



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION  
NORTHEAST REGIONAL OFFICE

April 28, 2017

**CERTIFIED MAIL NO. 7015 0640 0001 0396 3755**

Archbald Energy Partners LLC  
72 Glenmaura National Blvd  
Moosic, PA 18507

Attention: Mr. James P Palumbo  
Vice President

Dear Mr. Palumbo;

Enclosed please find the Air Quality Program Permit No. **35-00070A**.

I suggest that you carefully read your permit and any special conditions accompanying it, to assure all of these conditions are satisfied. Note that the expiration date of your plan approval is **4/30/2021**. If construction/modification is not completed prior to this expiration date, please submit an extension application, which can be found at the following website: <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10621>. Upon completion of construction/modification, submit written notification to the Department of the date that operation is to commence as required under Section B - General Plan Approval Requirements #003 of your Plan Approval.

By copy of this letter, we are informing Archbald Borough and Lackawanna County of the issuance of your permit.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

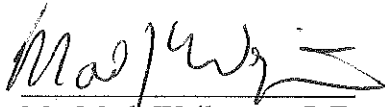


IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If the Department can be of further assistance, please contact Mr. Shailesh Patel in the Air Quality Program at the above telephone number.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Wejksznar', with a stylized flourish at the end.

Mr. Mark Wejksznar, P.E.  
Program Manager  
Air Quality Program



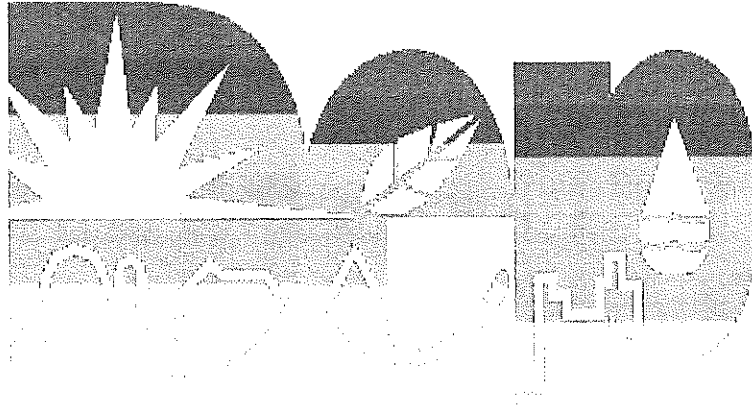
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Operations Chief  
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**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Northeast Regional Office

Air Quality Program



*PLAN APPROVAL PERMIT # 35-00070A*

*ARCHBALD ENERGY PARTNERS LLC*  
Archbald Borough, Lackawanna County

Issue Date: April 28, 2017

Expiration Date: April 30, 2021







COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: April 28, 2017

Effective Date: April 28, 2017

Expiration Date: April 30, 2021

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 35-00070A

Federal Tax Id - Plant Code: 47-4745794-1

Owner Information

Name: ARCHBALD ENERGY PARTNERS LLC  
Mailing Address: 72 GLENMAURA NATIONAL BLVD  
MOOSIC, PA 18507

Plant Information

Plant: ARCHBALD ENERGY PARTNERS/NATURAL GAS POWER PLANT  
Location: 35 Lackawanna County 35804 Archbald Borough  
SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: JAMES P PALUMBO  
Title: VICE PRESIDENT  
Phone: (570) 342 - 5200

Plan Approval Contact Person

Name: JAMES P PALUMBO  
Title: VICE PRESIDENT  
Phone: (570) 342 - 5200

[Signature]

MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER



#### Plan Approval Description

This plan approval is for the construction and temporary operation of a natural gas-fired combined cycle electric generation facility. It is designed to generate up to 485 MW nominal using a combustion turbine generator and a heat recovery steam generator that will provide steam to drive a steam turbine generator. The heat recovery steam generator will be equipped with a natural gas-fired duct burner to supplement power output. The turbine is rated at 3,140 MMBtu/hr and the duct burner is rated at 111 MMBtu/hr. A selective catalytic reduction (SCR) system and oxidation catalyst in series will control NO<sub>x</sub>, CO and VOC. The proposed project will also include a diesel emergency generator, a diesel emergency fire pump and an air cooled condenser.



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Note: These same sub-sections are repeated for each source!

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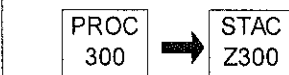
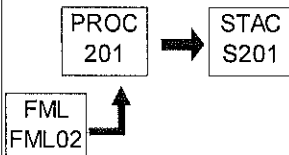
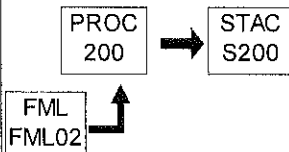
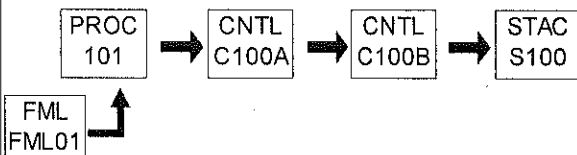
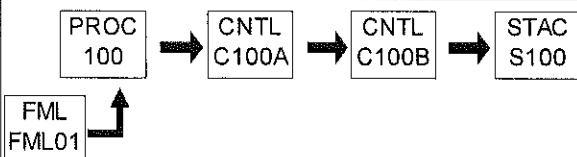
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
100	COMBUSTION TURBINE	3,140.000 MMBTU/HR	
101	DUCT BURNER-HRSG	111.000 MMBTU/HR	
200	EMERGENCY GENERATOR (670 HP)		
201	EMERGENCY FIRE PUMP ENGINE (450 BHP)		
300	AQUEOUS AMMONIA STORAGE TANK		
C100A	SELECTIVE CATALYTIC REDUCTION (SCR)		
C100B	OXIDATION CATALYST		
FML01	NATURAL GAS		
FML02	DIESEL STORAGE TANK		
S100	COMBUSTION TURBINE/DUCT BURNER STACK		
S200	EMERGENCY GENERATOR STACK		
S201	FIRE PUMP STACK		
Z300	AMMONIA TANK FUGITIVE		

**PERMIT MAPS**

**SECTION B. General Plan Approval Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

**#002 [25 Pa. Code § 127.12b (a) (b)]****Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

**#003 [25 Pa. Code § 127.12b]****Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

**#004 [25 Pa. Code § 127.12(a) (10)]****Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

**#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]****Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

**SECTION B. General Plan Approval Requirements**

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. §§ 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

**#006 [25 Pa. Code § 127.12b]****Plan Approval terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in §§ 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

**#007 [25 Pa. Code § 127.32]****Transfer of Plan Approvals**

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

**#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]****Inspection and Entry**

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

**SECTION B. General Plan Approval Requirements**

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

**#009 [25 Pa. Code 127.13a]****Plan Approval Changes for Cause**

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

**#010 [25 Pa. Code §§ 121.9 & 127.216]****Circumvention**

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

**#011 [25 Pa. Code § 127.12c]****Submissions**

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the plan approval transmittal letter or otherwise notified)

**#012 [25 Pa. Code § 127.12(9) & 40 CFR Part 68]****Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:



## SECTION B. General Plan Approval Requirements

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

### #013 [25 Pa. Code § 127.25]

#### Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

## SECTION C. Site Level Plan Approval Requirements

### I. RESTRICTIONS.

#### Emission Restriction(s).

##### # 001 [25 Pa. Code §121.7]

##### Prohibition of air pollution.

No person may permit air pollution as that term is defined in the act.

##### # 002 [25 Pa. Code §123.1]

##### Prohibition of certain fugitive emissions

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
  - (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

(c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (3) Paving and maintenance of roadways.

**SECTION C. Site Level Plan Approval Requirements**

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

**# 003 [25 Pa. Code §123.2]****Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

**# 004 [25 Pa. Code §123.31]****Limitations**

The permittee may not allow the emission into the outdoor atmosphere of any malodorous air contaminants from any source, in such a manner that the malodors are detectable outside the permittee's property.

**# 005 [25 Pa. Code §123.41]****Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.

(2) Equal to or greater than 60% at any time.

**# 006 [25 Pa. Code §123.42]****Exceptions**

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

(1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.

(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).

(4) N/A

**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit emissions from the facility to less than the following during any consecutive 12-month period:

- a. PM-10 - 100 tons
- b. PM-2.5 - 100 tons
- c. Sulfur Dioxide - 100 tons
- d. Nitrogen Oxides - 100 tons
- e. Carbon Monoxide - 100 tons
- f. Volatile Organic Compounds (VOC) - 50 tons
- g. Hazardous Air Pollutants (HAP)
  - 1. 10 tons of any individual
  - 2. 25 tons total of all

**SECTION C. Site Level Plan Approval Requirements****II. TESTING REQUIREMENTS.****# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Performance testing shall be conducted as follows:

(a) The Permittee shall submit three copies of a pre-test protocol to the Department for review at least 45 days prior to the performance of any EPA reference method stack test. The Permittee shall submit three copies of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

(b) The Permittee shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 40 CFR Part 60.8(a), a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.

(d) Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

- (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- (2) Permit number(s) and condition(s) which are the basis for the evaluation.
- (3) Summary of results with respect to each applicable permit condition.
- (4) Statement of compliance or non-compliance with each applicable permit condition.

(e) Pursuant to 25 Pa. Code § 139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(g) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS\*Online available through <https://www.depgreenport.state.pa.us/ecom/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.

(h) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

**# 009 [25 Pa. Code §139.1]****Sampling facilities.**

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

**# 010 [25 Pa. Code §139.11]****General requirements.**

The following are applicable to source tests for determining emissions from stationary sources:

**SECTION C. Site Level Plan Approval Requirements**

(1) Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:

(i) A thorough source description, including a description of any air cleaning devices and the flue.

(ii) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.

(iii) The location of the sampling ports.

(iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO<sub>2</sub>, O<sub>2</sub> and N<sub>2</sub>), static and barometric pressures.

(v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.

(vi) Laboratory procedures and results.

(vii) Calculated results.

**III. MONITORING REQUIREMENTS.****# 011 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

(1) A device approved by the Department and maintained to provide accurate opacity measurements.

(2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall conduct a facility-wide inspection for the presence of any visible stack emissions, fugitive emissions, and any potentially objectionable odors at the property line at a minimum of once a week, during daylight hours, and while the sources are operating. If visible stack emissions, fugitive emissions, and/or potentially objectionable odors are apparent, the permittee shall take corrective action. Records of each inspection shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

**# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the circuit breakers at the facility shall be state-of-the-art sealed enclosed-pressure circuit breakers equipped with low-pressure alarms and a low-pressure lockout where the alarms are triggered when 10% of the sulfur hexafluoride (SF<sub>6</sub>) (by weight) has escaped. When the alarms are triggered, the permittee shall take immediate corrective action to fix the circuit breaker units to a like-new state to prevent the emission of sulfur hexafluoride (SF<sub>6</sub>) to the maximum extent practicable. If immediate corrective action can not be taken the permittee shall notify the Department of the reason for such a delay and ask for approval to take corrective action as soon as practicable..

**IV. RECORDKEEPING REQUIREMENTS.****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall maintain the following comprehensive and accurate records:

## SECTION C. Site Level Plan Approval Requirements

- (a) Amount of fuel used by combustion unit, engine, and turbine on a 12-month rolling basis.
- (b) Hours of operation of each source on a 12-month rolling basis.
- (c) Results of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.
- (d) Copies of the manufacturer's recommended maintenance schedule for each air source and air cleaning device.
- (e) All maintenance performed on each source and air cleaning device.
- (f) Copies of the current, valid purchase contract, tariff sheet, or transportation contract obtained from the natural gas supplier with the sulfur content of the natural gas or results of the annual natural gas sulfur content analyses.
- (g) Amount of sulfur hexafluoride (SF6) dielectric fluid is added to each circuit breaker unit each month.
- (h) The date and time that each alarm associated with the circuit breaker units is activated, the corrective action taken to remedy the problem associated with each alarm, and the date the corrective action remedied the problem.

### # 015 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

All logs and required records shall be maintained on site, or at an alternative location acceptable to the Department, for a minimum of five years and shall be made available to the Department upon request.

## V. REPORTING REQUIREMENTS.

### # 016 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

The annual emission report shall include all emissions information for all previously reported sources and new sources which were first operated during the preceding calendar year. Emissions data including, but not limited to the following, shall be reported: carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter less than 10 micrometers in diameter (PM10), particulate matter less than 2.5 micrometers in diameter (PM2.5), sulfur dioxide (SO2), volatile organic compounds including formaldehyde (VOC), total hazardous air pollutants (HAP), speciated individual HAP emissions, sulfuric acid mist (H2SO4), sulfur hexafluoride (SF6) and greenhouse gases, expressed as CO2e. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

### # 017 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

Malfunction reporting shall be conducted as follows:

(a) For purpose of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or source to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Examples of malfunctions may include, but are not limited to: large dust plumes, heavy smoke, a spill or release that results in a malodor that is detectable outside the property of the person on whose land the source is being operated.

(b) When the malfunction poses an imminent and substantial danger to the public health and safety or the environment, the notification shall be submitted to the Department no later than one hour after the incident commences.

(c) All other malfunctions that must be reported under subsection (a) shall be reported to the Department no later than the next business day.

(d) The report shall describe the:

- (1) Name and location of the facility;
- (2) Nature and cause of the malfunction or breakdown;
- (3) Time when the malfunction or breakdown was first observed;
- (4) Expected duration of excess emissions; and
- (5) Estimated rate of emissions.

(e) Malfunctions shall be reported to the Department at the following address:

PADEP  
Air Quality Program

**SECTION C. Site Level Plan Approval Requirements**

2 Public Square  
Wilkes Barre, PA 18701  
570-826-2511

(f) The owner or operator shall notify the Department immediately upon completion when corrective measures have been accomplished.

(g) Subsequent to the malfunction, the owner/operator shall submit a full written report to the Department including the items identified in (d) and corrective measures taken on the malfunction within 15 days, if requested.

**# 018 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The facility is subject to New Source Performance Standards from 40 CFR Part 60 Subparts IIII, TTTT and KKKK and National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding the engines shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

Associate Director  
Office of Air Enforcement and Compliance  
Mail Code 3AP20  
US EPA, Region III  
1650 Arch Street  
Philadelphia, PA 19101-2029

PA DEP  
Air Quality Program  
2 Public Square  
Wilkes Barre, PA 18701

Any NSPS and MACT reports submitted electronically should be submitted to EPA's Central Data Exchange:  
<https://cdx.epa.gov/>

**# 019 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Within 30 days of the selection of the specific manufacturer and model of each air contamination source and air cleaning device approved under this plan approval, the permittee shall submit, in writing, the manufacturer's specifications to the Department.

**# 020 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall submit annual reports that include:

- (1) the amount of sulfur hexafluoride (SF6) dielectric fluid added to each circuit breaker unit each month,
- (2) the date and time that each alarm associated with the circuit breaker units is activated, the corrective action taken to remedy the problem associated with each alarm, and the date the corrective action remedied the problem.

**# 021 [25 Pa. Code §135.3]****Reporting**

Annual emissions reporting shall be conducted as follows:

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial

## SECTION C. Site Level Plan Approval Requirements

source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

### VI. WORK PRACTICE REQUIREMENTS.

#### # 022 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this Plan Approval in accordance with the manufacturer's specifications and recommended maintenance schedules.

### VII. ADDITIONAL REQUIREMENTS.

#### # 023 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

(a) Nothing in this plan approval shall relieve the owner or operator from complying with any local zoning ordinances.

#### # 024 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this plan approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

#### # 025 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

Upon completion of the Initial Operating Permit Inspection and determination by the Department that the permittee is in compliance with all conditions of the plan approval, the permittee shall submit an Operating Permit (OP) application for this Facility within 120 days.

#### # 026 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

Upon determination by the permittee that the air contamination sources and air cleaning devices covered by this plan approval are in compliance with all conditions of the plan approval, the permittee shall contact the Department's technical reviewer and schedule the Initial Operating Permit Inspection.

#### # 027 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

New air contamination sources and air cleaning devices authorized for construction and operation under this plan approval include:

- One (1) 3,140 MMBtu/hr combined cycle combustion turbine serving one steam turbine generator equipped with heat recovery steam generators (HRSG) with supplemental 111 MMBtu/hr natural gas fired duct burner; controlled by SCR and oxidation catalysts.
- One (1) 670 bhp diesel-fired emergency generator engine.
- One (1) 450 bhp diesel-fired emergency fire pump engine.

#### # 028 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

This plan approval is to allow construction and operation of a combined cycle natural gas-fired power plant known as the Archbald Energy Partners, LLC located in Archbald Borough, Lackawanna County

#### # 029 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

The permittee shall comply with the cross-state air pollution rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA-



**SECTION C. Site Level Plan Approval Requirements**

DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA-DDDDD, as amended.

**# 030 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all applicable requirements under 40 CFR Parts 72-78 related to the Acid Rain Program.

**# 031 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all applicable requirements under 40 CFR Part 64 related to Compliance Assurance Monitoring (CAM).

**# 032 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all applicable requirements under 40 CFR Part 68 related to the Chemical Accident Prevention Provisions.

**# 033 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all applicable requirements of New Source Performance Standards from 40 CFR Part 60 Subparts IIII, TTTT and KKKK and National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ.

**# 034 [25 Pa. Code §129.14]****Open burning operations**

The permittee shall not permit the open burning of materials at this facility unless in accordance with 25 Pa. Code Section 129.14.

**VIII. COMPLIANCE CERTIFICATION.**

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

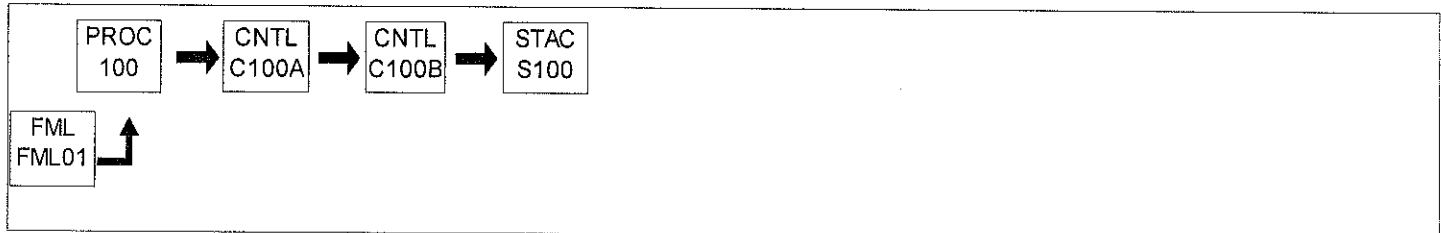
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 100

Source Name: COMBUSTION TURBINE

Source Capacity/Throughput: 3,140.000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 1  
GROUP 2  
GROUP 5

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

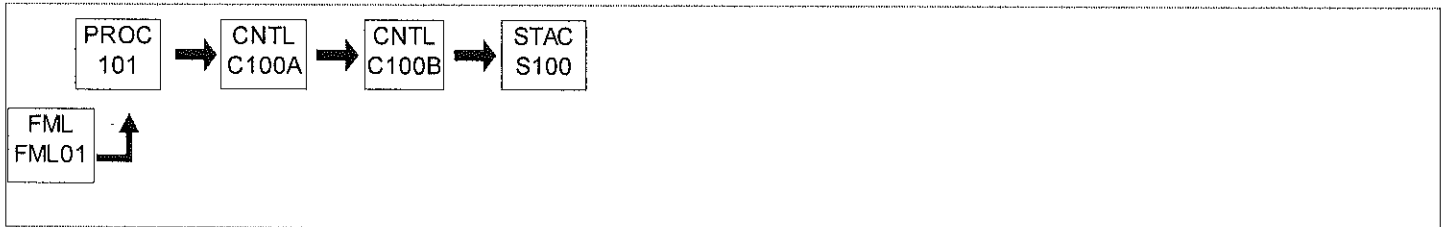
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 101

Source Name: DUCT BURNER-HRSG

Source Capacity/Throughput: 111,000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 1  
GROUP 2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 200

Source Name: EMERGENCY GENERATOR (670 HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 3

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The emissions shall not exceed the following:

1. PM/PM10/PM2.5: 0.05 lb/hr or 0.003 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.13]
2. NOx: 4.4 lb/hr or 0.2 tpy based on a 12-month rolling total
3. CO: 0.52 lb/hr or 0.03 tpy based on a 12-month rolling total
4. VOC: 0.06 lb/hr or 0.003 tpy based on a 12-month rolling total
5. SOx: 0.01 lb/hr or 0.00034 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.21].

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The emergency generator shall fire only ultralow sulfur diesel fuel. The sulfur content of the diesel fuel shall not exceed 0.0015% by weight.

**Operation Hours Restriction(s).****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The emergency generator operating hours shall not exceed 100 hours in any consecutive 12-month period.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Source shall be equipped with a non-resettable meter for hours of operation prior to startup and the meter shall be operated at all times Source is in operation.

**SECTION D. Source Level Plan Approval Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- a. The permittee shall maintain comprehensive, accurate records which, at a minimum, shall include:
  - i. The number of hours per 12 month rolling sum that engine or piece of equipment operated.
  - ii. The amount of fuel used per 12 month rolling sum in engine or piece of equipment.
  - iii. The date, time, and duration of each start-up and shut-down of the engine.
- b. These records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall keep records of the fuel certification reports for each delivery of diesel fuel to verify compliance with the fuel restriction requirements.

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.****# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The company shall maintain and operate the emergency generator in accordance with the manufacturer's specification and with good engineering practice.

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

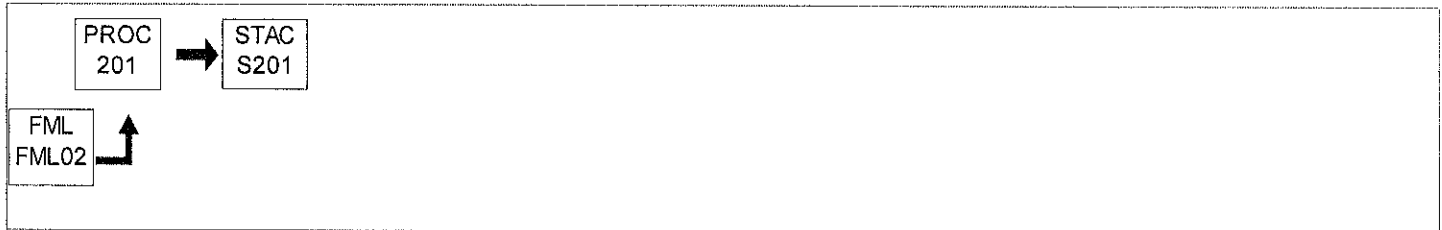
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 201

Source Name: EMERGENCY FIRE PUMP ENGINE (450 BHP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 3

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The emissions shall not exceed the following:

1. PM/PM10/PM2.5: 0.11 lb/hr or 0.001 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.13]
2. NOx: 2.22 lb/hr or 0.11 tpy based on a 12-month rolling total
3. CO: 1.48 lb/hr or 0.01 tpy based on a 12-month rolling total
4. VOC: 0.74 lb/hr or 0.04 tpy based on a 12-month rolling total
5. SOx: 0.00546 lb/hr or 0.0003 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.21]

**Fuel Restriction(s).**

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emergency firewater pump shall fire only ultralow sulfur diesel fuel. The sulfur content of the diesel fuel shall not exceed 0.0015% by weight

**Operation Hours Restriction(s).**

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emergency fire pump operating hours shall not exceed 100 hours in any consecutive 12-month period.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source shall be equipped with a non-resettable meter for hours of operation prior to startup and the meter shall be operated at all times Source is in operation.

**SECTION D. Source Level Plan Approval Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall keep records of the fuel certification reports for each delivery of diesel fuel to verify compliance with the fuel restriction requirements.

**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

a. The permittee shall maintain comprehensive, accurate records which, at a minimum, shall include:

- i. The number of hours per 12 month rolling sum that fire engine or piece of equipment operated.
- ii. The amount of fuel used per 12 month rolling sum in fire engine or piece of equipment.
- iii. The date, time, and duration of each start-up and shut-down of the engine.

b. These records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.****# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The company shall maintain and operate the fire pump engine in accordance with the manufacturer's specification and with good engineering practice.

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

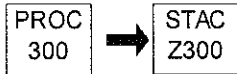
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 300

Source Name: AQUEOUS AMMONIA STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: GROUP 1

Group Description: Combined Cycle Power Block

Sources included in this group

ID	Name
100	COMBUSTION TURBINE
101	DUCT BURNER-HRSG
C100A	SELECTIVE CATALYTIC REDUCTION (SCR)
C100B	OXIDATION CATALYST
FML01	NATURAL GAS

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

At all times, including startup and shutdown, emissions from combined cycle combustion turbine & duct burner, Source IDs 100 & 101, shall not exceed the following on a 12-month rolling sum basis:

- (a) Nitrogen Oxides (NO<sub>x</sub>): 99 tpy
- (b) Carbon Monoxide (CO): 60.4 tpy
- (d) Volatile Organic Compounds (VOC): 19.4 tpy
- (e) Total Particulate Matter (PM): 48.8 tpy
- (f) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM<sub>10</sub>): 48.8 tpy
- (g) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>): 48.8 tpy
- (h) Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>): 13.7 tpy
- (c) Sulfur Oxides (SO<sub>x</sub>): 22.4 tpy
- (i) Ammonia (NH<sub>3</sub>): 89.5 tpy
- (k) Greenhouse Gases, expressed as Carbon Dioxide Equivalent (CO<sub>2</sub>e): 1,464,093 tpy
- (l) Total HAPs: 9.0 tpy
- (j) Formaldehyde: 5.7 tpy

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

Compliance with the above limits for NO<sub>x</sub>, CO, VOC, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, GHG, and H<sub>2</sub>SO<sub>4</sub> ensures compliance with the best available technology (BAT) requirements under 25 Pa. Code, Chapter 127.

**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, During normal operation, emissions from combined cycle combustion turbine, Source IDs 100, shall not exceed following:

- (a) Nitrogen Oxides (NO<sub>x</sub>): (expressed in terms of NO<sub>2</sub>) (3-hour rolling average, calculated once per hour)
  - (1) 2.0 ppmvd @ 15% O<sub>2</sub>
  - (2) 23.1 lb/hr without duct burner
  - (3) 23.0 lb/hr with duct burner

[Compliance with the NO<sub>x</sub> requirements specified in part (a) of this streamlined plan approval condition assures compliance with 40 CFR §60.4320(a)]

- (b) Carbon Monoxide (CO): (3-hour rolling average, calculated once per hour)
  - (1) 2.0 ppmvd @ 15% O<sub>2</sub>
  - (2) 14.0 lb/hr without duct burner
  - (3) 15.6 lb/hr with duct burner

- (c) Volatile Organic Compounds (VOC): (expressed in terms of propane (C<sub>3</sub>H<sub>8</sub>))
  - (1) 2.0 ppmvd @ 15% O<sub>2</sub> with duct burner

**SECTION E. Source Group Plan Approval Restrictions.**

- (2) 1.0 ppmvd @ 15% O<sub>2</sub> without duct burner
- (3) 4.0 lb/hr without duct burner
- (4) 8.0 lb/hr with duct burner

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

(d) Total Particulate Matter (PM):(average of 3 test runs)

- (1) 0.0038 lb/MMBtu (Natural Gas, using EPA Reference Methods 5 or EPA revised methods)
- (2) 11.4 lb/hr without duct burner
- (3) 12.5 lb/hr with duct burner

(e) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM<sub>10</sub>):(average of 3 test runs)

- (1) 0.0038 lb/MMBtu (Natural Gas, using EPA Reference Methods 201A and 202 or EPA revised methods)
- (2) 11.4 lb/hr without duct burner
- (3) 12.5 lb/hr with duct burner

(f) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>):(average of 3 test runs)

- (1) 0.0038 lb/MMBtu (Natural Gas, using EPA Reference Methods 201A and 202 or EPA revised methods)
- (2) 11.74 lb/hr without duct burner
- (3) 12.5 lb/hr with duct burner

(g) Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>):(average of 3 test runs)

- (1) 0.001 lb/MMBtu
- (2) 2.9 lb/hr without duct burner
- (3) 3.06 lb/hr with duct burner

(h) Sulfur Dioxide (SO<sub>2</sub>):(average of 3 test runs)

- (1) 5.3 lb/hr

(i) Ammonia Slip (NH<sub>3</sub>):(corrected to 15% oxygen; 3-hour rolling average, calculated once per hour).

- (1) 5.0 ppmvd
- (2) 21.3 lb/hr without duct burner
- (3) 21.2 lb/hr with duct burner

(j) Formaldehyde (HCHO):(average of 3 test runs)

- (1) 1.35 lb/hr without duct burner
- (2) 1.4 lb/hr with duct burner

(k) Carbon Dioxide (CO<sub>2</sub>):

- (1) 1,000 lbs CO<sub>2</sub>/MWh (gross) on a 12-month annual average basis.

The emission limits above, do not apply during periods of startup and shutdown (S/S).

**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants from the combustion turbine in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one hour.
- (b) Equal to or greater than 30% at any time.

**Fuel Restriction(s).****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The permittee shall operate the combustion turbine using onlypipeline natural gas fuel.

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(b) The permittee shall operate the duct burner using natural gas fuel only.

(c) The sulfur content of the natural gas fuel fired by the combustion turbine and duct burner shall not exceed 0.5 grain per 100 standard cubic feet.

**Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.****Startups and shutdowns:**

(a) The durations of startups and shutdowns shall be minimized to the maximum extent possible.

(b) Total startup and shutdown duration for combined cycle combustion turbine shall not exceed the following:

- (i) Cold Startups shall not exceed 45 minutes in duration.
- (ii) Warm Startups shall not exceed 40 minutes in duration.
- (iii) Hot Startups shall not exceed 20 minutes in duration.
- (iv) Shutdown shall not exceed 12 minutes in duration.

Total Startups & Shutdowns hours shall not exceed 24 hours each in duration in any consecutive 12-month period.

**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.****Definitions:**

(a) A startup is defined as operation in the period beginning when continuous fuel flow to the combustion turbine is initiated and ending when the combustion turbine achieves compliance with the emission limits.

(b) Shutdown is defined as the period beginning with the lowering of unit load below 40% with the intent of ceasing operation of the unit and ending with the termination of continuous fuel flow to the combustion turbine.

(c) Normal operation is defined as all times except startup and shutdown.

**# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

a. The combined cycle combustion turbine, Source IDs 100, shall not be operated for more than 8,400 hours per year based on 12 month rolling sum.

b. The duct burner, Source IDs 101, shall not be operated for more than 1,200 hours per year based on 12 month rolling sum.

**II. TESTING REQUIREMENTS.****# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Within 180 days after initial startup, the permittee shall conduct EPA reference method stack testing with and without duct burners for NO<sub>x</sub>, CO, VOC, formaldehyde, PM (filterable), PM<sub>10</sub> (filterable and condensable), PM<sub>2.5</sub> (filterable and condensable), sulfuric acid mist, SO<sub>2</sub>, hexane, and toluene emissions and ammonia slip in accordance with the requirements of 25 Pa. Code §139.

**# 009 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall conduct subsequent EPA reference method stack testing for VOC, formaldehyde, PM (filterable), PM<sub>10</sub> (filterable and condensable), PM<sub>2.5</sub> (filterable and condensable), sulfuric acid mist and SO<sub>2</sub> no less often than every two years after initial testing.

**SECTION E. Source Group Plan Approval Restrictions.****III. MONITORING REQUIREMENTS.****# 010 [25 Pa. Code §123.51]****Monitoring requirements**

(a) This section applies to combustion units with a rated heat input of 250 million Btus per hour or greater and with an annual average capacity factor of greater than 30%.

(b) Sources subject to this section shall install, operate and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources).

(c) Sources subject to this section shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with Chapter 139, Subchapter C.

(d) Continuous nitrogen oxides monitoring systems installed under the requirements of this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

(e) The Department may exempt a source from the requirements of subsection (b) if the Department determines that the installation of a continuous emission monitoring system would not provide accurate determination of emissions or that installation of a continuous emission monitoring system cannot be implemented by a source due to physical plant limitations or to extreme economic reasons. A source exempted from the requirements of subsection (b) shall satisfy alternative emission monitoring and reporting requirements proposed by the source and approved by the Department which provide oxides emission data that is representative of actual emissions of the source.

(f) Sources subject to this section shall comply by October 20, 1993, unless the source becomes subject to the requirements later than October 20, 1990. For sources which become subject to the requirements after October 20, 1990, the source has 36 months from the date the source becomes subject to this section. The Department may issue orders providing a reasonable extension of time for sources that have made good faith efforts to install, operate and maintain continuous monitoring devices, but that have been unable to complete the operations within the time period provided.

**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide, and ammonia emissions on the exhaust of the combined-cycle powerblock in accordance with all applicable requirements specified in 25 Pa. Code §139 and the Department's Continuous Source Monitoring Manual.

(a) Initial Application (Phase I): Proposal[s] containing information as listed in the Phase I section of the Department's Continuous Source Monitoring Manual for the CEMS[s] must be submitted at least 180 days prior to the planned initial source startup date.

(b) Performance Testing (Phase II): Testing as listed in the Phase II section of the Department's Continuous Source Monitoring Manual must be completed for the CEMS[s] no later than 180 days after initial source startup date and no later than 60 days after source achieves normal process capacity.

(c) Final Approval (Phase III): The final report of testing as listed in the Phase III section of the Department's Continuous Source Monitoring Manual must be submitted to the Bureau no later than 60 days after completion of testing.

(d) The owner or operator of the source shall not be issued an operating permit until the CEMS has received Phase III approval, in writing from the Department, when installation of a CEMS is made a condition of the plan approval. Until Phase III Department approval is obtained, operation shall be covered solely under condition of a plan approval.

**# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall continuously monitor the oxygen level in the stack effluent.

**# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across the oxidation catalyst incorporated into source IDs C100B as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis. Visual and audible alarms shall be utilized to indicate improper

**SECTION E. Source Group Plan Approval Restrictions.**

operation.

**# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across the selective catalytic reduction catalysts incorporated into IDs C100A as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis. Visual and audible alarms shall be utilized to indicate improper operation.

**# 015 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pre-control and postcontrol nitrogen oxides (expressed as NO<sub>2</sub>) emissions from Source IDs 100 shall be monitored and recorded by the feed-forward process control loop to ensure maximum control efficiency and minimum ammonia slip. Visual and audible alarms shall be utilized to indicate improper operation.

**# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The following continuous emission monitoring systems must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the 'Submittal and Approval', 'Record Keeping and Reporting', and 'Quality Assurance' requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

**1. Continuous Emissions Monitoring System #1**

- (a) Source Combination to be Monitored: Turbine
- (b) Parameter to be Reported: CO
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported: dry
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
  - (1) Emission Standard Carbon Monoxide (CO): (1) 14.0 lb/hr without duct burner, 15.6 lb/hr with duct burner
- (a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: Yes

**2. Continuous Emissions Monitoring System #2**

- (a) Source Combination to be Monitored: Turbine
- (b) Parameter to be Reported: NOX
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported: dry
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
  - (1) Emission Standard # 1: Nitrogen Oxides (NO<sub>x</sub>): (1) 23.1lb/hr without duct burner, (2) 23.0 lb/hr with duct burner
- (a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: Yes

**3. Continuous Emissions Monitoring System #3**

- (a) Source Combination to be Monitored: Turbine
- (b) Parameter to be Reported: Ammonia Slip
- (c) Units of Measurement to be Reported: lb/hr

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- (d) Moisture Basis of Measurement to be Reported: dry
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard (i) Ammonia Slip (NH<sub>3</sub>): (1) 21.3 lb/hr without duct burner, (2) 21.2 lb/hr with duct burner
- (a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour.
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: Yes

**# 017 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

This section applies to monitoring systems as defined in the manual referenced at 139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under section 4 of the act(35 P. S. 4004).

(1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual," available from the Department shall be utilized to obtain Department approval. This publication includes:

- (i) Installation requirements.
- (ii) Performance specifications.
- (iii) Test procedures.
- (iv) Reporting requirements.
- (v) Quality assurance requirements.
- (vi) Administrative procedures for obtaining Department approval.

(2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of persons qualified by training and experience.

(3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.

(4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the manual referenced in 139.102.

(4)(a). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.

(5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the manual referenced in 139.102(3). The records shall be maintained for 5 years and be available for inspection by Department personnel.

(6) The owner of a monitored source shall provide permanent sampling facilities as specified in 139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.

(7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the manual referenced in 139.102(3).

(8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 139.102.

(9) The Department's approval will be based on the criteria specified in the manual referenced in 139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.

(10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than

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1 hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within 2 hours of the malfunction.

(11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the manual referenced in 139.102(3).

(12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title, in a plan approval or permit condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under section 4 of the act. For purposes of calculating data availability, "process down" time, as specified in the manual referenced in 139.102(3), shall be considered valid time.

(i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).

(ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).

(13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.

(14) Monitoring systems shall comply with the applicable performance specifications section of the manual referenced in 139.102(3). The Department has the authority to determine which of the performance specifications are applicable.

(15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.

(16) The requirements of this section apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

**# 018 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for the combustion turbine's SCR unit:

- (1) Catalyst bed inlet gas temperature.
- (2) Pressure differential across the catalyst bed.
- (3) Ammonia solution injection rate.

(b) The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for the combustion turbine's oxidation catalyst:

- (1) Catalyst bed inlet gas temperature.
- (2) Pressure differential across the catalyst bed.

(c) The aforementioned SCR unit and oxidation catalyst monitoring instrumentation shall be calibrated, at a minimum, annually.

(d) The permittee shall retain records to demonstrate compliance with part (c), above, for a minimum of five (5) years and shall make them available to the Department upon its request.

**# 019 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

In order to ensure continuous compliance with the VOC emission limits of Condition #002(c), above, the permittee shall use CO CEMS data as a surrogate for VOC emissions by developing a correlation factor between CO and VOC emissions during the initial emissions test, above, by simultaneously operating the Department certified CO CEMS during the VOC

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### emissions test.

The correlated VOC concentration (ppmvd) will be used to calculate VOC emissions in terms of the emission limits (i.e., ppmvd @ 15% O<sub>2</sub> and lb/hr). The molecular weight of propane (i.e., 44.1 lb/lb-mole) will be used to express the correlated VOC concentration and emission rate in terms of mass emissions. If the correlated VOC concentration or emission rate is in excess of the emission limit, an emission test program will be conducted to determine compliance with the VOC emission limits and to reestablish the correlation factor as necessary. The CO/VOC emissions correlation factor developed during emissions testing will be used in conjunction with the Department-certified CO CEMS to demonstrate compliance with the aforementioned VOC emission limits. Unless otherwise approved in writing by DEP, subsequent VOC emissions testing will be conducted every five years (58 to 62 months after the date of the previous compliant VOC emissions test), or more frequently at the Department's request, in order to verify the CO/VOC emissions correlation factor. The Department may approve an alternative methodology, in writing, for use as an indicator of compliance with the VOC emissions limit.

#### # 020 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

The facility shall monitor Gross Electrical Output (MW-hr) in order to comply with the CO<sub>2</sub> emission standard.

## IV. RECORDKEEPING REQUIREMENTS.

#### # 021 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:

- (a) Actual heat input and power output on a 12-month rolling basis.
- (b) The number of startups and shutdowns and the dates each occur.
- (c) Duration of each startup and shutdown event.
- (d) The type of each startup (i.e. cold, warm, or hot).
- (e) Duct burner hours of operation on a 12-month rolling basis.
- (f) Requirements established in 25 Pa. Code §139 Subchapter C, requirements for source monitoring for stationary sources.
- (g) Requirements in the most recent version of the Department's Continuous Source Monitoring Manual.

#### # 022 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

(a) The permittee shall maintain detailed records of all maintenance (preventive or otherwise) performed on the combustion turbine and its SCR unit and oxidation catalyst. The records shall include, at a minimum, the following information:

- (1) The name of the company representative performing the maintenance.
- (2) The date of each maintenance.
- (3) A description of the maintenance, mechanical repairs, and/or adjustments.

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

(c) The permittee shall maintain a copy of the combustion turbine/SCR unit/oxidation catalyst manufacturer's preventive maintenance schedule on-site at all times.

#### # 023 [25 Pa. Code §127.12b]

##### Plan approval terms and conditions.

(a) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period.

(b) The permittee shall maintain records of the duct burner's monthly operating hours and the operating hours for each consecutive 12-month period.

(c) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.



**SECTION E. Source Group Plan Approval Restrictions.****# 024 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall record the duration (hours) of each combustion turbine startup and shutdown event, including the date and times of each event. Air emissions of the non-monitored pollutants listed in Conditions, above, during these events shall be calculated based upon the emission rates presented in the plan approval application. The emissions of CO and NOx during these events will be determined by each pollutant's respective Continuous Emissions Monitoring System (CEMS). All of these emissions shall be included in the monthly and consecutive 12-month air emissions calculations, as well as the annual report.

**# 025 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period during startup events.

(b) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period during shutdown events.

(c) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

**V. REPORTING REQUIREMENTS.****# 026 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(10) and 139.101(12), 139.103, 139.108 or 139.111]

(a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), (and) the "Record Keeping and Reporting" requirements as established in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.

(b) The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.

(c) Initial quarterly reports following system certification shall be submitted to the Department within 35 days following the date upon which the Department notifies the owner or operator, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.

(d) Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.

(e) Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.

(f) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

**# 027 [25 Pa. Code §145.204.]****Incorporation of Federal regulations by reference.**

The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 96.21(b)(1)(ii).

**# 028 [25 Pa. Code §145.204.]****Incorporation of Federal regulations by reference.**

The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 97.21(b)(1)(ii).

**VI. WORK PRACTICE REQUIREMENTS.****# 029 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Within 180-days of commencement of operation, or by the date of the initial operating permit inspection, whichever is

**SECTION E. Source Group Plan Approval Restrictions.**

sooner, the permittee shall submit the proposed indicator ranges for the following:

1. Oxidation Catalyst

(a) Catalyst Temperature

The proposed indicator ranges, as approved by the Department, shall be incorporated into the operating permit. The permittee shall adhere to the approved indicator ranges so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over the specified averaging period shall be defined as an excursion. Within 24-hours of discovery of an indicator being out of range, the permittee shall perform a maintenance inspection on the control device and take corrective action.

(b) The permittee shall utilize approved QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the devices.

1. The permittee shall, for an approved device(s), install detectors or sensors at a location approved by the Department for obtaining data that are representative of the monitored indicator.

2. The permittee shall develop verification procedures to confirm the operational status of new or modified monitoring equipment prior to commencement of the monitoring process. (The operational status pertains to the first time calibration of new or modified equipment. The permittee may compare the data with any Department approved standardized data. For example, permittee might calibrate a new pH sensor by comparison with laboratory measurement of the scrubber recirculation fluid.) (The operational status pertains to the first time calibration of new or modified equipment. The permittee may compare the data with any Department approved standardized data. For example, you might compare a pressure gauge at a controlled pressure to that of a pressure standard of a known accuracy, or thermal couple temperature accuracy measured against a known reference temperature traceable to a National Institute for Standards and Technology (NIST)).

3. The permittee shall calibrate and check the accuracy of monitoring equipment taking into account the manufacturer's specifications at approved time intervals.

(a) Oxidation Catalyst

(i) Thermocouple or equivalent - calibrated and checked for accuracy annually

(c) The permittee shall maintain all monitoring equipment and stock parts necessary for routine repairs onsite.

(d) The permittee shall ensure that at least 90% of the monitoring data has been properly and accurately collected.

**# 030 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

(a) The SCR system shall be designed so it will not inject ammonia into the system when the inlet temperature to the catalyst is less than the minimum catalyst temperature to be established as part of the O&M plan.

(b) Prior to commencement of operations, the permittee shall develop and submit to the Department for approval a Risk Management Plan (RMP) meeting the requirements of Clean Air Act Section 112(r) and 40 CFR 68 Subpart G, with respect to the storage of aqueous ammonia if the permittee intends to store aqueous ammonia with a concentration of 20% or greater such that the quantity of ammonia present at the facility at any time exceeds 20,000 pounds, and the permittee shall implement the Department approved RMP.

**# 031 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

The permittee shall operate all air cleaning devices at all times once operating parameters (temperature, flow, etc.) are sufficient for proper operation.

**# 032 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(2), 139.101(3), 139.101(4), 139.101(6), 139.101(7), 139.101(8), 139.101(12), 139.101(14) and 139.101(15)]

**SECTION E. Source Group Plan Approval Restrictions.**

(a) Continuous Emission Monitoring Systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.

(b) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

(c) Data Availability Standards: Continuous emission monitoring shall meet the following minimum data availability requirements:

1. In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:

(a) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies, shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001; or

(b) In each calendar quarter, at least 95% of the hours shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

2. Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with the regulations.

3. Emission Standard(s) To Which Data Availability Standard applies:

(a) CO (lb/hr)

(b) NO<sub>x</sub> (lb/hr)

(c) Ammonia Slip (lb/hr)

**# 033 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall at all times operate and maintain the combustion turbine and its SCR unit and oxidation catalyst, including all associated monitoring equipment, in accordance with the manufacturer's recommendations/ specifications (including the manufacturer's preventive maintenance schedule), as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

(b) The permittee shall operate the combustion turbine's SCR unit and oxidation catalyst at all times the turbine is in operation once the relevant operating parameters (e.g., catalyst bed inlet gas temperature, air flow) are sufficient for proper control device operation pursuant to the manufacturer's recommendations/specifications.

(c) The permittee shall commence, and subsequently maintain, the ammonia flow for the combustion turbine's SCR unit as soon as the SCR unit's catalyst bed inlet gas temperature reaches the minimum operating temperature as recommended by the SCR unit manufacturer. The combustion turbine's SCR unit shall be designed so it will not inject ammonia into the system when the catalyst bed inlet gas temperature is less than the minimum catalyst bed inlet gas temperature as recommended by the SCR unit manufacturer.

**# 034 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

All gauges employed by the permittee to monitor the required control device operating parameters shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (+/- 2%) of full scale reading.

**VII. ADDITIONAL REQUIREMENTS.****# 035 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The combined cycle combustion turbine (Source IDs 100) shall be equipped with DLN burners, selective catalytic reduction, and oxidation catalyst.

**SECTION E. Source Group Plan Approval Restrictions.****# 036 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart KKKK [40 CFR § 60.4300 through § 60.4420].

**# 037 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Authority for this condition is also derived from 40 CFR Section 98.43 and 40 CFR Section 75.13]

a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide and ammonia emissions on the exhaust of combined-cycle powerblock incorporated into Source IDs 100 in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS may however be installed unless Phase I approval has first been obtained from the Department.

(b) The permittee shall submit a Phase I application to the Department for all CEMS to be associated with each combined cycle powerblock at least 180 days prior to the expected commencement of operation date of each respective unit.

**# 038 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[25 Pa. Code §127.441(c) & Chapter 139; §§114(a)(3), 504(b) of the CAA] Sampling, Testing and Monitoring Procedures

1. The permittee shall perform the emissions monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 114(a)(3) (42 U.S.C.A. §§ 7414 (a)(3)) or 504(b) (42 U.S.C.A. §§ 7661c(b)) of the Clean Air Act.

2. Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, quality assurance, recordkeeping and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, Subpart C, Article III (relating to air resources), including Chapter 139 (relating to sampling and testing). The permittee shall also comply with applicable requirements related to monitoring, quality assurance, reporting and recordkeeping required by the Clean Air Act including §§ 114(a)(3) and 504(b) and regulations adopted thereunder, unless otherwise required by this permit.

**# 039 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Department reserves the right to use the CEMS data, emissions test results, and the operating parameters recorded during emissions testing of the combustion turbine and its SCR and oxidation catalyst to verify emission rates, to establish emission factors, and to develop compliance assurance measures in this plan approval and any subsequent incorporation into operating permit.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: GROUP 2

Group Description: Units Subject to NSPS Subpart KKKK

Sources included in this group

ID	Name
100	COMBUSTION TURBINE
101	DUCT BURNER-HRSG
C100A	SELECTIVE CATALYTIC REDUCTION (SCR)
C100B	OXIDATION CATALYST
FML01	NATURAL GAS

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for nitrogen oxides (NOX)?**

(a) You must meet the emission limits for NO<sub>x</sub> specified in Table 1 to this subpart [15 ppm @ 15% O<sub>2</sub> or 54 nanograms per joule (ng/J) of useful output (0.43 lb/MWh)].

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4330]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for sulfur dioxide (SO<sub>2</sub>)?**

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO<sub>2</sub> 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<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; or

(3) N/A

(b) N/A

**II. TESTING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4400]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I conduct the initial and subsequent performance tests, regarding NOX ?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent NO<sub>x</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NO<sub>x</sub> concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO<sub>x</sub> emission rate:

$$E = [0.0000001194 * (NO_x)_c * Q_{std}] / P \text{ (Equation 5)}$$

Where:

## SECTION E. Source Group Plan Approval Restrictions.

E = NO<sub>x</sub> emission rate, in lb/MWh

0.0000001194 = conversion constant, in lb/dscf-ppm

(NO<sub>x</sub>)<sub>c</sub> = average NO<sub>x</sub> concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(ii) Measure the NO<sub>x</sub> and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO<sub>x</sub> emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO<sub>x</sub> emission rate in lb/MWh.

(2) Sampling traverse points for NO<sub>x</sub> and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

(i) You may perform a stratification test for NO<sub>x</sub> and diluent pursuant to

(A) [Reserved], or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NO<sub>x</sub> concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO<sub>x</sub> concentration during the stratification test; or

(B) N/A

(C) For turbines with a NO<sub>x</sub> standard less than or equal to 15 ppm @ 15% O<sub>2</sub>, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO<sub>x</sub> concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) N/A.

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(2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NOX emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.

(3) N/A

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOX emission rate at each tested level meets the applicable emission limit in §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

(6) The ambient temperature must be greater than 0 °F during the performance test.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4405]**

**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

**How do I perform the initial performance test if I have chosen to install a NOX-diluent CEMS?**

If you elect to install and certify a NOX-diluent CEMS under §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

(a) Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs.

(b) For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit.

(c) Use the test data both to demonstrate compliance with the applicable NOX emission limit under §60.4320 and to provide the required reference method data for the RATA of the CEMS described under §60.4335.

(d) Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NOX emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4415]**

**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

**How do I conduct the initial and subsequent performance tests for sulfur?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent SO<sub>2</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(i) N/A

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

(2) Measure the SO<sub>2</sub> concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the

## SECTION E. Source Group Plan Approval Restrictions.

unit. Then use the following equation to calculate the SO<sub>2</sub> emission rate:

$$E = [0.0000001664 * (SO_2)c * Qstd] / P \text{ (Equation 6)}$$

Where:

E = SO<sub>2</sub> emission rate, in lb/MWh

1.664 x 10<sup>-7</sup> = conversion constant, in lb/dscf-ppm

(SO<sub>2</sub>)c = average SO<sub>2</sub> concentration for the run, in ppm

Qstd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(3) Measure the SO<sub>2</sub> and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see §60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO<sub>2</sub> emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the SO<sub>2</sub> emission rate in lb/MWh.

(b) [Reserved]

### III. MONITORING REQUIREMENTS.

#### # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]

##### Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?

(a) Each NO<sub>x</sub> diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NO<sub>x</sub> diluent CEMS that is installed and certified according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NO<sub>x</sub> monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO<sub>x</sub> emission rate for the hour.

(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.

(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75 of this chapter.



**SECTION E. Source Group Plan Approval Restrictions.****# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4350]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

How do I use data from the continuous emission monitoring equipment to identify excess emissions?

- (a) All CEMS data must be reduced to hourly averages as specified in §60.13(h).
- (b) For each unit operating hour in which a valid hourly average, as described in §60.4345(b), is obtained for both NOX and diluent monitors, the data acquisition and handling system must calculate and record the hourly NOX emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of this part. For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2 (or the hourly average CO2 concentration is less than 1.0 percent CO2), a diluent cap value of 19.0 percent O2 or 1.0 percent CO2 (as applicable) may be used in the emission calculations.
- (c) Correction of measured NOX concentrations to 15 percent O2 is not allowed.
- (d) If you have installed and certified a NOX diluent CEMS to meet the requirements of part 75 of this chapter, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under §60.7(c).
- (e) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.
- (f) Calculate the hourly average NOX emission rates, in units of the emission standards under §60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:
- (1) N/A [Not simple-cycle]
- (2) For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1 of this subpart, except that the gross energy output is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW.
- (3) N/A
- (g) N/A
- (h) For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 30 unit operating day rolling average basis, as described in §60.4380(b)(1).

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4360]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

How do I determine the total sulfur content of the turbine's combustion fuel?

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION E. Source Group Plan Approval Restrictions.****V. REPORTING REQUIREMENTS.****# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What reports must I submit?**

(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**VII. ADDITIONAL REQUIREMENTS.****# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4333]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What are my general requirements for complying with this subpart?**

§60.4333 What are my general requirements for complying with this subpart?

(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:

(1) Determine compliance with the applicable NOX emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or

(2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for units located in continental areas and 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb

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SO<sub>2</sub>/MMBtu) heat input for continental areas or 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: GROUP 3

Group Description: Units Subject to NSPS Subpart IIII

Sources included in this group

ID	Name
200	EMERGENCY GENERATOR (670 HP)
201	EMERGENCY FIRE PUMP ENGINE (450 BHP)
FML02 DIESEL STORAGE TANK	

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?**

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) N/A

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) N/A

(c) [Reserved]

(d) N/A

(e) N/A

(f) N/A

(g) N/A

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?**

(a) N/A

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

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(d) N/A

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) N/A

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]**

**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?**

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

**Fuel Restriction(s).**

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]**

**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?**

(a) N/A

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) N/A

(e) N/A

**II. TESTING REQUIREMENTS.**

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4212]**

**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the equation in §60.4212(c).

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40

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CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) N/A

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

**III. MONITORING REQUIREMENTS.****# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) N/A

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**V. REPORTING REQUIREMENTS.****# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) N/A

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) N/A

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for

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engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vi) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

**VI. WORK PRACTICE REQUIREMENTS.****# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) N/A

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §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 (g) of this section.

(d) N/A

(e) N/A

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are

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recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) N/A

(2) N/A

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable



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emission standards.

**VII. ADDITIONAL REQUIREMENTS.****# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****Am I subject to this subpart?**

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) N/A

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(b) N/A

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) N/A

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4208]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What is the deadline for importing or installing stationary CI ICE produced in the previous model year?**

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) N/A

(c) N/A

(d) N/A

(e) N/A

(f) N/A

(g) N/A

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

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(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]**

**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

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Group Name: GROUP 4

Group Description: Storage Tanks

Sources included in this group

ID	Name
300	AQUEOUS AMMONIA STORAGE TANK
FML02	DIESEL STORAGE TANK

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep a record of the vapor pressure of the contents of each storage tank unless the respective tank is equipped with pressure relief valves that meets the requirement in this permit relating to pressure release settings.

(b) The information used to demonstrate compliance with this permit condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.****# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Compliance with this streamlined permit condition assures compliance with the provisions of 25 Pa. Code § 129.57]

The permittee shall not store any liquid containing volatile organic compounds (VOC) with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in each storage tank unless each of the tanks are equipped with pressure relief valve which is maintained in good operating condition and which are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum, or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

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Group Name: GROUP 5

Group Description: Unit subject to NSPS Subpart TTTT

Sources included in this group

ID	Name
100	COMBUSTION TURBINE

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5520]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****What CO<sub>2</sub> emission standard must I meet?**

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

**TABLE 2 REQUIREMENT**

CO<sub>2</sub> emission standard is 450 kg/MWh of gross energy output (1,000 lb CO<sub>2</sub>/MWh)

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

(c) [N/A – FACILITY HAS ELECTED NOT TO APPLY FOR THE NET ENERGY OUTPUT STANDARD]

(d) [N/A – FACILITY IS NOT SUBJECT TO A HEAT INPUT-BASED STANDARD]

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**III. MONITORING REQUIREMENTS.****# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5535]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****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). If your combustion turbine uses non-uniform fuels as specified under §60.5520(d)(2), you must monitor heat input in accordance with paragraph (c)(1) of this section, and you must monitor CO<sub>2</sub> emissions in accordance with either paragraph (b), (c)(2), or (c)(5) of this section. For all other affected sources, you must prepare a monitoring plan to quantify the hourly CO<sub>2</sub> mass emission rate (tons/h), in accordance with the applicable provisions in §75.53(g) and (h) of this chapter. The electronic portion of the monitoring plan must be submitted using the ECMPs Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under this subpart. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR (see §60.5555(c)).

(b) N/A

(c) [N/A]

(d) Consistent with §60.5520, you must determine the basis of the emissions standard that applies to your affected source

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in accordance with either paragraph (d)(1) or (2) of this section, as applicable:

(1) If you operate a source subject to an emissions standard established on an output basis (e.g., lb of CO<sub>2</sub> per gross or net MWh of energy output), you must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output or net electric output, as applicable, from the affected EGU(s). These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20 (incorporated by reference, see §60.17). For a combined heat and power (CHP) EGU, as defined in §60.5580, you must also install, calibrate, maintain, and operate meters to continuously (i.e., hour-by-hour) determine and record the total useful thermal output. For process steam applications, you will need to install, calibrate, maintain, and operate meters to continuously determine and record the hourly steam flow rate, temperature, and pressure. Your plan shall ensure that you install, calibrate, maintain, and operate meters to record each component of the determination, hour-by-hour.

(2) N/A

(e) N/A

(f) N/A

(g) N/A

**IV. RECORDKEEPING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5560]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****What records must I maintain?**

(a) You must maintain records of the information you used to demonstrate compliance with this subpart as specified in §60.7(b) and (f).

(b)(1) For affected EGUs subject to the Acid Rain Program, you must follow the applicable recordkeeping requirements and maintain records as required under subpart F of part 75 of this chapter.

(2) N/A

(c) You must keep records of the calculations you performed to determine the hourly and total CO<sub>2</sub> mass emissions (tons) for:

(1) Each operating month (for all affected EGUs); and

(2) Each compliance period, including, each 12-operating-month compliance period.

(d) Consistent with §60.5520, you must keep records of the applicable data recorded and calculations performed that you used to determine your affected EGU's gross or net energy output for each operating month.

(e) You must keep records of the calculations you performed to determine the percentage of valid CO<sub>2</sub> mass emission rates in each compliance period.

(f) You must keep records of the calculations you performed to assess compliance with each applicable CO<sub>2</sub> mass emissions standard in Table 1 or 2 of this subpart.

(g) You must keep records of the calculations you performed to determine any site-specific carbon-based F-factors you used in the emissions calculations (if applicable).

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5565]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review.

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(b) You must maintain each record for 3 years after the date of conclusion of each compliance period.

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

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5508]**  
**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**  
**What is the purpose of this subpart?**

This subpart establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions from a steam generating unit, IGCC, or a stationary combustion turbine that commences construction after January 8, 2014 or commences modification or reconstruction after June 18, 2014. An affected steam generating unit, IGCC, or stationary combustion turbine shall, for the purposes of this subpart, be referred to as an affected EGU.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5509]**  
**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**  
**Am I subject to this subpart?**

(a) Except as provided for in paragraph (b) of this section, the GHG standards included in this subpart apply to any steam generating unit, IGCC, or stationary combustion turbine that commenced construction after January 8, 2014 or commenced reconstruction after June 18, 2014 that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section. The GHG standards included in this subpart also apply to any steam generating unit or IGCC that commenced modification after June 18, 2014 that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section.

(1) Has a base load rating greater than 260 GJ/h (250 MMBtu/h) of fossil fuel (either alone or in combination with any other fuel); and

(2) Serves a generator or generators capable of selling greater than 25 MW of electricity to a utility power distribution system.

(b) You are not subject to the requirements of this subpart if your affected EGU meets any of the conditions specified in paragraphs (b)(1) through (10) of this section.

(1) - (10) N/A.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5515]**  
**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**  
**Which pollutants are regulated by this subpart?**

(a) The pollutants regulated by this subpart are greenhouse gases. The greenhouse gas standard in this subpart is in the form of a limitation on emission of carbon dioxide.

(b) N/A.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5525]**  
**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**  
**What are my general requirements for complying with this subpart?**

Combustion turbines qualifying under §60.5520(d)(1) are not subject to any requirements in this section other than the

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requirement to maintain fuel purchase records for permitted fuel(s). For all other affected sources, compliance with the applicable CO<sub>2</sub> emission standard of this subpart shall be determined on a 12-operating-month rolling average basis. See table 1 or 2 of this subpart for the applicable CO<sub>2</sub> emission standards.

**TABLE 2 REQUIREMENT**

CO<sub>2</sub> emission standard is 450 kg/MWh of gross energy output (1,000 lb CO<sub>2</sub>/MWh)

(a) You must be in compliance with the emission standards in this subpart that apply to your affected EGU at all times. However, you must determine compliance with the emission standards only at the end of the applicable operating month, as provided in paragraph (a)(1) of this section.

(1) For each affected EGU subject to a CO<sub>2</sub> emissions standard based on a 12-operating-month rolling average, you must determine compliance monthly by calculating the average CO<sub>2</sub> emissions rate for the affected EGU at the end of the initial and each subsequent 12-operating-month period.

(2) N/A

(b) At all times you must operate and maintain each affected EGU, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practice. The Administrator will determine if you are using consistent operation and maintenance procedures based on information available to the Administrator that may include, but is not limited to, fuel use records, monitoring results, review of operation and maintenance procedures and records, review of reports required by this subpart, and inspection of the EGU.

(c) Within 30 days after the end of the initial compliance period (i.e., no more than 30 days after the first 12-operating-month compliance period), you must make an initial compliance determination for your affected EGU(s) with respect to the applicable emissions standard in table 1 or 2 of this subpart, in accordance with the requirements in this subpart. The first operating month included in the initial 12-operating-month compliance period shall be determined as follows:

**TABLE 2 REQUIREMENT**

CO<sub>2</sub> emission standard is 450 kg/MWh of gross energy output (1,000 lb CO<sub>2</sub>/MWh)

(1) For an affected EGU that commences commercial operation (as defined in §72.2 of this chapter) on or after October 23, 2015, the first month of the initial compliance period shall be the first operating month (as defined in §60.5580) after the calendar month in which emissions reporting is required to begin under:

(i) Section 63.5555(c)(3)(i), for units subject to the Acid Rain Program; or

(ii) N/A

(2) N/A

(3) N/A

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5540]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****How do I demonstrate compliance with my CO<sub>2</sub> emissions standard and determine excess emissions?**

(a) In accordance with §60.5520, if you are subject to an output-based emission standard or you burn non-uniform fuels as specified in §60.5520(d)(2), you must demonstrate compliance with the applicable CO<sub>2</sub> emission standard in table 1 or 2 of this subpart as required in this section. For the initial and each subsequent 12-operating-month rolling average compliance period, you must follow the procedures in paragraphs (a)(1) through (7) of this section to calculate the CO<sub>2</sub> mass emissions rate for your affected EGU(s) in units of the applicable emissions standard (i.e., either kg/MWh or lb/MMBtu). You must use the hourly CO<sub>2</sub> mass emissions calculated under §60.5535(b) or (c), as applicable, and either the generating load data from §60.5535(d)(1) for output-based calculations or the heat input data from §60.5535(d)(2) for heat-input-based calculations. Combustion turbines firing non-uniform fuels that contain CO<sub>2</sub> prior to combustion (e.g., blast furnace gas or landfill gas) may sample the fuel stream to determine the quantity of CO<sub>2</sub> present in the fuel prior to

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combustion and exclude this portion of the CO<sub>2</sub> mass emissions from compliance determinations.

(1) Each compliance period shall include only "valid operating hours" in the compliance period, i.e., operating hours for which:

(i) "Valid data" (as defined in §60.5580) are obtained for all of the parameters used to determine the hourly CO<sub>2</sub> mass emissions (kg) and, if a heat input-based standard applies, all the parameters used to determine total heat input for the hour are also obtained; and

**PER 60.5580 - VALID DATA DEFINITION**

Valid data means quality-assured data generated by continuous monitoring systems that are installed, operated, and maintained according to part 75 of this chapter. For CEMS, the initial certification requirements in §75.20 of this chapter and appendix A to part 75 of this chapter must be met before quality-assured data are reported under this subpart; for on-going quality assurance, the daily, quarterly, and semiannual/annual test requirements in sections 2.1, 2.2, and 2.3 of appendix B to part 75 of this chapter must be met and the data validation criteria in sections 2.1.5, 2.2.3, and 2.3.2 of appendix B to part 75 of this chapter apply. For fuel flow meters, the initial certification requirements in section 2.1.5 of appendix D to part 75 of this chapter must be met before quality-assured data are reported under this subpart (except for qualifying commercial billing meters under section 2.1.4.2 of appendix D to part 75), and for on-going quality assurance, the provisions in section 2.1.6 of appendix D to part 75 apply (except for qualifying commercial billing meters).

**END OF VALID DATA DEFINITION**

(ii) The corresponding hourly gross or net energy output value is also valid data (Note: For hours with no useful output, zero is considered to be a valid value).

(2) You must exclude operating hours in which:

(i) The substitute data provisions of part 75 of this chapter are applied for any of the parameters used to determine the hourly CO<sub>2</sub> mass emissions or, if a heat input-based standard applies, for any parameters used to determine the hourly heat input; or

(ii) An exceedance of the full-scale range of a continuous emission monitoring system occurs for any of the parameters used to determine the hourly CO<sub>2</sub> mass emissions or, if applicable, to determine the hourly heat input; or

(iii) The total gross or net energy output (P<sub>gross/net</sub>) or, if applicable, the total heat input is unavailable.

(3) For each compliance period, at least 95 percent of the operating hours in the compliance period must be valid operating hours, as defined in paragraph (a)(1) of this section.

(4) You must calculate the total CO<sub>2</sub> mass emissions by summing the valid hourly CO<sub>2</sub> mass emissions values from §60.5535 for all of the valid operating hours in the compliance period.

(5) Sources subject to output based standards. For each valid operating hour of the compliance period that was used in paragraph (a)(4) of this section to calculate the total CO<sub>2</sub> mass emissions, you must determine P<sub>gross/net</sub> (the corresponding hourly gross or net energy output in MWh) according to the procedures in paragraphs (a)(3)(i) and (ii) of this section, as appropriate for the type of affected EGU(s). For an operating hour in which a valid CO<sub>2</sub> mass emissions value is determined according to paragraph (a)(1)(i) of this section, if there is no gross or net electrical output, but there is mechanical or useful thermal output, you must still determine the gross or net energy output for that hour. In addition, for an operating hour in which a valid CO<sub>2</sub> mass emissions value is determined according to paragraph (a)(1)(i) of this section, but there is no (i.e., zero) gross electrical, mechanical, or useful thermal output, you must use that hour in the compliance determination. For hours or partial hours where the gross electric output is equal to or less than the auxiliary loads, net electric output shall be counted as zero for this calculation.

(i) Calculate P<sub>gross/net</sub> for your affected EGU using the following equation. All terms in the equation must be expressed in units of megawatt-hours (MWh). To convert each hourly gross or net energy output (consistent with §60.5520) value reported under part 75 of this chapter to MWh, multiply by the corresponding EGU or stack operating time.



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### REFER TO REGULATION FOR EQUATION 2

Where:

$P_{gross/net}$  = In accordance with §60.5520, gross or net energy output of your affected EGU for each valid operating hour (as defined in §60.5540(a)(1)) in MWh.

$(P_e)_{ST}$  = Electric energy output plus mechanical energy output (if any) of steam turbines in MWh.

$(P_e)_{CT}$  = Electric energy output plus mechanical energy output (if any) of stationary combustion turbine(s) in MWh.

$(P_e)_{IE}$  = Electric energy output plus mechanical energy output (if any) of your affected EGU's integrated equipment that provides electricity or mechanical energy to the affected EGU or auxiliary equipment in MWh.

$(P_e)_{FW}$  = Electric energy used to power boiler feedwater pumps at steam generating units in MWh. Not applicable to stationary combustion turbines, IGCC EGUs, or EGUs complying with a net energy output based standard.

$(P_e)_A$  = Electric energy used for any auxiliary loads in MWh. Not applicable for determining  $P_{gross}$ .

$(P_t)_{PS}$  = Useful thermal output of steam (measured relative to SATP conditions, as applicable) that is used for applications that do not generate additional electricity, produce mechanical energy output, or enhance the performance of the affected EGU. This is calculated using the equation specified in paragraph (a)(5)(ii) of this section in MWh.

$(P_t)_{HR}$  = Non steam useful thermal output (measured relative to SATP conditions, as applicable) from heat recovery that is used for applications other than steam generation or performance enhancement of the affected EGU in MWh.

$(P_t)_{IE}$  = Useful thermal output (relative to SATP conditions, as applicable) from any integrated equipment is used for applications that do not generate additional steam, electricity, produce mechanical energy output, or enhance the performance of the affected EGU in MWh.

TDF = Electric Transmission and Distribution Factor of 0.95 for a combined heat and power affected EGU where at least on an annual basis 20.0 percent of the total gross or net energy output consists of electric or direct mechanical output and 20.0 percent of the total gross or net energy output consists of useful thermal output on a 12-operating-month rolling average basis, or 1.0 for all other affected EGUs.

(ii) If applicable to your affected EGU (for example, for combined heat and power), you must calculate  $(P_t)_{PS}$  using the following equation:

### REFER TO REGULATION FOR EQUATION 3

Where:

$Q_m$  = Measured steam flow in kilograms (kg) (or pounds (lb)) for the operating hour.

$H$  = Enthalpy of the steam at measured temperature and pressure (relative to SATP conditions or the energy in the condensate return line, as applicable) in Joules per kilogram (J/kg) (or Btu/lb).

CF = Conversion factor of  $3.6 \times 10^9$  J/MWh or  $3.413 \times 10^6$  Btu/MWh.

(6) Calculation of annual basis for standard. Sources complying with energy output-based standards must calculate the basis (i.e., denominator) of their actual annual emission rate in accordance with paragraph (a)(6)(i) of this section. Sources complying with heat input based standards must calculate the basis of their actual annual emission rate in accordance with paragraph (a)(6)(ii) of this section.

(i) In accordance with §60.5520 if you are subject to an output-based standard, you must calculate the total gross or net energy output for the affected EGU's compliance period by summing the hourly gross or net energy output values for the affected EGU that you determined under paragraph (a)(5) of this section for all of the valid operating hours in the applicable

## SECTION E. Source Group Plan Approval Restrictions.

compliance period.

(ii) If you are subject to a heat input-based standard, you must calculate the total heat input for each fuel fired during the compliance period. The calculation of total heat input for each individual fuel must include all valid operating hours and must also be consistent with any fuel-specific procedures specified within your selected monitoring option under §60.5535(d)(2).

(ii) N/A

(7) If you are subject to an output-based standard, you must calculate the CO<sub>2</sub> mass emissions rate for the affected EGU(s) (kg/MWh) by dividing the total CO<sub>2</sub> mass emissions value calculated according to the procedures in paragraph (a)(4) of this section by the total gross or net energy output value calculated according to the procedures in paragraph (a)(6)(i) of this section. Round off the result to two significant figures if the calculated value is less than 1,000; round the result to three significant figures if the calculated value is greater than 1,000. If you are subject to a heat input-based standard, you must calculate the CO<sub>2</sub> mass emissions rate for the affected EGU(s) (lb/MMBtu) by dividing the total CO<sub>2</sub> mass emissions value calculated according to the procedures in paragraph (a)(4) of this section by the total heat input calculated according to the procedures in paragraph (a)(6)(ii) of this section. Round off the result to two significant figures.

(b) In accordance with §60.5520, to demonstrate compliance with the applicable CO<sub>2</sub> emission standard, for the initial and each subsequent 12-operating-month compliance period, the CO<sub>2</sub> mass emissions rate for your affected EGU must be determined according to the procedures specified in paragraph (a)(1) through (7) of this section and must be less than or equal to the applicable CO<sub>2</sub> emissions standard in table 1 or 2 of this part, or the emissions standard calculated in accordance with §60.5525(a)(2).

### # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5550]

#### Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

##### What notifications must I submit and when?

(a) You must prepare and submit the notifications specified in §§60.7(a)(1) and (3) and 60.19, as applicable to your affected EGU(s) (see table 3 of this subpart).

(b) You must prepare and submit notifications specified in §75.61 of this chapter, as applicable, to your affected EGUs.

### # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5555]

#### Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

##### What reports must I submit and when?

(a) You must prepare and submit reports according to paragraphs (a) through (d) of this section, as applicable.

(1) For affected EGUs that are required by §60.5525 to conduct initial and on-going compliance determinations on a 12-operating-month rolling average basis, you must submit electronic quarterly reports as follows. After you have accumulated the first 12-operating months for the affected EGU, you must submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, you must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.

(2) In each quarterly report you must include the following information, as applicable:

(i) Each rolling average CO<sub>2</sub> mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. You must calculate each average CO<sub>2</sub> mass emissions rate for the compliance period according to the procedures in §60.5540. You must report the dates (month and year) of the first and twelfth operating months in each compliance period for which you performed a CO<sub>2</sub> mass emissions rate calculation. If there are no compliance periods that end in the quarter, you must include a statement to that effect;

(ii) If one or more compliance periods end in the quarter, you must identify each operating month in the calendar quarter where your EGU violated the applicable CO<sub>2</sub> emission standard;

(iii) If one or more compliance periods end in the quarter and there are no violations for the affected EGU, you must include a statement indicating this in the report;

(iv) The percentage of valid operating hours in each 12-operating-month compliance period described in paragraph (a)(1)(i)

## SECTION E. Source Group Plan Approval Restrictions.

of this section (i.e., the total number of valid operating hours (as defined in §60.5540(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent);

(v) Consistent with §60.5520, the CO<sub>2</sub> emissions standard (as identified in table 1 or 2 of this part) with which your affected EGU must comply; and

(vi) Consistent with §60.5520, an indication whether or not the hourly gross or net energy output (P<sub>gross/net</sub>) values used in the compliance determinations are based solely upon gross electrical load.

(3) In the final quarterly report of each calendar year, you must include the following:

(i) Consistent with §60.5520, gross energy output or net energy output sold to an electric grid, as applicable to the units of your emission standard, over the four quarters of the calendar year; and

(ii) The potential electric output of the EGU.

(b) You must submit all electronic reports required under paragraph (a) of this section using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

(c)(1) For affected EGUs under this subpart that are also subject to the Acid Rain Program, you must meet all applicable reporting requirements and submit reports as required under subpart G of part 75 of this chapter.

(2) N/A

(3)(i) For all newly-constructed affected EGUs under this subpart that are also subject to the Acid Rain Program, you must begin submitting the quarterly electronic emissions reports described in paragraph (c)(1) of this section in accordance with §75.64(a) of this chapter, i.e., beginning with data recorded on and after the earlier of:

(A) The date of provisional certification, as defined in §75.20(a)(3) of this chapter; or

(B) 180 days after the date on which the EGU commences commercial operation (as defined in §72.2 of this chapter).

(ii) N/A

(A) The date on which reporting is required to begin under §75.64(a) of this chapter, if that date occurs on or after October 23, 2015; or

(B) N/A

(4) If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph (c)(3) of this section, the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with §75.4(j) of this chapter, §75.37(b) of this chapter, or section 2.4 of appendix D to part 75 of this chapter (as applicable). Operating hours in which CO<sub>2</sub> mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in §60.5540(a)(1)), and shall not be used in the compliance determinations under §60.5540.

(d) For affected EGUs subject to the Acid Rain Program, the reports required under paragraphs (a) and (c)(1) of this section shall be submitted by:

(1) The person appointed as the Designated Representative (DR) under §72.20 of this chapter; or

(2) The person appointed as the Alternate Designated Representative (ADR) under §72.22 of this chapter; or

(3) A person (or persons) authorized by the DR or ADR under §72.26 of this chapter to make the required submissions.

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**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5570]**

**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**

**What parts of the general provisions apply to my affected EGU?**

Notwithstanding any other provision of this chapter, certain parts of the general provisions in §§60.1 through 60.19, listed in table 3 to this subpart, do not apply to your affected EGU.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.



**SECTION H. Miscellaneous.**



\*\*\*\*\* End of Report \*\*\*\*\*

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