lb./hr.	3.40 lb./hr.	3.02 lb./hr.	2.29 lb./hr.	**On**: 15 lb./hr. **Off**: 11 lb./hr.
PM filterable	1.70 lb./hr.	1.28 lb./hr.	2.31 lb./hr.	1.97 lb./hr.	**On**: 12.2 lb./hr. **Off**: 8.8 lb./hr.
CO_2	851 lb./MW-hr.	796 lb./MW-hr.	840 lb./MW-hr.	794 lb./MW-hr.	869 lb./MW-hr.
NH_3	1.76 ppm @ 15% O_2	1.24 ppm @ 15% O_2	0.84 ppm @ 15% O_2	1.55 ppm @ 15% O_2	5 ppm @ 15% O_2

All results were within the compliance limits.

Annual performance testing of the two (2) CTs was conducted on Sept 23-29th 2019 under both duct burner firing and without duct burner firing. The results are as follows:

Pollutant	CT12 – duct burner On	CT12 - duct burner Off	CT11 – duct burner On	CT11-duct burner Off	Limit
NO_X	1.44 ppm	1.42ppm	1.41 ppm	1.44 ppm	2 ppm
CO	0	0	0	0	2 ppm
VOC	0.02 ppm	0.00 ppm	0.02 ppm	0.02 ppm	**On**: 2 ppm **Off**: 1 ppm
SO_2	0.00001lb./MMBtu	0.00001 lb./MMBtu	0.00001 lb./MMBtu	0.00002 lb./MMBtu	0.06 lb./MMBtu
PM_{10}	17.92 lb./hr.	13.32 lb./hr.	19.14 lb./hr.	19.28 lb./hr.	**On**: 15 lb./hr. **Off**: 11 lb./hr.
PM filterable	5.07 lb./hr.	3.32 lb./hr.	5.99 lb./hr.	4.49 lb./hr.	**On**: 12.2 lb./hr. **Off**: 8.8 lb./hr.
CO_2	849 lb./MW-hr.	824 lb./MW-hr.	822 lb./MW-hr.	727 lb./MW-hr.	869 lb./MW-hr.

The PM_{10} levels exceeded the limits and a NOV was issued. The Permittee was retested on December 2-3, 2019. The results showed that the PM_{10} levels were below the required limits. See the table below.

Pollutant	CT12 – duct burner On	CT12 - duct burner Off	CT11 – duct burner On	CT11-duct burner Off	Limit
PM_{10}	8.25 lb./hr.	5.98 lb./hr.	3.70 lb./hr.	2.79 lb./hr.	**On**: 15 lb./hr. **Off**: 11 lb./hr.

EU1 (**CT11**) and EU2 (**CT12**) startup dates are May 5 and May 16th respectively. Also, EU1 & EU2 commenced commercial operation on May 18th and June 2, 2018 respectively. Initial performance testing of the two (2) CTs was conducted on October 25-27, 2018. Both CTs were tested with the duct burners on and off. The results are as follows:

Pollutant	CT12 – duct burner On	CT12 - duct burner Off	CT11 – duct burner On	CT11-duct burner Off	Limit
NO_X	1.17 ppm	1.29 ppm	1.40 ppm	1.52 ppm	2 ppm
CO	0	0	0	0	2 ppm
VOC	0.13 ppm	0.05 ppm	0.05 ppm	0.05 ppm	**On**: 2 ppm **Off**: 1 ppm
SO_2	0.0003 lb./MMBtu	0.0003 lb./MMBtu	0.0003 lb./MMBtu	0.0003 lb./MMBtu	0.06 lb./MMBtu
PM_{10}	6.17 lb./hr.	4.27 lb./hr.	10.53 lb./hr.	5.60 lb./hr.	**On**: 15 lb./hr. **Off**: 11 lb./hr.
PM filterable	2.05 lb./hr.	1.37 lb./hr.	2.54 lb./hr.	1.00 lb./hr.	**On**: 12.2 lb./hr. **Off**: 8.8 lb./hr.

Pollutant	CT12 – duct burner On	CT12 - duct burner Off	CT11 – duct burner On	CT11-duct burner Off	Limit
CO_2	796.67 lb./MW-hr.	757.27 lb./MW-hr.	797.68 lb./MW-hr.	753.07 lb./MW-hr.	869 lb./MW-hr.
NH_3	1.93 ppm @ 15% O_2	0.94 ppm @ 15% O_2	1.88 ppm @ 15% O_2	1.22 ppm @ 15% O_2	5 ppm @ 15% O_2

CEMs certification completed August 15, 2018.

Please Note: September 6, 2022: The Department granted reduced stack testing frequency as follows: Testing for NO_X, CO, SO_2, GHG, VOC, Ammonia, PM filterable and PM total shall be conducted at least once during the term of the Title V Operating Permit and performed no later than 18-months prior to the Permits' expiration date.
June 23, 2023: The Department granted the request to use the onsite gas chromatograph and plant data gathered during the summer PJM ICAP testing to determine annual thermal efficiency.
July 25, 2023: The Department granted and concurred that the implementation of "Peak Firing" capability on the Units qualified as routine maintenance, repair or replacement (RMRR) provisions.

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05A - Visible Emissions.
(2) Areas III and IV. "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."
(3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
  (a) The visible emissions are not greater than 40 percent opacity; and
  (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period."

Compliance Demonstration
The Permittee shall conduct visible observations in accordance with EPA Reference Method 22 at least once each calendar quarter to verify that there are no visible emissions during operation. If visible emissions are observed, PSEG Keys shall inspect the combustion control system; perform necessary adjustments and/or repairs within 48 hours, and document in writing the results of inspection, adjustments, and/or repair. After 48 hours, if the required

adjustments and/or repairs have not eliminated the visible emissions, PSEG Keys shall perform Method 9 observations once daily for at least one hour until corrective actions have reduced the visible emissions to less than 20 percent opacity. **[Reference: COMAR 26.11.02.02(H)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN Case 9297 Condition B-I-7]**
The Permittee shall report incidents of excess emissions in accordance with Section III Condition 4 "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C(7)]**

B. Control of Particulate Matter
(1) **COMAR 26.11.06.03B(2)(a)** - Particulate Matter from Confined Sources. "A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

(2) **PM (filtrable) BACT** : 8.8 lb./hr. without duct firing and 12.2 lb./hr. with duct firing at all times. (3-hour block average)
PM_{10} (filterable and condensable) BACT: 11.0 lb./hr. without duct firing and 15.0 lb./hr. with duct firing at all times.
[Reference: CPCN 9297, Conditions B-IV-5 & B-IV-6 & Table B-1]

Compliance Demonstration
(1) The Permittee shall conduct stack tests **annually** for **PM, PM_{10}, $PM_{2.5}$** ... After three continuous years of conducting annual stack tests, the Permittee may request the Department to reduce the frequency of the stack tests. **[Reference: CPCN 9297, Condition B-IV-8]**
(2) The Permittee shall conduct annual performance test using EPA Method 5, 201A/202 or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]**

C. Control of Sulfur Oxides
The Permittee must not burn in the stationary CT any fuel which contains total potential sulfur emissions in excess of 26 ng/J (0.060 lb. SO_2/MMBtu) heat input. **[Reference: CPCN 9297, Table B-1 & 40 CFR §60.4330(a)(2)]**

See Cross State Air Pollutant Rule (CSAPR) in Table IV-1a and Acid Rain Permit attached as Appendix A.

Compliance Demonstration
The Permittee shall conduct stack tests shall be conducted **annually** for ... **SO_2** (unless fuel sulfur content is determined through fuel sampling in lieu of stack testing in accordance with 40 CFR §60.4415 as noted in Table B-1), ... After three continuous years of conducting annual stack tests, the Permittee may request the Department to reduce the frequency of the stack tests. **[Reference: CPCN 9297, Condition B-IV-8]**
"You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb. SO_2/MMBtu) heat input for units located in continental areas.... You must use one of the following sources of information to make the required demonstration:
(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less." **[Reference: 40 CFR §60.4365(a)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN Case 9297 Condition B-I-7]**
If the Permittee elects to demonstrate compliance with the SO_2 emission limit in 40 CFR §60.4330 using methods described in §60.4415(a) as described in CPCN Case 9297 Table B-1, the Permittee shall submit periodic representative fuel sampling records. **[Reference: CPCN Case 9297 Condition B-IV-18]**

D. Control of Nitrogen Oxides
(1) **COMAR 26.11.09.08G.** - Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.
"(**2**) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than **42 ppm when burning gas** or 65 ppm when burning fuel oil (dry

volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive."

Per CPCN Case 9297, Table B-1 - The NO_X emission limit not to exceed **42-ppm at 15% O_2** is based on a **3-hour block average**.

Compliance Demonstration
Emissions shall be continuously monitored via NO_X CEMS.
The Permittee shall maintain annual fuel use records on site for not less than 3 years and make these records available to the Department upon request. **[Reference: COMAR 26.11.09.08K(3)]**
"When demonstration of compliance with the NO_X emission standards in this regulation is based on CEM data, quarterly emission reports shall be submitted to the Department on or before the thirtieth day of the month following the end of each calendar quarter." **[Reference: COMAR 26.11.09.08K(1)]**

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(2) **40 CFR Part 60, Subpart KKKK** - Standards of Performance for Stationary Combustion Turbines for which Construction, Modification or Reconstruction commenced after February 18, 2005.
Emission Limits
§60.4315 - What pollutants are regulated by this subpart?
The pollutants regulated by this subpart are nitrogen oxide (NO_X) and sulfur dioxide (SO_2).

§60.4320 - What emission limits must I meet for nitrogen oxides (NO_X)?
You must meet the emission limits for NO_X specified in Table 1 to this subpart.

Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines		
Combustion turbine type	**Combustion turbine heat input at peak load (HHV)**	**NO_X emission standard (30 day rolling average)**
New, modified, or reconstructed turbine firing natural gas	> 850 MMBtu/h	15 ppm at 15 percent O_2 or 54 ng/J of useful output (0.43 lb./MWh)

Compliance Demonstration
The Permittee shall conduct the annual performance test as required by 40 CFR §60.4400(a). **[Reference: CPCN 9297 Table B-I]**
Emissions shall be continuously monitored via NO_X CEMS. [40 CFR §60.4340(a)-(b)]. **[Reference: CPCN 9297, Condition B-IV-3]**

Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: COMAR 26.11.01.05B and CPCN 9297 Condition B-IV-13]**

The Permittee shall submit electronic quarterly reports from DHAS to the EPA Clean Air Markets Division System as specified in 40 CFR §75.64. **[Reference: 40 CFR §75.64 and CPCN 9297 Condition B-IV-14]**

The Permittee shall submit the following CEMS reports to the Department for all CEMS required to be operated with the CTs: (a) CEMS Systems Downtime Reports as required by COMAR 26.11.01.11E(1); (b) Quarterly CEMS Summary Reports as required by COMAR 26.11.01.11E(2)(c). **[Reference: COMAR 26.11.01.11E and CPCN 9297 Condition B-IV-15]**

The Permittee shall submit reports of excess emissions and monitor downtime associated with the CTs/HRSGs in accordance with 40 CFR §60.7(c). Excess emissions as defined in 40 CFR §60.4380 (NO_x) and 40 CFR §60.4385 (SO_2) shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: 40 CFR §60.4375 and CPCN 9297 Condition B-IV-16]**

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(3) **NO_x LAER** requirements and the **NO_x BACT** requirements listed in the CPCN 9297: NO_x emission limit of 2.0 ppmvd at 15% O_2 with and without duct firing, except during periods of startup and shutdown. (3-hour block average); NO_x During Startup/Shutdown: 245.2 lb./event (cold startup); 82.9 lb./event (warm startup); 71.4 lb./event (hot startup); 60 lb./event (shutdown). **[Reference: CPCN 9297, Conditions B-IV-5 & B-IV-6 & Table B-1]**

Compliance Demonstration

The Permittee shall conduct the annual performance test using EPA Method 7E or equivalent method approved by MDE-ARA. (3-hour block average). **[Reference: CPCN 9297 Table B-I]**

Emissions shall be continuously monitored via NO_x CEMS. **[Reference: 40 CFR §60.4340(a)-(b)]**. PSEG Keys shall calculate monthly emissions (during startup/shutdown events) from the CTs/HRSGs, based on emissions measured using the CEMS to demonstrate compliance with the facility-wide emissions limit in Condition B-III-3. Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: COMAR 26.11.01.05B and CPCN 9297 Condition B-IV-13]**

The Permittee shall submit electronic quarterly reports from DHAS to the EPA Clean Air Markets Division System as specified in 40 CFR §75.64. **[Reference: 40 CFR §75.64 and CPCN 9297 Condition B-IV-14]**

The Permittee shall submit the following CEMS reports to the Department for all CEMS required to be operated with the CTs: (a) CEMS Systems Downtime Reports as required by COMAR 26.11.01.11E(1); (b) Quarterly CEMS Summary Reports as required by COMAR 26.11.01.11E(2)(c). **[Reference: COMAR 26.11.01.11E and CPCN 9297 Condition B-IV-15]**

The Permittee shall submit reports of excess emissions and monitor downtime associated with the CTs/HRSGs in accordance with 40 CFR §60.7(c). Excess emissions as defined in 40 CFR §60.4380 (NO_x) and 40 CFR §60.4385 (SO_2) shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: 40 CFR §60.4375 and CPCN 9297 Condition B-IV-16]**

E. Control of VOC

VOC LAER requirements listed in the CPCN 9297: VOC emission limit: 1.0 ppmvd at 15% O_2 without duct firing and 2.0 ppmvd at 15% O_2 with duct firing, except during periods of startup and shutdown. (3-hour block average); 164 lb./event (cold startup); 63 lb./event (warm startup); 52.6 lb./event (hot startup; 12 lb./event (shutdown).
[Reference: CPCN 9297, Conditions B-IV-6 & Table B-1]

See CAM Requirements in Table IV-1b.

Compliance Demonstration

The Permittee shall conduct an annual performance test using Method 18/25A or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]** CO CEMS data shall be used as a surrogate for VOC emissions. A correlation shall be developed between CO and VOC emissions based on an initial stack test. The emission correlation shall be verified annually by stack test, or a new correlation established. Monthly emissions during normal operation shall be calculated using the VOC emission rates and monthly fuel throughput rates to the CTs/HRSGs. The VOC emissions factors during startup and shutdown provided by the vendor and number and type of startup and shutdown events shall be used to calculate the monthly emissions during startup and shutdown events. The monthly emissions shall be used to demonstrate compliance with the facility-wide VOC emissions limit in Condition B-III-3. **[Reference: CPCN 9297 Table B-I]**

Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]**

F. Control of Ammonia

The Permittee shall limit emissions of ammonia resulting from un-reacted ammonia (ammonia slip) from each of the SCRs installed on the CTs/HTSGs as specified in Table B-1. Emission Limit (not to exceed) 5 ppmvd at 15% O_2. **[Reference: CPCN 9297, Condition B-IV-7 & Table B-1]**

Compliance Demonstration

The Permittee shall conduct performance stack tests at least once every five years using EPA Method CTM-027 or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297 Table B-I]**

Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: COMAR 26.11.01.05B and CPCN 9297 Condition B-IV-13]**

G. Control of CO_2

(1) **40 CFR Part 60 Subpart TTTT** for Greenhouse Gas Emissions for Electric Generating Units.

§60.5520 - What CO_2 emissions standard must I meet?

(**a**) For each affected EGU subject to this subpart, you must not discharge from the affected EGU any gases that contain CO_2 in excess of the applicable CO_2 emission standard specified in table 1 or **2** of this subpart, consistent with paragraphs (b), (c), and (d) of this section, as applicable.

(**b**) Except as specified in paragraphs (c) and (d) of this section, you must comply with the applicable gross energy output standard, and your operating permit must include monitoring, recordkeeping, and reporting methodologies based on the applicable gross energy output standard. For the remainder of this subpart (for sources that do not qualify under paragraphs (c) and (d) of this section), where the term "gross or net energy output" is used, the term that applies to you is "gross energy output."

Table 2 of Subpart TTTT of Part 60—CO_2 Emission Standards for Affected Stationary Combustion Turbines That Commenced Construction After January 8, 2014 and Reconstruction After June 18, 2014 (Net Energy Output-Based Standards Applicable as Approved by the Administrator)

[Note: Numerical values of 1,000 or greater have a minimum of 3 significant figures and numerical values of less than 1,000 have a minimum of 2 significant figures]

Affected EGU	CO_2 Emission standard
Newly constructed or reconstructed stationary combustion turbine that supplies more than its design efficiency or 50 percent, whichever is less, times its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis	450 kg of CO_2 per MWh of gross energy output (1,000 lb. CO_2/MWh); or 470 kilograms (kg) of CO_2 per megawatt-hour (MWh) of net energy output (1,030 lb./MWh).

Compliance Demonstration

§60.5535 - How do I monitor and collect data to demonstrate compliance?

"**(c)** If your affected EGU exclusively combusts liquid fuel and/or gaseous fuel, as an alternative to complying with paragraph (b) of this section, you may determine the hourly CO_2 mass emissions according to paragraphs (c)(1) through (4) of this section. If you use non-uniform fuels as specified in §60.5520(d)(2), you may determine CO_2 mass emissions during the compliance period according to paragraph (c)(5) of this section.

(2) For each measured hourly heat input rate, use Equation G-4 in appendix G to part 75 of this chapter to calculate the hourly CO_2 mass emission rate (tons/h). You may determine site-specific carbon-based F-factors (F_c) using Equation F-7b in section 3.3.6 of appendix F to part 75 of this chapter, and you may use these F_c values in the emissions calculations instead of using the default F_c values in the Equation G-4 nomenclature.

(3) For each "valid operating hour" (as defined in §60.5540(a)(1), multiply the hourly tons/h CO_2 mass emission rate from paragraph (c)(2) of this section by the EGU or stack operating time in hours (as defined in §72.2 of this chapter), to convert it to tons of CO_2. Then, multiply the result by 909.1 to convert from tons of CO_2 to kg. Round off to the nearest two significant figures.

(4) The hourly CO_2 tons/h values and EGU (or stack) operating times used to calculate CO_2 mass emissions are required to be recorded under §75.57(e) of this chapter and must be reported electronically under §75.64(a)(6) of this chapter. You must use these data to calculate the hourly CO_2 mass emissions.

(5) If you operate a combustion turbine firing non-uniform fuels, as an alternative to following paragraphs (c)(1) through (4) of this section, you may determine CO_2 emissions during the compliance period using one of the following methods:

(i) Units firing fuel gas may determine the heat input during the compliance period following the procedure under §60.107a(d) and convert this heat input to CO_2 emissions using Equation G-4 in appendix G to part 75 of this chapter.

(ii) You may use the procedure for determining CO_2 emissions during the compliance period based on the use of the Tier 3 methodology under §98.33(a)(3) of this chapter.

(d) Consistent with §60.5520, you must determine the basis of the emissions standard that applies to your affected source in accordance with either paragraph (d)(1) or (2) of this section, as applicable:
(1) If you operate a source subject to an emissions standard established on an output basis (*e.g.,* lb. of CO_2 per gross or net MWh of energy output), you must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output or net electric output, as applicable, from the affected EGU(s). These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20 (incorporated by reference, see §60.17). For a combined heat and power (CHP) EGU, as defined in §60.5580, you must also install, calibrate, maintain, and operate meters to continuously (*i.e.,* hour-by-hour) determine and record the total useful thermal output. For process steam applications, you will need to install, calibrate, maintain, and operate meters to continuously determine and record the hourly steam flow rate, temperature, and pressure. Your plan shall ensure that you install, calibrate, maintain, and operate meters to record each component of the determination, hour-by-hour.
(2) If you operate a source subject to an emissions standard established on a heat-input basis (*e.g.,* lb. CO_2/MMBtu) and your affected source uses non-uniform heating value fuels as delineated under §60.5520(d), you must determine the total heat input for each fuel fired during the compliance period in accordance with one of the following procedures:
(i) Appendix D to part 75 of this chapter;
(ii) The procedures for monitoring heat input under §60.107a(d);
(iii) If you monitor CO_2 emissions in accordance with the Tier 3 methodology under §98.33(a)(3) of this chapter, you may convert your CO_2 emissions to heat input using the appropriate emission factor in table C-1 of part 98 of this chapter. If your fuel is not listed in table C-1, you must determine a fuel-specific carbon-based F-factor (F_c) in accordance with section 12.3.2 of EPA Method 19 of appendix A-7 to this part, and you must convert your CO_2 emissions to heat input using **Equation G-4** in appendix G to part 75 of this chapter."

§60.5560 - <u>What records must I maintain?</u>
"(a) You must maintain records of the information you used to demonstrate compliance with this subpart as specified in §60.7(b) and (f)."

§60.5565 - <u>In what form and how long must I keep my records?</u>
"(a) Your records must be in a form suitable and readily available for expeditious review.
(b) You must maintain each record for 3 years after the date of conclusion of each compliance period.

(c) You must maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. You may maintain the records off site for the remaining year(s) as required by this subpart."

§60.5555 - What reports must I submit and when?
"(a) You must prepare and submit reports according to paragraphs (a) through (d) of this section, as applicable.
(1) For affected EGUs that are required by §60.5525 to conduct initial and on-going compliance determinations on a 12-operating-month rolling average basis, you must submit electronic quarterly reports as follows. After you have accumulated the first 12-operating months for the affected EGU, you must submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, you must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
(2) In each quarterly report you must include the following information, as applicable:
(i) Each rolling average CO_2 mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. You must calculate each average CO_2 mass emissions rate for the compliance period according to the procedures in §60.5540. You must report the dates (month and year) of the first and twelfth operating months in each compliance period for which you performed a CO_2 mass emissions rate calculation. If there are no compliance periods that end in the quarter, you must include a statement to that effect;
(ii) If one or more compliance periods end in the quarter, you must identify each operating month in the calendar quarter where your EGU violated the applicable CO_2 emission standard;
(iii) If one or more compliance periods end in the quarter and there are no violations for the affected EGU, you must include a statement indicating this in the report;
(iv) The percentage of valid operating hours in each 12-operating-month compliance period described in paragraph (a)(1)(i) of this section (*i.e.*, the total number of valid operating hours (as defined in §60.5540(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent);
(v) Consistent with §60.5520, the CO_2 emissions standard (as identified in table 1 or 2 of this part) with which your affected EGU must comply; and

(vi) Consistent with §60.5520, an indication whether or not the hourly gross or net energy output ($P_{gross/net}$) values used in the compliance determinations are based solely upon gross electrical load.
(3) In the final quarterly report of each calendar year, you must include the following:
(i) Consistent with §60.5520, gross energy output or net energy output sold to an electric grid, as applicable to the units of your emission standard, over the four quarters of the calendar year; and (*January 30th of each year; include a hard copy to the MDE-ARA*)
(ii) The potential electric output of the EGU.
(**b**) You must submit all electronic reports required under paragraph (a) of this section using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.
(**c**)(1) For affected EGUs under this subpart that are also subject to the Acid Rain Program, you must meet all applicable reporting requirements and submit reports as required under subpart G of part 75 of this chapter.
(2) For affected EGUs under this subpart that are not in the Acid Rain Program, you must also meet the reporting requirements and submit reports as required under subpart G of part 75 of this chapter, to the extent that those requirements and reports provide applicable data for the compliance demonstrations required under this subpart.
(3)(i) For all newly constructed affected EGUs under this subpart that are also subject to the Acid Rain Program, you must begin submitting the quarterly electronic emissions reports described in paragraph (c)(1) of this section in accordance with §75.64(a) of this chapter, *i.e.,* beginning with data recorded on and after the earlier of:
(A) The date of provisional certification, as defined in §75.20(a)(3) of this chapter; or
(B) 180 days after the date on which the EGU commences commercial operation (as defined in §72.2 of this chapter).
(ii) For newly constructed affected EGUs under this subpart that are not subject to the Acid Rain Program, you must begin submitting the quarterly electronic reports described in paragraph (c)(2) of this section, beginning with data recorded on and after:
(A) The date on which reporting is required to begin under §75.64(a) of this chapter, if that date occurs on or after October 23, 2015; or
(B) October 23, 2015, if the date on which reporting would ordinarily be required to begin under §75.64(a) of this chapter has passed prior to October 23, 2015.
(iii) For reconstructed or modified units, reporting of emissions data shall begin at the date on which the EGU becomes an affected unit under this subpart, provided that the ECMPS Client Tool is able to receive and process net energy

output data on that date. Otherwise, emissions data reporting shall be on a gross energy output basis until the date that the Client Tool is first able to receive and process net energy output data.
(4) If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph (c)(3) of this section, the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with §75.4(j) of this chapter, §75.37(b) of this chapter, or section 2.4 of appendix D to part 75 of this chapter (as applicable). Operating hours in which CO_2 mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in §60.5540(a)(1)) and shall not be used in the compliance determinations under §60.5540.
(**d**) For affected EGUs subject to the Acid Rain Program, the reports required under paragraphs (a) and (c)(1) of this section shall be submitted by:
(1) The person appointed as the Designated Representative (DR) under §72.20 of this chapter; or
(2) The person appointed as the Alternate Designated Representative (ADR) under §72.22 of this chapter; or
(3) A person (or persons) authorized by the DR or ADR under §72.26 of this chapter to make the required submissions."

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(2) **GHG (as CO_2) BACT** requirements listed in the CPCN 9297: 869 lb./CO_2/MW-hr. with and without duct firing (gross). (12-month rolling average).

See CO_2 Budget Permit attached as Appendix B.

Compliance Demonstration
The Permittee shall conduct annual performance test for CO_2 using EPA Method 3A or equivalent method approved by MDE-ARA. Monitor CO_2 emissions from each CTs/HRSGs using Equation G-4 in Appendix G to Part 75 of this chapter. The total generation (MW) shall be monitored to calculate the emission rate of CO_2 (lb./MW-hr.), determined each month by summing the CO_2 emissions for all hours in which power is being generated to the grid during the previous 12 months and dividing that value by the sum of the electrical energy output over that same period. **[Reference: CPCN 9297 Table B-I]** All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]** Final results of each compliance stack performance test shall be submitted to the Department within

60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]**

H. Control of CO

CO BACT requirements listed in the CPCN 9297: **CO emission limit**: 2.0 ppmvd at 15% O_2 with and without duct firing, except during periods of startup and shutdown (based on 3-hour block average); **CO During Startup/Shutdown**: 1,064 lb./event (cold startup); ***759 lb./event*** (warm startup); 269 lb./event (hot startup); 60 lb./event (shutdown). **[Reference: CPCN 9297, Conditions B-IV-5 & Table B-1]**

Compliance Demonstration

The Permittee shall conduct the annual performance test using EPA Method 10, or equivalent method approved by MDE-ARA. **[Reference: CPCN 9297, Table B-1]** Emissions shall be continuously monitored via CO CEMS. [COMAR 26.11.01.11]. PSEG Keys shall calculate monthly emissions from the CTs/HRSGs based on emissions measured using the CEMS to demonstrate compliance with the facility-wide emissions limit in Condition B-III-3. **[Reference: CPCN 9297, Table B-1]** Final results of each compliance stack performance test shall be submitted to the Department within 60 days after completion of the test. **[Reference: CPCN 9297 Condition B-IV-13]** The Permittee shall submit electronic quarterly reports from the DHAS to the EPA Clean Air Markets Division System as specified in 40 CFR §75.64. **[Reference: CPCN 9297 Condition B-IV-14]** The Permittee shall submit the following CEMS reports to the Department for all CEMS required to be operated with the CTs: (a) CEMS Systems Downtime Reports as required by COMAR 26.11.01.11E(1); (b) Quarterly CEMS Summary Reports as required by COMAR 26.11.01.11E(2)(c). **[Reference: COMAR 26.11.01.11E and CPCN 9297 Condition B-IV-15]**

The Permittee shall submit reports of excess emissions and monitor downtime associated with the CTs/HRSGs in accordance with 40 CFR §60.7(c). Excess emissions as defined in 40 CFR §60.4380 (NOx) and 40 CFR §60.4385 (SO_2) shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: CPCN 9297 Condition B-IV-16]**

I. Operational Limits

(1) The Permittee shall use only pipeline quality natural gas in the combustion turbines and duct burners. **[Reference: CPCN Case 9297 Condition B-IV-1]**

Compliance Demonstration

All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes summary of the monthly and consecutive rolling 12-month total fuel use and hours of operation for each CT and duct burner. **[Reference: CPCN 9297 Condition B-IV-18]**

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(2) The Permittee shall install a fuel flow meter and continuously monitor the fuel flow for each CT/HRSG and duct burner. The total fuel usage per month shall be recorded. **[Reference: CPCN Case 9297 Condition B-IV-10]**

Compliance Demonstration
The Permittee shall continuously monitor the fuel flow to each CT/HRSG and duct burner. **[Reference: CPCN 9297 Condition B-IV-10]** The Permittee shall keep records of summary of the monthly and consecutive 12-month total fuel use and hour of operation for each CT and duct burner. **[Reference: COMAR 26.11.03.06C**]. The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes summary of the monthly and consecutive rolling 12-month total fuel use and hours of operation for each CT and duct burner. **[Reference: CPCN 9297 Condition B-IV-18]**

J. BACT Requirements
Heat Rate: Emission Limit (not to exceed) - 6,802 Btu/kWh (net)(LHV).

Compliance Demonstration
The Permittee shall conduct an annual thermal efficiency test in accordance with ASME PTC-46, or another methodology approved by MDE-ARA, and compare results to design thermal efficiency value. An exceedance of the heat rate limit is not considered a violation of this permit but triggers a requirement for PSEG Keys to submit a maintenance plan to MDE-ARA which specifies the actions PSEG Keys plans to take in order to achieve the heat rate limit. The plan shall include a timeframe that the heat rate limit will be met not to exceed 60 days unless agreed to by MDE-ARA. **[Reference: CPCN 9297 Table B-I]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were

collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

Definitions ***[Reference: CPCN Case 9297 B-II-2 thru B-II-8]***

"Excess emissions" means an emission rate which exceeds any applicable emission standard unless the emission rate is in compliance with an approved plan for compliance, departmental order, consent order, or condition of a permit.

"Malfunction" is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process that operates in an abnormal or unusual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

"Startup" as it relates to the CTs is defined as the period of time from initiation of combustion firing until the unit reaches a steady state operating condition which could take up to 2-hours in duration.

"Cold Startup" is defined as a startup event prior to which the CT has not been operating for at least 48-hours. A cold startup could take up to 2 hours to bring the CT up to a steady state operating condition.

"Warm Startup" is defined as a startup event prior to which the CT has not been operating for at least 8-hours but no more than 48-hours. A warm startup could take up to 1-hours to bring the CT up to a steady state operating condition.

"Hot Startup" is defined as a startup event prior to which the CT has been operating within the last 8-hours. A hot startup could take up to 0.9 hours to bring the CT up to a steady state operating condition.

"Shutdown" as it relates to the CT is defined as the period of time from which the turbine output is lowered with the intent to shut down, beginning at the point at which the load drops below 50%.

Emission Unit – EU1 & EU2 Cont'd - CSAPR

EU1: **CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. **[Reg # 033-2737-5-1578 & 5-1580]**

Controls: Selective Catalyst Reduction and oxidation catalyst.

EU2: **CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. **[Reg. # 033-2737-5-1579 & 5-1581]**
Controls: Selective Catalyst Reduction and oxidation catalyst

Applicable Standards and limits:
TR NOx Annual Trading Program 40 CFR Part 97 Subpart AAAAA
The Permittee shall comply with the provisions and requirements of §97.401 through §97.435.
Note: §97.406(c) NOx emissions requirements. For TR NOx Annual emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOx Annual source and each TR NOx Annual unit at the source shall hold, in the source's compliance account, TR NOx Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NOx emissions for such control period from all TR NOx Annual units at the source.

Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a TR NOx Annual allowance transfer must be submitted for recordation in a TR NOx Annual source's compliance account in order to be available for use in complying with the source's TR NOx Annual emissions limitation for such control period in accordance with §§97.406 and 97.424.

TR NOx Ozone Season Trading Program 40 CFR Part 97 Subpart BBBBB
The Permittee shall comply with the provisions and requirements of §97.501 through §97.535.
Note: §97.506(c) NOx emissions requirements. For TR NOx Ozone Season emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOx Ozone Season source and each TR NOx Ozone Season unit at the source shall hold, in the source's compliance account, TR NOx Ozone Season allowances available for deduction for such control period under §97.524(a) in an amount not less than the tons of total NOx emissions for such control period from all TR NOx Ozone Season units at the source.

Allowance transfer deadline means, for a control period in a given year, midnight of December 1 (if it is a business day), or midnight of the first business day

thereafter (if December 1 is not a business day), immediately after such control period and is the deadline by which a TR NO_X Ozone Season allowance transfer must be submitted for recordation in a TR NO_X Ozone Season source's compliance account in order to be available for use in complying with the source's TR NO_X Ozone Season emissions limitation for such control period in accordance with §§97.506 and 97.524.

TR SO_2 Group 1 - Trading Program 40 CFR Part 97 Subpart CCCCC
The Permittee shall comply with the provisions and requirements of §97.601 through §97.635.
Note: §97.606(c) SO_2 emissions requirements. For TR SO_2 Group 1 emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO_2 Group 1 source and each TR SO_2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO_2 Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all TR SO_2 Group 1 units at the source.
Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a TR SO_2 Group 1 allowance transfer must be submitted for recordation in a TR SO_2 Group 1 source's compliance account in order to be available for use in complying with the source's TR SO_2 Group 1 emissions limitation for such control period in accordance with §§97.606 and 97.624.

Compliance Demonstration
The Permittee shall comply with the monitoring, recordkeeping and reporting requirements found in §97.606, §97.630, §97.631, §97.632, and §97.633.

The Permittee operates continuous emission monitoring system (CEMS) pursuant to 40 CFR Part 75, Subpart B (for SO_2 monitoring) and 40 CFR Part 75, Subpart H (for NO_X monitoring).

The Permittee shall comply with the monitoring, recordkeeping and reporting requirements found in §97.406, §97.430, §97.431, §97.432, and §97.433 for the NO_X Annual Trading Program and §97.506, §97.530, §97.531, §97.532, and §97.533 for the NO_X Ozone Season Trading Program.

Emission Unit – EU1 & EU2 Cont'd - CAM

EU1: **CT11**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG11**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. **[Reg. # 033-2737-5-1578 & 5-1580]**
Controls: Selective Catalyst Reduction and oxidation catalyst.

EU2: **CT12**: Siemens Model SGT6-5000Fee natural gas-fired combustion turbine rated at 2,330 MMBtu/hr. equipped with **HRSG12**: Heat recovery steam generator which includes Forney natural gas-fired duct burner rated at 443 MMBtu/hr. **[Reg. # 033-2737-5-1579 & 5-1581]**
Controls: Selective Catalyst Reduction and oxidation catalyst

Applicable Standards and limits:
CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach established monitoring for the purpose of:
(1) Documenting continued operation of the control measures within ranges of specified indicators of performances (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements;
(2) Indicating any excursions from these ranges; and
(3) Responding to the data so that the causes of or caused excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100 percent of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

EU1 and EU2 meet all the above criteria for VOC emissions and are therefore subject to the CAM requirements for VOC.

VOC: Emission limit: <=1.0 ppmvd at 15% O_2 without duct firing and <=2.0 ppmvd at 15% O_2 with duct firing, except during periods of startup and shutdown.

Compliance Demonstration
Monitoring Approach and Rationale
The CAM indicator selected for VOC emissions is the CO emission rate measured by the CO CEMs. The CO emission rate was chosen as the CAM

indicator because the same parameters that influence the oxidation catalyst control of CO also influence control of VOC. Elevated CO levels are an indicator that emissions of VOC may also be elevated. The CO will be measured continuously by the CO CEMS. CO levels that remain below the prescribed CO emission limit will indicate that the oxidation catalyst system is performing adequately and will provide reasonable assurance of ongoing compliance with the permitted VOC emission limitations.

The indicator range for CO is the emission limitation established in the permit. Both the proposed indicator range and averaging period are based on the values prescribed in the permit.

In the event of an excursion of the CO emission limitation, the occurrence will be evaluated by a station operator to determine the procedures necessary to correct the condition. In addition to correcting the condition, the operator will also ensure that the following recordkeeping and reporting requirements are met:

(1) Time of day and duration of any excursion and resulting corrective actions will be recorded.
(2) A list of all excursions, their duration and corrective actions will be reported in the quarterly summary report.

Table IV-1b	
COMPLIANCE ASSURANCE MONITORING (CAM) Plan	
Emission Units: EU1 & EU2	
Applicable Requirement	**VOC:** Emission limit: <=1.0 ppmvd at 15% O_2 without duct firing and <=2.0 ppmvd at 15% O_2 with duct firing, except during periods of startup and shutdown.
I. Indicator	CO emission rate (ppmvd at 15% O_2)
Measurement Approach	CO is measured and recorded using a certified CEMs
II. Indicator Range	CO emissions less than or equal to the CO emission limitation prescribed in the permit (i.e., <= 2.0 ppmvd @ 15% O_2).
III. Performance Criteria: The CO CEMs meet the performance criteria for installation and operation as prescribed in the equipment protocol and Performance Specification Test protocol prepared in accordance with applicable EPA and MDE requirements.	
1. Data Representativeness	The indicator is based on the CO BACT emission level prescribed by the Department. CO data will be collected and validated in accordance with applicable EPA and MDE requirements.
2. Verification of Operational Status	CO CEMs data availability is in accordance with applicable EPA and MDE requirements.

3. AQ/QC Practices and Criteria	CO QA/QC procedures are consistent with the applicable EPA and MDE requirements.
4. Monitoring Frequency	CO is measured on a continuous basis with the exception of QA/QC periods, monitor malfunction periods and periods where the module is not combusting fuel.
5. Data Collection Procedures	CO data is collected by a computerized Data Acquisition System meeting applicable EPA and MDE requirements.
6. Averaging Period	CO emission rate is a 3-hour block average pursuant to Table B-1 in the CPCN 9297.

Emission Unit – EU3

EU3: Cleaver Brooks natural gas-fired auxiliary boiler rated at 87.1 MMBtu/hr. [033-2737-5-1582]

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05A - Visible Emissions.
(2) Areas III and IV. "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."
(3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

Compliance Demonstration
The Permittee shall conduct visible emissions observation in accordance with EPA Reference Method 22 at least once each calendar quarter to verify that there are no visible emissions during operation. If the auxilary boiler is not operated in a calendar quarter, the Permittee shall document this and no visible emission observation is required. If visible emissions are observed, the Permittee shall inspect the combustion control system, perform necessary adjustments and/or repairs within 48 hours, and document in writing the results of

the inspection, adjustments and/or repairs. After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, the Permittee shall perform EPA Reference Method 9 observations once daily for at least one hour until corrective action have reduced the visible emissions to less than 20 percent opacity. **[Reference : CPCN 9297 Condition B-V-8]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN 9297 Condition B-I-7]**

B. Control of Particulate Matter
COMAR 26.11.06.03B(2)(a) - Particulate Matter from Confined Sources.
"A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm)."

Compliance Demonstration
Emissions of PM and PM_{10} shall be calculated using fuel measurements and vendor guaranteed emission rates. **[Reference: CPCN 9297 Condition B-V-7(b)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: COMAR 26.11.01.05 and CPCN 9297 Condition B-I-7]**

C. Control of Nitrogen Oxides
COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:
(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;
(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

Compliance Demonstration
The Permittee shall:
(1) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the MDE-ARA and the EPA upon request.
(2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to MDE-ARA upon request.
[Reference: CPCN 9297 Condition B-V-14(b) & B-V-14(c)]

D. Operational Limit
(1) The auxiliary boiler shall be fueled exclusively on pipeline quality natural gas at all times when operating. **[Reference: CPCN Case 9297 Condition B-V-3]**

Compliance Demonstration
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

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(2) The heat input to the auxiliary boiler shall not exceed 372,000 MMBtu in any 12-month rolling period. **[Reference: CPCN Case 9297 Condition B-V-4]**

Compliance Demonstration
The Permittee shall install a fuel flow meter on the auxiliary boiler to continuously monitor the fuel flow. The fuel usage shall be recorded at least on a monthly basis. **[Reference: CPCN Case 9297 Condition B-V-9]**
The Permittee shall maintain records of natural gas fuel usage in the auxiliary boiler on a monthly basis. **[Reference: 40 CFR §60.48c(g)(1)-(3) and CPCN Case 9297 Condition B-V-12]**

The Permittee shall maintain records of any maintenance performed on the auxiliary boiler for two years from the date of the record. **[Reference: 40 CFR §60.48c(i) and CPCN Case 9297 Condition B-V-16]**
The Permittee shall submit a quarterly report of the monthly fuel usage to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4(a)]**

E. BACT Requirements
Emissions from the auxiliary boiler shall meet the following BACT limits, through the use of efficient boiler design, exclusive use of pipeline quality natural gas, the use of ultra-low NO_X burners, and application of good combustion practices:

(a) Emissions of NO_X shall not exceed 0.01 lbs./MMBtu on a 3-hr block average basis;
(b) Emissions of CO shall not exceed 0.080 lbs./MMBtu on a 3-hr block average basis;
(c) Emissions of PM shall not exceed 0.0075 lbs./MMBtu on a 3-hr block average basis;
(d) Emissions of PM 10 shall not exceed 0.0075 lbs./MMBtu on a 3-hr block average basis;
(e) Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period.

[Reference: CPCN Case 9297 Condition B-V-5]

Compliance Demonstration
Compliance with the BACT emission limits shall be demonstrated as follows: Emissions of NO_X, VOC, CO, PM, and PM_{10} shall be calculated using fuel measurements and vendor guaranteed emission rates.

To demonstrate compliance with BACT for GHG pollutants, the Permittee shall conduct an annual combustion analysis on the auxiliary boiler. The results of the combustion analysis shall be provided to MDE-ARA within 45 days of its completion.

Methane (CH_4) and nitrous oxide (N_2O) emissions from the auxiliary boiler shall be calculated in accordance with the methodology and emission factors noted in 40 CFR 98, Subpart C. On a monthly basis, fuel consumption, coupled with the appropriate emission factors and global warming potentials (25 for CH_4 and 298 for N_2O) shall be used to calculate the CH_4 and N_2O emissions on a CO_2e basis.

These emission rates, summed with the monthly CO_2 emissions based on 40 CFR §98, Subpart C or other methods approved by MDE-ARA shall be used to calculate GHG emissions from the auxiliary boiler on a CO_2e basis.
[Reference: CPCN Case 9297 Condition B-V-7(b), (c) & (d)]
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The results of the combustion analysis shall be provided to MDE-ARA within 45 days of its completion.
[Reference: CPCN 9297 Condition B-III-4 & B-V-7(c)]

F. LAER Requirements
Emissions from the auxiliary boiler shall meet the following LAER limits, through the use of efficient boiler design, exclusive use of pipeline quality natural gas, the use of ultra-low NO_x burners, and application of good combustion practices:
(a) NO_x emissions shall not exceed 0.01 lb/MMBtu on a 3-hr block average basis; and
(b) VOC emissions shall not exceed 0.002 lb/MMBtu on a 3-hr block average basis.
[Reference: CPCN Case 9297 Condition B-V-6]

Compliance Demonstration
Compliance with the LAER emission limits shall be demonstrated as follows: Emissions of NO_x, and VOC, shall be calculated using fuel measurements and vendor guaranteed emission rates. **[Reference: CPCN Case 9297 Condition B-V-7(b)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

Emissions Unit - EU4 & EU5

EU4: MTU-Onsite Energy diesel-fired power block emergency generator rated at 1500 kW. [033-2737-9-1485]

EU5: Cummins diesel-fired water pump engine rated at 260 brake horsepower. [033-2737-9-1484]

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05E - Stationary Internal Combustion Engine Powered Equipment.

"(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.

(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(i) Engines that are idled continuously when not in service: 30 minutes;

(ii) All other engines: 15 minutes.

(c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration

The Permittee shall properly operate and maintain the engines in a manner to minimize visible emissions. The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, "Report of Excess Emissions and Deviations"

B. Control of Sulfur Oxides

COMAR 26.11.09.07A(2) - Sulfur Content Limitations for Fuel.

" A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: (b) Distillate fuel oils, 0.3 percent."

Compliance Demonstration

The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. **[Reference: COMAR 26.11.03.06C].**

The Permittee shall retain fuel supplier certifications for each fuel delivery that documents the sulfur content of the ultra-low sulfur diesel (ULSD) is 15 ppm sulfur by weight or less. Fuel supplier certification shall include the following information:

(1) The name of the oil supplier;
(2) The sulfur content of the oil;
(3) The method used to determine the sulfur content of the oil. ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 may be used; and
(4) A statement that the sampling was performed according to either the single tank composite sampling procedure of the all-levels sampling procedure in ASTM D4057-88, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products" and that no additions have been made to the supplier's tank since sampling. [40 CFR 60.17].

[Reference: CPCN 9297 Condition B-VI-12]

Note: The Permittee shall use fuel that meets specification approves by the Department.

The Permittee shall report fuel supplier certification to the Department upon request. **[Reference: COMAR 26.11.09.07C].**

C. Control of Nitrogen Oxides

COMAR 26.11.09.08E. - Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;
(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;
(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

Compliance Demonstration

The Permittee shall:

(1) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the MDE-ARA and the EPA upon request.

(2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to MDE-ARA upon request.

[Reference: CPCN 9297 Condition B-V-13(b) & B-V-13(c)]

The Permittee shall submit:

(1)The results of combustion analysis to the department and the EPA upon request. **[Reference: COMAR 26.11.09.08E(3)]**

(2) A record of training program attendance for each operator to the Department upon request. **[Reference: COMAR 26.11.09.08E(5)].**

D. Operational Limit

The emergency diesel generator and the fire water pump engine shall be fired with diesel fuel only. . **[Reference: CPCN Case 9297 Condition B-VI-5]**

Compliance Demonstration

All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

Emissions Unit - EU4 & EU5 Cont'd

EU4: MTU-Onsite Energy diesel-fired power block emergency generator rated at 1500 kW. [033-2737-9-1485]

EU5: Cummins diesel-fired water pump engine rated at 260 brake horsepower. [033-2737-9-1484]

Applicable Standards and limits:

A. NSPS Requirements

For EU4 only (1500 kW)

(1) The diesel-fired emergency generator shall be equipped with a non-resettable hour meter prior to startup of the engine. **[Reference: 40 CFR §60.4209(a) & CPCN Case 9297 Condition B-VI-8(e)]**

(2) Exhaust emissions from the diesel fired emergency generator must not exceed:
Non-methane hydrocarbons (NMHC) + NO_x: 6.4 grams per kilowatt hour (g/kW-hr) (4.8 g/hp-hr.);
CO: 3.5 g/kW-hr (2.6 g/hp-hr.); and
PM: 0.2 g/kW-hr (0.15 g/hp-hr.).
[Reference: 40 CFR §60.4205(b), 40 CFR §60.4202(a)(2), 40 CFR §89.112(a) and Table 1, CPCN Case 9297 ConditionB-VI-3(a)]

(3) Exhaust opacity from the emergency generator must not exceed:
20 percent during the acceleration mode;
15 percent during the lugging mode; and
50 percent during the peaks in either the acceleration or lugging modes.
[Reference: 40 CFR §60.4205(b) 40 CFR §60.4202(a)(2), and 40 CFR §89.113(a)]

(4) There is no time limit on the use of the emergency generator in emergency situations. **[Reference: 40 CFR §60.4211(f)(1)]**
The Permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **[Reference: 40 CFR §60.4211(f)(2)(i)]**
Note: *Effective May 2, 2016, emergency generators are no longer allowed to participate for emergency demand response operation unless they meet the requirements of a non-emergency generator of the same model year. This engine does not meet the standards for a non-emergency generator, therefore, operation for emergency demand response or during periods of voltage deviation are not permitted.*

Compliance Demonstration
The stationary CI internal combustion engine must comply with the emission standards specified in §60.4205(b) as applicable. The engine must be installed and configured according to the manufacturer's emission-related specifications. **[Reference: 40 CFR §60.4211(c)]**
Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. **[Reference: 40 CFR §89. 113(b)]**
(4) See Record Keeping Requirements.

Emissions of NO_X +NMHC, CO PM and PM_{10} shall be calculated using vendor guaranteed emission rates and used to calculate 12-month rolling emissions. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report of the monthly fuel usage and hours of operation of emergency generator to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4(d)]**
(2) The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

For EU5 only (260 bhp)
(1) The diesel fired fire water pump must meet the following emissions standards:
NMHC + NO_X: 4.0 g/kW-hr (3.0 g/hp-hr.);
CO: 3.5 g/kW-hr (2.6 g/hp-hr.)
PM: 0.20 g/kW-hr (0.15 g/hp-hr.).
[Reference: 40 CFR §60.4205(c), 40 CFR Part 60, Subpart IIII, Table 4, and CPCN Case 9297 Condition B-VI-3(b)]

(2) The fire water pump shall be equipped with a non-resettable hour meter prior to startup of the engine. **[Reference: 40 CFR §60.4209(a) & CPCN Case 9297 Condition B-VI-8(e)]**

<u>Compliance Demonstration</u>
Emissions of NO_X +NMHC, CO PM and PM_{10} shall be calculated using vendor guaranteed emission rates and used to calculate 12-month rolling emissions. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

For EU4 & EU5 only

The diesel fuel used in the emergency generator and the fire water pump must meet the following specifications:
Sulfur content – 15 ppm maximum
Cetane index or aromatic content as follows:
A minimum cetane index of 40; or
A maximum aromatic content of 35 volume percent.
[Reference: 40 CFR §60.4207(b) and 40 CFR §80.510(b)]

The diesel-fired emergency generator and the fire water pump shall be certified to the emissions standards in §60.4205(b), as applicable. The generator must be installed and configured according to the manufacturer's specifications.
[Reference: 40 CFR §60.4211(c)]

Compliance Demonstration
The Permittee must operate and maintain the diesel fired emergency generator and the diesel fired fire water pump according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The Permittee may only change those settings that are permitted by the manufacturer. The Permittee must meet the requirements of 40 CFR Part 89, as applicable. **[Reference: 40 CFR §60.4211(a)]**
The Permittee shall provide fuel supplier certifications for each fuel delivery that documents the sulfur content of the ultra-low sulfur diesel (ULSD) is 15 ppm sulfur by weight or less. Fuel supplier certification shall include the following information:
(a) The name of the fuel oil supplier;
(b) The sulfur content of the fuel oil;
(c) The method used to determine the sulfur content of the fuel oil. ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 may be used; and
(d) A statement that the sampling was performed according to either the single tank composite sampling procedures or the all-levels sampling procedure in ASTM D4057-88, "Standard Practice for Manual Sampling of Petroleum Products" and that no additions have been made to the supplier's tank since sampling.
[Reference: 40 CFR §60.17 and CPCN Case 9297 Condition B-VI-12]
Note: The Permittee shall use fuel that meets specification approves by the Department.

B. BACT Requirements

(1) The auxiliary diesel generator shall be designed to meet the following BACT emission limits through the exclusive use of ultra-low sulfur diesel (ULSD) fuel and good combustion practices:
NO_X+NMHC, CO, and PM (filterable) emissions shall not exceed the applicable NSPS Subpart IIII emission limitations;
PM_{10} (filterable and condensable) emissions shall not exceed 0.18 g/hp-hour; and
Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period. **[Reference: CPCN Case 9297 Condition B-VI-6(a)]**

(2) The fire water pump engine shall be designed to meet the following BACT limits through the exclusive use of ULSD fuel and good combustion practices:
NO_X+NMHC, CO, and PM (filterable) emissions shall not exceed the applicable NSPS Subpart IIII emission limitations;
PM_{10} (filterable and condensable) emissions shall not exceed 0.18 g/hp-hour; and
Facility-wide GHG emissions shall not exceed 2,467,793 tons in any rolling 12-month period. **[Reference: CPCN Case 9297 Condition B-VI-6(b)]**

Compliance Demonstration
The Permittee shall calculate PM_{10} emissions using vendor guaranteed emission rates. **[Reference: CPCN Case 9297 Condition B-VI-9(a)]**
Methane (CH_4) and nitrous oxide (N_2O) emissions from the auxiliary generator and fire water pump engine shall be calculated in accordance with the methodology and emissions factors noted in 40 CFR 98, Subpart C. On a monthly basis, fuel consumption, coupled with the appropriate emission factors and global warming potentials (25 for CH_4 and 298 for N_2O) shall be used to calculate the CH_4 and N_2O emissions on a CO_2e basis. These emission rates, summed with the monthly CO_2 emissions based on 40 CFR 98, Subpart C or other methods approve by MDE-ARA shall be used to establish GHG emissions from the auxiliary generator and fire water pump engine on a CO_2e basis.
[Reference: CPCN Case 9297 Condition B-VI-9(b)]
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

C. LAER Requirements

The emergency generator and fire water pump engine shall each be designed such that emissions shall not exceed the applicable limits in NSPS Subpart IIII for NO_X+NMHC through the use of ULSD fuel and good combustion practices at all times. **[Reference: CPCN Case 9297 Condition B-VI-7]**

Compliance Demonstration
The Permittee shall operate and maintain the engines in accordance to the manufacturers' written instructions and procedures approved by the engines manufacturer, over the entire life of the engine. **[Reference: 40 CFR §60.4206]**
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**
The Permittee shall submit a quarterly report to the Department to be postmarked by the 30th day of the month following the end of each quarter. **[Reference: CPCN 9297 Condition B-III-4]**

Emissions Unit - EU6, EU7, EU8, & EU9

EU6: Natural gas pipeline components, including valves, flanges, pump seals, pressure relief valves, and six (6) catalytic heaters – all within the facility boundary.

EU7: Circuit breakers containing sulfur hexafluoride (SF6).

EU8: Two (2) fuel oil storage tanks: 900 gallons (emergency generator) and 350 gallons (fire pump).

EU9: On-site paved and unpaved roads

Applicable Standards and limits:
A. BACT Requirements: **EU6**
Greenhouse Gas (GHG) Best Available Control Technology (BACT) for the natural gas pipeline components associated with the pipeline shall be the implementation of an Audio, Visual, and Olfactory (AVO) Program on file at power plant site for review upon request by the agency. In accordance with the AVO program Plan, the AVO inspections shall be documented, leaks identified from the AVO assessment shall be repaired within five days of discovery, repairs documented, and associated repair records maintained. **[Reference: CPCN Case 9297 Condition B-VII-1]**

Compliance Demonstration
The Permittee shall maintain all records of monitoring and repair associated with the natural gas pipeline components at the facility in accordance with the AVO Program Plan for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VII-3]**

B. Control of GHG Emissions: **EU6**
The GHG emissions from the natural gas pipeline components shall be limited to meet the facility-wide GHG emissions limit listed in CPCN Case 9297 Condition B-III-3. The emissions from the natural gas pipeline components shall be calculated as follows:
(a) The GHG emissions from the natural gas pipeline components shall be based on EPA AP-42 emission factors, methodology described in 40 CFR Part §98 Subpart W, or other MDE-approved emission factors;
(b) The total GHG emissions from the natural gas pipeline components shall be presented on a CO_2e basis.
[Reference: CPCN Case 9297 Condition B-VII-2]

Compliance Demonstration
All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

C. BACT Requirements: **EU7**
GHG BACT for the circuit breakers shall be installation of circuit breakers that are designed to meet ANSI C37.013 or equivalent to detect and minimize SF6 leaks. Leaks detected shall be repaired within five days of discovery; repairs documented, and associated repair records maintained. **[Reference: CPCN Case 9297 Condition B-VIII-1]**

Compliance Demonstration
The Permittee shall maintain all records of monitoring and repair associated with the circuit breakers at the Facility for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-VIII-3]**

D. Control of GHG Emissions: **EU7**

The GHG emissions from the circuit breakers shall be limited to meet the facility-wide GHG emissions limit listed in CPCN Case 9297 Condition B-III-3. The emissions from the circuit breakers shall be calculated as follows:

(a) SF6 emissions from the circuit breakers shall be calculated using a manufacturer provided leak rate, the methodology in 40 CFR §98, Subpart DD, and assuming 8,760 hours per year of operation;

(b) The total GHG emissions from the circuit breakers shall be presented on a CO_2e basis.

[Reference: CPCN Case 9297 Condition B-VIII-2]

Compliance Demonstration

All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

E. Control of VOC: **EU8**

Lowest Achievable Emission Rate (LAER): The VOC emissions from the storage tanks (combined) shall not exceed 0.1 tons in any 12-month rolling period, through periodic maintenance on the tanks to minimize fugitive emissions. **[Reference: CPCN Case 9297 Condition B-IX-2]**

Compliance Demonstration

The Permittee shall maintain records of periodic maintenance performed on the tanks to minimize fugitive emissions for at least five years after the completion of the calendar year in which they were collected. This data shall be readily available for inspection by the Department. **[Reference: CPCN Case 9297 Condition B-IX-3]**

F. Control of PM and PM_{10} Emissions: **EU9**

Best Available Control Technology (BACT): The Permittee shall minimize PM and PM_{10} emissions from onsite roadways by taking reasonable precautions to prevent particulate matter from becoming airborne by sweeping or water application dust control, as needed. **[Reference: COMAR 26.11.06.03D and CPCN Case 9297 Condition B-X-1]**

Compliance Demonstration

The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions or best management practices (BMP) Plan that will be used to prevent particulate matter from becoming airborne.

The Permittee shall update the BMP Plan, as required by the initial Part 70 permit for this facility when a revision is needed to ensure that reasonable precautions will be used to prevent particulate matter from this equipment from becoming airborne and that adequate inspection will be conducted and documented. The BMP shall include provisions for routine inspections of emission sources and controls, corrective measures, and recordkeeping for such. The Permittee shall maintain the written reasonable precautions (BMP) at the facility and make it available to the Department upon request. The Permittee shall report the results of the inspections and provide a copy of the current BMP plan upon request by the Department. **[Reference: COMAR 26.11.03.06C]**

Emissions Unit - Facility-wide/Plant-wide

Facility-wide/Plant-wide

Applicable Standards and limits:
Operational Limits
(1) Plant-wide emissions, including emissions during periods of startup and shutdown, shall be limited to the following in any consecutive 12-month rolling period:

Pollutant	Emission Limit (tons per year)
Particulate Matter (PM) – Filterable	77.2
Particulate Matter (PM_{10}) – Filterable and Condensable	94.4
Nitrogen Oxides (NO_x)	156.0
Carbon Monoxide (CO)	203.4
Volatile Organic Compounds (VOCs)	56.2
Greenhouse Gas (GHG) as Carbon Dioxide Equivalent (CO_2e)	2,467,793

[Reference: CPCN Case 9297 Condition B-III-3]

(2) Facility-wide emissions of Particulate Matter less than 2.5 microns ($PM_{2.5}$) (Filterable and Condensable) shall not exceed 100 tons per 12-month rolling period. **[Reference: CPCN Case 9297 Condition B-III-1(k)]**

Compliance Demonstration

For CTs/HRSGs and Duct Burners: The Permittee shall monitor the fuel usage in million standard cubic feet (MMSCF) continuously and record the heat input (MMBtu) per month to the CTs and duct burners. **[Reference: CPCN Case 9297 Condition B-III-8(a)(ii)]**

For Aux Boiler: $PM_{2.5}$ emissions from the auxiliary boiler shall be calculated based on the monthly heat input (MMBtu/month) to the auxiliary boiler and an emission factor of 0.0075 lb/MMBtu) or any lower emission factor established by performance tests. **[Reference: CPCN Case 9297 Condition B-III-8(b)]**

Emergency generator and fire pump engine: $PM_{2.5}$ emissions from the auxiliary generators and the firewater pump engine shall be calculated based on the monthly hours of operation and an emission factor provided by vendor which the engine is designed to meet. In the absence of an emission factor provided by the vendor, $PM_{2.5}$ emissions shall be calculated based on the monthly hours of operation and the appropriate AP-42 or other MDE-approved emission factor for $PM_{2.5}$. **[Reference: CPCN Case 9297 Condition B-III-8(c)]**

All records and logs required by the CPCN shall be maintained at the facility for at least five (5) years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of the Department. **[Reference: CPCN 9297 Condition B-I-7]**

The Permittee shall submit quarterly reports to MDE-ARA to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following information: summarizes the monthly and consecutive rolling 12-month total emissions (in tons per month and tons per year) of PM, PM_{10}, NO_X, CO, VOC, and GHG (as CO_2e) separately for each emission unit and total emissions of those pollutants for all the facility's sources. **[Reference: CPCN 9297 Condition B-III-4(e)**

The Permittee shall certify the actual emissions of regulated air pollutants from all installations at the facility. Certification shall be on a form obtained from MDE-ARA and shall be submitted to MDE-ARA not later than April 1 of the year following the year for which the certification is required. All emission certification submitted pursuant to this section and which contains all information required by COMAR 26.11.01.05-1 for NO_X and VOC, satisfies the requirements of COMAR 26.11.01.05-1. [COMAR 26.11.02.19D]. **[Reference: CPCN 9297 Condition B-III-2(d)]**

COMPLIANCE SCHEDULE

Keys Energy Center is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Keys Energy Center is subject to the Acid Rain Program requirements. The Phase II Acid Rain Permit will be issued in conjunction with this Part 70 permit.

TITLE VI – OZONE DEPLETING SUBSTANCES

Keys Energy Center is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Keys Energy Center is not subject to the requirements of Section 112(r).

PERMIT SHIELD

Keys Energy Center did not request a permit shield.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 5 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas III and IV]

The *affected fuel burning units* are subject to the following requirements:

COMAR 26.11.09.05A(2). "In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form,

which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity."

COMAR 26.11.09.05A(3) Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period."

[For Distillate Fuel Oil]
COMAR 26.11.09.07A(2)(b), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(3) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planning, spindle sanding, or disc sanding of wood or wood products;

(4) Containers, reservoirs, or tanks used exclusively for:

(a) No. 26 Storage of lubricating oils;
Includes an average of five (5) storage totes of lubricating oils used to fill the twenty-one (21) dedicated lube oil tanks/containers.

(b) No. 1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(5) ✓ Laboratory fume hoods and vents;

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

1. Applicable Regulations:

   COMAR 26.11.06.08 - Nuisance.
   "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   COMAR 26.11.06.09 - Odors.
   "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

   CO_2 Budget Permit
   The Permittee shall comply with the requirements of the CO_2 Budget Permit issued for Keys Energy Center. Note: A CO_2 Budget Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix B.

2. Record Keeping and Reporting:

   The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

   (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

   (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.