

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR DIVISION**

INTRA AGENCY MEMORANDUM

TO: File

FROM: Mary E. Major
Environmental Program Manager

SUBJECT: Meeting Minutes - Technical Advisory Committee Concerning Peak
Shaving Generators General Permit (Rev. Dg)

DATE: May 4, 2010

INTRODUCTION

A meeting of the technical advisory committee concerning peak shaving generator general permit was held in the 11th Floor Conference Room, Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia. A record of meeting attendees is attached.

Start: 9:30 a.m.
End: 11:50 a.m.

Subcommittee Members Present:

Walid M. Daniel, PE, CEM
Terry Darton
Andy Gates
Michael W. Kendall, R.S.
Mary E. Major
Rebekah Remick
William Scarpinato
Susan Stewart
Joe Suchecki

Subcommittee Members Absent:

Jerome A. Brooks

Public Attendees:

Ms. Laura Rose

SUMMARY OF DISCUSSION

Ms. Major reviewed the regulatory process and the group's specific role in that process.

Ms. Becky Remick reviewed the contents of the document titled the Peak Shaving General Permit - Draft 1. It was explained that the document was just a starting point for discussion. The TAC had significant discussion on the following provisions:

Applicability provisions:

Discussion as to whether there is a need to include modification and reconstruction or is the permit just for greenfield/new construction. Need to address nonattainment concerns.

Definitions:

Need the following additional definitions or clarifying language with regard to terms:

- Aggregate rated electrical power
- Demand response
- Distillate oil; including biodiesel
- Load curtailment
- Peak shaving
- Routine testing
- Start up; integration operational period; operation

Monitoring Requirements:

- Two options; 1. Fuel flow, and
- 2. Hours of operation.

The general permit can be formatted in such a way that the permittee can choose which monitoring requirements is the best fit for his operation; therefore, the group will develop language to address both options. Each option will require different operating limitations.

Operating Limitations:

Need to include the heat content of biodiesel in the fuel throughput limits provided in Condition 8.

Emission Limits:

Permit contains limits for both compression ignition (CI) units and spark ignition

(SI) units.

Annual process emission limits were established at a level that does not require modeling.

Visible emission limit: Opacity limit will be determined using EPA Method 9. Visible emission evaluation only conducted upon request of DEQ.

Testing Requirements:

No routine testing or operation for maintenance purposed until after 5:00 p.m. during ozone season in nonattainment areas.

Initial stack tasting for only one of each size/type of unit, not every unit.

Need additional information regarding certification of units for Tier four engines.

Discussion as to whether Tier 4 certified CI engines need to be stack tested.

Stack tests conducted every 5 years or only after the replacement of the catalyst or some other timeframe.

Notifications:

Discussion regarding the best way to notify DEQ as to the anticipated start-up date of the unit.

NEXT MEETING DATE

The next meeting is scheduled for May 19, 2010, 2nd Floor Conference Room A, Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia.

DOCUMENT DISTRIBUTION

The following documents were distributed to the committee prior to or at the meeting:

1. Copy of Meeting attendees
2. Copy of enabling legislation (HB 2531)
3. List of TAC members
4. Role of the Technical Advisory Committee in the Regulatory Process
5. Peak Shaving Generator General Permit –Draft 1

Attachments

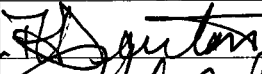

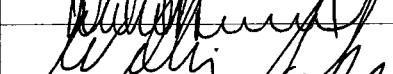
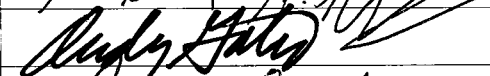


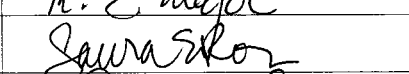
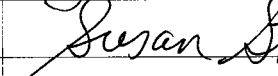

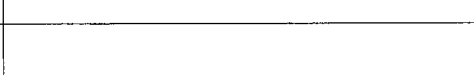
COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD

TECHNICAL ADVISORY COMMITTEE MEETING
ATTENDANCE RECORD

May 4, 2010

SUBJECT: Peak Shaving/Emergency Generator GP (Revision DG/EG)

LOCATION: 11th Floor Conference Room, Department of Environmental Quality, 629
East Main Street, Richmond, Virginia

PRINTED NAME	SIGNATURE
TERRY DARTON	
Michael W. Kendall	
Walter Damico	
Bill Scarpinato	
Andy Gates	
Joe Suchecki	
Rebekah Remick	
Beth Major	
Laura Rose	
Susan Stewart	

1

VIRGINIA ACTS OF ASSEMBLY — CHAPTER

2 *An Act to amend the Code of Virginia by adding a section numbered 10.1-1307.02 and to direct the*
 3 *State Corporation Commission to conduct a proceeding to determine appropriate energy conservation*
 4 *and demand response targets that can realistically be accomplished through demand-side*
 5 *management portfolios and other energy conservation, energy efficiency, and demand-side*
 6 *management programs to be administered by generating electric utilities, and directing the Air*
 7 *Pollution Control Board to adopt regulations providing exemptions to certain air quality*
 8 *requirements.*

9

[H 2531]

10

Approved

11 **Be it enacted by the General Assembly of Virginia:**12 **1. That the Code of Virginia is amended by adding a section numbered 10.1-1307.02 as follows:**13 *§ 10.1-1307.02. Permit for generation of electricity during ISO-declared emergency.*14 *A. As used in this section:*15 *"Emergency generation source" means a stationary internal combustion engine that operates*
 16 *according to the procedures in the ISO's emergency operations manual during an ISO-declared*
 17 *emergency.*18 *"ISO-declared emergency" means a condition that exists when the independent system operator, as*
 19 *defined in § 56-576, notifies electric utilities that an emergency exists or may occur and that complies*
 20 *with the definition of "emergency" adopted by the Board pursuant to subsection B.*21 *"Retail customer" has the same meaning ascribed thereto in § 56-576.*22 *B. The Board shall adopt a general permit or permits for the use of back-up generation to authorize*
 23 *the construction, installation, reconstruction, modification, and operation of emergency generation*
 24 *sources during ISO-declared emergencies. Such general permit or permits shall include a definition of*
 25 *"emergency" that is compatible with the ISO's emergency operations manual. After adoption of such*
 26 *general permit or permits, any amendments to the Board's regulations necessary to carry out the*
 27 *provisions of this section shall be exempt from Article 2 (§ 2.2-4006 et seq.) of the Administrative*
 28 *Process Act.*29 **2. § 1. That the State Corporation Commission shall conduct a formal public proceeding that will**
 30 *include an evidentiary hearing for the purpose of determining achievable, cost-effective energy*
 31 *conservation and demand response targets that can realistically be accomplished in the Commonwealth*
 32 *through demand-side management portfolios administered by each generating electric utility in the*
 33 *Commonwealth. As used in this act, "generating electric utility" means a public service corporation that*
 34 *serves electric load at retail, has rates regulated by the State Corporation Commission, and that, as of*
 35 *January 1, 2009, directly owns and operates electric generation facilities in excess of six megawatts,*
 36 *other than diesel generators used for voltage control. The determination of what consumption and peak*
 37 *load reductions can be achieved cost-effectively shall consider standard industry-recognized tests. The*
 38 *Commission shall determine which test should be given greatest weight when preparing a cost-benefit*
 39 *analysis of a demand-side management program, taking into consideration the public interest and the*
 40 *potential impact on economic development in the Commonwealth.*41 **§ 2. That the State Corporation Commission shall report its findings to the Governor and the**
 42 *General Assembly on or before November 15, 2009. Such report shall (i) indicate the range of*
 43 *consumption and peak load reductions that are potentially achievable by each generating electric utility,*
 44 *the range of costs that consumers would pay to achieve those reductions, and the range of financial*
 45 *benefits or savings that could be realized if the targets were met over a 15-year period; and (ii)*
 46 *determine a just and reasonable ratemaking methodology to be employed to quantify the cost*
 47 *responsibility of each customer class to pay for generating electric utility-administered demand-side*
 48 *management programs. This evaluation shall include an examination of the class cost responsibility*
 49 *methods used in other jurisdictions, including, but not limited to, the allocation of costs based on*
 50 *projected class benefits and the allocation of costs based on program participation. The analysis shall*
 51 *also examine other jurisdictions that permit certain nonresidential customers or classes of customers to*
 52 *either be exempt from paying for the utility demand-side management programs or to opt out of*
 53 *participating in or paying for the utility demand-side management programs, and determine if it would*
 54 *be in the public interest for the Commonwealth to have a similar policy.*55 **§ 3. That the State Corporation Commission, for the service area of a generating electric utility that**
 56 *has elected to meet its capacity obligations of a regional transmission entity through a fixed capacity*

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57 resource requirement as an alternative to other capacity mechanisms, shall approve any demand
58 response program proposed to be offered to retail customers by the generating electric utility or any
59 other qualified nonutility provider if, following notice and the opportunity for a hearing, the State
60 Corporation Commission finds (i) any nonutility provider to be qualified, (ii) the program to be
61 effective, reliable, and verifiable as a capacity resource, and (iii) such program to be in the public
62 interest. A State Corporation Commission order issued pursuant to this section shall not affect any
63 contract between a retail customer and a curtailment service provider executed prior to July 1, 2009.

64 § 4. That the State Air Pollution Control Board, in consultation with the State Corporation
65 Commission and the Department of Mines, Minerals and Energy, shall adopt an air general permit or
66 permits for the construction, installation, and operation of distillate oil, natural gas, liquid propane gas,
67 and bio-diesel fired electric generating facilities that participate in a voluntary demand response
68 program (i.e. load curtailment, demand response, peak shaving or like program) and that qualify as non
69 major facilities under the Clean Air Act Amendments of 1990. Participation in PJM Interconnection
70 LLC's Emergency Load Response Program, as defined in PJM Interconnection LLC's Manual 13
71 Emergency Operations, shall not be considered as participating in a voluntary load reduction program.
72 The air general permit shall have requirements ensuring air quality is protected, including appropriate
73 control technologies.

TECHNICAL ADVISORY COMMITTEE
REVISIONS DG and EG
GENERAL PERMIT FOR PEAK SHAVING AND EMERGENCY GENERATORS
9VAC5-530 and 9VAC5-540

William Scarpinato
Dominion
5000 Dominion Blvd.
Glen Allen, VA 23060

Andy Gates (Alternate)
Dominion
5000 Dominion Blvd.
Glen Allen, VA 23060

Joe Suchecki
Director, Public Affairs
Engine Manufacturers Association
Two North LaSalle Street, Suite 1700
Chicago, IL 60662

Walid M. Daniel, PE, CEM
Utilities and Performance Manager
Department Of Mines Minerals and
Energy
11000 Bank Street/8th Floor
Richmond, VA 23219

Susan Stewart
Sr. Project Manager
ATC Associates Inc.
30 Bent Creek Ct
Stafford, VA 22556

Michael W. Kendall, R.S.
Senior Air Program Manager
URS Corporation
13825 Sunrise Valley Drive Suite, 250
Herndon, VA 20171

Trisha R. Eyler (Alternate)
Environmental Scientist
URS Corporation
13825 Sunrise Valley Drive Suite, 250

Herndon, VA 20171

Terry Darton
Air Permit Manager
VA DEQ
Northern Regional Office
13901 Crown Court
Woodbridge, Virginia 22193

Elizabeth H. Aiken (Alternate)
Environmental Engineer
VA DEQ
Northern Regional Office
13901 Crown Court
Woodbridge, Virginia 22193

Rebekah Remick
Minor NSR Coordinator
VA-DEQ Central Office

Jerome A. Brooks
Director
Office of Air Compliance Coordination -
VA DEQ Central Office

Mary E. Major
Office of Regulatory Affairs
VA-DEQ Central Office

THE ROLE OF THE TECHNICAL ADVISORY COMMITTEE IN THE REGULATORY PROCESS

In accordance with the Administrative Process Act, general permits must be processed as regulations, including the participation of a technical advisory committee. The purpose of the technical advisory committee is to assist in the development of a proposed regulation consisting of a general permit. This committee has been formed to balance the concerns of all those interested in this particular regulation. All such concerns will be addressed by the committee, and any committee member is free to advance any opinion.

DEQ staff members within this committee are also free to advance any opinion, but these opinions are not those of DEQ management. Of DEQ staff on the committee, the Office of Air Regulatory Development will coordinate the committee's activity, provide staff support, draft the regulation, and act as the committee's liaison to DEQ management, the State Air Pollution Control Board, EPA, and the Office of Attorney General.

Technical advisory committee meetings are public. Anyone may attend and observe the proceedings; however, only committee members may participate.

The role of the committee is **advisory**. The committee's function is to make recommendations to DEQ management and to the board on a specific action. **Neither** DEQ nor the board is obligated to accept the committee's recommendations.

The committee's primary responsibility is to collaboratively develop a regulation that is in the in the best interests of the Commonwealth as a whole. Because the committee represents different interests, all members should expect to compromise in order to accomplish the committee's mission. If the committee cannot reach consensus, staff will present the differing opinions to DEQ management and the board. **A divided opinion will significantly decrease the committee's impact.**

After the committee makes its recommendations, DEQ management will develop the department's position, which will be sent to the board prior to the meeting at which it addresses this issue. In turn, the board will decide if DEQ's recommendation should be modified before the proposed regulation is promulgated for public comment. The documentation sent to the board before the meeting will also be sent to the committee. As with all other members of the public, committee members are free to attend the meeting at which DEQ will present its recommendation, but the board will not receive comment at that time. Public comment will be received only after the proposed regulation has been promulgated for public comment.

After the board approves the promulgation of the proposal, the proposed regulation will undergo executive review and then be published in the Virginia Register, marking the beginning of a 60-day comment period. During this period, any member of the public may comment on the proposed regulation. These comments will be forwarded to the board and will be responded to in the public record. Any member of the committee, like any other member of the public, is free to express any opinion on the proposed regulation.

The key steps in the regulation development process are provided in the attached table.

**Virginia Regulation Adoption Process
General Permits – Exempted APA Process**

Key Steps

The maximum or minimum number of days allotted to accomplish each step as mandated by law or executive order is indicated after each step, as applicable.

Regulatory action notification stage.

1. Agency makes determination to promulgate regulation.
2. Agency prepares and transmits NOIRA to Registrar of Regulations (14 days maximum).
3. Registrar publishes NOIRA in Virginia Register (20 days minimum).
4. Public comment period opens (30 days maximum for steps 10, 11, and 12).
5. Agency holds public meeting.
6. NOIRA comment period closes.

Proposed regulation development and promulgation stage.

13. Agency prepares, **in conjunction with technical advisory committee**, proposed regulation (**180 days maximum** for steps 13, 14, 15 and 16).
14. Agency presents proposed regulation to Board for publication approval.
15. Attorney General sends statutory authority statement to agency.
24. Agency submits regulatory review package to Registrar (14 days maximum).
25. Proposed regulation published in Virginia Register (20 days minimum).
26. Public comment period opens (60 days minimum for steps 26, 27, 28, and 29).
27. Public hearing(s) held on proposed regulation.
28. Governor submits comments to Virginia Register for publication.
29. Public comment period closes.

Final regulation development and promulgation stage.

30. Agency addresses public comments and prepares changes to proposed regulation (120 days maximum for steps 30, 31, 32, and 33).
31. Agency submits proposed regulation with any suggested changes to Board for approval as final regulation.
32. Attorney General sends statutory authority statement to agency.
33. Agency transmits final regulation to Virginia Register for publication.
34. Registrar publishes final regulation in Virginia Register (20 days minimum).
35. Final adoption period commences (30 days minimum for steps 35 and 36).
36. Final adoption period ends.
37. Final regulation becomes effective immediately or on date specified by agency.

Peak Shaving Generator General Permit

Applicability:

- A. The affected units to which this chapter applies is each electric generating unit for which construction, installation, or operation is commenced after the date of this general permit and that meets the requirements stated below:
 - a. For compression ignition engines: Tier 4 engines (or equivalent) with an aggregate rated electrical power output greater than or equal to 2,960 kW and less than 85,900 kW.
 - b. For spark ignition engines: An aggregate rated electrical power output greater than or equal to 3,100 kW and less than 89,100 kW.
- B. Any electric generating unit that is a major source, as defined in 9 VAC 5-80-1615, is not eligible for this general permit.
- C. Any electric generating unit that is located at a major source, as defined in 9 VAC 5-80-1615, is not eligible for this general permit.
- D. Any electric generating unit that is an emergency generator and/or participates in an ISO Emergency Load Response Program (ELRP) is not eligible for this general permit.

Definitions:

Bio-diesel means a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM D 6751. Biodiesel may be designated as B100 (for 100% biodiesel) or may be designated as a blend with diesel oil; for example B20 (20% bio-diesel mixed with 80% petroleum diesel). Only glycerol-free bio-diesel can be burned.

Compression ignition engine means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Electric generating unit means a stationary internal combustion engine that participates in a voluntary demand response program (i.e. load curtailment, demand response, peak shaving or like program).

Independent system operator (ISO) means a person that may receive or has received, by transfer pursuant to §56-576, any ownership or control of, or any responsibility to operate, all or part of the transmission systems in the Commonwealth.

Spark ignition engine means a natural gas or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel

at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Tier 4 engine means a compression ignition electric generating unit that meets Tier 4 standards. Tier 4 standards were published as a final rule on June 29, 2004.

Monitoring Requirements:

1. **[O] Fuel Flow Meter Device** – The permittee shall install and use a fuel flow meter to monitor the monthly and yearly fuel throughput for each electric generating unit, calculated monthly as the sum of each consecutive 12-month period. Each fuel flow meter shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.
2. **[O] Fuel Flow Meter Device Observation** – To ensure good performance, the fuel flow meter used to continuously measure the monthly and yearly fuel throughput for each electric generating unit shall be observed by the permittee with a frequency of not less than once per month. The permittee shall keep a log of the observations from the fuel flow meter.

OR

3. **[O] Hour Meter Device** – The permittee shall install and use a non-resettable hour metering device to monitor the monthly and yearly operating hours for each electric generating unit, calculated monthly as the sum of each consecutive 12-month period. Each metering device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.
4. **[O] Hour Meter Device Observation** – To ensure good performance, the hour meter used to continuously measure the monthly and yearly hours of operation for each electric generating unit shall be observed by the permittee with a frequency of not less than once per month. The permittee shall keep a log of the observations from the hour meter.

Operating Limitations:

5. **Fuel** - The approved fuels for each compression ignition electric generating unit are distillate oil and/or bio-diesel.
6. **Fuel** - The approved fuels for each spark ignition electric generating unit are natural gas and/or liquid propane gas.
7. **Fuel** - The approved fuels shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment: 0.0015%

NATURAL GAS:

Minimum heat content: 1,000 Btu/cf HHV
as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.

LIQUID PROPANE GAS, including butane and propane, which meets ASTM specification D1835

BIO-DIESEL which meets ASTM specification D6751
Maximum sulfur content per shipment: 0.0015%

8. **[O] Fuel Throughput** - The compression ignition electric generating unit(s) combined shall consume no more than 628,637 gallons of distillate oil or ## gallons of bio-diesel per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. If any combination of the two fuels is used, then the quantities of distillate oil and bio-diesel, calculated monthly as the sum of each consecutive 12 month period, shall not exceed values that will allow the following equation to hold true:

$$(A) * (140,000 \text{ Btu/gal}) + (B) * (C) \leq 88,009 \times 10^6 \text{ Btu/yr}$$

where: A = Number of gallons of distillate oil burned during any 12 consecutive month period

B = Number of gallons of bio-diesel burned during any 12 consecutive month period.

C = Heating value of bio-diesel used (Btu/gal)

9. **[O] Fuel Throughput** - The spark ignition electric generating unit(s) combined shall consume no more than 971,146 gallons of LPG or 91.3×10^6 cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. If any combination of the two fuels is used, then the quantities of natural gas and propane, calculated monthly as the sum of each consecutive 12 month period, shall not exceed values that will allow the following equation to hold true:

$$(A) * (1,000 \text{ Btu/ft}^3) + (B) * (94,000 \text{ Btu/gal}) \leq 91,300 \times 10^6 \text{ Btu/yr}$$

where: A = Number of cubic feet of natural gas burned during any 12 consecutive month period

B = Number of gallons of propane burned during any 12 consecutive month period.

OR

10. **[O] Operating Hours** – The electric generating unit(s) combined shall not operate more than 300 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
11. **Fuel Certification** – If distillate oil or bio-diesel is used, the permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil or bio-diesel. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the distillate oil or bio-diesel was received;
 - c. The quantity of distillate oil or bio-diesel delivered in the shipment;
 - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil;
 - e. A statement that the bio-diesel complies with the American Society for Testing and Materials specifications (ASTM D6751); and
 - f. The sulfur content of the distillate oil or bio-diesel.

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Emission Limits:

12. **Process Emission Limits** - Emissions from the operation of each compression ignition electric generating unit shall not exceed the limits specified below:

Pollutant	Emissions g/kW-hr (g/hp-hr)
PM	0.03 (0.022)
PM-10	0.03 (0.022)
PM 2.5	0.03 (0.022)
NO _x	0.67 (0.50)
CO	3.5 (2.6)
VOC	0.19 (0.14)

13. **Process Emission Limits** - Emissions from the operation of each spark ignition electric generating unit shall not exceed the limits specified below:

Pollutant	Emissions g/kW-hr (g/hp-hr)
PM	0.015 (0.011)
PM-10	0.015 (0.011)
PM 2.5	0.015 (0.011)
NO _x	1.34 (1.0)
CO	2.68 (2.0)
VOC	0.94 (0.7)

14. **Process Emission Limits** – Combined facility wide emissions from the operation of the electric generating unit(s) shall not exceed the limits specified below:

Pollutant	Emissions (tons/yr)
PM	24.5
PM-10	14.5
PM 2.5	9.5
NO _x	39.5
SO ₂	39.5
CO	99.5
VOC	39.5

15. **Visible Emission Limit** - Visible emissions from each electric generating unit shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

Testing Requirements:

16. **Emissions Testing** - Each electric generating unit shall be constructed/installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
17. **Testing and Maintenance** - No electric generating unit shall be used during testing or for maintenance purposes before 5 pm during the ozone season of May 1 – September 30.
18. **Initial Stack Test** – Initial performance tests shall be conducted for NO_x, CO, PM-10, and PM 2.5 from the electric generating unit using reference methods [] to determine compliance with the emission limits contained in Conditions 12 and 13. If multiple electric generating units are located on site, only one electric generating unit needs to be tested. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Regional Office within 60 days after test completion [and shall conform to the test report format enclosed with this general permit].
19. **Initial Visible Emissions Evaluation** – Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the electric generating unit. If multiple electric generating units are located on site, only one electric generating unit

needs to be tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Regional Office within 60 days after test completion [and shall conform to the test report format enclosed with this general permit].

20. **Stack Tests** – Every five years and upon request by the DEQ, the permittee shall conduct additional performance tests for NO_x, CO, PM-10, and PM 2.5 from the electric generating unit to demonstrate compliance with the emission limits contained in this general permit. If multiple electric generating units are located on site, only one electric generating unit needs to be tested. The details of the tests shall be arranged with the Regional Office.
21. **Visible Emissions Evaluation** – Every five years and upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the electric generating unit to demonstrate compliance with the visible emission limits contained in this permit. If multiple electric generating units are located on site, only one electric generating unit needs to be tested. The details of the tests shall be arranged with the Regional Office.

Records:

22. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this general permit. The content and format of such records shall be arranged with the Regional Office. These records shall include, but are not limited to:
- a. [O] Total combined annual throughput of fuel for the electric generating units, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. [O] Total annual heat input values to show compliance with Conditions 8 and 9.

OR

- c. [O] Total combined annual hours of operation for the electric generating units, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding

the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

d. All fuel supplier certifications.

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e. Engine information including make, model, serial number, model year, maximum engine power, and engine displacement for each electric generating facility.

f. Written manufacturer specifications or written standard operating procedures prepared by the permittee for each electric generating facility.

g. Results of all stack tests, visible emission evaluations and performance evaluations.

h. Operation and control device monitoring records for the fuel flow meter.

i. Scheduled and unscheduled maintenance/testing and operator training.

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These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

Notifications:

23. **Initial Notifications** - The permittee shall furnish written notification to the Regional Office of:

a. The actual date on which construction of each electric generating facility commenced within 30 days after such date.

b. The anticipated start-up date of each electric generating facility postmarked not more than 60 days nor less than 30 days prior to such date.

c. The actual start-up date of each electric generating facility within 15 days after such date.

d. The anticipated date of performance tests of each electric generating facility postmarked at least 30 days prior to such date.

General Requirements:

24. **Permit Invalidation** – This general permit to construct, install, or operate each electric generating facility shall become invalid, unless an extension is granted by the DEQ, if:

a. A program of continuous construction, reconstruction, or modification is not commenced within the latest of the following:

i. 18 months from the date that this general permit is issued to the permittee;

- ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;
- iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
- b. A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

25. **Permit Suspension/Revocation** - This general permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the conditions of this general permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

26. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

27. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

28. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
29. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Regional Office.
30. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid

violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

31. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Regional Office of the change of ownership within 30 days of the transfer.
32. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.