Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

JUL 16 2024

Mr. Joseph M. Dick, Plant Manager
Constellation Power Source Generation, LLC
1310 Point Street
Baltimore, MD 21231

Dear Mr. Dick:

Re: Amended Renewal Part 70/ Title V Operating Permit #24-025-0024

Enclosed, please find the Amended Renewal Part 70/Title V Operating Permit and Fact Sheet for the CPSG, LLC – Perryman Generating Station located at 900 Chelsea Road, Perryman, MD. The Permit includes the minor modification will expire on October 31, 2028. This Permit supersedes Part 70 Operating Permit No. 24-025-0024 issued November 1, 2023.

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 Sariscak, Manager
Air Quality Permits Program
Air & Radiation Administration

SYS/jm

Enclosures

cc: Susan Hoheneder, Manager Environmental Programs
EPA Region III (w/encl)

KEEP PERMIT AT SITE

CONTROL NO. B - 07673

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

[X] Part 70 Operating Permit

PERMIT NO. 24-025-0024

DATE ISSUED JUL 16 2024

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE October 31, 2028

LEGAL OWNER & ADDRESS

Constellation Power Source Generation, LLC
1310 Point Street
Baltimore, MD 21231
Attn: Mr. Joseph M. Dick, Plant Manager

SITE

Perryman Generating Station
900 Chelsea Road
Perryman. MD 21130
AI # 3946

SOURCE DESCRIPTION

One (1) Electric Generating Station.

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

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Program Manager

Director, Air and Radiation Administration

CONSTELLATION POWER SOURCE GENERATION, LLC.
PERRYMAN GENERATING STATION
900 CHELSEA ROAD, PERRYMAN MD 21130
PART 70 OPERATING PERMIT NO. 24-025-0024

Attachments

CO2 Budget Permit
Acid Rain Permit

CPCN 9677

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

The Perryman Generating Station (Perryman Station) is an electric generating station located in eastern Harford County. The facility generates electricity for peak loads. The SIC code for this facility is 4911.

The Perryman Station consists of three (3) identical Westinghouse model 501 simple cycle combustion turbines capable of burning only distillate oil; one (1) General Electric Frame 7FA simple cycle combustion turbine with dual fuel firing capability; and a Pratt & Whitney 120-MW gas turbine electric generator package, comprised of two identical simple cycle combustion turbines and associated facilities (Perryman 6 Project).

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
PY-Unit1	12-4-0081	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Jan 1972
PY-Unit3	12-4-0083	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Apr 1972
PY-Unit4	12-4-0084	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Apr 1972
PY-Unit51	12-5-0088	One (1) General Electric Frame 7FA stationary, single-shaft combustion turbine with a design heat input of 1900 MMBtu/hr., operating in the simple cycle mode rate at a nominal 150 megawatts output. This turbine has dual fuel (natural gas and No. 2 oil) firing capability.	Jun 1995

CT6A & CT6B	025-0024-5-0353 & 025-0024-5-0354	One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. In order to avoid forced outage, the CTs combust pipeline-quality natural gas as a primary fuel, and only combust secondary fuel, ultra-low sulfur diesel fuel (ULSD) fuel oil (with a sulfur content not to exceed 0.0015% by weight) during periods when natural gas supply has been interrupted or when PJM issues an emergency alert and natural gas supply is unavailable.	Apr 2015, Mod Feb 2024
EG6	025-0024-9-0492	One (1) diesel-fired emergency generator rated at 268-hp. This generator is fired with ultra-low sulfur diesel (ULSD)	Apr 2015
FWP6	025-0024-9-0502	One (1) diesel-fired emergency firewater pump engine rated at 350-hp. This generator is fired with ultra-low sulfur diesel (ULSD)	Apr 2015
FUG6	NA	Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices within the facility boundary.	Apr 2015
CB6	NA	Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6).	Apr 2015
PR6	NA	Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.	Apr 2015
GS	025-0024-9-0532	Two (2) diesel-fired emergency generator sets (gensets), each rated at 3,010-kW. The gensets will only be fired with ultra-low sulfur diesel (ULSD) and be used to self-start Units 1, 3 and 4 during a systemwide power outage. (Reliability Project)	TBD

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
PM10	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 or 82.157.

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 82.157(l) and (m) and 40 CFR 82.166.

16. ACID RAIN PERMIT

The Acid Rain Permit is attached as Appendix A. The Permittee shall comply with all applicable requirements contained in the Phase II Acid Rain Permit. The PY-Units 1, 3, & 4 are not subject to the Acid Rain Requirements.

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)]**

Table IV – 1	
1.0	**Emissions Unit Number(s): Combustion Turbines** **PY-Unit1, PY-Unit3 & PY-Unit4:** Three (3) Westinghouse model 501 simple cycle combustion turbines, each with a design heat input of 704 MMBtu/hr., rated at a nominal 51-MW output and capable of only burning No.2 distillate oil. **[MDE Reg Nos. 12-4-0081, 12-4-0083 & 12-4-0084]**
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05** - Visible Emissions. "**A**. Fuel Burning Equipment. (**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

Table IV – 1	
	(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period." B. Control of Sulfur Oxides **COMAR 26.11.09.07**: Control of Sulfur Oxides From Fuel Burning Equipment. "**A**. 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: (**2**) In Areas III and IV: (**b**) **Distillate fuel oils, 0.3 percent."** **Cross-State Air Pollution Rule** **See Table IV-7: CSAPR for requirements.** C. Control of Nitrogen Oxides: **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. "(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall: (a) Provide certification of the capacity factor of the equipment to the Department in writing; (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually; (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request; (d) – (e) *Not applicable* (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. " **Cross-State Air Pollution Rule** **See Table IV-7: CSAPR for requirements.**
1.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirement.

Table IV – 1	
	B. Control of Sulfur Oxides See Monitoring Requirement. C. Control of Nitrogen Oxides: If the Permittee operates a turbine in excess of 15 percent capacity factor, the Permittee shall demonstrate compliance with the 65-ppm limit by performing an EPA Reference Method Test within 120 days after exceeding the 15 percent capacity factor. The Permittee shall submit a test protocol to the Department for approval at least 30 days prior to the proposed test date. **[Reference: COMAR 26.11.03.06C]**
1.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall: (a) properly operate and maintain the combustion turbines in a manner to prevent visible emissions; (b) verify no visible emissions when burning No. 2 fuel oil. An observer shall perform an EPA Reference Method 9 observation of stack emissions for an 18-minute period once for each 168 hours a combustion turbine operates on No. 2 oil. The Permittee shall perform the following if visible emissions are observed: (a) inspect combustion turbine operations; (b) perform all necessary adjustments and/or repairs to the combustion turbine within 48 operating hours so that visible emissions are eliminated; (c) document in writing the results of the inspections, adjustments and/or repairs to the combustion unit; and (d) if the required adjustments and/or repairs had not eliminated the visible emissions within the stipulated 48 operating hours, the Permittee shall perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil is in compliance with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analysis of oil that is representative of oil burned. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides: The Permittee shall:

Table IV – 1	
	(1) Perform a combustion analysis and optimize combustion at least once annually when the turbines operate for more than 500 hours in a calendar year. **[Reference: COMAR 26.11.09.08G(1)(b)]**. (2) Calculate the capacity factor of each unit for each calendar year within 30 days after the end of each year. **[Reference: COMAR 26.11.03.06C]**
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 The Permittee shall maintain for a period of at least five years the following: (a) records of maintenance performed on the combustion turbines that relate to preventing visible emissions; and (b) log of visible emission observations performed. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of the sulfur in fuel analysis. **[Reference: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides: The Permittee shall: (1) Maintain the results of the combustion analysis and any stack tests for at least 5years and make these results available to the Department and the EPA upon request. **[Reference: COMAR 26.11.09.08G(1)(c) and COMAR 26.11.03.06C]**. (2) Maintain a record of the calculated capacity factors. **[Reference: COMAR 26.11.03.06C]**.
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of excess emissions in accordance with Part 70 Operating Permit Section III Condition 4 "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C(7)]**

Table IV – 1	
	B. Control of Sulfur Oxides The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit Section III Condition 4 "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C(7)]** C. Control of Nitrogen Oxides: The Permittee shall: (1) Provide certification of the capacity factor of the equipment to the Department in writing as part of the annual Emissions Certification. **[Reference: COMAR 26.11.09.08G(1)(a)]** (2) Submit the results of any stack tests within 45 days after completion of the stack test. **[Reference: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

Table IV – 2	
2.0	**Emissions Unit Number(s): Combustion Turbine** **PY-Unit51:** General Electric Frame 7FA stationary, single-shaft combustion turbine operating in the simple cycle mode, rated at a nominal 150-MW output. This turbine has dual fuel (natural gas and No. 2 fuel oil) firing capacity. **[MDE Reg No. 12-5-0088]**
2.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05** - Visible Emissions. "**A.** Fuel Burning Equipment. (**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."

Table IV – 2

B. Control of Sulfur Oxides
COMAR 26.11.09.07: Control of Sulfur Oxides From Fuel Burning Equipment.
"A. 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:
(2) In Areas III and IV: (b) **Distillate fuel oils, 0.3 percent."**

Subpart GG—Standards of Performance for Stationary Gas Turbines 40 CFR §60.333, which limits the sulfur content in No. 2 distillate fuel oil to 0.8%.

CPCN #8241, which states "The fuel oil burned in PY-Unit51 shall contain no more than 0.05% by weight. If this type of fuel is not available or is not priced competitively, fuel oil with a maximum sulfur content of 0.2 percent may be used. Fuel oil with a maximum of 0.05 percent sulfur is considered to be "priced competitively" if it costs (on a $/MMBtu basis) no more than 10 percent more than No. 2 oil containing 0.2 percent sulfur."
CPCN #8241 which limits sulfur oxides (as SO_2) emissions to 28 lb./hr. when burning natural gas and 87 lb./hr. when burning No. 2 oil.
CPCN #8241, which limits Sulfuric Acid Mist to 7.8 lb./hr. when burning No. 2 oil.
CPCN#8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Acid Rain Permit
The Permittee shall comply with the requirements of the Phase II Acid Rain Permit issued for this generating station. **Note**: A renewal Phase II Acid Rain Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix A.

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

C. Control of Particulate Matter
CPCN #8241 which limits particulate emissions (TSP and PM_{10} emissions each) to 10 lb./hr. when burning natural gas and 11 lb./hr. when burning No. 2 oil.

Table IV – 2	
	CPCN #8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction. D. Control of Nitrogen Oxides **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. "(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall: (a) Provide certification of the capacity factor of the equipment to the Department in writing; (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually; (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request; (d) - (e) *Not applicable*. (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. " **Note:** Compliance with the CPCN will be used to demonstrate compliance with NO_X RACT requirements. **Subpart GG—Standards of Performance for Stationary Gas Turbines 40 CFR §60.332,** which limits NO_X emissions in accordance with the equation contained in 40 CFR §60.332 (a)(1). **CPCN #8241** which limits NO_X emissions to 170 lb./hr. when burning natural gas and 490 lb./hr. when burning No. 2 oil. **CPCN #8241** which limits NO_X emissions to 25 parts per million by volume on a dry basis (ppmvd) at 15% excess oxygen on an hourly basis when burning natural gas and 65 ppmvd at 15% oxygen on an hourly basis when burning No. 2 oil. **CPCN #8241, which** limits NO_X emissions to 1,363 tons in any consecutive 12-month period. **CPCN #8241 condition 26**, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Table IV – 2	
	Cross-State Air Pollution Rule **See Table IV-7: CSAPR for requirements.** E. Control of VOC **CPCN #8241** which limits VOC emissions to 2.9 lb./hr. when burning natural gas and 7 lb./hr. when burning No. 2 oil. **CPCN #8241 condition 26**, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction. F. Control of Carbon Monoxide **CPCN # 8241** which limits CO emissions to 52 lb./hr. when burning natural gas and 70 lb./hr. when burning No. 2 oil. **CPCN #8241 condition 26**, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.
2.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirement. B. Control of Sulfur Oxides See Monitoring Requirement. C. Control of Particulate Matter See Monitoring Requirements D. Control of Nitrogen Oxides See Monitoring Requirements E. Control of VOC See Monitoring Requirements F. Control of Carbon Monoxide See Monitoring Requirements
2.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall:

Table IV – 2

(a) properly operate and maintain the combustion turbine in a manner to prevent visible emissions; and
(b) verify no visible emissions when burning No.2 fuel oil. An observer shall perform an EPA Reference Method 9 observation of stack emissions for an 18-minute period once for each 168 hours the combustion turbine burns No. 2 fuel oil or perform such an observation no less than once a calendar year if No 2-fuel oil is burned during the year.

The Permittee shall perform the following if visible emissions are observed:

(a) inspect combustion turbine operations;
(b) perform all necessary adjustments and/or repairs to the combustion turbine within 48 operating hours so that visible emissions are eliminated;
(c) document in writing the results of the inspections, adjustments and/or repairs to the combustion turbine; and
(d) if the required adjustments and/or repairs had not eliminated the visible emissions within the stipulated 48 operating hours, the Permittee shall perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions.

[Reference: COMAR 26.11.03.06C]

B. Control of Sulfur Oxides

The Permittee shall obtain a certification from the fuel supplier indicating that the oil is in compliance with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analysis of oil that is representative of oil burned. **[Reference: COMAR 26.11.03.06C].**

Acid Rain Permit:

The Permittee shall comply with the monitoring requirements in 40 CFR Part 75 including the QC/QA procedures in Part 75 Appendix B. See Acid Rain Permit in Appendix A of this permit.

C. Control of Particulate Matter

The Permittee shall perform preventative maintenance to maintain the turbine as designed. **[Reference: COMAR 26.11.03.06C]**

D. Control of Nitrogen Oxides

The Permittee shall:

(1) Operate, calibrate, and maintain a certified NO_x CEM system **[Reference: CPCN 8241 and COMAR 26.11.29.08A].**

Table IV – 2	
	(2) Certify the NOx CEM system in accordance with Part 75, Appendix A. **[Reference: 40 CFR §75.70, COMAR 26.11.09.08B(2)(b), and COMAR 26.11.29.08B].** E. Control of VOC The Permittee shall perform preventative maintenance to maintain the turbine as designed. **[Reference: COMAR 26.11.03.06C]** F. Control of Carbon Monoxide The Permittee shall perform preventative maintenance to maintain the turbine as designed. **[Reference: COMAR 26.11.03.06C]**
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)]** A. Control of Visible Emissions The Permittee shall: (1) Maintain for at least five years records of maintenance performed on the combustion turbine that relate to preventing visible emissions. (2) Maintain for at least five years a log of visible emission observations performed. **[Reference: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall (1) Maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of the sulfur in fuel analysis. (2) Maintain for at least five years records of the number of hours, in any consecutive 12-month period, that fuel oil is used. **[Reference: COMAR 26.11.03.06C]** Acid Rain Permit: The Acid Rain Permit contains specific recordkeeping requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75, Subpart F]** C. Control of Particulate Matter The Permittee shall maintain records of the preventive maintenance that relates to combustion performance for 5 years. **[Reference: COMAR 26.11.03.06C]**

Table IV – 2	
	D. Control of Nitrogen Oxides The Permittee shall maintain records necessary to prepare a quarterly emission report that contains the requirements of COMAR 26.11.01.11E(2). **[Reference: COMAR 26.11.03.06C]** E. Control of VOC The Permittee shall maintain records of the preventive maintenance that relates to combustion performance for 5 years. **[Reference: COMAR 26.11.03.06C]** F. Control of Carbon Monoxide The Permittee shall maintain records of the preventive maintenance that relates to combustion performance for 5 years. **[Reference: COMAR 26.11.03.06C]**
2.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides The Permittee shall report fuel supplier certifications or fuel analysis to the Department upon request. **[Reference: COMAR 26.11.09.07C]** Acid Rain Permit: The Acid Rain Permit contains specific reporting requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75, Subpart G]** C. Control of Particulate Matter The Permittee shall submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]** D. Control of Nitrogen Oxides The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following: (1) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;

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	(2) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned; (3) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data; (4) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter; (5) Quarterly quality assurance activities; and (6) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and (7) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation. **[Reference: COMAR 26.11.09.08K(1) and COMAR 26.11.01.11E(2)]** E. Control of VOC The Permittee shall submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]** F. Control of Carbon Monoxide The Permittee shall submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

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3.0	**Emissions Unit Number(s): Combustion Turbines (Project 6)** **CT6A & CT6B:** One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. *In order to avoid forced outage*, the CTs will combust pipeline-quality natural gas as a primary fuel, and only combust secondary fuel, ultra-low sulfur diesel fuel (ULSD) fuel oil (with a sulfur content not to exceed 0.0015% by weight) during periods when natural gas supply has been interrupted or *when PJM issues an emergency alert and natural gas supply is unavailable.* **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354 & CPCN Case No. 9677 Condition B-IV-1]**

Table IV – 3	
3.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05** - Visible Emissions. "**A.** Fuel Burning Equipment. (**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 Sulfur Oxides **COMAR 26.11.09.07**: Control of Sulfur Oxides From Fuel Burning Equipment. "A. 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: (**2**) In Areas III and IV: (**b**) **Distillate fuel oils, 0.3 percent."** **Subpart KKKK—Standards of Performance for Stationary Combustion Turbines** **§60.4330** - What emission limits must I meet for sulfur dioxide (SO_2)? "(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb./MWh))** gross output; (2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb. SO_2/MMBtu)** heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement;" **CPCN 9677**, which states, "Fuel type Limit: The only permissible fuels for CT6A and CT6B are pipeline quality natural gas and ultra-low sulfur diesel (ULSD). *In order to avoid forced outage*, ULSD may only be used *(1)* during periods of interruption of the natural gas supply, *or (2) when*

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PJM issues an emergency alert and natural gas supply is unavailable.
[Reference: CPCN Case No. 9677, Condition B-IV-1]

Acid Rain Permit
The Permittee shall comply with the requirements of the Phase II Acid Rain Permit issued for this generating station. **Note**: A renewal Phase II Acid Rain Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix A.

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

C. 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)."

CPCN 9677 states PM_{10} and $PM_{2.5}$ (filterable and condensable), when burning NG emissions from CT6A and CT6B shall not exceed the following emission limits: 5.0 lb./hr. (0.0079 lb./MMBtu High heat value (HHV) at all times, averaged over 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4: BACT/LAER]**

CPCN 9677 states PM_{10} and $PM_{2.5}$ (filterable and condensable), when burning ULSD emissions from CT6A and CT6B shall not exceed the following emission limits: 15.0 lb./hr. (0.0248 lb./MMBtu High heat value (HHV) at all times, averaged over 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4: BACT/LAER]**

D. Control of Nitrogen Oxides
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.
"(**1**) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

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	(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request; (d) - (e) *Not Applicable.* (**2**) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NOx 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. " *When burning NG: 42-ppm @15% O_2 at all times excluding startup events and shutdown events.* *When burning USLD: 65-ppm @15% O_2 at all times excluding startup events and shutdown events.* **Note:** Compliance with the CPCN will be used to demonstrate compliance with NOx RACT requirements. **Subpart KKKK—Standards of Performance for Stationary Combustion Turbines** **40 CFR §60.4320,** which states that NOx emissions standard (**when burning NG**) shall not exceed 25 ppm at 15% O_2 or 150 ng/J (1.2 lb./MWh) of useful output at all times greater than or equal to 75 percent of peak load or greater than or equal to 0°F, average 4-hr rolling. **40 CFR §60.4320,** which states that NOx emissions standard **(when burning ULSD**) shall not exceed 74 ppm at 15% O_2 or 460 ng/J (3.6 lb./MWh) of useful output at all times greater than or equal to 75 percent of peak load or greater than or equal to 0°F, average 4-hr rolling. **40 CFR §60.4320,** which states the NOx (**when burning NG or ULSD**) shall not exceed 96 ppm at 15% O_2 or 150 ng/J (1.2 lb./MWh) of useful output at all times less than 75 percent of peak load or less than 0°F, averaged over 4-hr rolling average. **CPCN 9677** which states the NOx (**when burning NG**) shall not exceed 2.5 ppmvd at 15% O_2 (5.8 lb./hr.) at all times, excluding during startup events and shutdown events, averaged over 3-hr block. **[LAER]** **CPCN 9677** which states the NOx (**when burning ULSD**) shall not exceed 5 ppmvd at 15% O_2 (11.7 lb./hr.) at all times, excluding during startup events and shutdown events, averaged over 3-hr block. **[LAER]** **CPCN 9677** states *"Startup Events"* (1 CT or 2 CTs) are limited to 36.4 lb./event and "*Shutdown Events*" (1 CT or 2 CTs) are limited to 9.27

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	lb./event. **[Reference: CPCN Case No. 9677, Condition B-IV-4 & LAER]** *CPCN 9677, Conditions II: Definitions.* *B-II-4. "Shutdown Event" as it relates to the CTs can involve either 1 CT or 2 CTs. In the case of 1 CT, a shutdown event is defined as the period of time during which one CT's output is lowered with the intent to shut down, beginning at the point at which the load drops below 50% and ending when fuel combustion ceases. In the case a shutdown event of 2 CTs occurs, a shutdown event begins at the point at which the first CT drops below 50% and ends when fuel combustion from both CTs ceases. Notwithstanding the foregoing, if 2 CTs are in operation and 1 CT's load is lowered below 50% with the intent to shut down while the other CT continues in normal operation during and beyond the point fuel combustion ceases from the first CT that shall not constitute a "Shutdown Event."* *B-II-5. "Startup Event" as it relates to the CTs can involve either 1 CT or 2 CTs. In the case of 1 CT, a startup event is defined as the period of time during which one CT's output is increased with the intent to start up, beginning with initiation of fuel combustion in one CT and ending when the SCR system catalyst reaches 600 degrees Fahrenheit (°F). In the case of 2 CTs, the startup event begins at the point at which at least 1 CT initiates combustion and ends when the SCR system catalyst reaches 600 °F.* **Cross-State Air Pollution Rule** **See Table IV-7: CSAPR for requirements.** E. Control of GHG Emissions **CPCN 9677** which states the emissions from **CT6A and CT6B** shall not exceed the following emission limits: GHG (when burning NG) shall not exceed 1,394 lb. CO_{2e}/MWh gross at all times excluding startup events and shutdown events, over a 12-month rolling averaging period. GHG (when burning ULSD) shall not exceed 1,741 lb. CO_{2e}/MWh gross at all times excluding startup events and shutdown events, over a 12-month rolling averaging period. **[Reference: CPCN Case No. 9677, Condition B-IV-4 & BACT]** **NSPS Subpart TTTT** - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units **§60.5520** - What CO_2 emissions standard must I meet? **Table 2 of Subpart TTTT of Part 60**, which states the applicable CO_2 emission standard for the affected EGU is 50 kg CO_2 per gigajoule (GJ) of heat input (120 lb. CO_2/MMBtu). F. Control of Ammonia Emissions **CPCN 9677** which states the emissions from CT6A and CT6B shall not exceed the following emission limits:

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	Ammonia (all fuels) shall not exceed 5 ppmvd at 15% O_2 at all times, over an averaged period of 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4]** G. Operational Limit **CPCN 9677, BACT/LAER Operational Limits:** CT6A and CT6B combined may not exceed the following operational restrictions: (a) The total number of hours of operation for CT6A and CT6B, inclusive of startup and shutdown, shall not exceed 10,512 hours in any consecutive rolling 12-month period. (b) The total number of hours burning fuel oil on CT6A and CT6B, exclusive of startup and shutdown, shall not exceed 2,628 hours in any consecutive rolling 12-month period. (c) The total number of startup events (1CT or 2CTs) shall not exceed 1,040 events in any consecutive rolling 12-month period. (d) The total number of shutdown events (1CT or 2CTs) shall not exceed 1,040 events in any consecutive rolling 12-month period. **[Reference: CPCN Case No. 9677, Condition B-IV-2]**
3.2	**Testing Requirements:** A. Control of Visible Emissions The Permittee shall conduct subsequent visual observations in accordance with EPA Reference Method 22 - Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares shall be conducted at least once each calendar quarter to verify there are no visible emissions during operation. Quarterly visual observations are required for each fuel burned during the previous quarter under normal operation. If visual emissions are observed, the Permittee shall inspect combustion control systems, perform necessary adjustments and/ or repairs within 48 hours, and document in writing the results of inspection, adjustments, and or repairs. After 48 hours, if the required adjustments and/ or repairs have not eliminated the visible emissions, CPSG shall perform Reference Method 9 observations once daily for a period of 18 minutes burning the fuel where visual emissions are observed until corrective actions have reduced the visible emissions to less than 10 percent opacity. **[Reference: CPCN 9677, Conditions B-IV-8; COMAR 26.11.09.05A(5), COMAR 26.11.02.02H]**. B. Control of Sulfur Oxides

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	The Permittee shall conduct the stack testing annually per the methods described in 40 CFR §60.8 (40 CFR §60.4415 and 40 CFR §60.4360] or monitor the sulfur content of each fuel combusted at a frequency prescribed in 40 CFR §60.4370 (see monitoring requirements). **[Reference: CPCN Case No. 9136, Condition B-IV-11]** C. Control of Particulate Matter The Permittee shall conduct stack test annually for PM_{10}, and $PM_{2.5}$. Unless otherwise approved by the Department, the stack testing shall be conducted in accordance with the following EPA approved test methods to determine compliance: (d) Reference Method 201A – Determination of PM_{10} and $PM_{2.5}$ Emissions From Stationary Sources and (e) Reference Method 202 – Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources. **[Reference: CPCN Case No. 9677, Condition B-IV-9]** The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9677, Condition B-IV-9]** D. Control of Nitrogen Oxides See Monitoring Requirement E. Control of GHG Emissions The Permittee shall conduct the stack testing once every 5 years. Unless otherwise approved by the Department, for each fuel burned, the performance test shall be conducted in accordance with the following EPA approved test methods to determine compliance: (b) Reference Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure) or as an alternative to annual stack testing for CO_2, and upon approval by the Department, the Permittee may choose to demonstrate compliance with emission limitations by installing and operating a certified CEMS in accordance with the performance specifications of 40 CFR Part 75, Appendix A. **[Reference: CPCN Case No. 9677, Condition B-IV-9 & MDE Letter dated June 23, 2023]** The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9136, Condition B-IV-9]** **NSPS Subpart TTTT** See Monitoring Requirement. F. Control of Ammonia Emissions

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	The Permittee shall conduct the stack testing every five (5) years for ammonia. Unless otherwise approved by the Department, the stack test shall be conducted in accordance with the following EPA approved test methods to determine compliance: (a) Conditional Test Method 027 – Procedure for Collection and Analysis of Ammonia in Stationary Sources. **[Reference: CPCN Case No. 9677, Condition B-IV-9]** The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9677, Condition B-IV-9]** G. Operational Limit See Monitoring Requirement
3.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]** B. Control of Sulfur Oxides The Permittee shall monitor the sulfur content of each fuel combusted in the turbines at a frequency prescribed in 40 CFR 60.4370. The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the affected facility. Alternately, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter may be used. A representative fuel sample shall be collected following ASTM D5287 for pipeline natural gas of ASTM D4177 or ASTM D4057 Section 14 for ULSD. The fuel analyses may be performed either by the Permittee, a service contractor, the fuel vendor, or any qualified agency. Analyze the samples for the total sulfur content of the fuel using ASTM D129 (or alternatively D1266, D1552, D2622, D4294, D5453, D5623,or D7039) for ULSD and ASTM D1072 (or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2140, 2261 or 2377) for pipeline quality natural gas. **[Reference: 40 CFR 60 §60.4415(a)(1 & 2)]** ***§60.4370*** *- How often must I determine the sulfur content of the fuel?* *The frequency of determining the sulfur content of the fuel must be as follows:*

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	*(a) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or **sampling each delivery** prior to combining it with fuel oil already in the intended storage tank).* *(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and **recorded once per unit operating day**.* Acid Rain Permit: The Permittee shall comply with the monitoring requirements in 40 CFR Part 75 including the QC/QA procedures in Part 75 Appendix B. See Acid Rain Permit in Appendix A of this permit. C. Control of Particulate Matter The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]** D. Control of Nitrogen Oxides The Permittee shall install ULSD and pipeline quality natural gas flow meters and continuously monitor each fuel flow for **CT6A and CT6B**. The pipeline quality natural gas and USLD fuel flow shall be recorded monthly. **[Reference: CPCN Case No. 9677, Condition B-IV-7]** The Permittee shall demonstrate compliance with NO_X emission standards by installing a certified NO_X CEMS in accordance with the performance specifications of 40 CFR Part 60, Appendix B or 40 CFR Part 75, Appendix A. The CEMS shall be operated and maintained to meet the quality assurance requirements of 40 CFR 60, Appendix F, and applicable requirement of 40 CFR Part 75. **[Reference: CPCN Case No. 9677, Condition B-IV-10]** The Permittee shall install and maintain a temperature gauge to accurately indicate the temperature in degrees Fahrenheit of the SCR catalyst system. During startup events, the temperature of the SCR system catalyst should be continuously monitored. **[Reference: CPCN Case No. 9677, Condition B-IV-13]** E. Control of GHG Emissions

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Monthly and 12-month consecutive rolling emissions for **CT6A and CT6B** shall be calculated as follows:
(a) The GHG emissions from CT6A and CT6B shall be calculated as follows:
(i) The CO_2 emissions shall be based on fuel flow and the measured carbon content of the fuel using the procedures specified in Appendix G of 40 CFR Part 75, or other emission factors approved by MDE-ARA.
(ii) The methane (CH_4) and nitrous oxide (N_2O) emissions shall be calculated using the procedures specified in 40 CFR Part 98 Subpart C.
(iii) The total GHG emissions shall be presented on a CO_2e basis using the following global warming potential values:

Chemical Formula	Global Warming Potential
CO_2	1
CH_4	25
N_2O	298

(iv) The total generation (MWh) shall be monitored to calculate the emission rate of (lb. CO_2e/MWh), determined each month by summing the CO_2e emissions for all hours in which power is being generated from CT6A and CT6B during the previous 12 months and dividing that value by the sum of the electrical energy output over that same period.
[Reference: CPCN Case No. 9677, Condition B-IV-12]

NSPS Subpart TTTT
§60.5535 - How do I monitor and collect data to demonstrate compliance?
"(a) Combustion turbines qualifying under §60.5520(d)(1) are not subject to any requirements in this section other than the requirement to maintain fuel purchase records for permitted fuel(s)."

F. Control of Ammonia Emissions
The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]**

G. Operational Limit
The Permittee shall maintain ULSD and pipeline quality natural gas flow meters and continuously monitor each fuel flow for **CT6A and CT6B**. The pipeline quality natural gas and USLD fuel flow shall be recorded monthly. **[Reference: CPCN Case No. 9677, Condition B-IV-7]**

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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 document in writing the results of inspection, adjustments, and/or repairs, taken to address visible emissions observed during quarterly Method 22 and/or Method 9 observations and make them available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-8 & COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain all annual fuel use records on site for not less than three years and make them available to the Department upon request. **[Reference: COMAR 26.11.09.08K(3)]** The Permittee shall maintain Representative fuel sampling records, as available if CPSG elects to demonstrate compliance with the SO_2 emissions limit in 40 CFR 60.4330 using methods described in 60.4415(a). **[Reference: CPCN Case No. 9677, Condition B-IV-23(j) & COMAR 26.11.02.02H]** *The Permittee shall maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of sulfur in fuel analysis.* **[Reference: COMAR 26.11.03.06C]** Acid Rain Permit: The Acid Rain Permit contains specific recordkeeping requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75, Subpart F]** C. Control of Particulate Matter See Operational Limit Record Keeping Requirements. D. Control of Nitrogen Oxides The Permittee shall maintain: (1) CEMS reports on site for not less than two years from the time the report was submitted and make these records available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-20 & COMAR 26.11.01.00E(2)(d)]** (2) Records of the SCR system catalyst temperature during startup events for not less than five years and make available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-22 & COMAR 26.11.02.02H]**

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	E. Control of GHG Emissions See Operational Limits Record Keeping Requirements. **NSPS Subpart TTTT** The Permittee shall maintain fuel purchase records as required by 40 CFR §60.5520(d)(1). F. Control of Ammonia Emissions See Operational Limits Record Keeping Requirements. G. Operational Limit The Permittee shall maintain the monthly and 12-month consecutive rolling GHG, NOx, PM_{10}, and $PM_{2.5}$ emissions for CT6A and CT6B. The following information for CT6A and CT6B shall be included in the quarterly report required by CPCN Case No. 9677, Condition B-III-5: a) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT. b) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events. c) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events. d) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events. e) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events. f) Total NOx emission expressed in lb./ event for each startup event and shutdown event. g) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb.CO_2/MWh gross, for each CT for each fuel burned. h) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned. i) For any period where a CT burned ULSD, an explanation for why ULSD was burned. j) Representative fuel sampling records, as available if the Permittee elects to demonstrate compliance with the SO2 emissions limit in 40 CFR 60.4330 using methods described in 60.4415(a). **[Reference: CPCN Case No. 9677, Condition B-IV-23 & COMAR 26.11.02.02H]**
3.5	**Reporting Requirements:** A. Control of Visible Emissions

Table IV – 3	
	The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides The Permittee shall report fuel supplier certifications or fuel analyses to the Department upon request. **[Reference: COMAR 26.11.09.07C]** The Permittee shall submit reports of NSPS Subpart KKKK excess emissions and monitor downtime associated with the combustion turbines, in accordance with 40 CFR 60.79(c). Excess emissions as defined in 40 CFR 60.4385 (SO_2) must be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-27]** All reports required must be postmarked by the 30th day following the end of each 6-month period. **[Reference: §60.4395]** Acid Rain Permit: The Acid Rain Permit contains specific reporting requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75, Subpart G]** C. Control of Particulate Matter At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval: a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA. **[Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.02.02H]**. Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. **[Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.01.05B & C]**. D. Control of Nitrogen Oxides The Permittee shall submit the following CEMS reports to MDE-ARA for all CEMS required to be operated with the CTs:

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	a) CEMS System Downtime Reports - All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to MDE-ARA by telephone before 10 a.m. on the first regular business day following the breakdown. [COMAR 26.11.01.IIE(I)] b) Quarterly CEMS Summary Reports - A quarterly summary report shall be submitted to MDE-ARA not later than 30 days following each calendar quarter. The report shall be in a format approved by MDE-ARA and shall include the information required under COMAR 26.11.01.11E(2)(c)(i)-(vii). [COMAR 26.11.01.11E(2)(c)] **[Reference: CPCN Case No. 9677, Condition B-IV-19]** c) Reports of NSPS Subpart KKKK excess emissions and monitor downtime associated with the combustion turbines, in accordance with 40 CFR 60.79(c). Excess emissions as defined in 40 CFR 60.4380 (NO_x) must be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-27]** All reports required must be postmarked by the 30th day following the end of each 6-month period. **[Reference: §60.4395]** E. Control of GHG Emissions At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval: a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA. **[Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.02.02H]**. Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. **[Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.01.05B & C]** **NSPS Subpart TTTT** See Record Keeping Requirements. F. Control of Ammonia Emissions At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval:

Table IV – 3	
	a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA. **[Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.02.02H]**. Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. **[Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.01.05B and C]** G. Operational Limit The Permittee shall submit a quarterly report to MDE-ARA to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: a) Monthly and consecutive rolling 12-month emissions (in tons per month and tons per year) of PM_{10}, $PM_{2.5}$, NO_X, and GHGs (as CO_2e) for the entire Perryman 6 Project. b) Additional emissions source specific supporting documentation as defined within each emissions source section of conditions. [COMAR 26.11.02.02H] **[Reference: CPCN Case No. 9677, Condition B-III-5]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

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4.0	**Emissions Unit Number(s): EG6, FWP6 & GS** **EG6**: One (1) diesel-fired emergency generator rated at 268-hp **(MDE Reg. No. 025-0024-9-0492)**. **FWP6**: One (1) diesel-fired emergency firewater pump engine rated at 350-hp **(MDE Reg. No. 025-0024-9-0502)** **GS**: Two (2) diesel-fired emergency generator sets (gensets), each rated at 3,010-kW. The generators will be used to start Units 1, 3 and 4 during a systemwide power outage. **(MDE Reg. No. 025-0024-9-0532)** These generators are only fired with ultra-low sulfur diesel (ULSD).
4.1	**Applicable Standards/Limits:**

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A. Control of Visible Emissions
COMAR 26.11.09.05E - Visible Emissions.
(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(3) 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) Sections 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 - Control of Sulfur Oxides From Fuel Burning Equipment. "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: (**2**) In Areas III and IV: (**b**) Distillate fuel oils, 0.3 percent;"

The only permissible fuel for the emergency generator, firewater pump engine, and each emergency genset is ULSD with a sulfur content not to exceed 15 parts per million by weight. **[Reference: CPCN Case No. 9677, Condition B-V-1]**

The emergency generator, firewater pump engine, and each emergency genset must be fitted with a non-resettable hour meter prior to startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8 & 40 CFR §60.4209(a)]**

C. Control of Nitrogen Oxides
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.

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"(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(e) Maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request."

D. NSPS

40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The emergency generator, firewater pump engine, and each emergency genset must meet the following emissions limits for the entire life of the engines:

Pollutant	Each emergency genset (**GS**)	Emergency Generator (**EG6**)	Firewater Pump Engine (**FWP6**)
	Emissions Limit g/kW-hr (g/hp-hr.)	Emissions Limit g/kW-hr (g/hp-hr.)	Emissions Limit g/kW-hr (g/hp-hr.)
NO_X + NMHC	6.4 (4.8)	4.0 (3.0)	4.0 (3.0)
CO	3.5 (2.5)	3.5 (2.0)	n/a
PM (filterable only)	0.20 (0.15)	0.20 (0.15)	0.20 (0.15)

[Reference: 40 CFR §60.4205 & §60.4206 & CPCN Case No. 9766, Condition B-V-3.]

Note: The emergency generator actually installed on the project was 268-hp, not the 1300-hp engine specified in the application and CPCN. Thus, the emission limit for NO_X+NHMC was reduced from 6.4 to 4.0 g/kW-hr to reflect the requirements in 40 CFR 60, Subpart IIII.

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	The emergency generator, firewater pump engine, and each emergency genset must be certified to meet the emission standards of 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph 40 CFR 60.4211(g). **[Reference: CPCN Case No. 9677, Condition B-V-4(b) & 40 CFR §60.4211(c)]** The emergency generator and each emergency genset may only be operated for emergencies, maintenance, and testing purposes; any other operation is prohibited. Operation of the emergency generator and each emergency genset for maintenance and testing purposes is limited to a maximum of 100 hours per year. There is no limit on emergency usage. **[Reference: CPCN Case No. 9677, Condition B-V-4(c) & 40 CFR §60.4211(f)]** The firewater pump engine may operate for emergencies, maintenance and testing purposes and non-emergency purposes as defined in 40 CFR §60.4211(f)(3). Operation of the engine for maintenance and testing is limited to a maximum of 100 hours per year. Operation of firewater pump engine for non-emergency purposes is limited to a maximum of 50 hours per year and counts as part of the total maximum 100 hours per year limit. There is no limit on emergency usage. **[Reference: CPCN Case No. 9677, Condition B-V-4(d) & 40 CFR §60.4211(f)]** The emergency generator, firewater pump engine and each emergency genset shall not have PM_{10} and $PM_{2.5}$ total emissions (filterable and condensable) exceed 0.17 g/hp-hr. with PM condensable emissions alone not to exceed 0.02 g/hp-hr. **[Reference: CPCN Case No. 9766, Condition B-V-6]** NESHAP: To satisfy the requirements of 40 CFR Part 63, Subpart ZZZZ, the emergency generator, firewater pump engine and each emergency genset shall comply with all the applicable requirements of NSPS Subpart IIII. **[Reference: CPCN Case No. 9677, Condition B-V-5]**
4.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirement. B. Control of Sulfur Oxides

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	See Monitoring Requirement. C. Control of Nitrogen Oxides See Monitoring Requirement D. NSPS See Monitoring Requirements
4.3	**Monitoring Requirements:** A. Control of Visible Emissions The emergency generator, firewater pump engine, and each emergency genset shall be operated and maintained in accordance with the manufacturer's emission-related written instructions, changing only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as applicable. **[Reference: CPCN Case No. 9677, Condition B-V-9 & 40 CFR §60.4211(a)]** B. Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel oil supplier indicating that the oil complies with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analyses of oil that is representative of oil burned. **[Reference: COMAR 26.11.09.07C & CPCN Case No. 9677, Condition B-V-7]** C. Control of Nitrogen Oxides The emergency generator, firewater pump engine, and each emergency genset must be fitted with a non-resettable hour meter prior to startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8]** D. NSPS The emergency generator, firewater pump engine and each emergency genset shall be operated and maintained in accordance with the manufacturer's emission-related written instructions, changing only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as applicable. The emergency generator and firewater pump engine were fitted with a non-resettable hour meter prior to startup of each engine. Each

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	emergency genset will be fitted with a non-resettable hour meter prior to the startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8 & 9]**
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)]** A. Control of Visible Emissions See Reporting Requirement. B. Control of Sulfur Oxides The Permittee shall maintain: All annual fuel records for the project. A certification from the fuel supplier indicating that the ULSD complies with the limitation of sulfur content in the fuel oil. The certification should include the name of the supplier, the date of delivery, the amount of fuel delivered, the method used to determine the sulfur content of the oil, and a statement from the fuel supplier that the ULSD complies with the specifications of 40 CFR 80.510. **[Reference: CPCN Case No. 9677, Condition B-V-7, and B-V-14]** C. Control of Nitrogen Oxides The Permittee shall maintain: Results of any combustion analyses on the emergency generator, firewater pump engine, and each emergency genset. Records of training program attendance for each operator of the emergency generator, firewater pump engine, and each emergency genset. **[Reference: CPCN Case No. 9677, Condition B-V-11(a)-(b)]** D. NSPS The Permittee shall maintain: All annual fuel records for the project. Results of any combustion analysis on the emergency generator, firewater pump engine and each emergency genset. **[Reference: CPCN Case No. 9677, Condition B-IV-21 & B-V-11(a) and COMAR 26.11.09.08.09G(1)(c)]**
4.5	**Reporting Requirements:** A. Control of Visible Emissions

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	The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset: The monthly and 12-month consecutive rolling emissions; The monthly and 12-month consecutive rolling hours of operation; The monthly and 12-month consecutive rolling quantity of ULSD burned; The reason the engine was in operation for each time operated. **[Reference: CPCN Case No. 9677, Condition B-V-16]** C. Control of Nitrogen Oxides The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset: The monthly and 12-month consecutive rolling emissions; The monthly and 12-month consecutive rolling hours of operation; The monthly and 12-month consecutive rolling quantity of ULSD burned; The reason the engine was in operation for each time operated. **[Reference: CPCN Case No. 9677, Condition B-V-16]** D. NSPS The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset: The monthly and 12-month consecutive rolling emissions; The monthly and 12-month consecutive rolling hours of operation; The monthly and 12-month consecutive rolling quantity of ULSD burned; The reason the engine was in operation for each time operated. **[Reference: CPCN Case No. 9677, Condition B-V-16]**

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A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

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5.0	**Emissions Unit Number(s): FUG6, CB6 & PR6.** **FUG6**: Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices. **CB6**: Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6). **PR6**: Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.
5.1	**Applicable Standards/Limits:** Operational Limit For **FUG6** only **GHG BACT Emission Limit** - The GHG emissions from FUG6 shall be included as part of the Project-wide GHG emissions limit listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677, Condition B-VI-1]** For **CB6** only **GHG BACT Emission Limit** - The GHG Emissions from CB6 shall be included as part of the Project-wide GHG emissions limit listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677, Condition B-VII-1]** For **PR6** only **BACT/LAER Emission Limits** - The PM_{10} and $PM_{2.5}$ emissions from PR6 shall be included as part of the Project-wide PM_{10} and $PM_{2.5}$ emissions limits listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677,Condition B-VIII-1; COMAR 26.11.02.02H]**
5.2	**Testing Requirements:** Operational Limit For **FUG6** only

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See Monitoring Requirements.

For **CB6** only
See Monitoring Requirements

For **PR6** only
See Record Keeping Requirements

5.3 Monitoring Requirements:

Operational Limit
For **FUG6** only
Monthly and 12-month consecutive rolling emissions shall be calculated as follows:
(a) The GHG emissions shall be based on EPA AP-42 emission factors, methodology described in 40 CFR Part 98 Subpart W, or other emission factors approved by the Department.
(b) The total GHG emissions from FUG6 shall be presented on a CO_2e basis using the following global warming potential values:

Chemical Formula	Global Warming Potential
CO_2	1
CH_4	25

GHG BACT for FUG6 shall be the implementation of an audio, visual, and olfactory (AVO) program. Fugitive GHG emissions shall be evaluated on a weekly basis from the natural gas pipeline and associated components through implementation of an AVO program. The AVO inspections shall be documented. Leaks identified from the AVO assessment shall be repaired within five days of discovery; repairs shall be documented, and associated repair records shall be maintained.
[Reference: CPCN Case No. 9677, Condition B-VI-2(a)-(b) & B-VI-3; and 40 CFR 98]

For **CB6** only
Monthly and 12-month consecutive rolling emissions for **CB6** shall be calculated as follows:
(a) SF6 emissions 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 **CB6** shall be presented on a CO_2e basis using a global warming potential value of 23,900 for SF6.
(c) GHG BACT for **CB6** shall be installation of a state-of-the-art circuit breaker that is designed to meet ANSI C37.013 or equivalent to detect and minimize SF6 leaks. Leaks detected shall be repaired within five days

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	of discovery; repairs shall be documented, and associated repair records shall be maintained. **[Reference: CPCN Case No. 9677, Condition B-VII-2(a)-(b) & B-VII-3; COMAR 26.11.02.02H; 40 CFR 98]** For **PR6** only Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions for **PR6** shall be calculated based on EPA AP-42 emission factors or other emission factors approved by MDE-ARA. PM_{10} BACT and $PM_{2.5}$ LAER for **PR6** shall be to minimize PM_{10} and $PM_{2.5}$ emissions by taking reasonable precautions to prevent particulate matter from becoming airborne. **[Reference: CPCN Case No. 9677, Condition B-VIII-2 & B-VIII-3; COMAR 26.11.02.02H]**
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 Limit For **FUG6** only: The Permittee shall maintain all records of monitoring and repair associated with FUG6 for at least 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 MDE-ARA. The Permittee shall maintain a record of the monthly and 12-month consecutive rolling GHG emissions for FUG6. The emissions and supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: COMAR 26.11.02.02H; CPCN Case No. 9677, Condition B-VI-4 & B-VI-5]** For **CB6** only: The Permittee shall maintain all records of monitoring and repair associated with CB6 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 representatives of MDE-ARA. The Permittee shall maintain a record of the monthly and 12-month consecutive rolling GHG emissions for CB6. The emissions and supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: CPCN Case No. 9677, Condition B-VII-4 & B-VII-5; COMAR 26.11.02.02H]** For **PR6** only: The Permittee shall maintain a record of the monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions for PR6. The emissions and

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	supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: CPCN Case No. 9677, Condition B-VIII-4; COMAR 26.11.02.02H]**
5.5	**Reporting Requirements:** Operational Limit For **FUG6** only: The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling GHG emissions from fugitive sources. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VI-5]** For **CB6** only: The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VII-5]** For **PR6** only: The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VIII-4]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

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6.0	**Emissions Unit Number(s): CT6A & CT6B, EG6, FWP6, FUG6, CB6 & PR6; (Project-wide)** **CT6A & CT6B:** One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633

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MMBtu), sharing a single stack. **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354]**

EG6: One (1) diesel-fired emergency generator rated at 268-hp **(MDE Reg. No. 025-0024-9-0492)**.

FWP6: One (1) diesel-fired emergency firewater pump engine rated at 350-hp **(MDE Reg. No. 025-0024-9-0502)**

FUG6: Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices.

CB6: Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6).

PR6: Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.

6.1 **Applicable Standards/Limits:**

Operational Limit

Emissions for all sources identified as part of the Perryman 6 Project including emissions during periods of startup and shutdown, shall be limited to the following, in tons per year, in any consecutive 12-month rolling period:

Pollutant	Project-Wide Emission Limit (tpy)
Greenhouse (GHG) as Carbon Dioxide Equivalent (CO_2e)	430,120
Particulate Matter less than 10 microns (PM_{10}) Filterable and Condensable	43.0
Particulate Matter less than 2.5 microns ($PM_{2.5}$) Filterable and Condensable	43.0
Nitrogen Dioxides	58.5

[Reference: CPCN Case No. 9677, Conditions B-III-3 & COMAR 26.11.02.02H]

BACT/LAER Emissions Limit: The GHG, NOx, PM_{10}, and $PM_{2.5}$ emissions from CT6A and CT6B shall be included as part of the Project-wide emissions limit listed in Condition B-III-3. **[Reference: CPCN Case No. 9677, Conditions B-IV-5 & COMAR 26.11.02.02H]**.

6.2 **Testing Requirements:**

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	Operational Limit See Monitoring Requirements
6.3	**Monitoring Requirements:** Operational Limit The Permittee shall calculate monthly and consecutive 12-month emissions (in tons per month and tons per year) of GHGs (as CO_2e), PM_{10}, $PM_{2.5}$, and NO_X for the entire Perryman 6 Project. **[Reference: CPCN Case No. 9677, Condition B-III-4 & COMAR 26.11.02.02H]**
6.4	**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 Limit The Permittee shall maintain the monthly and 12-month consecutive rolling GHG, NO_X, PM_{10},and $PM_{2.5}$ emissions for CT6A and CT6B. The following information for CT6A and CT6B shall be included in the quarterly report required by Condition B-III-5: a) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT. b) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events. c) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events. d) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events. e) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events. f) Total NOx emission expressed in lb./ event for each startup event and shutdown event. g) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb. CO_2/MWh gross, for each CT for each fuel burned. h) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned. i) For any period where a CT burned ULSD, an explanation for why ULSD was burned. j) For the EG6 and FW6, the monthly and 12-month consecutive rolling emissions; Monthly and 12-month consecutive rolling hours of operation; Monthly and 12-month consecutive rolling quantity of ULSD burned.

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	k) For FUG6, monthly and 12-month consecutive rolling GHG emissions from FUG6. l) For CB6: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker. m) For PR6: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads. **[Reference: CPCN Case No. 9677, Condition B-IV-23 (a)-(i); B-V-16(a)-(c), B-VI-5, B-VII-5 & B-VIII-4]**
6.5	**Reporting Requirements:** Operational Limit The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: For CT6A & CT6B: (a) Monthly and consecutive rolling 12-month emissions (in tons per month and tons per year) of GHGs (as CO_2e), PM_{10}, $PM_{2.5}$, and NO_X for the entire Perryman 6 Project. **[Reference: CPCN 9677, Condition B-III-5]** (b) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT. (c) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events. (d) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events. (e) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events. (f) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events. (g) Total NOx emission expressed in lb./ event for each startup event and shutdown event. (h) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb.CO_2/MWh gross, for each CT for each fuel burned. (i) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned. (j) For any period where a CT burned ULSD, an explanation for why ULSD was burned. (k) For the EG6 and FW6, the monthly and 12-month consecutive rolling emissions; Monthly and 12-month consecutive rolling hours of operation; Monthly and 12-month consecutive rolling quantity of ULSD burned.

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	(l) For FUG6, monthly and 12-month consecutive rolling GHG emissions from FUG6. (m) For CB6: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker. (n) For PR6: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads. **[Reference: CPCN Case No. 9677, Condition B-III-5(a)-(b), B-IV-23(a)-(i), B-V-16(a)-(c), B-VI-5, B-VII-5 & B-VIII-4]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above.

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7.0	**Emissions Unit Number(s): PY-Unit1, PY-Unit3, PY-Unit4, PY-Unit51, CT6A and CT6B.** **PY-Unit1, PY-Unit3 & PY-Unit4:** Three (3) Westinghouse model 501 simple cycle combustion turbines, each with a design heat input of 704 MMBtu/hr., rated at a nominal 51 MW output and capable of only burning No.2 distillate oil. **[MDE Reg Nos. 12-4-0081, 12-4-0083 & 12-4-0084]** **PY-Unit51:** General Electric Frame 7FA stationary, single-shaft combustion turbine operating in the simple cycle mode, rated at a nominal 150-MW output. This turbine has dual fuel (natural gas and No. 2 fuel oil) firing capacity. **[MDE Reg No. 12-5-0088]** **CT6A & CT6B:** One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354]**
7.1	**Applicable Standards/Limits:** **COMAR 26.11.28.02** - Requirements. A. This chapter incorporates by reference the U.S. EPA CSAPR and the CSAPR Update, including the definitions, criteria, and procedures therein. B. Trading Program Requirements. (1) This chapter incorporates by reference provisions of the CSAPR NO_X Annual Trading Program set forth in 40 CFR Part 97, Subpart AAAAA, as published July 1, 2017, and associated reference methods, performance specifications, and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §97.411(b)(2) and (c)(5)(iii), 97.412(b), and 97.421(h) and (j).

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	(2) This chapter incorporates by reference provisions of the CSAPR NO_x Ozone Season Group 3 Trading Program set forth in 40 CFR Part 97, Subpart EEEEE, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.811(b)(2) and (c)(5)(iii), 97.812(b), and 97.821(h) and (j). (***This is superseded by Group 3 Subpart GGGGG published April 30, 2021, effective June 29, 2021***). (3) This chapter incorporates by reference provisions of the CSAPR SO_2 Group 1 Trading Program set forth in 40 CFR Part 97, Subpart CCCCC, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.611(b)(2) and (c)(5)(iii), 97.612(b), and 97.621(h) and (j). **A. 40 CFR Part 97 Subpart AAAAA—CSAPR NO_x Annual Trading Program** **§97.406** - Standard requirements. "(a) ***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 §§97.413 through 97.418. (b) ***Emissions monitoring, reporting, and recordkeeping requirements***. (1) 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 §§97.430 through 97.435. (2) The emissions data determined in accordance with §§97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under §§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. (c) ***NO_x emissions requirements***—(1) *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

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	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 than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source. (ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x 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 NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under §97.424(d); and (B) The owners and operators of the source and each CSAPR NO_x 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. (2) *CSAPR NO_x Annual assurance provisions*. (i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x 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 NO_x 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 NO_x 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 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 Annual units at CSAPR NO_x Annual sources in the State (and Indian

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	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 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 NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x 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 NO_x emissions exceed the sum, for such control period, of the State NO_x 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 NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x 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 NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x 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 NO_x 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 NO_x 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 constitute a separate violation of this subpart and the Clean Air Act. (3) *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. (4) *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

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	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. (5) *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 this subpart. (6) *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 this subpart, 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. (7) *Property right*. A CSAPR NO_x Annual allowance does not constitute a property right. (**d**) ***Title V permit requirements***. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with this subpart. (2) 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 §§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 §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (**e**) ***Additional recordkeeping and reporting requirements***. (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x

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	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 certificate of representation under §97.416 changing the designated representative. (ii) All emissions monitoring information, in accordance with this subpart. (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 Annual Trading Program. (2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x 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. (**f**) ***Liability***. (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source. (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit. (**g**) ***Effect on other authorities***. No provision of the CSAPR NO_x 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 NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act."

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	B. 40 CFR Part 97 Subpart CCCCC—CSAPR SO_2 Group 1 Trading Program **§97.606** - Standard requirements. "(a) ***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 §§97.613 through 97.618. (b) ***Emissions monitoring, reporting, and recordkeeping requirements***. (1) 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 §§97.630 through 97.635. (2) The emissions data determined in accordance with §§97.630 through 97.635 shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under §§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 determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§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. (c) ***SO_2 emissions requirements***—(1) *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 §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 §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

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	control period shall constitute a separate violation of this subpart and the Clean Air Act. (2) *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 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 §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 §97.625(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such SO_2 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 this subpart 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)

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	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 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 this subpart and the Clean Air Act. (3) *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 §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 §97.630(b) and for each control period thereafter. (4) *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. (5) *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 this subpart.

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	(6) *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 this subpart, 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. (7) *Property right*. A CSAPR SO_2 Group 1 allowance does not constitute a property right. (**d**) ***Title V permit requirements***. (1) 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 this subpart. (2) 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 (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.630 through 97.635 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 §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (**e**) ***Additional recordkeeping and reporting requirements***. (1) 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 §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

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	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 this subpart. (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. (2) 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 §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. (f) ***Liability***. (1) 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. (2) 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. (g) ***Effect on other authorities***. No provision of the CSAPR SO_2 Group 1 Trading Program or exemption under §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." **C. 40 CFR Part 97 Subpart GGGGG - CSAPR NO_X Ozone Season Group 3 Trading Program** **§97.1006** Standard requirements. (a) ***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 §§97.1013 through 97.1018. (b) ***Emissions monitoring, reporting, and recordkeeping requirements.*** (1) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall comply with the

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	monitoring, reporting, and recordkeeping requirements of §§97.1030 through 97.1035. (2) The emissions data determined in accordance with §§97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NOx Ozone Season Group 3 allowances under §§97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NOx Ozone Season Group 3 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 §§97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (c) ***NOx emissions requirements*** - (1) *CSAPR NOx Ozone Season Group 3 emissions limitation.* (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NOx Ozone Season Group 3 source and each CSAPR NOx Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NOx Ozone Season Group 3 allowances available for deduction for such control period under §97.1024(a) in an amount not less than the tons of total NOx emissions for such control period from all CSAPR NOx Ozone Season Group 3 units at the source. (ii) If total NOx emissions during a control period in a given year from the CSAPR NOx Ozone Season Group 3 units at a CSAPR NOx Ozone Season Group 3 source are in excess of the CSAPR NOx Ozone Season Group 3 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 3 unit at the source shall hold the CSAPR NOx Ozone Season Group 3 allowances required for deduction under §97.1024(d); and (B) The owners and operators of the source and each CSAPR NOx Ozone Season Group 3 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. (2) *CSAPR NOx Ozone Season Group 3 assurance provisions.* (i) If total NOx emissions during a control period in a given year from all base CSAPR NOx Ozone Season Group 3 units at base CSAPR NOx Ozone Season Group 3 sources in a State (and Indian country within the

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	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 NO_x 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 NO_x Ozone Season Group 3 allowances available for deduction for such control period under §97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.1025(b), of multiplying - (A) The quotient of the amount by which the common designated 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 base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 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 base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 trading budget under §97.1010(a), the State's variability limit under §97.1010(b), and, for the control period in 2021 only, the product (rounded to the nearest allowance) of 1.21 multiplied by the supplemental amount of CSAPR NO_x Ozone Season Group 3 allowances determined for the State under §97.1010(d). (iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO_x emissions from all base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period

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	exceed the State assurance level or if a common designated representative's share of total NO_x emissions from the base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 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 NO_x Ozone Season Group 3 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. (3) *Compliance periods*. (i) A CSAPR NO_x Ozone Season Group 3 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, 2021, or the deadline for meeting the unit's monitor certification requirements under §97.1030(b) and for each control period thereafter. (ii) A base CSAPR NO_x Ozone Season Group 3 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, 2021, or the deadline for meeting the unit's monitor certification requirements under §97.1030(b) and for each control period thereafter. (4) *Vintage of CSAPR NO_x Ozone Season Group 3 allowances held for compliance*. (i) A CSAPR NO_x Ozone Season Group 3 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 3 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 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 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. (5) *Allowance Management System requirements*. Each CSAPR NO_x Ozone Season Group 3 allowance shall be held in, deducted from, or

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	transferred into, out of, or between Allowance Management System accounts in accordance with this subpart. (6) *Limited authorization.* A CSAPR NO_x Ozone Season Group 3 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 3 Trading Program; and (ii) Notwithstanding any other provision of this subpart, 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. (7) *Property right.* A CSAPR NO_x Ozone Season Group 3 allowance does not constitute a property right. **(d) *Title V permit requirements.*** (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 3 allowances in accordance with this subpart. (2) 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 §§97.1030 through 97.1035 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 §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. **(e) *Additional recordkeeping and reporting requirements.*** (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 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 §97.1016 for the designated representative for the source and each CSAPR NO_x Ozone Season

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	Group 3 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 §97.1016 changing the designated representative. (ii) All emissions monitoring information, in accordance with this subpart. (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 Ozone Season Group 3 Trading Program. (2) The designated representative of a CSAPR NOx Ozone Season Group 3 source and each CSAPR NOx Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NOx Ozone Season Group 3 Trading Program, except as provided in §97.1018. 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. (f) ***Liability.*** (1) Any provision of the CSAPR NOx Ozone Season Group 3 Trading Program that applies to a CSAPR NOx Ozone Season Group 3 source or the designated representative of a CSAPR NOx Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NOx Ozone Season Group 3 units at the source. (2) Any provision of the CSAPR NOx Ozone Season Group 3 Trading Program that applies to a CSAPR NOx Ozone Season Group 3 unit or the designated representative of a CSAPR NOx Ozone Season Group 3 unit shall also apply to the owners and operators of such unit. (g) ***Effect on other authorities.*** No provision of the CSAPR NOx Ozone Season Group 3 Trading Program or exemption under §97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOx Ozone Season Group 3 source or CSAPR NOx Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.
7.2	**Testing Requirements:** **A, B** & **C**: See Monitoring Requirements.
7.3	**Monitoring Requirements:**

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	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 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. The Permittee operates a 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). **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program** The Permittee shall comply with the monitoring requirements found in §97.1006; §97.1030; §97.1031, §97.1032, and §97.1033 for the NO_X Ozone Season Group 3 Trading Program.
7.4	**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. 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 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. **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program** The Permittee shall comply with the recordkeeping requirements found in §97.1006; §97.1030 and §97.1034 for the NO_X Ozone Season Group 3 Trading Program.
7.5	**Reporting Requirements:**

Table IV–7: Cross State Air Pollution Rule (CSAPR)	
	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 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. **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_x Ozone Season Group 3 Trading Program** The Permittee shall comply with the reporting requirements found in §97.1006; §97.1030 and §97.1034 for the NO_x Ozone Season Group 3 Trading Program.

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. 2 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The [*affected units*] are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) 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.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes.
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

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

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

(a) No. 5 Storage of lubricating oils;

(b) No. 9 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(4) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(5) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

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

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 consumed 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."

CONSTELLATION POWER SOURCE GENERATION, LLC.
PERRYMAN GENERATING STATION
900 CHELSEA ROAD, PERRYMAN MD 21130
PERMIT NO. 24-025-0024
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

The Perryman Generating Station (Perryman Station) is an electric generating station located in eastern Harford County. The facility generates electricity for peak loads. The SIC code for this facility is 4911.

The Perryman Station consists of three (3) identical Westinghouse model 501 simple cycle combustion turbines (**PY-Unit1, PY-Unit3, & PY-Unit4**) capable of burning only distillate oil; one (1) General Electric Frame 7FA simple cycle combustion turbine with dual fuel firing capability; and a Pratt & Whitney 120-MW gas turbine electric generator package, comprised of two identical simple cycle combustion turbines (**CT6A & CT6B**) and associated facilities (Perryman 6 Project). **PY-Unit2** retired in 2016.

The Public Service Commission (PSC) issued a Certificate of Public Convenience and Necessity (**CPCN Case No.8241**) for the Perryman **PY-Unit51** on July 16, 1993. This CPCN was amended on December 22, 1999 (Order No. 75847) to include hourly emission limits for sulfur oxides when burning No. 2 oil with 0.2 percent sulfur content. PY-Unit51 consists of a General Electric stationary, single-shaft combustion turbine operating in simple cycle mode. The combustion turbine drives a generator set rated at a nominal 140 MW output. This turbine has dual fuel (natural gas and No. 2 oil) firing capability. Fuel firing is dependent upon cost and availability of the fuel. When firing natural gas, the unit operates in the dry low NO_X or premix mode. Natural gas and air are premixed prior to the combustion zone for NO_X control. Water injection is used for NO_X control when firing No. 2 fuel oil. The CPCN conditions restrict NO_X emissions to 25 ppm when firing natural gas and 65 ppm when firing No. 2 fuel oil. The Perryman Unit51 is subject to 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines.

Note: CPCN #8241 was issued for two-combined cycle generating units (**PY-Unit51 and PY-Unit52**). **PY-Unit52** was never constructed. In addition, the two units were to be constructed in two phases. The first phase was the construction of two 140 MW simple cycle combustion turbines. In the second phase, the two simple cycle units were to be converted to one 440 MW combined cycle unit through the addition of a heat recovery steam generator and a steam-turbine generator. The second phase was also never constructed. The CPCN contains emission limits that are applicable during "Power Augmentation". Power augmentation would only occur during combined cycle operation. Since the combined cycle phase was never constructed, these emission limits have not been included in the Part 70 operating permit.

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The Public Service Commission (PSC) issued a Certificate of Public Convenience and Necessity (**CPCN Case No.9136**) for the Perryman 6 Project on May 19, 2014. The Perryman 6 Project consists of construction and operation of a nominal 120-megawatt (MW) generator set consisting of two (2) identical simple cycle natural-gas fired combustion turbines (**CT6A & CT6B**) and associated facilities (**EG6, FWP6, FUG6, CB6 & PR6**).

Each of the five combustion turbines is equipped with a single discharge stack.

New Source Performance Standards (NSPS) – 40 CFR Part 60
Several emission units at the Perryman Generating Station are subject to the following NSPS:

Subpart GG for Stationary Gas Turbines applies stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired which commences construction, modification, or reconstruction after October 3, 1977. (**PY-Unit51**)

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. (**EG6, FWP6 & GS**)

Subpart KKKK for Combustion Turbines: Standards of Performance for Stationary Combustion Turbines applies 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. (**CT6A & CT6B**)

Subpart TTTT for Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units (**CT6A & CT6B**)

National Emission Standard for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63
Perryman Generating Station is not a major HAP Emissions Source. Instead, it is an area HAP emission source and is subject to the following MACTs:

Subpart YYYY – Stationary Combustion Turbines: the combustion turbines are not subject to this requirement because the Perryman Generating Station is not a major HAP source.

Subpart ZZZZ — Stationary Reciprocating Internal Combustion Engines.

Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions. (**EG6, FWP6 & GS**)

CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

The following changes and/or modifications have been incorporated into the renewal Title V – Part 70 Operating Permit for the Perryman Generating Station:

The Public Service Commission (PSC) issued a Certificate of Public Convenience and Necessity (**CPCN Case No.9677**) for the modification Perryman Generating Station on August 19, 2022. The Perryman Generating Station modification consists of adding two (2) 3010-kW diesel generator sets to enable Perryman Generating Station three (3) existing combustion turbines (**PY-Units 1, 3 & 4**) to self-start as opposed to relying on electrical power from the grid for the purpose of plant startup ("Reliability" capability project). The two (2) emergency gensets (**GS**) will total 6.02-MW.

PY-Unit2 was deactivated in 2016 and permanently retired as of December 31, 2016. The Department received the "Retired Unit Exemption" Acid Rain and CSAPR Trading programs application for the unit.

Letter dated June 23rd, 2023, from the Department approving CPSG Perryman's request to reduce the frequency of annual CO_2 stack testing of Unit 6 [**CT6A and CT6B**] to once every 5 years.

Amendment

On January 31, 2024, the Public Service Commission (PSC) granted the motion to amend CPCN Case No. 9677, Condition B-IV-1 for Perryman Generating Station. The amendment is required to allow Perryman to reliably perform during emergency events declared by PJM Interconnection, L.L.C. ("PJM"), thereby ensuring reliable power service for Maryland customers during those times. Moreover, the amendment will not alter, nor change Perryman's previously approved fuel sources, previously approved air emissions restrictions, or Perryman's previously approved hours of operation. To better equip Perryman to perform during grid emergencies, the amended Conditions B-IV-1 now reads as follows: Fuel Type Limits — The only permissible fuels for CT6A and CT6B are pipeline quality natural gas and ULSD. *In order to avoid a forced outage*, ULSD may only be used: *(1)* during periods of interruption of the natural gas supply, *or (2) when PJM issues an emergency alert and natural gas supply is unavailable.*

On February 8, 2024, the Department received an application for minor modification to the Part 70 permit for Perryman Generating Station. An

administrative completeness review was conducted, and the application was deemed to be administratively complete. A completeness determination letter was sent to Perryman Generating Station on February 14, 2024, granting Perryman Generating Station an application shield.

This permit supersedes Part 70 Operating Permit No. 24-025-0024 issued November 1, 2023.

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

Table 1: Actual Emissions

Year	NOx (TPY)	SOx (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2022	95.5	0.9	8.7	15.5	3.3	0
2021	66.1	0.8	5.5	10.5	2.5	0
2020	104.0	0.6	5.9	8.2	1.6	0
2019	51.0	0.6	7.0	10.1	2.2	0.78
2018	160	0.9	7.49	12.5	2.9	0.27
2017	80	8	2	10.4	2.3	0.11

The major source threshold for triggering Title V permitting requirements in Harford county is 25 tons per year for VOC, 25 tons for NOx, 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 NOx emission from the facility are greater than the major source threshold, Perryman Generating Station is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

As a major source of NOx, this facility is also subject to the requirements of Reasonably Available Control Technology (RACT) for NOx found in COMAR 26.11.09.08. Perryman is also subject to the Cross-State Air Pollution Rule (CSAPR) which replaced the Clean Air Interstate Rule (CAIR). The facility was subject to the NOx Reduction and Trading Program which expired at the end of 2008. Perryman is subject to the requirements of the Regional Greenhouse Gas Initiative (RGGI), a Maryland state-only enforceable program. Under these regulations, Perryman Generating Station will be required to obtain a RGGI permit.

The Department on October 25, 2022, received Perryman Generating Station's Part 70 renewal permit application. An administrative completeness review was conducted, and the application was deemed to be administratively complete. A

COMPLIANCE ASSURANCE MONITORING (CAM)

Perryman Generating Station conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that the facility is not subject to the (CAM) Rule 40 CFR Subpart 64. 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.

The Perryman Generating Station is not subject to CAM requirements because none of the units (**PY-Units 1, 3, 4, 51, CT6A and CT6B**) use control devices to achieve compliance with their emission limits.

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.

The Perryman **PY-Unit51, CT6A & CT6B** are Phase II units under the Title IV Acid Rain Program. The renewal Phase II Acid Rain Permit is attached as Appendix A. In order to comply with the requirements of the 1990 Clean Air Amendments, as prescribed in 40 CFR §75, Constellation has installed a Continuous Emissions Monitoring (CEM) system to continuously monitor the NO_X and CO_2 concentrations in the exhaust gases from this unit.

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.

On September 7, 2016, EPA finalized the CSAPR Update, which further reduced NOx emissions from EGUs in 22 states during the ozone season, May 1 thru September 30, thereby reducing pollution transport and helping downwind states achieve and maintain the 2008 ozone standard (75 ppb). On October 26, 2016, CSAPR Update was published in the federal register, with an effective date of December 27, 2016.

On March 15, 2021, EPA finalized the Revised Cross-State Air Pollution Rule Update for the 2008 ozone National Ambient Air Quality Standards (NAAQS). Starting in the 2021 ozone season, the rule will require additional emissions reductions of nitrogen oxides (NOx) from power plants in 12 states, improving air quality for millions of Americans. The final rule was published in the Federal Register on April 30, 2021, with an effective date of June 29, 2021.

This renewal Part 70 permit identifies the applicable regulations of the CSAPR rule as found in 40 CFR Part 97 subparts AAAAA- NOx Annual Trading Program, subparts GGGGG- CSAPR NOx Ozone Season Group 3 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

The Perryman Generating Station emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from combustion turbine power generation. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certification reports for the years 2019, 2020, and 2021, showed that the Perryman Generating Station is a major source (threshold: 100,000tpy CO_2e) for GHGs (see Table 2 shown below). The Permittee shall quantify facility wide GHG emissions and report them in accordance with Section 3 of the Part 70 permit.

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

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2019 tpy CO_2e	2020 tpy CO_2e	2021 tpy CO_2e
Carbon dioxide CO_2	1	135,956	140,663	159,036

Methane CH_4	25	3.1	3.4	3.4
Nitrous Oxide N_2O	298	0.4	0.4	0.4
Total GHG CO_{2eq}		**135,959.5**	**140,666.8**	**159,039.8**

EMISSION UNIT IDENTIFICATION

Perryman Generating Station 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
PY-Unit1	12-4-0081	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Jan 1972
PY-Unit3	12-4-0083	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Apr 1972
PY-Unit4	12-4-0084	One (1) Westinghouse model 501 simple cycle combustion turbine with a design heat input of 704 MMBtu/hr., rated at a nominal 51 megawatts output and capable of only burning No.2 distillate oil.	Apr 1972
PY-Unit51	12-5-0088	One (1) General Electric Frame 7FA stationary, single-shaft combustion turbine with a design heat input of 1900 MMBtu/hr., operating in the simple cycle mode rate at a nominal 150 megawatts output. This turbine has dual fuel (natural gas and No. 2 oil) firing capability.	Jun 1995
CT6A & CT6B	025-0024-5-0353 & 025-0024-5-0354	One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with	Apr 2015

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
		a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. The CTs combust pipeline-quality natural gas as a primary fuel, and only combust secondary fuel, ultra-low sulfur diesel fuel (ULSD) fuel oil (with a sulfur content not to exceed 0.0015% by weight) during periods when natural gas supply has been interrupted or **when PJM issues an emergency alert and natural gas supply is unavailable.**	
EG6	025-0024-9-0492	One (1) diesel-fired emergency generator rated at 268-hp. This generator is fired with ultra-low sulfur diesel (ULSD)	Apr 2015
FWP6	025-0024-9-0502	One (1) diesel-fired emergency firewater pump engine rated at 350-hp. This generator is fired with ultra-low sulfur diesel (ULSD)	Apr 2015
FUG6	NA	Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices within the facility boundary.	Apr 2015
CB6	NA	Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6).	Apr 2015
PR6	NA	Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.	Apr 2015
GS	025-0024-9-0532	Two (2) diesel-fired emergency generator sets (gensets), each rated at 3,010-kW. The emergency gensets will only be fired with ultra-low sulfur diesel (ULSD) and be used to start Units 1, 3 and 4 during a systemwide power outage. (Reliability Project)	TBD

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.

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. 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 – Combustion Turbines

PY-Unit1, PY-Unit3, and PY-Unit4

Three (3) Westinghouse model 501 simple cycle combustion turbines, each with a design heat input of 704 mm Btu/hr., rated at a nominal 51-megawatt output and capable of only burning No.2 distillate oil. **[MDE Reg. Nos.12-4-0081, 12-4-0083 and 12-4-0084]**

The units were all installed in January 1970, prior to the NSPS applicability date of October 3, 1977, and have not been modified or reconstructed after the NSPS applicability date. Therefore, the units are not subject to the NSPS standards found in 40 CFR 60 Subpart GG. **PY-Units 1, 3 & 4** are also exempt from the Title IV Acid Rain requirements. Note: **PY-Unit2** retired in December 2016.

Compliance Status

During the April 26, 2021, inspection, these units were not operating. Compliance could not be confirmed with opacity limit. Units operate infrequently for high demand days. Fuel sulfur samples analysis showed sulfur less than 0.001% was reviewed. Capacity factor shows the units did not exceed the 15% limit, so the 65ppm limit of COMAR 26.11.09.08G does not apply. The units did not exceed 500 hrs. operation in 2020 and 2021 (ytd), therefore no combustion analysis was required.

NO_X stack testing Part 75 Appendix E (July 2020) was conducted on Units 1, 3 & 4. Three 1-hour NO_X tests were conducted at each of the four operating loads (low, mid-low, mid-high and high). The results of tests were used to develop a NO_X/Heat Input curve for Part 75 emissions reporting purposes. See table below.

Units	Low (12 MW)	Mid-low (24 MW)	Mid-high (38 MW)	High (47 MW)
PY-Unit1	0.383	0.487	0.628	0.672
PY-Unit3	0.358	0.433	0.524	0.612
PY-Unit4	0.360	0.424	0.505	0.540

Please Note: Unit2 retired December 2016.

Capacity Factor

Units	Year	Hours of Operation	Capacity Factor
PY-Unit1	2021	73.6	0.5

Units	Year	Hours of Operation	Capacity Factor
PY-Unit3	2021	57.0	0.3
PY-Unit4	2021	48.0	0.3

Applicable Standards and limits:
A. Control of Visible Emissions
COMAR 26.11.09.05 - Visible Emissions.
"**A**. Fuel Burning Equipment.
(**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: (a) properly operate and maintain the combustion turbines in a manner to prevent visible emissions; (b) verify no visible emissions when burning No. 2 fuel oil. An observer shall perform an EPA Reference Method 9 observation of stack emissions for an 18-minute period once for each 168 hours a combustion turbine operates on No. 2 oil.
The Permittee shall perform the following if visible emissions are observed: (a) inspect combustion turbine operations; (b) perform all necessary adjustments and/or repairs to the combustion turbine within 48 operating hours so that visible emissions are eliminated; (c) document in writing the results of the inspections, adjustments and/or repairs to the combustion unit; and(d) if the required adjustments and/or repairs had not eliminated the visible emissions within the stipulated 48 operating hours, the Permittee shall perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions.
The Permittee shall maintain for a period of at least five years the following: (a) records of maintenance performed on the combustion turbines that relate to preventing visible emissions; and (b) log of visible emission observations performed. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall report incidents of excess emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides
COMAR 26.11.09.07: Control of Sulfur Oxides From Fuel Burning Equipment.
"**A**. 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: (**2**) In Areas III and IV: (**b**) **Distillate fuel oils, 0.3 percent.**"

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

Compliance Demonstration
The Permittee shall obtain a certification from the fuel supplier indicating that the oil is in compliance with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analysis of oil that is representative of oil burned. The Permittee shall maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of the sulfur in fuel analysis. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit Section III Condition 4 "Report of Excess Emissions and Deviations" **[Reference: COMAR 26.11.01.07 & COMAR 26.11.03.06C(7)]**

C. Control of Nitrogen Oxides:
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.
"(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) – (e) *Not applicable*
(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. "

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

Compliance Demonstration
If the Permittee operates a turbine in excess of 15 percent capacity factor, the Permittee shall demonstrate compliance with the 65-ppm limit by performing an EPA Reference Method Test within 120 days after exceeding the 15 percent capacity factor. The Permittee shall submit a test protocol to the Department for approval at least 30 days prior to the proposed test date. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall: Perform a combustion analysis and optimize combustion at least once annually when the turbines operate for more than 500 hours in a calendar year. **[Reference: COMAR 26.11.09.08G(1)(b)]**. Maintain the results of the combustion analysis and any stack tests for at least 5years and make these results available to the Department and the EPA upon request. **[Reference: COMAR 26.11.09.08G(1)(c) and COMAR 26.11.03.06C]**. Submit the results of any stack tests within 45 days after completion of the stack test. **[Reference: COMAR 26.11.03.06C].**
The Permittee shall: Calculate the capacity factor of each unit for each calendar year within 30 days after the end of each year. Maintain a record of the calculated capacity factors. **[Reference: COMAR 26.11.03.06C]**. Provide certification of the capacity factor of the equipment to the Department in writing as part of the annual Emissions Certification. **[Reference: COMAR 26.11.09.08G(1)(a)].**

Rationale: Capacity factors
The **PY-Unit1, 3 & 4** turbines typically operate with a capacity factor less than 15%. The hours of operation are managed by economic dispatch from the PJM interconnector grid. Constellation is not able to unilaterally decide to operate a turbine and the cost to generate electricity by these turbines also prohibits the units from running with any frequency except for times of peak demands or emergencies. These turbines will never operate with a capacity factor greater than 15% unless there is a PJM grid emergency with possibility of brown outs or worse. **PY-Unit51, CT6A & CT6B** satisfy COMAR 26.11.09.08G by meeting the hourly average emission rates at 42 NOx ppmvd @15%O_2 for gas and 65 NOx ppmvd @15%O_2 for oil.

Emission Unit: Combustion Turbine

PY-Unit51: General Electric Frame 7FA stationary, single-shaft combustion turbine operating in the simple cycle mode, rated at a nominal 150-MW output. This turbine has dual fuel (natural gas and No. 2 fuel oil) firing capacity. **[MDE Reg No. 12-5-0088]**

The type of fuel (oil or gas) utilized is dependent upon cost and availability of the fuel. During the winter PY-Unit51 typically burns fuel oil due to the limited availability of natural gas. When firing No. 2 fuel oil water injection is used for NO_X control. This unit is equipped with NO_X and CO_2 CEMs as required by Part 75.

The Public Service Commission (PSC) issued a Certificate of Public Convenience and Necessity (CPCN Case No.8241) for the PY-Unit51 on July 16, 1993. The PY-Unit51 is subject to 40 CFR §60 Subpart GG – Standards of Performance for Stationary Gas Turbines.

Compliance Status:
During the April 26, 2021, inspection, PY-Unit51 was operating. Method 9 was conducted, and no visible emissions were observed.

Initial performance testing was conducted in 1995 per CPCN. Results are as follows: **PM**: 3.39lb/hr. firing on natural gas and 4.39 lb./hr. firing on oil. In compliance with the CPCN limit. **CO**: 1.8 lb./hr. firing on natural gas and 41.9 lb./hr. firing on oil.

The 2022 Q4 CEM report for Perryman Unit 51 stated the following.
SO_2: 0 incidents of excess emissions (based on sulfur content of fuel), 0 hours of SO_2 downtime (SO_2 based on sulfur content of fuel).
NOx: 32 periods of concentration above normal operation limits occurred during startup, shutdown, or malfunction when these limit normal operation limits do not apply per CPCN case # 8241 paragraph 26. No violations. 3 hours (1%) of NOx monitor downtime. Unit 51 operated 232 hours. The CEM recorded average hourly NOx emission rates of 183 lb./hr. and 35.69 ppm and maximum levels of 434.70 lbs./hr. and 193.67 ppm. The NOx limits are 490 lb./hr. and 65 ppm limits for operation using oil and 170 lb./hr. and 25ppm for operation on natural gas on an hourly basis as listed in CPCN #8241. 7 exceedances of the 65ppm limit were reported while operating on oil during startup, 2 while tuning the unit, and 23 exceedances of the 25ppm level were reported on natural gas during startup/shutdown. 0 exceedances of 170 lb./hr. level on natural gas. 0 exceedance of the 490 lb./hr. limit on oil. Since all periods of exceedance occurred during startup or shutdown when limits do not apply per CPCN case # 8241 paragraph 26 no violations occurred. 2 exceedances occurred during tuning while the manufacturer was on site tuning the unit on oil. CEM downtime 15 hours.

Capacity Factor

Unit	Year	Hours of Operation	Capacity Factor
PY-Unit51	2021	708.0	4.6

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05 - Visible Emissions.

"**A**. Fuel Burning Equipment.

(**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: (a) properly operate and maintain the combustion turbine in a manner to prevent visible emissions; (b) verify no visible emissions when burning No. 2 fuel oil. An observer shall perform an EPA Reference Method 9 observation of stack emissions for an 18-minute period once for each 168 hours a combustion turbine operates on No. 2 oil or perform such observation no less than once a calendar year if No. 2 fuel oil is burned.

The Permittee shall perform the following if visible emissions are observed: (a) inspect combustion turbine operations; (b) perform all necessary adjustments and/or repairs to the combustion turbine within 48 operating hours so that visible emissions are eliminated; (c) document in writing the results of the inspections, adjustments and/or repairs to the combustion unit; and(d) if the required adjustments and/or repairs had not eliminated the visible emissions within the stipulated 48 operating hours, the Permittee shall perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions.

The Permittee shall maintain for a period of at least five years the following: (a) records of maintenance performed on the combustion turbine that relate to preventing visible emissions; and (b) log of visible emission observations performed. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall report incidents of excess emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides
COMAR 26.11.09.07: Control of Sulfur Oxides From Fuel Burning Equipment.
"A. 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:
(**2**) In Areas III and IV: (**b**) **Distillate fuel oils, 0.3 percent."**

Subpart GG—Standards of Performance for Stationary Gas Turbines
40 CFR §60.333, which limits the sulfur content in No. 2 distillate fuel oil to 0.8%.

CPCN #8241, which states "The fuel oil burned in PY-Unit51 shall contain no more than 0.05% by weight. If this type of fuel is not available or is not priced competitively, fuel oil with a maximum sulfur content of 0.2 percent may be used. Fuel oil with a maximum of 0.05 percent sulfur is considered to be "priced competitively" if it costs (on a $/MMBtu basis) no more than 10 percent more than No. 2 oil containing 0.2 percent sulfur."
CPCN #8241 which limits sulfur oxides (as SO_2) emissions to 28 lb./hr. when burning natural gas and 87 lb./hr. when burning No. 2 oil.
CPCN #8241, which limits Sulfuric Acid Mist to 7.8 lb./hr. when burning No. 2 oil.
CPCN#8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.
Note: Compliance with these limitations will be by use of fuel supplier certifications or sulfur in fuel analyses.

Compliance Demonstration
The Permittee shall obtain a certification from the fuel supplier indicating that the oil is in compliance with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analysis of oil that is representative of oil burned. The Permittee shall: (1) Maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of the sulfur in fuel analysis. (2) Maintain for at least five years records of the number of hours, in any consecutive 12-month period, that fuel oil is used. **[Reference: COMAR 26.11.03.06C].** The Permittee shall report fuel supplier certifications or fuel analysis to the Department upon request. **[Reference: COMAR 26.11.09.07C]**

Acid Rain Permit
The Permittee shall comply with the requirements of the Phase II Acid Rain Permit issued for this generating station. **Note**: A renewal Phase II Acid Rain Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix A.

Compliance Demonstration
The Permittee shall: comply with the monitoring requirements in 40 CFR Part 75 including the QC/QA procedures in Part 75 Appendix B. The Acid Rain Permit contains specific recordkeeping and reporting requirements. **[Reference: 40 CFR Part 75, Subpart F & Subpart G]**. See Acid Rain Permit in Appendix A of this permit.

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

C. Control of Particulate Matter
CPCN #8241 which limits particulate emissions (TSP and PM_{10} emissions each) to 10 lb./hr. when burning natural gas and 11 lb./hr. when burning No. 2 oil.
CPCN #8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Compliance Demonstration
The Permittee shall perform preventative maintenance to maintain the turbine as designed. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall maintain records of the preventive maintenance that relates to combustion performance for 5 years. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

D. Control of Nitrogen Oxides
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.
"(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) - (e) *Not applicable.*
(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. "
Note: Compliance with the CPCN will be used to demonstrate compliance with NO_X RACT requirements.

Subpart GG—Standards of Performance for Stationary Gas Turbines
40 CFR §60.332, which limits NO_X emissions in accordance with the equation contained in 40 CFR §60.332 (a)(1).

CPCN #8241 which limits NO_X emissions to 170 lb./hr. when burning natural gas and 490 lb./hr. when burning No. 2 oil.
CPCN #8241 which limits NO_X emissions to 25 parts per million by volume on a dry basis (ppmvd) at 15% excess oxygen on an hourly basis when burning natural gas and 65 ppmvd at 15% oxygen on an hourly basis when burning No. 2 oil.
CPCN #8241, which limits NO_X emissions to 1,363 tons in any consecutive 12-month period.
CPCN #8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

Compliance Demonstration
The Permittee shall: (1) Operate, calibrate, and maintain a certified NO_X CEM system **[Reference: CPCN 8241 and COMAR 26.11.29.08A].** (2) Certify the NO_X CEM system in accordance with Part 75, Appendix A. **[Reference: 40 CFR §75.70, COMAR 26.11.09.08B(2)(b), and COMAR 26.11.29.08B].**
The Permittee shall maintain records necessary to prepare a quarterly emission report that contains the requirements of COMAR 26.11.01.11E(2). **[Reference: COMAR 26.11.03.06C]**
The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:

(1) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;
(2) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
(3) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
(4) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
(5) Quarterly quality assurance activities; and
(6) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
(7) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.
[Reference: COMAR 26.11.09.08K(1) and COMAR 26.11.01.11E(2)]

Rationale: Capacity factors
The **PY-Unit51** turbine satisfies COMAR 26.11.09.08G by meeting the hourly average emission rates at 42 NO_x ppmvd @15%O_2 for gas and 65 NO_x ppmvd @15%O_2 for oil.

E. Control of VOC
CPCN #8241 which limits VOC emissions to 2.9 lb./hr. when burning natural gas and 7 lb./hr. when burning No. 2 oil.
CPCN #8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Compliance Demonstration
The Permittee shall: perform preventative maintenance to maintain the turbine as designed; maintain records of the preventive maintenance that relates to combustion performance for 5 years; submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

F. Control of Carbon Monoxide
CPCN # 8241 which limits CO emissions to 52 lb./hr. when burning natural gas and 70 lb./hr. when burning No. 2 oil.
CPCN #8241 condition 26, which states that the emissions limitations in the CPCN conditions do not apply during periods of start-up, shutdown, malfunction.

Compliance Demonstration
The Permittee shall: perform preventative maintenance to maintain the turbine as designed; maintain records of the preventive maintenance that relates to combustion performance for 5 years; submit records of maintenance to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Emission Unit: Combustion Turbines (Project 6)

CT6A & CT6B: One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. In order to avoid forced outage, the CTs will combust pipeline-quality natural gas as a primary fuel, and only combust secondary fuel, ultra-low sulfur diesel fuel (ULSD) fuel oil (with a sulfur content not to exceed 0.0015% by weight) during periods when natural gas supply has been interrupted or when PJM issues an emergency alert and natural gas supply is unavailable. **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354 & CPCN Case No. 9677 Condition B-IV-1]**

CT6A & CT6B were installed in 2015 and is subject to NSPS KKKK as well as BACT and LAER limits per the CPCN #9136 (Issued 2014). The CT6A & CT6B turbines are equipped with SCR for NO_x control and Oxidation Catalyst for CO control as well as CEMs to monitor emissions.
Note: The turbine part of Project 6 was replaced with a prototype unit while the original was sent for repairs. MDE was notified of this issue and approved the temporary installation of the prototype.

Compliance Status:
Initial startup for CT6A occurred on April 25, 2015; Initial Commercial Operation for CT6A commenced on May 9, 2015. Initial startup for CT6B occurred on May 29, 2015; Initial Commercial Operation for CT6B commenced on May 29, 2015.

During the April 26, 2021, inspection, these units were not operating due to maintenance outage.

Recent Stack Test Results:
Stack testing conducted July 20-22, 2022, firing on both natural gas and fuel oil, for PM_{10}, $PM_{2.5}$ & CO_2. The results indicated compliance with the BACT and LAER limits listed in the CPCN.

Pollutant	Limit Nat gas firing (each unit)	CT6A (natural gas)	CT6B (natural gas)	Limit oil firing	CT6A (oil firing)	CT6B (oil firing)
CO_2e	1394 (lbs./MWh)	1174	1160	1741 (lbs./MWh)	1571	1565
PM_{10}	5.0 lb./hr.	3.6	3.4	15	6.6	6.2
$PM_{2.5}$	5.0 lb./hr.	2.1	1.9	15	4.5	4.3

February 9-10, 2021, PM and Ammonia Test on Oil and Natural gas:

Pollutant	CT6A (lb./hr.	CT6B (lb./hr.)	Limit Nat gas firing (each unit)	CT6A	CT6B	Limit Oil firing (each unit)
CO_2	1261	1267	1394-lbs./MWh)	1575	1575	1741
PM_{10}	2.3	2.3	5-lb./hr.	2.8	2.8	15
$PM_{2.5}$	1.8	1.8	5-lb./hr.	2.2	2.2	15
Ammonia	5.0 ppm @ 15%	5	5-ppmvd @ 15%	4.7	4.7	5-ppmvd @ 15%

Capacity Factor

Unit	Year	Hour of Operation	Capacity Factor
CT6A & CT6B	2021	1693.0	13.6

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05 - Visible Emissions.

"**A**. Fuel Burning Equipment.

(**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 subsequent visual observations in accordance with EPA Reference Method 22 - Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares shall be conducted at least once each calendar quarter to verify there are no visible emissions during operation. Quarterly visual observations are required for each fuel burned during the previous quarter under normal operation. If visual emissions are observed, the Permittee shall inspect combustion control systems, perform necessary adjustments and/ or repairs within 48 hours, and document in writing the results of inspection, adjustments, and or repairs. After 48 hours, if the required adjustments and/ or repairs have not eliminated the visible emissions, CPSG shall perform Reference Method 9 observations once daily for a period of 18 minutes burning the fuel where visual emissions are observed until corrective actions have reduced the visible emissions to less than 10 percent opacity. **[Reference: CPCN 9677, Conditions B-IV-8; COMAR 26.II.09.05A(5), COMAR 26.II.02.02H]**.

The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]**

The Permittee shall document in writing the results of inspection, adjustments, and/or repairs, taken to address visible emissions observed during quarterly Method 22 and/or Method 9 observations and make them available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-8 & COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides

COMAR 26.11.09.07: Control of Sulfur Oxides From Fuel Burning Equipment.

"A. 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: (**2**) In Areas III and IV: (**b**) **Distillate fuel oils, 0.3 percent."**

Subpart KKKK—Standards of Performance for Stationary Combustion Turbines

§60.4330 - What emission limits must I meet for sulfur dioxide (SO_2)?

"(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110**

nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb./MWh)) gross output;
(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb. SO_2/MMBtu)** heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement;"

CPCN 9677, which states, "Fuel type Limit: The only permissible fuels for CT6A and CT6B are pipeline quality natural gas and ultra-low sulfur diesel (ULSD). In order to avoid forced outage, ULSD may only be used (1) during periods of interruption of the natural gas supply, or (2) when PJM issues an emergency alert and natural gas supply is unavailable. **[Reference: CPCN Case No. 9677, Condition B-IV-1]**

Compliance Demonstration
The Permittee shall conduct the stack testing annually per the methods described in 40 CFR §60.8 (40 CFR §60.4415 and 40 CFR §60.4360] or monitor the sulfur content of each fuel combusted at a frequency prescribed in 40 CFR §60.4370 (see monitoring requirements) **[Reference: CPCN Case No. 9677, Condition B-IV-11]**
The Permittee shall monitor the sulfur content of each fuel combusted in the turbines at a frequency prescribed in 40 CFR 60.4370. The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the affected facility. Alternately, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter may be used. A representative fuel sample shall be collected following ASTM D5287 for pipeline natural gas of ASTM D4177 or ASTM D4057 Section 14 for ULSD. The fuel analyses may be performed either by the Permittee, a service contractor, the fuel vendor, or any qualified agency. Analyze the samples for the total sulfur content of the fuel using ASTM D129 (or alternatively D1266, D1552, D2622, D4294, D5453, D5623 or D7039) for ULSD and ASTM D1072 (or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2140, 2261 or 2377) for pipeline quality natural gas. **[Reference: 40 CFR 60 §60.4415(a)(1 & 2]**

§60.4370 *- How often must I determine the sulfur content of the fuel?*
The frequency of determining the sulfur content of the fuel must be as follows:
(a) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to

*the tank, or **sampling each delivery** prior to combining it with fuel oil already in the intended storage tank).*
*(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and **recorded once per unit operating day**.*

The Permittee shall maintain all annual fuel use records on site for not less than three years and make these records available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-21 & COMAR 26.11.09.08K(3)]**
The Permittee shall maintain Representative fuel sampling records, as available if CPSG elects to demonstrate compliance with the SO_2 emissions limit in 40 CFR 60.4330 using methods described in 60.4415(a). **[Reference: CPCN Case No. 9677, Condition B-IV-23(j) & COMAR 26.11.02.02H]**
The Permittee shall maintain for at least five years documents certifying the sulfur content of fuel oil received or copies of sulfur in fuel analysis. **[Reference: COMAR 26.11.03.06C]**

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

The Permittee shall submit reports of NSPS Subpart KKKK excess emissions and monitor downtime associated with the combustion turbines, in accordance with 40 CFR 60.79(c). Excess emissions as defined in 40 CFR 60.4385 (SO_2) must be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-27]**
All reports required must be postmarked by the 30th day following the end of each 6-month period. [**Reference: §60.4395**]

Acid Rain Permit
The Permittee shall comply with the requirements of the Phase II Acid Rain Permit issued for this generating station. **Note**: A renewal Phase II Acid Rain Permit will be issued in conjunction with this Part 70 permit and is attached to the Part 70 permit as Appendix A.

Compliance Demonstration
The Permittee shall comply with the monitoring requirements in 40 CFR Part 75 including the QC/QA procedures in Part 75 Appendix B. See Acid Rain Permit in Appendix A of this permit.
The Acid Rain Permit contains specific recordkeeping requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75,**

Subpart F] The Acid Rain Permit contains specific reporting requirements. See Acid Rain Permit in Appendix A of this permit. **[Reference: 40 CFR Part 75, Subpart G]**

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

C. 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)."

CPCN 9677 states PM_{10} and $PM_{2.5}$ (filterable and condensable), when burning NG emissions from CT6A and CT6B shall not exceed the following emission limits: 5.0 lb./hr. (0.0079 lb./MMBtu High heat value (HHV) at all times, averaged over 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4: BACT/LAER]**

CPCN 9677 states PM_{10} and $PM_{2.5}$ (filterable and condensable), when burning ULSD emissions from CT6A and CT6B shall not exceed the following emission limits: 15.0 lb./hr. (0.0248 lb./MMBtu High heat value (HHV) at all times, averaged over 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4: BACT/LAER]**

Compliance Demonstration

The Permittee shall conduct stack test annually for PM_{10}, and $PM_{2.5}$. Unless otherwise approved by the Department, the stack testing shall be conducted in accordance with the following EPA approved test methods to determine compliance: (d) Reference Method 201A – Determination of PM_{10} and $PM_{2.5}$ Emissions From Stationary Sources and (e) Reference Method 202 – Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources. **[Reference: CPCN Case No. 9677, Condition B-IV-9]**
The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9677, Condition B-IV-9]**
The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]**

At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval:
a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and
b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA.
[**Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.02.02H**].
Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. [**Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.01.05B & C**]

D. Control of Nitrogen Oxides
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.
"(**1**) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) - (e) *Not Applicable.*
(**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. "
When burning NG: 42-ppm @15% 0_2 at all times excluding startup events and shutdown events.
When burning USLD: 65-ppm @15% 0_2 at all times excluding startup events and shutdown events.
Note: Compliance with the CPCN will be used to demonstrate compliance with NO_X RACT requirements.

Subpart KKKK—Standards of Performance for Stationary Combustion Turbines

40 CFR §60.4320, which states that NOx emissions standard (**when burning NG**) shall not exceed 25 ppm at 15% O_2 or 150 ng/J (1.2 lb./MWh) of useful output at all times greater than or equal to 75 percent of peak load or greater than or equal to 0°F, average 4-hr rolling.

40 CFR §60.4320, which states that NOx emissions standard **(when burning ULSD**) shall not exceed 74 ppm at 15% O_2 or 460 ng/J (3.6 lb./MWh) of useful output at all times greater than or equal to 75 percent of peak load or greater than or equal to 0°F, average 4-hr rolling.

40 CFR §60.4320, which states the NOx (**when burning NG or ULSD**) shall not exceed 96 ppm at 15% O_2 or 150 ng/J (1.2 lb./MWh) of useful output at all times less than 75 percent of peak load or less than 0°F, averaged over 4-hr rolling average.

CPCN 9677 which states the NOx (**when burning NG**) shall not exceed 2.5 ppmvd at 15% O_2 (5.8 lb./hr.) at all times, excluding during startup events and shutdown events, averaged over 3-hr block. [**LAER**]

CPCN 9677 which states the NOx (**when burning ULSD**) shall not exceed 5 ppmvd at 15% O_2 (11.7 lb./hr.) at all times, excluding during startup events and shutdown events, averaged over 3-hr block. [**LAER**]

CPCN 9677 states "*Startup Events*" (1 CT or 2 CTs) are limited to 36.4 lb./event and "*Shutdown Events*" (1 CT or 2 CTs) are limited to 9.27 lb./event.

[Reference: CPCN Case No. 9677, Condition B-IV-4 & LAER]

CPCN 9677, Conditions II: Definitions.

B-II-4. "Shutdown Event" as it relates to the CTs can involve either 1 CT or 2 CTs. In the case of 1 CT, a shutdown event is defined as the period of time during which one CT's output is lowered with the intent to shut down, beginning at the point at which the load drops below 50% and ending when fuel combustion ceases. In the case a shutdown event of 2 CTs occurs, a shutdown event begins at the point at which the first CT drops below 50% and ends when fuel combustion from both CTs ceases. Notwithstanding the foregoing, if 2 CTs are in operation and 1 CT's load is lowered below 50% with the intent to shut down while the other CT continues in normal operation during and beyond the point fuel combustion ceases from the first CT that shall not constitute a "Shutdown Event."

B-II-5. "Startup Event" as it relates to the CTs can involve either 1 CT or 2 CTs. In the case of 1 CT, a startup event is defined as the period of time during which one CT's output is increased with the intent to start up, beginning with initiation of fuel combustion in one CT and ending when the SCR system catalyst reaches 600 degrees Fahrenheit (°F). In the case of 2 CTs, the startup event begins at the point at which at least 1 CT initiates combustion and ends when the SCR system catalyst reaches 600 °F.

Cross-State Air Pollution Rule
See Table IV-7: CSAPR for requirements.

Compliance Demonstration

The Permittee shall install ULSD and pipeline quality natural gas flow meters and continuously monitor each fuel flow for CT6A and CT6B. The pipeline quality natural gas and USLD fuel flow shall be recorded monthly. **[Reference: CPCN Case No. 9677, Condition B-IV-7]**

The Permittee shall demonstrate compliance for NO_x emission standards by installing a certified NO_x CEMS in accordance with the performance specifications of 40 CFR Part 60, Appendix B or 40 CFR Part 75, Appendix A. The CEMS shall be operated and maintained to meet the quality assurance requirements of 40 CFR 60, Appendix F, and applicable requirement of 40 CFR Part 75. **[Reference: CPCN Case No. 9677, Condition B-IV-10]**

The Permittee shall install and maintain a temperature gauge to accurately indicate the temperature in degrees Fahrenheit of the SCR catalyst system. During startup events, the temperature of the SCR system catalyst should be continuously monitored. **[Reference: CPCN Case No. 9677, Condition B-IV-13]**

The Permittee shall maintain:

(1) CEMS reports on site for not less than two years from the time the report was submitted and make these records available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-20 & COMAR 26.11.01.00E(2)(d)]**

(2) Records of the SCR system catalyst temperature during startup events for not less than five years and make available to the Department upon request. **[Reference: CPCN Case No. 9677, Condition B-IV-22 & COMAR 26.11.02.02H]**

The Permittee shall submit the following CEMS reports to MDE-ARA for all CEMS required to be operated with the CTs:

a) CEMS System Downtime Reports - All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to MDE-ARA by telephone before 10 a.m. of the first regular business day following the breakdown. [COMAR 26.11.01.IIE(I)]

b) Quarterly CEMS Summary Reports - A quarterly summary report shall be submitted to MDE-ARA not later than 30 days following each calendar quarter. The report shall be in a format approved by MDE-ARA and shall include the information required under COMAR 26.11.01.11E(2)(c)(i)-(vii). [COMAR 26.11.01.11E(2)(c)] **[Reference: CPCN Case No. 9677, Condition B-IV-19]**

c) Reports of NSPS Subpart KKKK excess emissions and monitor downtime associated with the combustion turbines, in accordance with 40 CFR 60.79(c). Excess emissions as defined in 40 CFR 60.4380 (NO_x) must be reported for all periods of unit operation, including startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-27]**

All reports required must be postmarked by the 30th day following the end of each 6-month period. [**Reference: §60.4395**]

E. Control of GHG Emissions

CPCN 9677 which states the emissions from **CT6A and CT6B** shall not exceed the following emission limits:

GHG (**when burning NG**) shall not exceed 1,394 lb. CO_{2e}/MWh gross at all times excluding startup events and shutdown events, over a 12-month rolling averaging period.

GHG (**when burning ULSD**) shall not exceed 1,741 lb. CO_{2e}/MWh gross at all times excluding startup events and shutdown events, over a 12-month rolling averaging period. **[Reference: CPCN Case No. 9677, Condition B-IV-4 & BACT]**

Compliance Demonstration

The Permittee shall conduct the stack testing once every 5 years. Unless otherwise approved by the Department, for each fuel burned, the performance test shall be conducted in accordance with the following EPA approved test methods to determine compliance: (b) Reference Method 3A – Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure) or as an alternative to annual stack testing for CO_2, and upon approval by the Department, the Permittee may choose to demonstrate compliance with emission limitations by installing and operating a certified CEMS in accordance with the performance specifications of 40 CFR Part 75, Appendix A. **[Reference: CPCN Case No. 9677, Condition B-IV-9 & MDE Letter dated June 23, 2023]**

The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9677, Condition B-IV-9]**

At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval:

a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and

b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA.

[Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.02.02H].

Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. [Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.01.05B & C]

Monthly and 12-month consecutive rolling emissions for **CT6A and CT6B** shall be calculated as follows:
(a) The GHG emissions from CT6A and CT6B shall be calculated as follows:
(i) The CO_2 emissions shall be based on fuel flow and the measured carbon content of the fuel using the procedures specified in Appendix G of 40 CFR Part 75, or other emission factors approved by MDE-ARA.
(ii) The methane (CH_4) and nitrous oxide (N_2O) emissions shall be calculated using the procedures specified in 40 CFR Part 98 Subpart C.
(iii) The total GHG emissions shall be presented on a CO_2e basis using the following global warming potential values:

Chemical Formula	Global Warming Potential
CO_2	1
CH_4	25
N_2O	298

(iv) The total generation (MWh) shall be monitored to calculate the emission rate of (lb. CO_2e/MWh), determined each month by summing the CO_2e emissions for all hours in which power is being generated from CT6A and CT6B during the previous 12 months and dividing that value by the sum of the electrical energy output over that same period.
[Reference: CPCN Case No. 9677, Condition B-IV-12]

NSPS Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
§60.5520 - What CO_2 emissions standard must I meet?
Table 2 of Subpart TTTT of Part 60, which states the applicable CO_2 emission standard for the affected EGU is 50 kg CO_2 per gigajoule (GJ) of heat input (120 lb. CO_2/MMBtu).

Compliance Demonstration
§60.5535 - How do I monitor and collect data to demonstrate compliance?
"(a) Combustion turbines qualifying under §60.5520(d)(1) are not subject to any requirements in this section other than the requirement to maintain fuel purchase records for permitted fuel(s)."
The Permittee shall maintain fuel purchase records as required by 40 CFR §60.5520(d)(1).

F. Control of Ammonia Emissions
CPCN 9677 which states the emissions from CT6A and CT6B shall not exceed the following emission limits:

Ammonia (all fuels) shall not exceed 5 ppmvd at 15% O_2 at all times, over an averaged period of 3 stack test runs. **[Reference: CPCN Case No. 9677, Condition B-IV-4]**

Compliance Demonstration

The Permittee shall conduct the stack testing every five (5) years for ammonia. Unless otherwise approved by the Department, the stack test shall be conducted in accordance with the following EPA approved test methods to determine compliance: (a) Conditional Test Method 027 – Procedure for Collection and Analysis of Ammonia in Stationary Sources. **[Reference: CPCN Case No. 9677, Condition B-IV-9]**

The Permittee may submit to the Department a request to reduce the frequency of stack testing for any pollutant listed in this condition. **[Reference: CPCN Case No. 9677, Condition B-IV-9]**

The Permittee shall operate and maintain the combustion turbines and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. **[Reference: CPCN Case No. 9677, Condition B-IV-14]**

At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to MDE-ARA for review and approval:

a) Compliance stack testing shall be conducted in accordance with MDE-ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended by Supplement 3 (December 1997), 40 CFR Part 60, or subsequent test protocols approved by MDE-ARA; and

b) Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by MDE-ARA.

[Reference: CPCN Case No. 9677, Condition B-IV-24 & COMAR 26.11.02.02H].

Final results of each compliance stack test must be submitted to MDE-ARA within 60 days after completion of the test. **[Reference: CPCN Case No. 9677, Condition B-IV-25 & COMAR 26.11.01.05B & C]**

G. Operational Limit

CPCN 9677, BACT/LAER Operational Limits: CT6A and CT6B combined may not exceed the following operational restrictions:

(a) The total number of hours of operation for CT6A and CT6B, inclusive of startup and shutdown, shall not exceed 10,512 hours in any consecutive rolling 12-month period.

(b) The total number of hours burning fuel oil on CT6A and CT6B, exclusive of startup and shutdown, shall not exceed 2,628 hours in any consecutive rolling 12-month period.
(c) The total number of startup events (1CT or 2CTs) shall not exceed 1,040 events in any consecutive rolling 12-month period.
(d) The total number of shutdown events (1CT or 2CTs) shall not exceed 1,040 events in any consecutive rolling 12-month period.

[Reference: CPCN Case No. 9677, Condition B-IV-2]

Compliance Demonstration

The Permittee shall maintain ULSD and pipeline quality natural gas flow meters and continuously monitor each fuel flow for **CT6A and CT6B**. The pipeline quality natural gas and USLD fuel flow shall be recorded monthly. **[Reference: CPCN Case No. 9677, Condition B-IV-7]**

The Permittee shall maintain the monthly and 12-month consecutive rolling GHG, NOx, PM_{10}, and $PM_{2.5}$ emissions for CT6A and CT6B. The following information for CT6A and CT6B shall be included in the quarterly report required by CPCN Case No. 9677, Condition B-III-5:

a) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT.
b) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events.
c) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events.
d) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events.
e) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events.
f) Total NOx emission expressed in lb./ event for each startup event and shutdown event.
g) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb.CO_2/MWh gross, for each CT for each fuel burned.
h) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned.
i) For any period where a CT burned ULSD, an explanation for why ULSD was burned.
j) Representative fuel sampling records, as available if the Permittee elects to demonstrate compliance with the SO2 emissions limit in 40 CFR 60.4330 using methods described in 60.4415(a).

[Reference: CPCN Case No. 9677, Condition B-IV-23 & COMAR 26.11.02.02H]

The Permittee shall submit a quarterly report to MDE-ARA to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation:
a) Monthly and consecutive rolling 12-month emissions (in tons per month and tons per year) of PM_{10}, $PM_{2.5}$, NO_X, and GHGs (as CO_2e) for the entire Perryman 6 Project.
b) Additional emissions source specific supporting documentation as defined within each emissions source section of conditions. [COMAR 26.11.02.02H]
[Reference: CPCN Case No. 9677, Condition B-III-5]

EG6, FWP6 & GS

EG6: One (1) diesel-fired emergency generator rated at 268-hp **(MDE Reg. No. 025-0024-9-0492)**.
FWP6: One (1) diesel-fired emergency firewater pump engine rated at 350-hp **(MDE Reg. No. 025-0024-9-0502)**
GS: Two (2) diesel-fired emergency gensets, each rated at 3,010-kW. The generators will be used to self-start Units 1, 3 and 4 during a systemwide power outage. **(MDE Reg. No. 025-0024-9-0532)**
These generators are only fired with ultra-low sulfur diesel (ULSD).

Compliance Status:
During April 26, 2021, inspection, records diesel generator operating hours and maintenance logs were reviewed. Units did not exceed 500-hrs , so no combustion analysis was required. The emergency engines have no operators on site and maintenance is performed by an outside contractor. Engines meet limits by manufacture certification. No operating information for the GS unit yet.

Applicable Standards and limits.
A. Control of Visible Emissions
COMAR 26.11.09.05E - Visible Emissions.
(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(3) 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) Sections E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration

The emergency generator, firewater pump engine, and each emergency genset shall be operated and maintained in accordance with the manufacturer's emission-related written instructions, changing only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as applicable. **[Reference: CPCN Case No. 9677, Condition B-V-9 & 40 CFR §60.4211(a)]**

The Permittee shall report incidents of visible emissions in accordance with Part 70 Operating Permit 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 Sulfur Oxides

COMAR 26.11.09.07A - Control of Sulfur Oxides From Fuel Burning Equipment. "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: (**2**) In Areas III and IV: (**b**) Distillate fuel oils, 0.3 percent;"

The only permissible fuel for the emergency generator, firewater pump engine, and each emergency genset is ULSD with a sulfur content not to exceed 15 parts per million by weight. **[Reference: CPCN Case No. 9677, Condition B-V-1]**

The emergency generator, firewater pump engine, and each emergency genset must be fitted with a non-resettable hour meter prior to startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8 & 40 CFR §60.4209(a)]**

Compliance Demonstration

The Permittee shall obtain a certification from the fuel oil supplier indicating that the oil complies with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analyses of oil that is representative of oil burned. **[Reference: COMAR 26.11.09.07C & CPCN Case No. 9677, Condition B-V-7]**

The Permittee shall maintain: All annual fuel records for the project. A certification from the fuel supplier indicating that the ULSD complies with the limitation of sulfur content in the fuel oil. The certification should include the name of the supplier, the date of delivery, the amount of fuel

delivered, the method used to determine the sulfur content of the oil, and a statement from the fuel supplier that the ULSD complies with the specifications of 40 CFR 80.510. **[Reference: CPCN Case No. 9677, Condition B-V-7 and B-V-14]**

The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset:
The monthly and 12-month consecutive rolling emissions;
The monthly and 12-month consecutive rolling hours of operation;
The monthly and 12-month consecutive rolling quantity of ULSD burned;
The reason the engine was in operation for each time operated.
[Reference: CPCN Case No. 9677, Condition B-V-16]

C. Control of Nitrogen Oxides

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.

"(**1**) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
(a) Provide certification of the capacity factor of the equipment to the Department in writing;
(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
(e) 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 emergency generator, firewater pump engine, and each emergency genset must be fitted with a non-resettable hour meter prior to startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8]**
The Permittee shall maintain:

Results of any combustion analyses on the emergency generator, firewater pump engine, and each emergency genset.
Records of training program attendance for each operator of the emergency generator, firewater pump engine; and each emergency genset. **[Reference: CPCN Case No. 9677, Condition B-V-11(a)-(b)]**
The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset:
The monthly and 12-month consecutive rolling emissions;
The monthly and 12-month consecutive rolling hours of operation;
The monthly and 12-month consecutive rolling quantity of ULSD burned;
The reason the engine was in operation for each time operated.
[Reference: CPCN Case No. 9677, Condition B-V-16]

D. NSPS
40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
The emergency generator, firewater pump engine, and each emergency genset must meet the following emissions limits for the entire life of the engines:

Pollutant	Each emergency genset (**GS**)	Emergency Generator (**EG6**)	Firewater Pump Engine (**FWP6**)
	Emissions Limit g/kW-hr (g/hp-hr.)	Emissions Limit g/kW-hr (g/hp-hr.)	Emissions Limit g/kW-hr (g/hp-hr.)
NO_X + NMHC	6.4 (4.8)	4.0 (3.0)	4.0 (3.0)
CO	3.5 (2.5)	3.5 (2.0)	n/a
PM (filterable only)	0.20 (0.15)	0.20 (0.15)	0.20 (0.15)

[Reference: 40 CFR §60.4205 & §60.4206 & CPCN Case No. 9766, Condition B-V-3.]
Note: The emergency generator actually installed on the project was 268-hp, not the 1300-hp engine specified in the application and CPCN. Thus, the emission limit for NO_X+NHMC was reduced from 6.4 to 4.0 g/kW-hr to reflect the requirements in 40 CFR 60, Subpart IIII.

The emergency generator, firewater pump engine, and each emergency genset must be certified to meet the emission standards of 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured

according to the manufacturer's emission-related specifications, except as permitted in paragraph 40 CFR 60.4211(g). **[Reference: CPCN Case No. 9677, Condition B-V-4(b) & 40 CFR §60.4211(c)]**

The emergency generator and each emergency genset may only be operated for emergencies, maintenance, and testing purposes; any other operation is prohibited. Operation of the emergency generator and each emergency genset for maintenance and testing purposes is limited to a maximum of 100 hours per year. There is no limit on emergency usage. **[Reference: CPCN Case No. 9677, Condition B-V-4(c) & 40 CFR §60.4211(f)]**

The firewater pump engine may operate for emergencies, maintenance and testing purposes, and non-emergency purposes as defined in 40 CFR §60.4211(f)(3). Operation of the engine for maintenance and testing is limited to a maximum of 100 hours per year. Operation of firewater pump engine for non-emergency purposes is limited to a maximum of 50 hours per year and counts as part of the total maximum 100 hours per year limit. There is no limit on emergency usage. **[Reference: CPCN Case No. 9677, Condition B-V-4(d) & 40 CFR §60.4211(f)]**

The emergency generator, firewater pump engine and each emergency genset shall not have PM_{10} and $PM_{2.5}$ total emissions (filterable and condensable) exceed 0.17 g/hp-hr. with PM condensable emissions alone not to exceed 0.02 g/hp-hr. **[Reference: CPCN Case No. 9766, Condition B-V-6]**

Compliance Demonstration

The emergency generator, firewater pump engine and each emergency genset shall be operated and maintained in accordance with the manufacturer's emission-related written instructions, changing only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as applicable.

The emergency generator and firewater pump engine were fitted with a non-resettable hour meter prior to startup of each engine. Each emergency genset will be fitted with a non-resettable hour meter prior to the startup of each engine. **[Reference: CPCN Case No. 9677, Condition B-V-8 & 9]**

The Permittee shall maintain:
All annual fuel records for the project.
Results of any combustion analysis on the emergency generator, firewater pump engine and each emergency genset. **[Reference: CPCN Case No. 9677, Condition B-IV-21 & B-V-11(a) and COMAR 26.11.09.08.09G(1)(c)]**

The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation for the emergency generator, firewater pump engine and each emergency genset:
The monthly and 12-month consecutive rolling emissions;
The monthly and 12-month consecutive rolling hours of operation;
The monthly and 12-month consecutive rolling quantity of ULSD burned;
The reason the engine was in operation for each time operated.
[Reference: CPCN Case No. 9677, Condition B-V-16]

NESHAP: To satisfy the requirements of 40 CFR Part 63, Subpart ZZZZ, the emergency generator, firewater pump engine and each emergency genset shall comply with all the applicable requirements of NSPS Subpart IIII. **[Reference: CPCN Case No. 9677, Condition B-V-5]**

Compliance Demonstration
See NSPS Requirements.

Emission Units: FUG6, CB6 & PR6.

FUG6: Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices.
CB6: Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6).
PR6: Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.

Compliance Status
During the April 26, 2021, inspection, records of the weekly Audio, Visual, Olfactory (AVO) inspection to limit fugitive GHGs was reviewed.

Applicable Standards and limits:
Operational Limit
For **FUG6** only
GHG BACT Emission Limit - The GHG Emissions shall be included as part of the Project-wide GHG Emissions limit listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677, Condition B-VI-1]**

Compliance Demonstration

For **FUG6** only
Monthly and 12-month consecutive rolling emissions shall be calculated as follows:
(a) The GHG emissions shall be based on EPA AP-42 emission factors, methodology described in 40 CFR Part 98 Subpart W, or other emission factors approved by the Department.
(b) The total GHG emissions from FUG6 shall be presented on a CO_2e basis using the following global warming potential values:

Chemical Formula	Global Warming Potential
CO_2	1
CH_4	25

GHG BACT for FUG6 shall be the implementation of an audio, visual, and olfactory (AVO) program. Fugitive GHG emissions shall be evaluated on a weekly basis from the natural gas pipeline and associated components through implementation of an AVO program. The AVO inspections shall be documented. Leaks identified from the AVO assessment shall be repaired within five days of discovery; repairs shall be documented, and associated repair records shall be maintained.
[Reference: CPCN Case No. 9677, Condition B-VI-2(a)-(b) & B-VI-3; and 40 CFR 98]
The Permittee shall maintain all records of monitoring and repair associated with FUG6 for at least 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 MDE-ARA. The Permittee shall maintain a record of the monthly and 12-month consecutive rolling GHG emissions for FUG6. The emissions and supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: COMAR 26.11.02.02H; CPCN Case No. 9677, Condition B-VI-4 & B-VI-5]**
The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling GHG emissions from fugitive sources. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VI-5]**

For **CB6** only
GHG BACT Emission Limit - The GHG Emissions shall be included as part of the Project-wide GHG Emissions limit listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677, Condition B-VII-1]**

Compliance Demonstration
For **CB6** only

Monthly and 12-month consecutive rolling emissions for **CB6** shall be calculated as follows:
(a) SF6 emissions 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 **CB6** shall be presented on a CO_2e basis using a global warming potential value of 23,900 for SF6.
(c) GHG BACT for **CB6** shall be installation of a state-of-the-art circuit breaker that is 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 shall be documented, and associated repair records shall be maintained. **[Reference: CPCN Case No. 9677, Condition B-VII-2(a)-(b) & B-VII-3; COMAR 26.11.02.02H; 40 CFR 98]**
The Permittee shall maintain all records of monitoring and repair associated with CB6 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 representatives of MDE-ARA.
The Permittee shall maintain a record of the monthly and 12-month consecutive rolling GHG emissions for CB6. The emissions and supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: CPCN Case No. 9677, Condition B-VII-4 & B-VII-5; COMAR 26.11.02.02H]**
The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VII-5]**

For **PR6** only
BACT/LAER Emission Limits - The PM_{10} and $PM_{2.5}$ emissions shall be included as part of the Project-wide PM_{10} and $PM_{2.5}$ emissions limits listed in Condition B-III-3 of the CPCN Case No. 9677 and Table IV-6.1 of this permit. **[Reference: CPCN Case No. 9677,Condition B-VIII-1; COMAR 26.11.02.02H]**

Compliance Demonstration
For **PR6** only
Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions for **PR6** shall be calculated based on EPA AP-42 emission factors or other emission factors approved by MDE-ARA.
PM_{10} BACT and $PM_{2.5}$ LAER for **PR6** shall be to minimize PM_{10} and $PM_{2.5}$ emissions by taking reasonable precautions to prevent particulate matter from

becoming airborne. **[Reference: CPCN Case No. 9677, Condition B-VIII-2 & B-VIII-3; COMAR 26.11.02.02H]**
The Permittee shall maintain a record of the monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions for PR6. The emissions and supporting calculations shall be included in the quarterly report required by Condition B-III-5 of CPCN Case No. 9677. **[Reference: CPCN Case No. 9677, Condition B-VIII-4; COMAR 26.11.02.02H]**
The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads. **[Reference: CPCN Case No. 9677, Condition B-III-5 & B-VIII-4]**

Emission Units: CT6A & CT6B, EG6, FWP6, FUG6, CB6 & PR6; (Project-wide)

CT6A & CT6B: One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354]**
EG6: One (1) diesel-fired emergency generator rated at 268-hp **(MDE Reg. No. 025-0024-9-0492)**.
FWP6: One (1) diesel-fired emergency firewater pump engine rated at 350-hp **(MDE Reg. No. 025-0024-9-0502)**
FUG6: Natural gas pipeline associated with the Perryman 6 Project, including valves, connectors, flanges, pumps seals, and pressure relief devices.
CB6: Circuit breaker associated with the Perryman 6 Project. The circuit breaker contains sulfur hexafluoride (SF_6).
PR6: Paved road emissions associated with the Perryman 6 Project. Emissions from this emission unit are assumed to be entirely $PM_{2.5}$ and PM_{10}.

Compliance Status
During the April 26, 2021, inspection, quarterly reporting is submitted with monthly rolling emission totals.

Applicable Standards and limits:
Operational Limit

Emissions for all sources identified as part of the Perryman 6 Project including emissions during periods of startup and shutdown, shall be limited to the following, in tons per year, in any consecutive 12-month rolling period:

Pollutant	Project-Wide Emission Limit (tpy)
Greenhouse (GHG) as Carbon Dioxide Equivalent (CO_2e)	430,120
Particulate Matter less than 10 microns (PM_{10}) Filterable and Condensable	43.0
Particulate Matter less than 2.5 microns ($PM_{2.5}$) Filterable and Condensable	43.0
Nitrogen Dioxides	58.5

[Reference: CPCN Case No. 9677, Conditions B-III-3 & COMAR 26.11.02.02H]

BACT/LAER Emissions Limit: The GHG, NOx, PM_{10}, and $PM_{2.5}$ emissions from CT6A and CT6B shall be included as part of the Project-wide emissions limit listed in Condition B-III-3. **[Reference: CPCN Case No. 9677, Conditions B-IV-5 & COMAR 26.II.02.02H]**.

Compliance Demonstration

The Permittee shall calculate monthly and consecutive 12-month emissions (in tons per month and tons per year) of GHGs (as CO_2e), PM_{10}, $PM_{2.5}$, and NO_X for the entire Perryman 6 Project. **[Reference: CPCN Case No. 9677, Condition B-III-4 & COMAR 26.11.02.02H]**

The Permittee shall maintain the monthly and 12-month consecutive rolling GHG, NO_X, PM_{10},and $PM_{2.5}$ emissions for CT6A and CT6B. The following information for CT6A and CT6B shall be included in the quarterly report required by Condition B-III-5:

a) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT.

b) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events.

c) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events.

d) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events.

e) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events.

f) Total NOx emission expressed in lb./ event for each startup event and shutdown event.

g) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb. CO_2/MWh gross, for each CT for each fuel burned.
h) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned.
i) For any period where a CT burned ULSD, an explanation for why ULSD was burned.
j) For the EG6 and FW6, the monthly and 12-month consecutive rolling emissions; Monthly and 12-month consecutive rolling hours of operation; Monthly and 12-month consecutive rolling quantity of ULSD burned.
k) For FUG6, monthly and 12-month consecutive rolling GHG emissions from FUG6.
l) For CB6: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker.
m) For PR6: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads.
[Reference: CPCN Case No. 9677, Condition B-IV-23 (a)-(i); B-V-16(a)-(c), B-VI-5, B-VII-5 & B-VIII-4]
The Permittee shall submit quarterly reports to the Department to be postmarked by the 30th day of the month following the end of each calendar quarter that includes the following emissions information and supporting documentation: For CT6A & CT6B:
(a) Monthly and consecutive rolling 12-month emissions (in tons per month and tons per year) of GHGs (as CO_2e), PM_{10}, $PM_{2.5}$, and NO_X for the entire Perryman 6 Project. **[Reference: CPCN 9677, Condition B-III-5]**
(b) Monthly and 12-month consecutive rolling emissions and supporting calculations for each CT.
(c) Monthly and 12-month consecutive rolling quantity of pipeline natural gas and ULSD burned for each CT, inclusive of startup events and shutdown events.
(d) Monthly and 12-month consecutive rolling hours of operation for each CT, inclusive of startup events and shutdown events.
(e) Monthly and 12-month consecutive rolling hours of operation for each CT burning ULSD, exclusive of startup and shutdown events.
(f) Monthly and 12-month consecutive rolling total number of startup events and total number of shutdown events.
(g) Total NOx emission expressed in lb./ event for each startup event and shutdown event.
(h) Monthly and 12-month consecutive rolling GHG emissions rate, expressed in lb.CO_2/MWh gross, for each CT for each fuel burned.
(i) Monthly and 12-month consecutive rolling gross generation (MWh) for each CT for each fuel burned.
(j) For any period where a CT burned ULSD, an explanation for why ULSD was burned.

(k) For the EG6 and FW6, the monthly and 12-month consecutive rolling emissions; Monthly and 12-month consecutive rolling hours of operation; Monthly and 12-month consecutive rolling quantity of ULSD burned.
(l) For FUG6, monthly and 12-month consecutive rolling GHG emissions from FUG6.
(m) For CB6: Monthly and 12-month consecutive rolling GHG emissions from the circuit breaker.
(n) For PR6: Monthly and 12-month consecutive rolling PM_{10} and $PM_{2.5}$ emissions from paved roads.
[Reference: CPCN Case No. 9677, Condition B-III-5(a)-(b), B-IV-23(a)-(i), B-V-16(a)-(c), B-VI-5, B-VII-5 & B-VIII-4]

Emission Units: PY-Unit1, PY-Unit3, PY-Unit4, PY-Unit51, CT6A and CT6B.

Cross State Air Pollution Rule (CSAPR):
PY-Unit1, PY-Unit3 & PY-Unit4: Three (3) Westinghouse model 501 simple cycle combustion turbines, each with a design heat input of 704 MMBtu/hr., rated at a nominal 51 MW output and capable of only burning No.2 distillate oil. **[MDE Reg Nos. 12-4-0081, 12-4-0083 & 12-4-0084]**
PY-Unit51: General Electric Frame 7FA stationary, single-shaft combustion turbine operating in the simple cycle mode, rated at a nominal 150-MW output. This turbine has dual fuel (natural gas and No. 2 fuel oil) firing capacity. **[MDE Reg No. 12-5-0088]**
CT6A & CT6B: One (1) Pratt & Whitney FT4000 SWIFTPAC gas turbine generator package, which consists of two (2) simple cycle combustion turbines (CTs), each with a nominal generating capacity of 60 MW (633 MMBtu), sharing a single stack. **[MDE Reg Nos. 025-0024-5-0353 & 025-0024-5-0354]**

Compliance Status
During the April 26, 2021, inspection stated that the facility complies with the CSAPR requirements by reporting emissions to EPA CAMD and maintaining allowances equal to emissions. Records of allowances purchased were provided.

Applicable Standards and limits:
COMAR 26.11.28.02 - Requirements.
A. This chapter incorporates by reference the U.S. EPA CSAPR and the CSAPR Update, including the definitions, criteria, and procedures therein.
B. Trading Program Requirements.
(1) This chapter incorporates by reference provisions of the CSAPR NO_X Annual Trading Program set forth in 40 CFR Part 97, Subpart AAAAA, as published July 1, 2017, and associated reference methods, performance specifications, and

other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §97.411(b)(2) and (c)(5)(iii), 97.412(b), and 97.421(h) and (j).
(2) This chapter incorporates by reference provisions of the CSAPR NO_X Ozone Season Group 3 Trading Program set forth in 40 CFR Part 97, Subpart EEEEE, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.811(b)(2) and (c)(5)(iii), 97.812(b), and 97.821(h) and (j). (***This is superseded by Group 3 Subpart GGGGG published April 30, 2021, effective June 29, 2021***).
(3) This chapter incorporates by reference provisions of the CSAPR SO_2 Group 1 Trading Program set forth in 40 CFR Part 97, Subpart CCCCC, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.611(b)(2) and (c)(5)(iii), 97.612(b), and 97.621(h) and (j).

TR NO_X 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) NO_X emissions requirements. For TR NO_X Annual emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X 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 NO_X Annual allowance transfer must be submitted for recordation in a TR NO_X Annual source's compliance account in order to be available for use in complying with the source's TR NO_X Annual emissions limitation for such control period in accordance with §§97.406 and 97.424.

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.

A. 40 CFR Part 97 Subpart GGGGG-CSAPR NO_X Ozone Season Group 3 Trading Program

CSAPR NO_X Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

The Permittee shall comply with the provisions and requirements of §97.1001 through §97.1035.

Note: §97.1006(c) NO_X emissions requirements. For CSAPR NO_X Ozone Season Group 3 emissions limitation: 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 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 3 allowances available for deduction for such control period under §97.1024(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 3 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 CSAPR NO_X Ozone Season Group 3 allowance transfer must be submitted for recordation in a CSAPR NO_X Ozone Season Group 3 source's compliance account in order to be available for use in complying with the source's CSAPR NO_X Ozone Season Group 3 emissions limitation for such control period in accordance with §§97.1006 and 97.1024.

Compliance Demonstration

The Permittee shall comply with the monitoring, record keeping, and reporting requirements found in §97.406, §97.430, §97.431, §97.432, and §97.433 for the

CSAPR NO_X Annual Trading Program; §97.1006, §97.1030, §97.1031, §97.1032, §97.1033 and §97.1034 for the CSAPR NO_X Ozone Season Group 3 Trading Program; and §97.606, §97.630, §97.631, §97.632, and §97.633 and §97.634 for CSAPR SO_2 Group 1 Trading Program.

The Permittee operates a 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).

COMPLIANCE SCHEDULE

Perryman Generating Station is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Perryman Generating Station is subject to the Acid Rain Program requirements. The Phase II Acid Rain Permit renewal will be issued in conjunction with this Part 70 permit.

TITLE VI – OZONE DEPLETING SUBSTANCES

Perryman Generating Station is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Perryman Generating Station is not subject to the requirements of Section 112(r).

PERMIT SHIELD

The Perryman Generating Station requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

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. 2 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

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

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) 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.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes.
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

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

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

(a) No. 5 Storage of lubricating oils;

(b) No. 9 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(4) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(5) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

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.

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

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 consumed 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."