AIR QUALITY CONTROL ADVISORY COUNCIL

AGENDA

October 6, 2014
8:15 a.m.

Montgomery Park
Aeris Conference Room, 1st Floor
1800 Washington Boulevard
Baltimore, Maryland 21230

8:15 a.m.	**Welcome and Introductions**	**John Quinn, Advisory Council Chair** **Tad Aburn, Air Director**
8:20 a.m.	**Approval of Meeting Minutes**	**John Quinn**

Action Items for Discussion/Approval:

8:30 a.m.	**Control of Fuel-Burning Equipment** **COMAR 26.11.09.08** **Control of NOx Emissions from Coal-Fired Electric Generating Units** **COMAR 26.11.38**	**Tad Aburn**

Briefings:

11:00 a.m.	**111 (b & d) for Power Plants**	**Diane Franks**
11:15 a.m.	**Confirm Next Meeting Dates** **December 8, 2014** **March 2, 2015** **June 8, 2015** **September 21, 2015** **December 7, 2015**	**Members**
11:20 a.m.	**Adjourn**	

Department of the Environment

Facts About...

COMAR 26.11.38 - Control of NOx Emissions from Coal-Fired Electric Generating Units

Date: 10-3-14

Purpose of New Action

The primary purpose of this action is to establish NO_x emission standards and additional monitoring and reporting requirements for coal-fired electric generating units in Maryland in order to satisfy the requirements of § 182 of the federal Clean Air Act, and help achieve attainment of the National Ambient Air Quality Standards for ozone.

Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)

This action will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's State Implementation Plan.

Background

In 2014, the Maryland Department of the Environment (MDE) is required to update NO_x RACT (Reasonably Available Control Technology) requirements in the Maryland SIP (State Implementation Plan) pursuant to § 182 of the federal Clean Air Act, 42 U.S.C. § 7401 *et seq*. EPA defines RACT as the lowest emissions limitation (e.g., on a part per million or pound per million Btu basis) that a particular source is capable of meeting by the application of control technology (e.g., install and operate low-NOx burners) that is reasonably available considering technological and economic feasibility. States which contain moderate (or greater) ozone nonattainment areas are required to update provisions implementing RACT. RACT SIPs are typically updated when a new ozone standard is established and a new attainment plan is being developed. Maryland's 2014 RACT SIP must address both the new 75 ppb ozone standard and peak day NO_x emissions. Current short-term limits in Maryland's approved SIP are set at levels that are not appropriate for addressing peak day NO_x emissions.

Under Maryland's Healthy Air Act (HAA), which is codified as COMAR 26.11.27 – Emission Limitations for Power Plants, ozone-season and annual emission caps were used to drive very significant emission reductions of NO_x. While all of the coal fired electric generating units (units) comply with the HAA, the annual and ozone season caps have not required all units to consistently run emission controls each day – particularly during peak times or episodic air quality events when they would be most beneficial. The HAA allowed the owner of multiple coal-fired power plants to demonstrate that the cumulative emissions from its plants complied with a system-wide cap. In this manner, the owner of multiple coal-fired power plants could choose when and where to apply emission controls

within their "system" to most cost-effectively meet the NO_x caps set in the act. However, compliance with the annual and ozone season caps did not effectively limit daily NO_x emissions during certain days, allowing facilities to reduce operation of pollution control equipment when surplus cap room was available. This resulted in high (excess) NOx emissions on days where pollution controls were needed most (i.e. peak days).

In 2014, MDE evaluated the operation of post combustion controls, specifically selective catalytic reduction (SCR), at coal fired power plants in Maryland and other select states using publicly available data. Analysis of this data suggests that operation of SCRs is inconsistent. In fact, from 2007 - 2012, the average ozone season NO_x emission rates for certain units were shown to be increasing.

Based on an analysis of the operation of NO_x emission controls and the need to address peak day emissions, additional reductions from coal-fired power plants are needed to meet the new 75 ppb ozone standard. As discussed above, the HAA did not require strict compliance with unit-by-unit NOx emission limitations. Instead, electric generating facilities were allowed to meet system-wide emission caps. They did this by installing controls on the units that were most cost effective to control at the time. The new reductions proposed will come primarily from seven units that did not make significant control technology investments or improvements under the HAA and are high NO_x emitters when called upon to run — Chalk Point Unit #2; Wagner Unit #2; Crane Units #1 and #2; and Dickerson Units #1, #2, and #3. Because high electricity demand and bad ozone days are both driven by high temperatures, high emissions from these plants occur on the worst ozone days.

Sources Affected and Location

This action impacts coal fired electric generating units in Maryland, which account for over 90% of the state's power plant NO_x emissions. Affected electric generating units include: Brandon Shores (Units 1 and 2); Crane (Units 1 and 2), and Wagner (Units 2 and 3) plants; Chalk Point (Units 1 and 2), Morgantown (Units 1 and 2) and Dickerson plants (Units 1, 2 and 3); and Warrior Run.

Requirements

This action is part of an overall strategy to significantly reduce NO_x emissions from coal fired electric generating units (EGUs) in the state, by requiring owners and operators of affected EGUs to comply with certain requirements and standards in the regulation by specific dates. The requirements specified in the regulation include the following:

- No later than 45 days after the effective date of this regulation, the owner or operator of an affected unit must submit a plan (plan should summarize the data to be collected to demonstrate compliance with the requirements of the regulation and cover all modes of operation) to MDE and U.S. EPA for approval that demonstrates how the unit will operate installed pollution control technology and combustion controls as required in the regulation;

- Beginning May 1, 2015, for each operating day during the ozone season, affected units must minimize NO_x emissions by operating and optimizing the use of all installed pollution control technologies and combustion controls consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)) for such equipment and the unit at all times the unit is in operation while burning any coal;
- Owners or operators of two or more units (a unit that is located at an electric generating facility that is the only facility in Maryland owned, operated or controlled by the owner is exempt) must demonstrate compliance by meeting a system-wide NO_x emission rate of 0.15 lbs/MMBtu as a 30-day rolling average during the ozone season;
- Owners or operators of affected electric generating units must continue to meet the ozone season and annual NO_x reduction requirements in COMAR 26.11.27;
- Affected electric generating units with a fluidized bed combustor must meet a NO_x emission rate of 0.10 lbs/MMBtu as a 24-hour block average on an annual basis;
- No later than June 1, 2020, the owner or operator of the following units - C.P. Crane Units #1 and #2, Chalk Point Unit #2, Dickerson Units #1, #2, and #3 and H.A. Wagner Unit #2, must select one the following compliance options:

    - Install and continuously operate a selective catalytic reduction (SCR) control system at all times - not exceed a NO_x emission rate of 0.09 lbs/MMBtu, as determined on a 30-day rolling average during the ozone season no later than June 1, 2020;

    - Permanently retire the unit no later than June 1, 2020; or

    - Switch fuel from coal to natural gas for the unit no later than June 1, 2020.

- The regulation includes procedures for owners and operators of affected units to demonstrate compliance with the requirements and emission rates in the regulation as well as specific reporting requirements.

Coal fired electric generating units are still subject to Maryland's Healthy Air Act under COMAR 26.11.27, as well as federal regulations. The federal Clean Air Interstate Rule (CAIR) or its replacement applies to all the units under this regulation. This new regulation will allow units to meet the tonnage caps from the state and federal rules, and likely have NOx ozone season allowances associated with CAIR to trade ---or accrue NOx ozone season allowances surplus.

Expected Emissions Reductions

Based upon calculations and emissions estimates by the Department, the regulation requirements of section .03 has an estimated NOx emissions reduction potential of 25 percent and 9 tons per day of NOx emissions from the coal-fired generating units

category as compared to the average operating conditions of 2011 through 2013. Maryland's 2011-13 baseline emissions inventory indicates that ozone season NOx emissions from coal-fired electric generating power plants total 35.8 tons/day. The ozone season NOx emissions from coal-fired electric generating power plants has the potential to be reduced to 27 tons/day under the regulation requirements of section .03.

Meeting the proposed regulation requirements of section .04 has an estimated NOx emissions reduction potential of 48 percent and 17 tons per day of NOx emissions from the coal-fired generating units category as compared to the average operating conditions of 2011 through 2013. The ozone season NOx emissions from coal-fired electric generating power plants has the potential to be reduced to 19 tons/day under the regulation requirements of section .04.

Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public

I. Summary

Since all of Maryland's coal-fired electric generating units are equipped with either the best available NO_x control technology (SCR) or second best NO_x control technology (SNCR or SACR), the cost impact analysis for this proposed action is for the removal of SNCR/SACR control technologies and replacement with SCR technology.

Affected sources, specifically Raven Power and NRG, submitted cost effectiveness analysis for the conversion from existing SNCR/SACR control technology to SCR control technology for certain units. This analysis is presented in the following table:

Table 1: SCR Cost Effectiveness Calculations

	RAVEN POWER		NRG	
	Crane 1-2	**Wagner 2**	**Dickerson 1-3**	**Chalk Pt 2**
Total Capital Cost [(A)]	**$110,000,000**	**$40,000,000**	**$200,000,000**	**$122,000,000**
SCR Cost $/kW				
Annual Costs [(B)]				
Maintenance Costs	$1,000,000	$390,000	$2,000,000	$1,220,000
Reagent Cost			$848,844	$740,132
Electricity Cost			$280,868	$244,897
Catalyst Cost			$1,188,333	$865,833
Capital Recovery	$13,226,550	$4,809,655	$24,048,274	$14,669,447
Total Annual Cost	**$14,226,550**	**$5,199,655**	**$28,366,319**	**$17,740,309**
Annual NOx Emissions (Historical Averages)				

Gross Generation (MWh)	1,248,300	1,088,430			
Capacity Factor (%)	22%	22%		28%	53%
Inlet NOx Rate (lb/Mbtu)	0.261	0.306		0.255	0.300
Annual Heat Input (MMBtu)	9,689,214	3,960,792		12,126,298	14,458,839
Inlet NOx Tons	1,265	606		1,548	2,166
Outlet NOx Rate (lb/Mbtu)	0.07	0.07		0.07	0.07
Outlet NOx Tons	339	139		424	506
NOx Tons Removed	926	467		1,124	1,660
SCR Cost Effectiveness (Annual $/ton removed)	**$15,364**	**$11,125**		**$25,238**	**$10,689**

There will be no additional impact on the Department, other State agencies, or local governments as a result of this action.

II. Types of Economic Impact.	Revenue (R+/R-) Expenditure (E+/E-)	Magnitude
A. On issuing agency:	(E+)	Indeterminate
B. On other State agencies:	(E+)	Indeterminate
C. On local governments:	(E+)	Indeterminate
	Benefit (+) Cost (-)	Magnitude
D. On regulated industries or trade groups:		
(1) Capital Costs	(–)	$40M - $200M
(2) Annual Operating Costs	(–)	$6M - $28M

E. On other industries or trade groups:		
(1) MD Contractors	(–)	Indeterminate
(2) Electricity Rates	(–)	Indeterminate
F. Direct and indirect effects on public:		
(1) Health Benefits	(+)	Indeterminate
(2) Electricity Rates	(–)	Indeterminate

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

A. B. C. E. Commercial and consumer electricity rates are influenced by many factors. The costs associated with implementation of this action may be one factor that influences these rates, but the magnitude of that influence is difficult to quantify when added to other factors that significantly affect electric rates.

D.(1) It is difficult to determine the precise costs to regulated entities associated with implementation of this action because there can be of a number of site-specific requirements and variables associated with the cost of installation and operation of the pollution control equipment at specific plants. The affected facilities have provided cost estimates ranging from $40,000,000 to 200,000,000.

D.(2) The affected facilities have provided cost estimates ranging from $6,000,000 to $28,000,000.

F.(1) Health benefits in terms of dollars are influenced by many factors and difficult to quantify.

F.(2) Commercial and consumer electricity rates are influenced by many factors. The costs associated with implementation of this action may be one factor that influences these rates, but the magnitude of that influence is difficult to quantify when added to other factors that significantly affect electric rates.

Economic Impact on Small Businesses

The affected sources do not fit the definition of “small business”.

Is there an Equivalent Federal Standard to this Proposed Regulatory Action?

Yes. The federal Clean Air Act, 42 U.S.C. § 7401 et seq. compels the Maryland Department of the Environment to revise its regulations requiring the implementation of reasonably available control technology ("RACT") for certain sources, including coal-fired electric generating units ("EGU"). 42 U.S.C. §7511a(b)(2).

Furthermore, the Clean Air Act allows the State to enact regulations more stringent than federal law. In addition, MDE has the independent authority to regulate sources of air

emissions pursuant to Title 2 of the Environment Article. Additional reductions from coal-fired electric generating units in the State are needed to meet the 2008 ozone standard of 75 ppb. To meet the State's need for much deeper emission reductions to achieve the ozone standard, this action contains requirements for additional NO_x emissions reductions from coal-fired electric generating units.

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 09 Control of Fuel-Burning Equipment, Stationary Internal Combustion Engines, and Certain Fuel-Burning Installations

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 10-102, and 10-103, Annotated Code of Maryland

.01—.07 (text unchanged)

.08 Control of NOx Emissions for Major Stationary Sources.

A. — B. (text unchanged)

C. Requirements for *Oil Fired or Gas/Oil Fired* Fuel-Burning Equipment with a Rated Heat Input Capacity of 250 Million Btu Per Hour or Greater.

(1) A person who owns or operates *an oil fired or gas/oil fired* fuel-burning equipment with a rated heat input capacity of 250 Million Btu per hour or greater shall equip each installation with combustion modifications or other technologies to meet the NO_x emission rates in §C(2) of this regulation.

(2) The maximum NO_x emission *rate* [rates] as pounds of NO_x per Million Btu per hour is [are:~~] *0.30 for oil fired or gas/oil fired units located at an electric generating facility.*~~

~~[~~(a) 0.45 for tangentially coal fired units located at an electric generating facility (excluding high heat release units);

(b) 0.50 for wall coal fired units located at an electric generating facility (excluding high heat release units);

(c)] 0.30 for oil fired or gas/oil fired units located at an electric generating facility.~~[~~;

(d) 0.70 for coal fired cyclone fuel burning equipment located at an electric generating facility from May 1 through September 30 of each year and 1.5 during the period October 1 through April 30 of each year;

(e) 0.70 for a tangentially coal fired high heat release unit located at an electric generating facility;

(f) 0.80 for a wall coal fired high heat release unit located at an electric generating facility; and

(g) 0.6 for coal fired cell burners at an electric generating facility.]

(3) A person who owns or operates *oil fired or gas/oil fired* fuel burning equipment with a rated heat input capacity of 250 Million Btu per hour or greater shall install, operate, calibrate, and maintain a certified NO_x CEM or an alternative NO_x monitoring method approved by the Department and the EPA on each installation.

D. — K. (text unchanged)

.09—.11 (text unchanged)

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 38 Control of NOx Emissions from Coal-Fired Electric Generating Units

Authority: Environmental Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 2-1003, 10-102, 10-103, and 10-1002, Annotated Code of Maryland

ALL NEW MATTER

.01 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Affected electric generating unit" means any one of the following coal-fired electric generating units:

(a) Brandon Shores Units 1 and 2;

(b) C.P. Crane Units 1 and 2;

(c) Chalk Point Units 1 and 2;

(d) Dickerson Units 1, 2, and 3;

(e) H.A. Wagner Units 2 and 3;

(f) Morgantown Units 1 and 2; and

(g) Warrior Run.

(2) "Operating day" means a 24-hour period beginning midnight of one day and ending the following midnight, or an alternative 24-hour period approved by the Department, during which time an installation is operating, consuming fuel, or causing emissions.

(3) "Ozone season" means the period beginning May 1 of any given year and ending September 30 of the same year.

(4) System.

(a) "System" means all affected electric generating units within the State of Maryland subject to this chapter that are owned, operated, or controlled by the same person and are located:

(i) In the same ozone nonattainment area as specified in 40 CFR Part 81; or

(ii) Outside any designated ozone nonattainment area as specified in 40 CFR 81.

(b) A system must include at least two affected electric generating units.

(5) "System operating day" means any day in which an electric generating unit in a system operates.

(~~5~~6) "30-day rolling average emission rate" means a value in lbs/MMBtu calculated by:

(a) Summing the total pounds of pollutant emitted from the ~~unit~~system during the current system operating day and the previous twenty-nine system operating days;

(b) Summing the total heat input to the system~~unit~~ in MMBtu during the current system operating day and the previous twenty-nine system operating days; and

(c) Dividing the total number of pounds of pollutant emitted during the thirty system operating days by the total heat input during the thirty system operating days.

(~~6~~7) "24-hour block average emission rate" means a value in lbs/MMBtu calculated by:

(a) Summing the total pounds of pollutant emitted from the unit during 24 hours between midnight of one day and ending the following midnight;

(b) Summing the total heat input to the unit in MMBtu during 24 hours between midnight of one day and ending the following midnight; and

(c) Dividing the total number of pounds of pollutant emitted during 24 hours between midnight of one day and ending the following midnight by the total heat input during 24 hours between midnight of one day and ending the following midnight.

.02 Applicability.

The provisions of this chapter apply to an affected electric generating unit as that term is defined in §.01B of this chapter.

.03 2015 NO_x Emission Control Requirements.

A. Daily NOx Reduction Requirements During the Ozone Season.

(1) Not later than 45 days after the effective date of this regulation, the owner or operator of an affected electric generating unit shall submit a plan to the Department and EPA for approval that demonstrates how each affected electric generating unit will operate installed pollution control technology and combustion controls to meet the requirements of §A(2) of this regulation. The plan shall summarize the data that will be collected to demonstrate

compliance with §A(2). The plan shall cover all modes of operation, including but not limited to normal operations, start-up, shut-down and low capacity operations.

(2) Beginning on May 1, 2015, for each operating day during the ozone season, the owner or operator of an affected electric generating unit shall minimize NOx emissions by operating and optimizing the use of all installed pollution control technology and combustion controls consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)) for such equipment and the unit at all times the unit is in operation while burning any coal.

B. Ozone Season NOx Reduction Requirements.

(1) Except as provided in §B(3), ~~T~~the owner or operator of an affected electric generating unit shall not exceed a system-wide NOx emission rate of 0.15 lbs/MMBtu as a 30-day rolling average during the ozone season.

(2) The owner or operator of an affected electric generating unit subject to the provisions of this regulation shall continue to meet the ozone season NOx reduction requirements in COMAR 26.11.27.

(3) An affected electric generating unit is not subject to B(1) if the unit is located at an electric generating facility that is the only facility in Maryland owned, operated or controlled by the owner.

C. Annual NOx Reduction Requirements. The owner or operator of an affected electric generating unit subject to the provisions of this regulation shall continue to meet the annual NOx reduction requirements in COMAR 26.11.27.

D. NOx Emission Requirements for Affected Electric Generating Units Equipped with Fluidized Bed Combustors.

(1) The owner or operator of an affected electric generating unit equipped with a fluidized bed combustor is not subject to the requirements of §§A, ~~and~~ B(1), B(2) and C of this regulation.

(2) The owner or operator of an affected electric generating unit equipped with a fluidized bed combustor shall not exceed a NOx emission rate of 0.10 lbs/MMBtu as a 24-hour block average.

.04 Additional NO_x Emission Control Requirements Beginning ~~May 31, 2015 and April 1, 2018~~June 1, 2020.

A. This regulation applies to C.P. Crane units 1 and 2, Chalk Point unit 2, Dickerson units 1, 2, and 3 and H.A. Wagner unit 2.

~~B. Notification to the Department. Not later than May 31, 2015, the owner or operator of the affected electric generating units subject to this regulation shall notify the Department as to which compliance option as specified in §C of this regulation shall be selected by the owner or operator of the affected electric generating unit to comply with this regulation.~~

~~C~~B. General Requirements. The owner or operator of the affected electric generating units subject to this regulation shall choose from the following:

(1) Not later than June 1, 2020:

(a) Install and operate a selective catalytic reduction (SCR) control system; and

(b) Meet a NOx emission rate of 0.09 lbs/MMBtu, as determined on a 30-day rolling average during the ozone season;

(2) Not later than June 1, 2020, permanently retire the unit;

(3) Not later than June 1, 2020, switch fuel from coal to natural gas for the unit;

~~(4) Not later than April 1, 2016, meet a system-wide NOx emission rate during the ozone season or system-wide daily NOx tonnage cap during the ozone season calculated by assuming SCR controls at C.P. Crane units 1 and 2, Chalk Point unit 2, Dickerson units 1, 2, and 3 and H.A. Wagner unit 2 operated in a manner consistent with the requirements in §§.03A(2) and .04C(1)(b) and actual operations after 2007.~~

~~D. Where the compliance option of §C(4) is selected, the owner or operator of an affected electric generating unit shall submit no later than May 31, 2015, an alternative emission reduction plan for approval by the Department that ensures compliance with the applicable limit of §C(4). Upon approval by the Department, the provisions of the alternative emission reduction plan shall be enforceable and shall be incorporated into the owner's permit to operate.~~

~~E. For affected electric generating units following compliance option §C(4) of this regulation, a new alternative emissions reduction plan shall be submitted to the Department for approval no later than thirty days should a unit that is part of the system-wide plan retire, transfer ownership, or otherwise be removed from the system.~~

.05 Compliance Demonstration Requirements.

A. Procedures for demonstrating compliance with §.03(A) of this chapter.

(1) An affected electric generating unit shall demonstrate, to the Department's satisfaction, compliance with §.03(A)(2) of this chapter, using the information collected and maintained in accordance with §.03(A)(1) of this chapter and any additional documentation available to and maintained by the affected electric generating unit.

(2) An affected electric generating unit shall not be required to submit a unit-specific report consistent with §A(3) of this regulation, or any other information unless otherwise requested by the Department, where the unit emits at levels that are at or below the following rates:

Affected Unit	24-Hour Block Average NOx Emissions in lbs/MMBtu
Brandon Shores	
Unit 1	0.08
Unit 2 < 650 MWg ≥ 650 MWg	~~0.08~~ 0.07 0.15
C.P. Crane	
Unit 1	0.30
Unit 2	0.28
Chalk Point	
Unit 1 only	0.07
Unit 2 only	~~0.30~~0.33
Units 1 and 2 combined	~~0.18~~0.20
Dickerson	
Unit 1 only	0.24
Unit 2 only	0.24
Unit 3 only	0.24
Two or more Units combined	0.24
H.A. Wagner	
Unit 2	~~0.25~~0.34
Unit 3	0.07
Morgantown	
Unit 1	0.07
Unit 2	0.07

(3) The owner or operator of an affected electric generating unit subject to §.03(A)(2) of this chapter shall submit a unit-specific report for each day the unit exceeds its NOx emission rate of §A(2) of this regulation, which shall include the following information for the entire operating day:

(a) Hours of operation for the unit;
(b) Hourly averages of operating temperature of installed pollution control technology;
(c) Hourly averages of heat input (MMBtu/hr);
(d) Hourly averages of output (MWh);
(e) Hourly averages of Ammonia or urea flow rates;
(f) Hourly averages of NOx emissions data (lbs/MMBtu and ~~ppm~~tons);
(g) Malfunction data;
(h) The technical and operational reason the rate was exceeded, such as:
(i) operator error;
(ii) technical events beyond the control of the owner or operator (e.g. acts of God, malfunctions); or
(iii) dispatch requirements that mandate unplanned operation (e.g. start-ups and shut-downs, idling and operation at low voltage or low capacity);
(i) A written narrative describing any actions taken to reduce emission rates; and
(j) Other information that the Department determines is necessary to evaluate the data or to ensure that compliance is achieved.

(4) An exceedance of the emissions rate of §A(2) of this regulation ~~which is determined by the Department to be beyond the control of the owner or operator,~~ including but not limited to start-up and shut-down, days when the unit was directed by the electric grid operator to operate at low capacity or to operate pursuant to any emergency generation operations required by the electric grid operator, including necessary testing for such emergency

operations or to have otherwise occurred during operations which are deemed consistent with the unit's technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions, shall not be considered a violation of §.03A(2) of this chapter provided that the provisions of the approved plan as required in §.03A(1) are met.

B. Procedures for demonstrating compliance with NOx emission rates of this chapter.

(1) Compliance with the NOx emission rate limitations in §§.03B(1), .03D(2), ~~.04C(1) and .04C(4)~~ .04B(1)(b) and .05A(2) shall be demonstrated with a continuous emission monitoring system that is installed, operated, and certified in accordance with 40 CFR Part 75.

(2) For §.03B(1), ~~I~~in order to calculate the 30-day rolling average emission rates of this chapter, ~~beginning May 1, 2015 and for each subsequent May 1 of following years~~if twenty-nine system operating days are not available from the current ozone season, ~~data~~ system operating days from the previous ~~twenty-nine operating days of the preceding September~~ ozone season shall be used.

(3) For §.04B(1), in order to calculate the 30-day rolling average emission rates, if twenty-nine operating days are not available from the current ozone season, operating days from the previous ozone season shall be used.

.06 Reporting Requirements.

A. Reporting Schedule.

(1) Beginning 30 days after the first month of the ozone season after the effective date of this regulation, each affected electric generating unit subject to the requirements of this chapter shall submit a monthly report to the Department detailing the status of compliance with this regulation during the ozone season.

(2) Each subsequent monthly report shall be submitted to the Department not later than 30 days following the end of the calendar month during the ozone season.

B. Monthly Reports During Ozone Season. Monthly reports during the ozone season shall include:

(1) Daily pass or fail of the NOx emission rates of §.05A(2).

(2) The reporting information as required under §.05A(3).

(~~2~~3) The 30-day rolling system-wide average emission rate for each affected electric generating unit to demonstrate compliance with §.03B(1).

(~~3~~4) Beginning June 1, 2020, the daily 30-day rolling average heat input calculated in lbs/MMBtu to demonstrate compliance with the requirements of Regulation .~~04C~~04B(1)(b) of this chapter.

~~(4) For an affected electric generating unit which has selected the compliance option of §.04C(4), beginning April 1, 2016 a monthly report shall also include:~~

~~(a) For affected electric generating units following the compliance option of a system-wide NOx emission rate during the ozone season , the report shall also include data, information, and calculations which demonstrate that the unit meets the NOx emission rate of 0.07 lbs/MMBtu, on a 30-day rolling average during the ozone season; or~~

~~(b) For affected electric generating units following the compliance option of a system-wide daily NOx tonnage cap during the ozone season, the report shall also include data, information, and calculations which demonstrate that the actual system-wide daily NOx emissions in tons are less than or equal to the emissions calculated by assuming SCR controls at the system's units operated in a manner consistent with the requirements in §§.03A(2) and .04C(1)(b) and actual operations after 2007.~~

END NEW MATTER