TENTATIVE AGENDA AND MINIBOOK
STATE AIR POLLUTION CONTROL BOARD MEETING

THURSDAY, NOVEMBER 16, 2017
CAPITOL BUILDLING
HOUSE ROOM 1
STATE CAPITOL
RICHMOND, VIRGINIA 23219

Convene – 10:00 a.m.

			TAB
I.	**Review and Approve Agenda**		
II.	**Minutes** (September 22, 2017)		A
III.	**Final Exempt Regulation**		
	Federal Documents Incorporated by Reference (Rev. E17)	Sabasteanski	B
IV.	**Proposed Regulation**		
	Regulation for Emissions Trading (9VAC5 Chapter 140, Rev. C17)	Dowd	C
V.	**High Priority Violations Report**	Nicholas	D
VI.	**Public Forum**		
VII.	**Other Business**		
	Division Director's Report		

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE AIR POLLUTION CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft

permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may an additional comment period during which a public hearing is held. In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented at the public hearing or during the public comment period up to 3 minutes to exercise their rights to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cindy.berndt@deq.virginia.gov.

Federal Documents Incorporated by Reference (Rev. E17) - Request for Board Action on Exempt Final Regulation: The purpose of the proposed action is to amend the regulations to incorporate newly promulgated federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and national emission standards for hazardous air pollutants for source categories (Maximum Achievable Control Technology, or MACT), Rules 5-5, 6-1, and Rule 6-2, respectively, of the board's regulations. The board needs to

incorporate newly promulgated NSPS, NESHAP, and MACT standards in order for the department to obtain authority from the U.S. Environmental Protection Agency (EPA) to enforce these standards. If the board does not do so, authority to enforce the standards remains with the federal government. Further, the standards reflect the most current technical research on the subjects addressed by the standards. To continue to follow the old standards would mean relying on inaccurate and outdated information. The department is requesting approval of draft final regulation amendments that meet federal statutory and regulatory requirements. Approval of the amendments will ensure that the Commonwealth will be able to meet its obligations under the federal Clean Air Act. The regulation amendments update state regulations that incorporate by reference certain federal regulations to reflect the Code of Federal Regulations as published on July 1, 2017. The date of the Code of Federal Regulations book being incorporated by reference is being updated to the latest version.

Regulation for Emissions Trading (9VAC5 Chapter 140, Rev. C17) - Regulation Development Report and Request to Publish Proposal for Public Comment: Executive Directive 11 (ED 11), "Reducing Carbon Dioxide Emissions from the Electric Power Sector and Growing Virginia's Clean Energy Economy," directs the Director of the Department of Environmental Quality, in coordination with the Secretary of Natural Resources, to take the following actions in accordance with the provisions and requirements of Virginia Code § 10.1-1300 et seq., and Virginia Code § 2.2-4000, et seq.:

1. Develop a proposed regulation for the State Air Pollution Control Board's consideration to abate, control, or limit CO_2 from electric power facilities that:

a. Includes provisions to ensure that Virginia's regulation is "trading-ready" to allow for the use of market-based mechanisms and the trading of CO_2 allowances through a multi-state trading program; and

b. Establishes abatement mechanisms providing for a corresponding level of stringency to limits on CO_2 emissions imposed in other states with such limits.

2. By no later than December 31, 2017, present the proposed regulation to the State Air Pollution Control Board for consideration for approval for public comment in accordance with the Board's authority pursuant to Virginia Code § 10.1-1308.

The department is requesting approval of a proposal for public comment that meets the requirements of ED 11.

To solicit comment from the public on the notice of intended regulatory action, the Department issued a notice that provided for receiving comment during a comment period. The summary and analysis of public input is included in the agency background document.

To assist in the development of the proposal, the department formed a regulatory advisory panel consisting of affected stakeholders and department staff. Information gathered from experts in the field, its own analysis and input from the panel forms the basis for the department recommendation. A copy of the panel report containing the recommendations of the panel has been forwarded to the board.

Summary of Draft Regulation Amendments:

1. The primary purpose of the regulation is to implement a declining cap on carbon emissions. The administrative means of accomplishing this will be effected by linking Virginia to RGGI, which is an established emissions trading program. An allowance will be issued for each ton of carbon emitted by an electricity generating facility. The company must then decide if it will reduce carbon emissions and sell the resulting additional allowances, or if it will not reduce carbon emissions and make up the difference with purchased allowances. The proposal includes two options on the base budgets, 33 million tons and 34 million tons, which will determine, based on a 3% annual reduction, the annual budgets and allocations for future years.

2. The mechanism for determining the cost of allowances will be a consignment auction.

3. A cost containment reserve allowance will be offered for sale at an auction by the department for the purpose of containing the cost of CO_2 allowances in the event of higher than anticipated emission reduction costs. An emission containment reserve allowance will be withheld from sale at an auction by the department for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs.

4. Monitoring, recording, and recordkeeping requirements will be implemented to track compliance.

5. Conditional allowances will be allocated to the Department of Mines, Minerals and Energy (DMME) in order to assist the department for the abatement and control of air pollution, specifically, CO_2.

Regulatory Text:

9VAC5 CHAPTER 140.
REGULATION FOR EMISSIONS TRADING.

PART VII.
CO_2 Budget Trading Program

Article 1 - CO_2 Budget Trading Program General Provisions.

9VAC5-140-6010. Purpose.

This part establishes the Virginia component of the CO_2 Budget Trading Program, which is designed to reduce anthropogenic emissions of CO_2, a greenhouse gas, from CO_2 budget sources in an economically efficient manner.

9VAC5-140-6020. Definitions.

A. As used in this part, all words or terms not defined here shall have the meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.

B. For the purpose of this part and any related use, the words or terms shall have the meanings given them in this section.

C. Terms defined.

"Account number" means the identification number given by the department or its agent to each COATS account.

"Acid rain emission limitation" means, as defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide (SO_2) or nitrogen oxides (NO_X) under the Acid Rain Program under Title IV of the CAA.

"Acid Rain Program" means a multi-state SO_2 and NO_X air pollution control and emission reduction program established by the administrator under Title IV of the CAA and 40 CFR Parts 72 through 78.

"Adjustment for banked allowances" means an adjustment applied to the Virginia CO_2 Budget Trading Program base budget for allocation years 2021 through 2025 to address allowances held in general and compliance accounts, including compliance accounts established pursuant to the CO_2 Budget Trading Program, but not including accounts opened by participating states, that are in addition to the aggregate quantity of emissions from all CO_2 budget sources in all of the participating states at the end of the control period in 2020 and as reflected in the CO_2 Allowance Tracking System on March 17, 2021.

"Administrator" means the administrator of the U.S. Environmental Protection Agency or the administrator's authorized representative.

"Allocate" or "allocation" means the determination by the department of the number of CO_2 conditional allowances allocated to a CO_2 budget unit or the Department of Mines, Minerals and Energy (DMME).

"Allocation year" means a calendar year for which the department allocates CO_2 conditional allowances pursuant to Article 5 (9VAC5-140-6190 et seq.) of this part. The allocation year of each CO_2 conditional allowance is reflected in the unique identification number given to the allowance pursuant to 9VAC5-140-6250 C.

"Allowance" means an allowance up to one ton of CO_2 purchased from the consignment auction in accordance with Article 9 (9VAC5-140-6410 et seq.) of this part and may be deposited in the compliance account of a CO_2 budget source.

"Allowance auction" or "auction" means an auction in which the department or its agent offers CO_2 allowances for sale.

"Alternate CO_2 authorized account representative" means, for a CO_2 budget source and each CO_2 budget unit at the source, the alternate natural person who is authorized by the owners and operators of the source and all CO_2 budget units at the source, in accordance with Article 2 (9VAC5-140-6080 et seq.) of this part, to represent and legally bind each owner and operator in matters pertaining to the CO_2 Budget Trading Program or, for a general account, the alternate natural person who is authorized, under Article 6 (9VAC5-140-6220 et seq.) of this part, to transfer or otherwise dispose of CO_2 allowances held in the general account. If the CO_2 budget source is also subject to the Acid Rain Program, CSAPR NO_X Annual Trading Program, CSAPR NO_X Ozone Season Trading Program, CSAPR SO_2 Group 1 Trading Program or CSAPR SO_2 Group 2 Trading Program then, for a CO_2 Budget Trading Program compliance account, this alternate natural person shall be the same person as the alternate designated representative as defined in the respective program.

"Attribute" means a characteristic associated with electricity generated using a particular renewable fuel, such as its generation date, facility geographic location, unit vintage, emissions output, fuel, state program eligibility, or other characteristic that can be identified, accounted for, and tracked.

"Attribute credit" means a credit that represents the attributes related to one megawatt-hour of electricity generation.

"Automated Data Acquisition and Handling System" or "DAHS" means that component of the Continuous Emissions Monitoring System (CEMS), or other emissions monitoring system approved for use under Article 8 (9VAC5-140-6330 et seq.) of this part, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by Article 8 (9VAC5-140-6330 et seq.) of this part.

"Billing meter" means a measurement device used to measure electric or thermal output for commercial billing under a contract. The facility selling the electric or thermal output shall have different owners from the owners of the party purchasing the electric or thermal output.

"Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

"CO_2 allowance deduction" or "deduct CO_2 allowances" means the permanent withdrawal of CO_2 allowances by the department or its agent from a COATS compliance account to account for the number of tons of CO_2 emitted from a CO_2 budget source for a control period or an interim control period, determined in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part, or for the forfeit or retirement of CO_2 allowances as provided by this part.

"CO_2 allowances held" or "hold CO_2 allowances" means the CO_2 allowances recorded by the department or its agent, or submitted to the department or its agent for recordation, in accordance with Article 6 (9VAC5-140-6220 et seq.) and Article 7 (9VAC5-140-6300 et seq.) of this part, in a COATS account.

"CO_2 Allowance Tracking System" or "COATS" means the system by which the department or its agent records allocations, deductions, and transfers of CO_2 allowances under the CO_2 Budget Trading Program. The tracking system may also be used to track CO_2 allowance prices and emissions from affected sources.

"CO_2 Allowance Tracking System account" means an account in COATS established by the department or its agent for purposes of recording the allocation, holding, transferring, or deducting of CO_2 allowances.

"CO_2 allowance transfer deadline" means midnight of the March 1 occurring after the end of the relevant control period and each relevant interim control period or, if that March 1 is not a business day, midnight of the first business day thereafter and is the deadline by which CO_2 allowances shall be submitted for recordation in a CO_2 budget

source's compliance account in order for the source to meet the CO_2 requirements of 9VAC5-140-6050 C for the control period and each interim control period immediately preceding such deadline.

"CO_2 authorized account representative" means, for a CO_2 budget source and each CO_2 budget unit at the source, the natural person who is authorized by the owners and operators of the source and all CO_2 budget units at the source, in accordance with Article 2 (9VAC5-140-6080 et seq.) of this part, to represent and legally bind each owner and operator in matters pertaining to the CO_2 Budget Trading Program or, for a general account, the natural person who is authorized, under Article 6 (9VAC5-140-6220 et seq.) of this part, to transfer or otherwise dispose of CO_2 allowances held in the general account. If the CO_2 budget source is also subject to the Acid Rain Program, CSAPR NO_X Annual Trading Program, CSAPR NO_X Ozone Season Trading Program, CSAPR SO_2 Group 1 Trading Program or CSAPR SO_2 Group 2 Trading Program, then for a CO_2 Budget Trading Program compliance account, this natural person shall be the same person as the designated representative as defined in the respective program.

"CO_2 budget emissions limitation" means, for a CO_2 budget source, the tonnage equivalent, in CO_2 emissions in a control period or an interim control period, of the CO_2 allowances available for compliance deduction for the source for a control period or an interim control period.

"CO_2 budget permit" means the portion of the legally binding permit issued by the department pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation) to a CO_2 budget source or CO_2 budget unit which specifies the CO_2 Budget Trading Program requirements applicable to the CO_2 budget source, to each CO_2 budget unit at the CO_2 budget source, and to the owners and operators and the CO_2 authorized account representative of the CO_2 budget source and each CO_2 budget unit.

"CO_2 budget source" means a source that includes one or more CO_2 budget units.

"CO_2 Budget Trading Program" means the Regional Greenhouse Gas Initiative (RGGI), a multi-state CO_2 air pollution control and emissions reduction program as a means of reducing emissions of CO_2 from CO_2 budget sources.

"CO_2 budget unit" means a unit that is subject to the CO_2 Budget Trading Program requirements under 9VAC5-140-6040.

"CO_2 cost containment reserve allowance" or "CO_2 CCR allowance" means a CO_2 allowance that is offered for sale at an auction for the purpose of containing the cost of CO_2 allowances. CO_2 CCR allowances offered for sale at an auction are separate from and additional to CO_2 allowances allocated from the Virginia CO_2 Budget Trading Program base and adjusted budgets. CO_2 CCR allowances are subject to all applicable limitations contained in this part.

"CO_2 cost containment reserve trigger price" or "CCR trigger price" means the minimum price at which CO_2 CCR allowances are offered for sale at an auction. Beginning in 2020 and each calendar year thereafter, the CCR trigger price shall be 1.025 multiplied by the CCR trigger price from the previous calendar year, rounded to the nearest whole cent. The CCR trigger price in calendar year 2021 shall be $13.00. Each calendar year thereafter, the CCR trigger price shall be 1.07 multiplied by the CCR trigger price from the previous calendar year, rounded to the nearest whole cent, as shown in Table 140-1A below.

Table 140-1A. CO_2 CCR Trigger Price.

2020	$ 10.77
2021	$ 13.00
2022	$ 13.91
2023	$ 14.88
2024	$ 15.93
2025	$ 17.04
2026	$ 18.23
2027	$ 19.51
2028	$ 20.88
2029	$ 22.34

2030	$ 23.90

"CO_2 emission containment reserve allowance" or "CO_2 ECR allowance" means a CO_2 allowance that is withheld from sale at an auction by the department for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs.

"CO_2 emission containment reserve trigger price" or "ECR trigger price" means the price below which CO_2 allowances will be withheld from sale by the department or its agent at an auction. The ECR trigger price in calendar year 2021 shall be $6.00. Each calendar year thereafter, the ECR trigger price shall be 1.07 multiplied by the ECR trigger price from the previous calendar year, rounded to the nearest whole cent, as shown in Table 140-1B.

Table 140-1B. CO_2 ECR Trigger Price.

2021	$ 6.00
2022	$ 6.42
2023	$ 6.87
2024	$ 7.35
2025	$ 7.86
2026	$ 8.42
2027	$ 9.00
2028	$ 9.63
2029	$ 10.31
2030	$ 11.03

"Combined cycle system" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

"Combustion turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor (if applicable), a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

"Commence commercial operation" means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For a unit that is a CO_2 budget unit under 9VAC5-140-6040 on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a CO_2 budget unit under 9VAC5-140-6040 on the date the unit commences commercial operation, the date the unit becomes a CO_2 budget unit under 9VAC5-140-6040 shall be the unit's date of commencement of commercial operation.

"Commence operation" means to begin any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber. For a unit that is a CO_2 budget unit under 9VAC5-140-6040 on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. For a unit that is not a CO_2 budget unit under 9VAC5-140-6040 on the date of commencement of operation, the date the unit becomes a CO_2 budget unit under 9VAC5-140-6040 shall be the unit's date of commencement of operation.

"Compliance account" means a COATS account, established by the department or its agent for a CO_2 budget source under Article 6 (9VAC5-140-6220 et seq.) of this part, in which are held CO_2 allowances available for use by the source for a control period and each interim control period for the purpose of meeting the CO_2 requirements of 9VAC5-140-6050 C.

"Conditional allowance" means an allowance allocated by the department to CO_2 budget sources and to DMME. Such conditional allowance shall be consigned by the entity to whom it is allocated to the consignment auction as specified under Article 9 (9VAC5-140-6410 et seq.) of this part, after which the conditional allowance becomes an allowance to be used for compliance purposes.

"Consignment auction" or "auction" means the CO_2 auction conducted on a quarterly basis by RGGI, Inc., in which CO_2 budget sources and DMME are allocated a share of allowances by the department that CO_2 budget sources and the holder of a public contract with DMME consign into the auction, and auction revenue is returned to CO_2 budget sources and the holder of a public contract with DMME in accordance with procedures established by the department.

"Continuous Emissions Monitoring System" or "CEMS" means the equipment required under Article 8 (9VAC5-140-6330 et seq.) of this part to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated DAHS), a permanent record of stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75 and Article 8 (9VAC5-140-6330 et seq.) of this part. The following systems are types of CEMS required under Article 8 (9VAC5-140-6330 et seq.) of this part:

a. A flow monitoring system, consisting of a stack flow rate monitor and an automated DAHS and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

b. A NO_X emissions rate (or NO_X-diluent) monitoring system, consisting of a NO_X pollutant concentration monitor, a diluent gas (CO_2 or O_2) monitor, and an automated DAHS and providing a permanent, continuous record of NO_X concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2; and NO_X emissions rate, in pounds per million British thermal units (lb/MMBtu);

c. A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O;

d. A CO_2 monitoring system, consisting of a CO_2 pollutant concentration monitor (or an O_2 monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated DAHS and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

e. An O_2 monitoring system, consisting of an O_2 concentration monitor and an automated DAHS and providing a permanent, continuous record of O_2, in percent O_2.

"Control period" means a three-calendar-year time period. The first control period is from January 1, 2021 to December 31, 2023, inclusive. Each subsequent compliance control period shall be a sequential three-calendar-year period. The first two compliance years of each control period are each defined as an interim control period, beginning on January 1, 2022.

"Cross State Air Pollution Rule (CSAPR) NO_X Annual Trading Program" means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart AAAAA of 40 CFR Part 97 and 40 CFR 52.38(a) (including such a program that is revised in a SIP revision approved by the administrator under 40 CFR 52.38(a)(3) or (4) or that is established in a SIP revision approved by the administrator under 40 CFR 52.38(a)(5)), as a means of mitigating interstate transport of fine particulates and NO_X.

"Cross State Air Pollution Rule (CSAPR) NO_X Ozone Season Trading Program" means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart BBBBB of 40 CFR Part 97 and 40 CFR 52.38(b) (including such a program that is revised in a SIP revision approved by the administrator under 40 CFR 52.38(b)(3) or (4) or that is established in a SIP revision approved by the Administrator under 40 CFR 52.38(b)(5)), as a means of mitigating interstate transport of ozone and NO_X.

"Cross State Air Pollution Rule (CSAPR) SO_2 Group 1 Trading Program" means a multi-state SO_2 air pollution control and emission reduction program established in accordance with subpart CCCCC of 40 CFR Part 97 and 40 CFR 52.39(a), (b), (d) through (f), (j), and (k) (including such a program that is revised in a SIP revision approved by the administrator under 40 CFR 52.39(d) or (e) or that is established in a SIP revision approved by the administrator under 40 CFR 52.39(f)), as a means of mitigating interstate transport of fine particulates and SO_2.

"Cross State Air Pollution Rule (CSAPR) SO_2 Group 2 Trading Program" means a multi-state SO2 air pollution control and emission reduction program established in accordance with subpart DDDDD of 40 CFR Part 97 and 40 CFR 52.39(a), (c), and (g) through (k) of this chapter (including such a program that is revised in a SIP revision approved by the administrator under 40 CFR 52.39(g) or (h) of this chapter or that is established in a SIP revision approved by the administrator under 40 CFR 52.39(i)), as a means of mitigating interstate transport of fine particulates and SO_2.

"Department" means the Virginia Department of Environmental Quality.

"DMME" means the Virginia Department of Mines, Minerals and Energy.

"Excess emissions" means any tonnage of CO_2 emitted by a CO_2 budget source during a control period that exceeds the CO_2 budget emissions limitation for the source.

"Excess interim emissions" means any tonnage of CO_2 emitted by a CO_2 budget source during an interim control period multiplied by 0.50 that exceeds the CO_2 budget emissions limitation for the source.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

"Fossil fuel-fired" means the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel combusted comprises, or is projected to comprise, more than 10% of the annual heat input on a Btu basis during any year.

"General account" means a COATS account, established under Article 6 (9VAC5-140-6220 et seq.) of this part, that is not a compliance account.

"Gross generation" means the electrical output (in MWe) at the terminals of the generator.

"Initial control period" means the period beginning on January 1, 2020 and ending on December 31, 2020.

"Interim control period" means a one-calendar-year time period, during each of the first and second calendar years of each three year control period. The first interim control period starts on January 1, 2021 and ends on December 31, 2021, inclusive. The second interim control period starts on January 1, 2022 and ends on December 31, 2022, inclusive. Each successive three year control period will have two interim control periods, comprised of each of the first two calendar years of that control period.

"Life-of-the-unit contractual arrangement" means a unit participation power sales agreement under which a customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and/or associated energy from any specified unit pursuant to a contract:

a. For the life of the unit;

b. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

c. For a period equal to or greater than 25 years or 70% of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

"Maximum design heat input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

"Maximum potential hourly heat input" means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use appendix D of 40 CFR Part 75 to report heat input, this

value shall be calculated, in accordance with 40 CFR Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value shall be reported, in accordance with 40 CFR Part 75, using the maximum potential flow rate and either the maximum CO_2 concentration (in percent CO_2) or the minimum O_2 concentration (in percent O_2).

"Minimum reserve price" means, in calendar year 2020, $2.00. Each calendar year thereafter, the minimum reserve price shall be 1.025 multiplied by the minimum reserve price from the previous calendar year, rounded to the nearest whole cent.

"Monitoring system" means any monitoring system that meets the requirements of Article 8 (9VAC5-140-6330 et seq.) of this part, including a CEMS, an excepted monitoring system, or an alternative monitoring system.

"Nameplate capacity" means the maximum electrical output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the U.S. Department of Energy standards.

"Net-electric output" means the amount of gross generation (in MWh) the generators produce (including, but not limited to, output from steam turbines, combustion turbines, and gas expanders), as measured at the generator terminals, less the electricity used to operate the plant (i.e., auxiliary loads); such uses include fuel handling equipment, pumps, fans, pollution control equipment, other electricity needs, and transformer losses as measured at the transmission side of the step up transformer (e.g., the point of sale).

"Non-CO_2 budget unit" means a unit that does not meet the applicability criteria of 9VAC5-140-6040.

"Operator" means any person who operates, controls, or supervises a CO_2 budget unit or a CO_2 budget source and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

"Owner" means any of the following persons:

a. Any holder of any portion of the legal or equitable title in a CO_2 budget unit; or

b. Any holder of a leasehold interest in a CO_2 budget unit, other than a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the CO_2 budget unit; or

c. Any purchaser of power from a CO_2 budget unit under a life-of-the-unit contractual arrangement in which the purchaser controls the dispatch of the unit; or

d. With respect to any general account, any person who has an ownership interest with respect to the CO_2 allowances held in the general account and who is subject to the binding agreement for the CO_2 authorized account representative to represent that person’s ownership interest with respect to the CO_2 allowances.

"Participating state" means a state that has established a corresponding regulation as part of the CO_2 Budget Trading Program.

"Receive" or "receipt of" means, with regard to CO_2 allowances, the movement of CO_2 allowances by the department or its agent from one COATS account to another, for purposes of allocation, transfer, or deduction.

"Recordation," "record," or "recorded" means, with regard to CO_2 allowances, the movement of CO_2 allowances by the department or its agent from one COATS account to another, for purposes of allocation, transfer, or deduction.

"RGGI, Inc." means the 501(c)(3) non-profit corporation created to support development and implementation of the Regional Greenhouse Gas Initiative (RGGI). Participating RGGI states use RGGI, Inc., as their agent to conduct the consignment auction, and operate and manage COATS.

"Reserve price" means the minimum acceptable price for each CO_2 allowance in a specific auction. The reserve price at an auction is either the minimum reserve price or the CCR trigger price, as specified in Article 9 (9VAC5-140-6410 et seq.) of this part.

"Serial number" means, when referring to CO_2 allowances, the unique identification number assigned to each CO_2 allowance by the department or its agent under 9VAC5-140 6250 C.

"Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any air pollutant. A source, including a source with multiple units, shall be considered a single facility.

"State" means the Commonwealth of Virginia. The term "state" shall have its conventional meaning where such meaning is clear from the context.

"Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

a. In person;

b. By U.S. Postal Service; or

c. By other means of dispatch or transmission and delivery.

Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

"Ton" or "tonnage" means any short ton, or 2,000 pounds. For the purpose of determining compliance with the CO_2 requirements of 9VAC5-140-6050 C, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons. A short ton is equal to 0.9072 metric tons.

"Undistributed CO_2 allowances" means CO_2 allowances originally allocated to a set aside account as pursuant to 9VAC5-140-6210 that were not distributed.

"Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

"Unit operating day" means a calendar day in which a unit combusts any fuel.

"Unsold CO_2 allowances" means CO_2 allowances that have been made available for sale in an auction conducted by the department or its agent, but not sold.

"Virginia CO_2 Budget Trading Program adjusted budget" means an adjusted budget determined in accordance with 9VAC5-140-6210 and is the annual amount of CO_2 tons available in Virginia for allocation in a given allocation year, in accordance with the CO_2 Budget Trading Program. CO_2 CCR allowances offered for sale at an auction are separate from and additional to CO_2 allowances allocated from the Virginia CO_2 Budget Trading Program adjusted budget.

"Virginia CO_2 Budget Trading Program base budget" means the budget specified in 9VAC5-140-6190. CO_2 CCR allowances offered for sale at an auction are separate from and additional to CO_2 allowances allocated from the Virginia CO_2 Budget Trading Program Base Budget.

9VAC5-140-6030. Measurements, abbreviations and acronyms.

Measurements, abbreviations, and acronyms used in this part are defined as follows:

Btu - British thermal unit.
CAA - federal Clean Air Act.
CCR - cost containment reserve
CEMS - Continuous Emissions Monitoring System.
COATS - CO_2 Allowance Tracking System.
CO_2 - carbon dioxide.
DAHS - Data Acquisition and Handling System.
EEM - efficiency measure.
H_2O - water.
lb - pound.
LME - low mass emissions.
MMBtu - million British thermal units.
MW - megawatt.
MWe - megawatt electrical.
MWh - megawatt hour.
NO_X - nitrogen oxides.
O_2 - oxygen.
ORIS - Office of Regulatory Information Systems.
QA/QC - quality assurance/quality control.
ppm - parts per million.
scf - standard cubic feet per hour.
SO_2 - sulfur dioxide.

9VAC5-140-6040. Applicability.

A. Any fossil fuel-fired unit that serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe shall be a CO_2 budget unit, and any source that includes one or more such units shall be a CO_2 budget source, subject to the requirements of this part.

B. Exempt from the requirements of this regulation is any fossil fuel power generating unit owned by an individual facility and located at that individual facility that generates electricity and heat from fossil fuel for the primary use of operation of the facility.

9VAC5-140-6050. Standard requirements.

A. Permit requirements shall be as follows.

1. The CO_2 authorized account representative of each CO_2 budget source required to have an operating permit pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation) and each CO_2 budget unit required to have an operating permit pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation) shall:

a. Submit to the department a complete CO_2 budget permit application under 9VAC5-140-6160 in accordance with the deadlines specified in 9VAC5-140-6150; and

b. Submit in a timely manner any supplemental information that the department determines is necessary in order to review the CO_2 budget permit application and issue or deny a CO_2 budget permit.

2. The owners and operators of each CO_2 budget source required to have an operating permit pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation) and each CO_2 budget unit required to have an operating permit pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation) for the

source shall have a CO_2 budget permit and operate the CO_2 budget source and the CO_2 budget unit at the source in compliance with such CO_2 budget permit.

B. Monitoring requirements shall be as follows.

1. The owners and operators and, to the extent applicable, the CO_2 authorized account representative of each CO_2 budget source and each CO_2 budget unit at the source shall comply with the monitoring requirements of Article 8 (9VAC5-140-6330 et seq.) of this part.

2. The emissions measurements recorded and reported in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part shall be used to determine compliance by the unit with the CO_2 requirements under subsection C of this section.

C. CO_2 requirements shall be as follows.

1. The owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold CO_2 allowances available for compliance deductions under 9VAC5-140-6260, as of the CO_2 allowance transfer deadline, in the source's compliance account in an amount not less than the total CO_2 emissions for the control period from all CO_2 budget units at the source, less the CO_2 allowances deducted to meet the requirements of subdivision 2 of this subsection, with respect to the previous two interim control periods as determined in accordance with Article 6 (9VAC5-140-6220 et seq.) and Article 8 (9VAC5-140-6330 et seq.) of this part.

2. The owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold CO_2 allowances available for compliance deductions under 9VAC5-140-6260, as of the CO_2 allowance transfer deadline, in the source's compliance account in an amount not less than the total CO_2 emissions for the interim control period from all CO_2 budget units at the source multiplied by 0.50, as determined in accordance with Article 6 (9VAC5-140-6220 et seq.) and Article 8 (9VAC5-140-6330 et seq.) of this part.

3. Each ton of CO_2 emitted in excess of the CO_2 budget emissions limitation for a control period shall constitute a separate violation of this part and applicable state law.

4. Each ton of excess interim emissions shall constitute a separate violation of this part and applicable state law.

5. A CO_2 budget unit shall be subject to the requirements under subdivision 1 of this subsection starting on the later, of January 1, 2020 or the date on which the unit commences operation.

6. CO_2 allowances shall be held in, deducted from, or transferred among COATS accounts in accordance with Article 5 (9VAC5-140-6190 et seq.), Article 6 (9VAC5-140-6220 et seq.), and Article 7 (9VAC5-140-6300 et seq.) of this part.

7. A CO_2 allowance shall not be deducted, in order to comply with the requirements under subdivision 1 or 2 of this subsection, for a control period that ends prior to the year for which the CO_2 allowance was allocated.

8. A CO_2 allowance under the CO_2 Budget Trading Program is a limited authorization by the department to emit one ton of CO_2 in accordance with the CO_2 Budget Trading Program. No provision of the CO_2 Budget Trading Program, the CO_2 budget permit application, or the CO_2 budget permit or any provision of law shall be construed to limit the authority of the department or a participating state to terminate or limit such authorization.

9. A CO_2 allowance under the CO_2 Budget Trading Program does not constitute a property right.

D. The owners and operators of a CO_2 budget source that has excess emissions in any control period shall:

1. Forfeit the CO_2 allowances required for deduction under 9VAC5-140-6260 D 1; and

2. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9VAC5-140-6260 D 2.

E. Recordkeeping and reporting requirements shall be as follows.

1. Unless otherwise provided, the owners and operators of the CO_2 budget source and each CO_2 budget unit at the source shall keep on site at the source each of the following documents for a period of 10 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 10 years, in writing by the department.

a. The account certificate of representation for the CO_2 authorized account representative for the source and each CO_2 budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9VAC5-140-6110, provided that the certificate and documents shall be retained on site at the source beyond such 10-year period until such documents are superseded because of the submission of a new account certificate of representation changing the CO_2 authorized account representative.

b. All emissions monitoring information, in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part and 40 CFR 75.57.

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CO_2 Budget Trading Program.

d. Copies of all documents used to complete a CO_2 budget permit application and any other submission under the CO_2 Budget Trading Program or to demonstrate compliance with the requirements of the CO_2 Budget Trading Program.

2. The CO_2 authorized account representative of a CO_2 budget source and each CO_2 budget unit at the source shall submit the reports and compliance certifications required under the CO_2 Budget Trading Program, including those under Article 4 (9VAC5-140-6170 et seq.) of this part.

F. Liability requirements shall be as follows.

1. No permit revision shall excuse any violation of the requirements of the CO_2 Budget Trading Program that occurs prior to the date that the revision takes effect.

2. Any provision of the CO_2 Budget Trading Program that applies to a CO_2 budget source (including a provision applicable to the CO_2 authorized account representative of a CO_2 budget source) shall also apply to the owners and operators of such source and of the CO_2 budget units at the source.

3. Any provision of the CO_2 Budget Trading Program that applies to a CO_2 budget unit (including a provision applicable to the CO_2 authorized account representative of a CO_2 budget unit) shall also apply to the owners and operators of such unit.

G. No provision of the CO_2 Budget Trading Program, a CO_2 budget permit application, or a CO_2 budget permit, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the CO_2 authorized account representative of the CO_2 budget source or CO_2 budget unit from compliance with any other provisions of applicable state and federal law or regulations.

9VAC5-140-6060. Computation of time.

A. Unless otherwise stated, any time period scheduled, under the CO_2 Budget Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

B. Unless otherwise stated, any time period scheduled, under the CO_2 Budget Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

C. Unless otherwise stated, if the final day of any time period, under the CO_2 Budget Trading Program, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

9VAC5-140-6070. Severability.

If any provision of this part, or its application to any particular person or circumstances, is held invalid, the remainder of this part, and the application thereof to other persons or circumstances, shall not be affected thereby.

Article 2 - CO_2 Authorized Account Representative for CO_2 Budget Sources.

9VAC5-140-6080. Authorization and responsibilities of the CO_2 authorized account representative.

A. Except as provided under 9VAC5-140-6090, each CO_2 budget source, including all CO_2 budget units at the source, shall have one and only one CO_2 authorized account representative, with regard to all matters under the CO_2 Budget Trading Program concerning the source or any CO_2 budget unit at the source.

B. The CO_2 authorized account representative of the CO_2 budget source shall be selected by an agreement binding on the owners and operators of the source and all CO_2 budget units at the source and must act in accordance with the certificate of representation under 9VAC5-140-6110.

C. Upon receipt by the department or its agent of a complete account certificate of representation under 9VAC5-140-6110, the CO_2 authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CO_2 budget source represented and each CO_2 budget unit at the source in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CO_2 authorized account representative by the department or a court regarding the source or unit.

D. No CO_2 budget permit shall be issued, and no COATS account shall be established for a CO_2 budget source, until the department or its agent has received a complete account certificate of representation under 9VAC5-140-6110 for a CO_2 authorized account representative of the source and the CO_2 budget units at the source.

E. Each submission under the CO_2 Budget Trading Program shall be submitted, signed, and certified by the CO_2 authorized account representative for each CO_2 budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CO_2 authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

F. The department or its agent will accept or act on a submission made on behalf of owners or operators of a CO_2 budget source or a CO_2 budget unit only if the submission has been made, signed, and certified in accordance with subsection E of this section.

9VAC5-140-6090. Alternate CO_2 authorized account representative.

A. An account certificate of representation may designate one and only one alternate CO_2 authorized account representative who may act on behalf of the CO_2 authorized account representative. The agreement by which the alternate CO_2 authorized account representative is selected shall include a procedure for authorizing the alternate CO_2 authorized account representative to act in lieu of the CO_2 authorized account representative.

B. Upon receipt by the department or its agent of a complete account certificate of representation under 9VAC5-140-6110, any representation, action, inaction, or submission by the alternate CO_2 authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative.

C. Except in this section and 9VAC5-140-6080 A, 9VAC5-140-6100, 9VAC5-140-6110, and 9VAC5-140-6230, whenever the term "CO_2 authorized account representative" is used in this part, the term shall be construed to include the alternate CO_2 authorized account representative.

9VAC5-140-6100. Changing the CO_2 authorized account representatives and the alternate CO_2 authorized account representative; changes in the owners and operators.

A. The CO_2 authorized account representative may be changed at any time upon receipt by the department or its agent of a superseding complete account certificate of representation under 9VAC5-140-6110. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative or alternate CO_2 authorized account representative prior to the time and date when the department or its agent receives the superseding account certificate of representation shall be binding on the new CO_2 authorized account representative and the owners and operators of the CO_2 budget source and the CO_2 budget units at the source.

B. The alternate CO_2 authorized account representative may be changed at any time upon receipt by the department or its agent of a superseding complete account certificate of representation under 9VAC5-140-6110. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous or alternate CO_2 authorized account representative or alternate CO_2 authorized account representative prior to the time and date when the department or its agent receives the superseding account certificate of representation shall be binding on the new alternate CO_2 authorized account representative and the owners and operators of the CO_2 budget source and the CO_2 budget units at the source.

C. Changes in the owners and operators shall be addressed as follows.

1. In the event a new owner or operator of a CO_2 budget source or a CO_2 budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the CO_2 authorized account representative and any alternate CO_2 authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the department, as if the new owner or operator were included in such list.

2. Within 30 days following any change in the owners and operators of a CO_2 budget source or a CO_2 budget unit, including the addition of a new owner or operator, the CO_2 authorized account representative or alternate CO_2 authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

9VAC5-140-6110. Account certificate of representation.

A. A complete account certificate of representation for a CO_2 authorized account representative or an alternate CO_2 authorized account representative shall include the following elements in a format prescribed by the department or its agent:

1. Identification of the CO_2 budget source and each CO_2 budget unit at the source for which the account certificate of representation is submitted;

2. The name, address, e-mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative and any alternate CO_2 authorized account representative;

3. A list of the owners and operators of the CO_2 budget source and of each CO_2 budget unit at the source;

4. The following certification statement by the CO_2 authorized account representative and any alternate CO_2 authorized account representative: "I certify that I was selected as the CO_2 authorized account representative or alternate CO_2 authorized account representative, as applicable, by an agreement binding on the owners and operators of the CO_2 budget source and each CO_2 budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 Budget Trading Program on behalf of the owners and operators of the CO_2 budget source and of each CO_2 budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the department or a court regarding the source or unit."; and

5. The signature of the CO_2 authorized account representative and any alternate CO_2 authorized account representative and the dates signed.

B. Unless otherwise required by the department or its agent, documents of agreement referred to in the account certificate of representation shall not be submitted to the department or its agent. Neither the department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

9VAC5-140-6120. Objections concerning the CO_2 authorized account representative.

A. Once a complete account certificate of representation under 9VAC5-140-6110 has been submitted and received, the department and its agent will rely on the account certificate of representation unless and until the department or its agent receives a superseding complete account certificate of representation under 9VAC5-140-6110.

B. Except as provided in 9VAC5-140-6100 A or B, no objection or other communication submitted to the department or its agent concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative shall affect any representation, action, inaction, or submission of the CO_2 authorized account representative or the finality of any decision or order by the department or its agent under the CO_2 Budget Trading Program.

C. Neither the department nor its agent will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any CO_2 authorized account representative, including private legal disputes concerning the proceeds of CO_2 allowance transfers.

9VAC5-140-6130. Delegation by CO_2 authorized account representative and alternate CO_2 authorized account representative.

A. A CO_2 authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the department or its agent under this part.

B. An alternate CO_2 authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the department or its agent under this part.

C. In order to delegate authority to make an electronic submission to the department or its agent in accordance with subsections A and B of this section, the CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, shall submit to the department or its agent a notice of delegation, in a format prescribed by the department that includes the following elements:

1. The name, address, e-mail address, telephone number, and facsimile transmission number of such CO_2 authorized account representative or alternate CO_2 authorized account representative;

2. The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as the "electronic submission agent";

3. For each such natural person, a list of the type of electronic submissions under subsections A or B of this section for which authority is delegated to him or her; and

4. The following certification statement by such CO_2 authorized account representative or alternate CO_2 authorized account representative: "I agree that any electronic submission to the department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of delegation and that is made when I am a CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 9VAC5-140-6130 D shall be deemed to be an electronic submission by me. Until this notice of delegation is superseded by another notice of delegation under 9VAC5-140-6130 D, I agree to maintain an e-mail account and to notify the department or its agent immediately of any change in my e-mail address unless all delegation authority by me under 9VAC5-140-6130 is terminated."

D. A notice of delegation submitted under subsection C of this section shall be effective, with regard to the CO_2 authorized account representative or alternate CO_2 authorized account representative identified in such notice, upon receipt of such notice by the department or its agent and until receipt by the department or its agent of a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

E. Any electronic submission covered by the certification in subdivision C 4 of this section and made in accordance with a notice of delegation effective under subsection D of this section shall be deemed to be an electronic submission by the CO_2 authorized account representative or alternate CO_2 authorized account representative submitting such notice of delegation.

F. A CO_2 authorized account representative may delegate, to one or more natural persons, his authority to review information in the CO_2 allowance tracking system under this part.

G. An alternate CO_2 authorized account representative may delegate, to one or more natural persons, his authority to review information in the CO_2 allowance tracking system under this part.

H. In order to delegate authority to review information in the CO_2 allowance tracking system in accordance with subsections F and G of this section, the CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, must submit to the department or its agent a notice of delegation, in a format prescribed by the department that includes the following elements:

1. The name, address, e-mail address, telephone number, and facsimile transmission number of such CO_2 authorized account representative or alternate CO_2 authorized account representative;

2. The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as the "reviewer";

3. For each such natural person, a list of the type of information under subsection F or G of this section for which authority is delegated to him; and

4. The following certification statement by such CO_2 authorized account representative or alternate CO_2 authorized account representative: "I agree that any information that is reviewed by a natural person identified in this notice of delegation and of a type listed for such information accessible by the reviewer in this notice of delegation and that is made when I am a CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under subsection 1 of this section shall be deemed to be a reviewer by me. Until this notice of delegation is superseded by another notice of delegation under subsection 1 of this section, I agree to maintain an e-mail account and to notify the department or its agent immediately of any change in my e-mail address unless all delegation authority by me under this section is terminated."

I. A notice of delegation submitted under subsection H of this section shall be effective, with regard to the CO_2 authorized account representative or alternate CO_2 authorized account representative identified in such notice, upon receipt of such notice by the department or its agent and until receipt by the department or its agent of a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified reviewer, add a new reviewer, or eliminate entirely any delegation of authority.

Article 3 - Permits.

9VAC5-140-6140. CO_2 budget permit requirements.

A. Each CO_2 budget source shall have a permit issued by the department pursuant to 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject to Regulation).

B. Each CO_2 budget permit shall contain all applicable CO_2 Budget Trading Program requirements and shall be a complete and distinguishable portion of the permit under subsection A of this section.

9VAC5-140-6150. Submission of CO_2 budget permit applications.

For any CO_2 budget source, the CO_2 authorized account representative shall submit a complete CO_2 budget permit application under 9VAC5-140-6160 covering such CO_2 budget source to the department by the later of January 1, 2020 or 12 months before the date on which the CO_2 budget source, or a new unit at the source, commences operation.

9VAC5-140-6160. Information requirements for CO_2 budget permit applications.

A complete CO_2 budget permit application shall include the following elements concerning the CO_2 budget source for which the application is submitted, in a format prescribed by the department:

1. Identification of the CO_2 budget source, including plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration of the U.S. Department of Energy, if applicable;

2. Identification of each CO_2 budget unit at the CO_2 budget source; and

3. The standard requirements under 9VAC5-140-6050.

Article 4 - Compliance Certification.

9VAC5-140-6170. Compliance certification report.

A. For each control period in which a CO_2 budget source is subject to the CO_2 requirements of 9VAC5-140-6050 C, the CO_2 authorized account representative of the source shall submit to the department by the March 1 following the relevant control period, a compliance certification report. A compliance certification report is not required as part of the compliance obligation during an interim control period.

B. The CO_2 authorized account representative shall include in the compliance certification report under subsection A of this section the following elements, in a format prescribed by the department:

1. Identification of the source and each CO_2 budget unit at the source;

2. At the CO_2 authorized account representative's option, the serial numbers of the CO_2 allowances that are to be deducted from the source’s compliance account under 9VAC5-140-6260 for the control period; and

3. The compliance certification under subsection C of this section.

C. In the compliance certification report under subsection A of this section, the CO_2 authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the CO_2 budget units at the source in compliance with the CO_2 Budget Trading Program, whether the source and each CO_2 budget unit at the source for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the CO_2 Budget Trading Program, including:

1. Whether the source was operated in compliance with the CO_2 requirements of 9VAC5-140-6050 C;

2. Whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute CO_2 emissions to the unit, in accordance with Article 8 of this part;

3. Whether all the CO_2 emissions from the units at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

4. Whether the facts that form the basis for certification under Article 8 (9VAC5-140-6330 et seq.) of this part of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under Article 8 (9VAC5-140-6330 et seq.) of this part, if any, have changed; and

5. If a change is required to be reported under subdivision 4 of this subsection, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

9VAC5-140-6180. Action on compliance certifications.

A. The department or its agent may review and conduct independent audits concerning any compliance certification or any other submission under the CO_2 Budget Trading Program and make appropriate adjustments of the information in the compliance certifications or other submissions.

B. The department or its agent may deduct CO_2 allowances from or transfer CO_2 allowances to a source's compliance account based on the information in the compliance certifications or other submissions, as adjusted under subsection A of this section.

Article 5 - CO_2 Allowance Allocations.

EDITOR'S NOTE: Two versions of 9VAC5-140-6190 are provided for comment. The board seeks comment on whether the base budget should be 33 million tons or 34 million tons, with corresponding 3% per year reductions. The first version represents a 33 million ton base budget, and the second version represents a 34 million ton base budget.

(Ve

9VAC5-140-6190. Base budgets.

A. The Virginia CO_2 Budget Trading Program base budget shall be as follows.

1. For 2020, the Virginia CO_2 Budget Trading Program base budget is 33 million tons.

2. For 2021, the Virginia CO_2 Budget Trading Program base budget is 32.01 million tons.

3. For 2022, the Virginia CO_2 Budget Trading Program base budget is 31.02 million tons.

4. For 2023, the Virginia CO_2 Budget Trading Program base budget is 30.03 million tons.

5. For 2024, the Virginia CO_2 Budget Trading Program base budget is 29.04 million tons.

6. For 2025, the Virginia CO_2 Budget Trading Program base budget is 28.05 million tons.

7. For 2026, the Virginia CO_2 Budget Trading Program base budget is 27.06 million tons.

8. For 2027, the Virginia CO_2 Budget Trading Program base budget is 26.07 million tons.

9. For 2028, the Virginia CO_2 Budget Trading Program base budget is 25.08 million tons.

10. For 2029, the Virginia CO_2 Budget Trading Program base budget is 24.09 million tons.

11. For 2030, the Virginia CO_2 Budget Trading Program base budget is 23.10 million tons.

B. The department will allocate conditional allowances to CO_2 budget units and to DMME. After a conditional allowance has been consigned in an auction by a CO_2 budget unit and the holder of a public contract with DMME as specified under Article 9 (9VAC5-140-6410 et seq.) of this part, the conditional allowance becomes an allowance to be used for compliance purposes.

C. For 2031 and each succeeding calendar year, the Virginia CO_2 Budget Trading Program base budget is 23.10 million tons.

(Version 2, 34 million ton base budget):

9VAC5-140-6190. Base budgets.

A. The Virginia CO_2 Budget Trading Program base budget shall be as follows.

1. For 2020, the Virginia CO_2 Budget Trading Program base budget is 34 million tons.

2. For 2021, the Virginia CO_2 Budget Trading Program base budget is 32.98 million tons.

3. For 2022, the Virginia CO_2 Budget Trading Program base budget is 31.96 million tons.

4. For 2023, the Virginia CO_2 Budget Trading Program base budget is 30.94 million tons.

5. For 2024, the Virginia CO_2 Budget Trading Program base budget is 29.92 million tons.

6. For 2025, the Virginia CO_2 Budget Trading Program base budget is 28.90 million tons.

7. For 2026, the Virginia CO_2 Budget Trading Program base budget is 27.88 million tons.

8. For 2027, the Virginia CO_2 Budget Trading Program base budget is 26.86 million tons.

9. For 2028, the Virginia CO_2 Budget Trading Program base budget is 25.84 million tons.

10. For 2029, the Virginia CO_2 Budget Trading Program base budget is 24.82 million tons.

11. For 2030, the Virginia CO_2 Budget Trading Program base budget is 23.80 million tons.

B. The department will allocate conditional allowances to CO_2 budget units and to DMME. After a conditional allowance has been consigned in an auction by a CO_2 budget unit and the holder of a public contract with DMME as specified under Article 9 (9VAC5-140-6410 et seq.) of this part, the conditional allowance becomes an allowance to be used for compliance purposes.

C. For 2031 and each succeeding calendar year, the Virginia CO_2 Budget Trading Program base budget is 23.80 million tons.

9VAC5-140-6200. Undistributed and unsold CO_2 allowances.

A. The department may retire undistributed CO_2 allowances at the end of each control period.

B. The department may retire unsold CO_2 allowances at the end of each control period.

EDITOR'S NOTE: Two versions of 9VAC5-140-6210 are provided for comment. The board seeks comment on whether the base budget should be 33 million tons or 34 million tons, with corresponding 3% per year reductions. The first version represents a 33 million ton base budget, and the second version represents a 34 million ton base budget.

(Version 1, 33 million ton base budget):

9VAC5-140-6210. CO_2 allowance allocations.

A. The department will allocate 95% of the Virginia CO_2 Budget Trading Program base budget to CO_2 budget sources to be consigned to auction to the Virginia Consignment Auction Account.

B. The department will allocate 5% of the Virginia CO_2 Budget Trading Program base budget to DMME to be consigned to auction by the holder of a public contract with DMME to assist the department for the abatement and control of air pollution, specifically, CO_2.

C. For allocation years 2020 through 2031, the Virginia CO_2 Budget Trading Program adjusted budget shall be the maximum number of allowances available for allocation in a given allocation year, except for CO_2 CCR allowances.

D. The cost containment reserve (CCR) allocation shall be managed as follows. The department will allocate CO_2 CCR allowances, separate from and additional to the Virginia CO_2 Budget Trading Program base budget set forth in 9VAC5-140-6190, to the Virginia Auction Account. The CCR allocation is for the purpose of containing the cost of CO_2 allowances. The department will allocate CO_2 CCR allowances as follows.

1. The department will initially allocate 3.4 million CO_2 CCR allowances for calendar year 2020.

2. On or before January 1, 2021 and each year thereafter, the department will allocate current vintage year CCR allowances equal to the quantity in Table 140-5A, and withdraw the number of CO_2 CCR allowances that remain in the Virginia Auction Account at the end of the prior calendar year.

Table 140-5A. CCR Allowances from 2021 Forward.

2021	3.201 million tons
2022	3.102 million tons
2023	3.003 million tons
2024	2.904 million tons
2025	2.805 million tons
2026	2.706 million tons
2027	2.607 million tons
2028	2.508 million tons

2029	2.409 million tons
2030 and each year thereafter	2.310 million tons

E. Annual base budgets as described in subsections A and B of this section may be decreased in any year as necessary to account for transfers to the Virginia Emission Containment Reserve (ECR) account and adjustments for banked allowances. The department will convert and transfer any CO_2 allowances that have been withheld from any auction or auctions in the prior year into the Virginia ECR account. The ECR withholding is for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs. The department will withhold CO_2 ECR allowances as follows.

1. If the condition in 9VAC5-140-6420 D 1 is met at an auction, then the maximum number of CO_2 ECR allowances that will be withheld from that auction will be equal to the quantity shown in Table 140-5B minus the total quantity of CO_2 ECR allowances that have been withheld from any prior auction or auctions in that calendar year. Any CO_2 ECR allowances withheld from an auction will be transferred into the Virginia ECR account.

Table 140-5B. ECR Allowances from 2021 Forward.

2021	3.201 million tons
2022	3.102 million tons
2023	3.003 million tons
2024	2.904 million tons
2025	2.805 million tons
2026	2.706 million tons
2027	2.607 million tons
2028	2.508 million tons
2029	2.409 million tons
2030 and each year thereafter	2.310 million tons

2. Allowances that have been transferred into the Virginia ECR account shall not be withdrawn.

F. The adjustment for banked allowances shall be as follows. On March 15, 2021, the department will determine the third adjustment for banked allowances quantity for allocation years 2021 through 2025 through the application of the following formula:

$$TABA = ((TA - TAE)/5) \times RS\%$$

Where:

TABA is the adjustment for banked allowances quantity in tons.
TA, adjustment, is the total quantity of allowances of vintage years prior to 2021 held in general and compliance accounts, including compliance accounts established pursuant to the CO_2 Budget Trading Program, but not including accounts opened by participating states, as reflected in the CO_2 Allowance Tracking System on March 15, 2021.
TAE, adjustment emissions, is the total quantity of 2018, 2019 and 2020 emissions from all CO_2 budget sources in all participating states, reported pursuant to CO_2 Budget Trading Program as reflected in the CO_2 Allowance Tracking System on March 15, 2021.
RS% is Virginia budget divided by the regional budget.

G. CO_2 Budget Trading Program adjusted budgets for 2021 through 2025 shall be determined as follows. On April 15, 2021 the department will determine the Virginia CO_2 Budget Trading Program adjusted budgets for the 2021 through 2025 allocation years by the following formula:

$$AB = BB - TABA$$

Where:

AB is the Virginia CO_2 Budget Trading Program adjusted budget.
BB is the Virginia CO_2 Budget Trading Program base budget.
TABA is the adjustment for banked allowances quantity in tons.

H. The department or its agent will publish the CO_2 trading program adjusted budgets for the 2021 through 2025 allocation years.
I. Timing requirements for CO_2 allowance allocations shall be as follows.

1. By May 1, 2019, the department will submit to RGGI, Inc., the CO_2 conditional allowance allocations, in a format prescribed by RGGI, Inc., and in accordance with 9VAC5-140-6215 A and B, for the initial control period (2020).

2. By May 1, 2020, and May 1 of every third year thereafter, the department will submit to RGGI, Inc., the CO_2 allowance allocations, in a format prescribed by RGGI, Inc., for the applicable control period, and in accordance with 9VAC5-140-6215 A and B.

(Version 2, 34 million ton base budget):

9VAC5-140-6210. CO_2 allowance allocations.

A. The department will allocate 95% of the Virginia CO_2 Budget Trading Program base budget to CO_2 budget sources to be consigned to auction to the Virginia Consignment Auction Account.

B. The department will allocate 5% of the Virginia CO_2 Budget Trading Program base budget to DMME to be consigned to auction by the holder of a public contract with DMME to assist the department for the abatement and control of air pollution, specifically, CO_2.

C. For allocation years 2020 through 2031, the Virginia CO_2 Budget Trading Program adjusted budget shall be the maximum number of allowances available for allocation in a given allocation year, except for CO_2 CCR allowances.

D. The cost containment reserve (CCR) allocation shall be managed as follows. The department will allocate CO_2 CCR allowances, separate from and additional to the Virginia CO_2 Budget Trading Program base budget set forth in 9VAC5-140-6190, to the Virginia Auction Account. The CCR allocation is for the purpose of containing the cost of CO_2 allowances. The department will allocate CO_2 CCR allowances as follows.

1. The department will initially allocate 3.4 million CO_2 CCR allowances for calendar year 2020.

2. On or before January 1, 2021 and each year thereafter, the department will allocate current vintage year CCR allowances equal to the quantity in Table 140-5A, and withdraw the number of CO_2 CCR allowances that remain in the Virginia Auction Account at the end of the prior calendar year.

Table 140-5A. CCR Allowances from 2021 Forward.

2021	3.298 million tons
2022	3.196 million tons
2023	3.094 million tons
2024	2.992 million tons
2025	2.890 million tons
2026	2.788 million tons
2027	2.686 million tons
2028	2.584 million tons
2029	2.482 million tons
2030 and each year	2.390 million tons

thereafter	

E. Annual base budgets as described in subsections A and B of this section may be decreased in any year as necessary to account for transfers to the Virginia Emission Containment Reserve (ECR) account and adjustments for banked allowances. The department will convert and transfer any CO_2 allowances that have been withheld from any auction or auctions in the prior year into the Virginia ECR account. The ECR withholding is for the purpose of additional emission reduction in the event of lower than anticipated emission reduction costs. The department will withhold CO_2 ECR allowances as follows.

1. If the condition in 9VAC5-140-6420 D 1 is met at an auction, then the maximum number of CO_2 ECR allowances that will be withheld from that auction will be equal to the quantity shown in Table 140-5B minus the total quantity of CO_2 ECR allowances that have been withheld from any prior auction or auctions in that calendar year. Any CO_2 ECR allowances withheld from an auction will be transferred into the Virginia ECR account.

Table 140-5B. ECR Allowances from 2021 Forward.

2021	3.298 million tons
2022	3.196 million tons
2023	3.094 million tons
2024	2.992 million tons
2025	2.890 million tons
2026	2.788 million tons
2027	2.686 million tons
2028	2.584 million tons
2029	2.482 million tons
2030 and each year thereafter	2.390 million tons

2. Allowances that have been transferred into the Virginia ECR account shall not be withdrawn.

F. The adjustment for banked allowances shall be as follows. On March 15, 2021, the department will determine the third adjustment for banked allowances quantity for allocation years 2021 through 2025 through the application of the following formula:

$$TABA = ((TA - TAE)/5) \times RS\%$$

Where:

TABA is the adjustment for banked allowances quantity in tons.
TA, adjustment, is the total quantity of allowances of vintage years prior to 2021 held in general and compliance accounts, including compliance accounts established pursuant to the CO_2 Budget Trading Program, but not including accounts opened by participating states, as reflected in the CO_2 Allowance Tracking System on March 15, 2021.
TAE, adjustment emissions, is the total quantity of 2018, 2019 and 2020 emissions from all CO_2 budget sources in all participating states, reported pursuant to CO_2 Budget Trading Program as reflected in the CO_2 Allowance Tracking System on March 15, 2021.
RS% is Virginia budget divided by the regional budget.

G. CO_2 Budget Trading Program adjusted budgets for 2021 through 2025 shall be determined as follows. On April 15, 2021 the department will determine the Virginia CO_2 Budget Trading Program adjusted budgets for the 2021 through 2025 allocation years by the following formula:

$$AB = BB - TABA$$

Where:

AB is the Virginia CO_2 Budget Trading Program adjusted budget.
BB is the Virginia CO_2 Budget Trading Program base budget.
TABA is the adjustment for banked allowances quantity in tons.

H. The department or its agent will publish the CO_2 trading program adjusted budgets for the 2021 through 2025 allocation years.
I. Timing requirements for CO_2 allowance allocations shall be as follows.

1. By May 1, 2019, the department will submit to RGGI, Inc., the CO_2 conditional allowance allocations, in a format prescribed by RGGI, Inc., and in accordance with 9VAC5-140-6215 A and B, for the initial control period (2020).

2. By May 1, 2020, and May 1 of every third year thereafter, the department will submit to RGGI, Inc., the CO_2 allowance allocations, in a format prescribed by RGGI, Inc., for the applicable control period, and in accordance with 9VAC5-140-6215 A and B.

9VAC5-140-6215. CO_2 allocation methodology.

A. The net electric output (in MWh) used with respect to CO_2 allowance allocations under subsection B of this section for each CO_2 budget unit shall be:

1. For units operating on or before January 1, 2020, the average of the three amounts of the unit's net electric output during 2016, 2017 and 2018 to determine allocations for the initial control period.

2. For all units operating in each control period after 2020, the average of the three amounts of the unit's total net electric output during the 3 most recent years for which data are available prior to the start of the control period.

B.1. For each control period beginning in 2020 and thereafter, the department will allocate to all CO_2 budget units that have a net electric output (as determined under subsection A of this section) a total amount of CO_2 conditional allowances equal to the CO_2 base budget.

2. The department will allocate CO_2 conditional allowances to each CO_2 budget unit under subdivision 1 of this subsection in an amount determined by multiplying the total amount of CO_2 allowances allocated under subdivision 1 of this subsection by the ratio of the baseline electrical output of such CO_2 budget unit to the total amount of baseline electrical output of all such CO_2 budget units and rounding to the nearest whole allowance as appropriate.

3. New CO_2 budget units will be allocated CO_2 conditional allowances once they have established electrical output data to be used in the conditional allowance allocation process.

C. For the purpose of the allocation process as described in subsections A and B of this section, CO_2 budget units shall report the unit's net electric output to the department on a yearly basis as follows.

1. By March 1, 2019, each CO_2 budget unit shall report yearly net electric output data during 2016, 2017 and 2018.

2. By March 1, 2020 and each year thereafter, each CO_2 budget unit shall report yearly net electric output data for the previous year.

Article 6 - CO_2 Allowance Tracking System.

9VAC5-140-6220. CO_2 Allowance Tracking System accounts.

A. Consistent with 9VAC5-140-6230 A, the department or its agent will establish one compliance account for each CO_2 budget source. Allocations of CO_2 conditional allowances pursuant to Article 5 (9VAC5-140-6190 et seq.) of this part and deductions or transfers of CO_2 conditional allowances pursuant to 9VAC5-140-6180, 9VAC5-140-6260, 9VAC5-140-6280, or Article 7 (9VAC5-140-6300 et seq.) of this part will be recorded in the compliance accounts in accordance with this section.

B. Consistent with 9VAC5-140-6230 B, the department or its agent will establish, upon request, a general account for any person. Transfers of CO_2 allowances pursuant to Article 7 (9VAC5-140-6300 et seq.) of this part will be recorded in the general account in accordance with this article.

9VAC5-140-6230. Establishment of accounts.

A. Upon receipt of a complete account certificate of representation under 9VAC5-140-6110, the department or its agent will establish a conditional allowance account and a compliance account for each CO_2 budget source and a conditional compliance account for DMME for which the account certificate of representation was submitted.

B. General accounts shall operate as follows.

1. Any person may apply to open a general account for the purpose of holding and transferring CO_2 allowances. An application for a general account may designate one and only one CO_2 authorized account representative and one and only one alternate CO_2 authorized account representative who may act on behalf of the CO_2 authorized account representative. The agreement by which the alternate CO_2 authorized account representative is selected shall include a procedure for authorizing the alternate CO_2 authorized account representative to act in lieu of the CO_2 authorized account representative. A complete application for a general account shall be submitted to the department or its agent and shall include the following elements in a format prescribed by the department or its agent:

a. Name, address, e-mail address, telephone number, and facsimile transmission number of the CO_2 authorized account representative and any alternate CO_2 authorized account representative;

b. At the option of the CO_2 authorized account representative, organization name and type of organization;

c. A list of all persons subject to a binding agreement for the CO_2 authorized account representative or any alternate CO_2 authorized account representative to represent their ownership interest with respect to the CO_2 allowances held in the general account;

d. The following certification statement by the CO_2 authorized account representative and any alternate CO_2 authorized account representative: "I certify that I was selected as the CO_2 authorized account representative or the CO_2 alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CO_2 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CO_2 Budget Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the department or its agent or a court regarding the general account.";

e. The signature of the CO_2 authorized account representative and any alternate CO_2 authorized account representative and the dates signed; and

f. Unless otherwise required by the department or its agent, documents of agreement referred to in the application for a general account shall not be submitted to the department or its agent. Neither the department nor its agent shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

2. Authorization of the CO_2 authorized account representative shall be as follows.

a. Upon receipt by the department or its agent of a complete application for a general account under subdivision 1 of this subsection:

(1) The department or its agent will establish a general account for the person or persons for whom the application is submitted.

(2) The CO_2 authorized account representative and any alternate CO_2 authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CO_2 allowances held in the general account in all matters pertaining to the CO_2 Budget Trading Program, notwithstanding any agreement between the CO_2 authorized account representative or any alternate CO_2 authorized account representative and such person. Any such person shall be bound by any order or decision issued to the CO_2 authorized account representative or any alternate CO_2 authorized account representative by the department or its agent or a court regarding the general account.

(3) Any representation, action, inaction, or submission by any alternate CO_2 authorized account representative shall be deemed to be a representation, action, inaction, or submission by the CO_2 authorized account representative.

b. Each submission concerning the general account shall be submitted, signed, and certified by the CO_2 authorized account representative or any alternate CO_2 authorized account representative for the persons having an ownership interest with respect to CO_2 allowances held in the general account. Each such submission shall include the following certification statement by the CO_2 authorized account representative or any alternate CO_2 authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CO_2 allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

c. The department or its agent will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with subdivision b of this subdivision.

3. Changing CO_2 authorized account representative and alternate CO_2 authorized account representative, and changes in persons with ownership interest, shall be accomplished as follows.

a. The CO_2 authorized account representative for a general account may be changed at any time upon receipt by the department or its agent of a superseding complete application for a general account under subdivision 1 of this subsection. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative, or the previous alternate CO_2 authorized account representative, prior to the time and date when the department or its agent receives the superseding application for a general account shall be binding on the new CO_2 authorized account representative and the persons with an ownership interest with respect to the CO_2 allowances in the general account.

b. The alternate CO_2 authorized account representative for a general account may be changed at any time upon receipt by the department or its agent of a superseding complete application for a general account under subdivision 1 of this subsection. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous CO_2 authorized account representative, or the previous alternate CO_2 authorized account representative, prior to the time and date when the department or its agent receives the superseding application for a general account shall be binding on the new alternate CO_2 authorized account representative and the persons with an ownership interest with respect to the CO_2 allowances in the general account.

c. In the event a new person having an ownership interest with respect to CO_2 allowances in the general account is not included in the list of such persons in the application for a general account, such new person shall be deemed to be subject to and bound by the application for a general account, the representations, actions, inactions, and submissions

of the CO_2 authorized account representative and any alternate CO_2 authorized account representative, and the decisions, orders, actions, and inactions of the department or its agent, as if the new person were included in such list.

d. Within 30 days following any change in the persons having an ownership interest with respect to CO_2 allowances in the general account, including the addition or deletion of persons, the CO_2 authorized account representative or any alternate CO_2 authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CO_2 allowances in the general account to include the change.

4. Objections concerning CO_2 authorized account representative shall be governed as follows.

a. Once a complete application for a general account under subdivision 1 of this subsection has been submitted and received, the department or its agent will rely on the application unless and until a superseding complete application for a general account under subdivision 1 of this subsection is received by the department or its agent.

b. Except as provided in subdivisions 3 a and b of this subsection, no objection or other communication submitted to the department or its agent concerning the authorization, or any representation, action, inaction, or submission of the CO_2 authorized account representative or any alternate CO_2 authorized account representative for a general account shall affect any representation, action, inaction, or submission of the CO_2 authorized account representative or any alternate CO_2 authorized account representative or the finality of any decision or order by the department or its agent under the CO_2 Budget Trading Program.

c. Neither the department nor its agent will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the CO_2 authorized account representative or any alternate CO_2 authorized account representative for a general account, including private legal disputes concerning the proceeds of CO_2 allowance transfers.

5. Delegation by CO_2 authorized account representative and alternate CO_2 authorized account representative shall be accomplished as follows.

a. A CO_2 authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the department or its agent provided for under Articles 6 and 7 of this part.

b. An alternate CO_2 authorized account representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the department or its agent provided for under this article and Article 7 (9VAC5-140-6300 et seq.) of this part.

c. In order to delegate authority to make an electronic submission to the department or its agent in accordance with subdivisions a and b of this subdivision, the CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, shall submit to the department or its agent a notice of delegation, in a format prescribed by the department that includes the following elements:

(1) The name, address, e-mail address, telephone number, and facsimile transmission number of such CO_2 authorized account representative or alternate CO_2 authorized account representative;

(2) The name, address, e-mail address, telephone number and facsimile transmission number of each such natural person, herein referred to as "electronic submission agent";

(3) For each such natural person, a list of the type of electronic submissions under subdivision (1) or (2) of this subdivision for which authority is delegated to him or her; and

(4) The following certification statement by such CO_2 authorized account representative or alternate CO_2 authorized account representative: "I agree that any electronic submission to the department or its agent that is by a natural person identified in this notice of delegation and of a type listed for such electronic submission agent in this notice of

delegation and that is made when I am a CO_2 authorized account representative or alternate CO_2 authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 9VAC5-140-6230 B 5 d shall be deemed to be an electronic submission by me. Until this notice of delegation is superseded by another notice of delegation under 9VAC5-140-6230 B 5 d, I agree to maintain an e-mail account and to notify the department or its agent immediately of any change in my e-mail address unless all delegation authority by me under 9VAC5-140-6230 B 5 is terminated."

d. A notice of delegation submitted under subdivision c of this subdivision shall be effective, with regard to the CO_2 authorized account representative or alternate CO_2 authorized account representative identified in such notice, upon receipt of such notice by the department or its agent and until receipt by the department or its agent of a superseding notice of delegation by such CO_2 authorized account representative or alternate CO_2 authorized account representative as appropriate. The superseding notice of delegation may replace any previously identified electronic submission agent, add a new electronic submission agent, or eliminate entirely any delegation of authority.

e. Any electronic submission covered by the certification in subdivision c (4) of this subdivision and made in accordance with a notice of delegation effective under subdivision d of this subdivision shall be deemed to be an electronic submission by the CO_2 authorized account representative or alternate CO_2 authorized account representative submitting such notice of delegation.

C. The department or its agent will assign a unique identifying number to each account established under subsections A or B of this section.

9VAC5-140-6240. CO_2 Allowance Tracking System responsibilities of CO_2 authorized account representative.

Following the establishment of a COATS account, all submissions to the department or its agent pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CO_2 allowances in the account, shall be made only by the CO_2 authorized account representative for the account.

9VAC5-140-6250. Recordation of CO_2 allowance allocations.

A. By January 1 of each calendar year, the department or its agent will record in the following accounts:

1. In each CO_2 budget source’s and DMME's conditional allowance account, the CO_2 conditional allowances allocated to those sources and DMME by the department prior to being consigned to auction; and

2. In each CO_2 budget source's compliance account, the CO_2 allowances purchased at auction by CO_2 budget units at the source under 9VAC5-140-6210 A.

B. Each year the department or its agent will record CO_2 allowances, as allocated to the unit under Article 5 (9VAC5-140-6190 et seq.) of this part, in the compliance account for the year after the last year for which CO_2 allowances were previously allocated to the compliance account. Each year, the department or its agent will also record CO_2 allowances, as allocated under Article 5 (9VAC5-140-6190 et seq.) of this part, in an allocation set-aside for the year after the last year for which CO_2 allowances were previously allocated to an allocation set-aside.

C. Serial numbers for allocated CO_2 allowances shall be managed as follows. When allocating CO_2 allowances to and recording them in an account, the department or its agent will assign each CO_2 allowance a unique identification number that will include digits identifying the year for which the CO_2 allowance is allocated.

9VAC5-140-6260. Compliance.

A. CO_2 allowances that meet the following criteria are available to be deducted in order for a CO_2 budget source to comply with the CO_2 requirements of 9VAC5-140-6050 C for a control period or an interim control period.

1. The CO_2 allowances are of allocation years that fall within a prior control period, the same control period, or the same interim control period for which the allowances will be deducted.

2. The CO_2 allowances are held in the CO_2 budget source's compliance account as of the CO_2 allowance transfer deadline for that control period or interim control period or are transferred into the compliance account by a CO_2 allowance transfer correctly submitted for recordation under 9VAC5-140-6300 by the CO_2 allowance transfer deadline for that control period or interim control period.

3. The CO_2 allowances are not necessary for deductions for excess emissions for a prior control period under subsection D of this section.

B. Following the recordation, in accordance with 9VAC5-140-6310, of CO_2 allowance transfers submitted for recordation in the CO_2 budget source's compliance account by the CO_2 allowance transfer deadline for a control period or interim control period, the department or its agent will deduct CO_2 allowances available under subsection A of this section to cover the source's CO_2 emissions (as determined in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part) for the control period or interim control period, as follows.

1. Until the amount of CO_2 allowances deducted equals the number of tons of total CO_2 emissions (or 0.50 times the number of tons of total CO_2 emissions for an interim control period), determined in accordance with Article 8 (9VAC5-140-6330 et seq.) of this part, from all CO_2 budget units at the CO_2 budget source for the control period or interim control period; or

2. If there are insufficient CO_2 allowances to complete the deductions in subdivision 1 of this subsection, until no more CO_2 allowances available under subsection A of this section remain in the compliance account.

C. Identification of available CO_2 allowances by serial number and default compliance deductions shall be managed as follows.

1. The CO_2 authorized account representative for a source's compliance account may request that specific CO_2 allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period or interim control period in accordance with subsection B or D of this section. Such identification shall be made in the compliance certification report submitted in accordance with 9VAC5-140-6170.

2. The department or its agent will deduct CO_2 allowances for a control period from the CO_2 budget source's compliance account, in the absence of an identification or in the case of a partial identification of available CO_2 allowances by serial number under subdivision 1 of this subsection, as follows: Any CO_2 allowances that are available for deduction under subdivision a of this subdivision. CO_2 allowances shall be deducted in chronological order (i.e., CO_2 allowances from earlier allocation years shall be deducted before CO_2 allowances from later allocation years). In the event that some, but not all, CO_2 allowances from a particular allocation year are to be deducted, CO_2 allowances shall be deducted by serial number, with lower serial number allowances deducted before higher serial number allowances.

D. Deductions for excess emissions shall be managed as follows.

1. After making the deductions for compliance under subsection B of this section, the department or its agent will deduct from the CO_2 budget source's compliance account a number of CO_2 allowances equal to three times the number of the source's excess emissions. In the event that a source has insufficient CO_2 allowances to cover three times the number of the source's excess emissions, the source shall be required to immediately transfer sufficient allowances into its compliance account.

2. Any CO_2 allowance deduction required under subdivision 1 of this subsection shall not affect the liability of the owners and operators of the CO_2 budget source or the CO_2 budget units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under applicable state law. The following guidelines will be followed in assessing fines, penalties or other obligations:

a. For purposes of determining the number of days of violation, if a CO_2 budget source has excess emissions for a control period, each day in the control period constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.

b. Each ton of excess emissions is a separate violation.

c. For purposes of determining the number of days of violation, if a CO_2 budget source has excess interim emissions for an interim control period, each day in the interim control period constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered.

d. Each ton of excess interim emissions is a separate violation.

3. The propriety of the department's determination that a CO_2 budget source had excess emissions and the concomitant deduction of CO_2 allowances from that CO_2 budget source's account may be later challenged in the context of the initial administrative enforcement, or any civil or criminal judicial action arising from or encompassing that excess emissions violation. The commencement or pendency of any administrative enforcement, or civil or criminal judicial action arising from or encompassing that excess emissions violation will not act to prevent the department or its agent from initially deducting the CO_2 allowances resulting from the department's original determination that the relevant CO_2 budget source has had excess emissions. Should the department's determination of the existence or extent of the CO_2 budget source's excess emissions be revised either by a settlement or final conclusion of any administrative or judicial action, the department will act as follows:

a. In any instance where the department's determination of the extent of excess emissions was too low, the department will take further action under subdivisions 1 and 2 of this subsection to address the expanded violation.

b. In any instance where the department's determination of the extent of excess emissions was too high, the department will distribute to the relevant CO_2 budget source a number of CO_2 allowances equaling the number of CO_2 allowances deducted which are attributable to the difference between the original and final quantity of excess emissions. Should such CO_2 budget source's compliance account no longer exist, the CO_2 allowances will be provided to a general account selected by the owner or operator of the CO_2 budget source from which they were originally deducted.

E. The department or its agent will record in the appropriate compliance account all deductions from such an account pursuant to subsections B and D of this section.

F. Action by the department on submissions shall be as follows.

1. The department may review and conduct independent audits concerning any submission under the CO_2 Budget Trading Program and make appropriate adjustments of the information in the submissions.

2. The department may deduct CO_2 allowances from or transfer CO_2 allowances to a source's compliance account based on information in the submissions, as adjusted under subdivision 1 of this subsection.

9VAC5-140-6270. Banking.

Each CO_2 allowance that is held in a compliance account or a general account will remain in such account unless and until the CO_2 allowance is deducted or transferred under 9VAC5-140-6180, 9VAC5-140-6260, 9VAC5-140-6280, or Article 7 (9VAC5-140-6300 et seq.) of this part.

9VAC5-140-6280. Account error.

The department or its agent may, at its sole discretion and on its own motion, correct any error in any COATS account. Within 10 business days of making such correction, the department or its agent will notify the CO_2 authorized account representative for the account.

9VAC5-140-6290. Closing of general accounts.

A. A CO_2 authorized account representative of a general account may instruct the department or its agent to close the account by submitting a statement requesting deletion of the account from the COATS and by correctly submitting for recordation under 9VAC5-140-6300 a CO_2 allowance transfer of all CO_2 allowances in the account to one or more other COATS accounts.

B. If a general account shows no activity for a period of one year or more and does not contain any CO_2 allowances, the department or its agent may notify the CO_2 authorized account representative for the account that the account will be closed in the COATS 30 business days after the notice is sent. The account will be closed after the 30-day period unless before the end of the 30-day period the department or its agent receives a correctly submitted transfer of CO_2 allowances into the account under 9VAC5-140-6300 or a statement submitted by the CO_2 authorized account representative demonstrating to the satisfaction of the department or its agent good cause as to why the account should not be closed. The department or its agent will have sole discretion to determine if the owner or operator of the unit demonstrated that the account should not be closed.

Article 7 - CO_2 Allowance Transfers.

9VAC5-140-6300. Submission of CO_2 allowance transfers.

The CO_2 authorized account representatives seeking recordation of a CO_2 allowance transfer shall submit the transfer to the department or its agent. To be considered correctly submitted, the CO_2 allowance transfer shall include the following elements in a format specified by the department or its agent:

a. The numbers identifying both the transferor and transferee accounts;

b. A specification by serial number of each CO_2 allowance to be transferred;

c. The printed name and signature of the CO_2 authorized account representative of the transferor account and the date signed;

d. The date of the completion of the last sale or purchase transaction for the allowance, if any; and

e. The purchase or sale price of the allowance that is the subject of a sale or purchase transaction under subdivision d of this section.

9VAC5-140-6310. Recordation.

A. Within 5 business days of receiving a CO_2 allowance transfer, except as provided in subsection B of this section, the department or its agent will record a CO_2 allowance transfer by moving each CO_2 allowance from the transferor account to the transferee account as specified by the request, provided that:

1. The transfer is correctly submitted under 9VAC5-140-6300; and

2. The transferor account includes each CO_2 allowance identified by serial number in the transfer.

B. A CO_2 allowance transfer into or out of a compliance account that is submitted for recordation following the CO_2 allowance transfer deadline and that includes any CO_2 allowances that are of allocation years that fall within a control period prior to or the same as the control period to which the CO_2 allowance transfer deadline applies will not be recorded until after completion of the process pursuant to 9VAC5-140-6260 B.

C. Where a CO_2 allowance transfer submitted for recordation fails to meet the requirements of subsection A of this section, the department or its agent will not record such transfer.

9VAC5-140-6320. Notification.

A. Within 5 business days of recordation of a CO_2 allowance transfer under 9VAC5-140-6310, the department or its agent will notify each party to the transfer. Notice will be given to the CO_2 authorized account representatives of both the transferor and transferee accounts.

B. Within 10 business days of receipt of a CO_2 allowance transfer that fails to meet the requirements of 9VAC5-140-6310 A, the department or its agent will notify the CO_2 authorized account representatives of both accounts subject to the transfer of: (i) a decision not to record the transfer, and (ii) the reasons for such non-recordation.

C. Nothing in this section shall preclude the submission of a CO_2 allowance transfer for recordation following notification of non-recordation.

Article 8 - Monitoring, Reporting and Recordkeeping.

9VAC5-140-6330. General requirements.

A. The owners and operators, and to the extent applicable, the CO_2 authorized account representative of a CO_2 budget unit, shall comply with the monitoring, recordkeeping and reporting requirements as provided in this section and all applicable sections of 40 CFR Part 75. Where referenced in this article, the monitoring requirements of 40 CFR Part 75 shall be adhered to in a manner consistent with the purpose of monitoring and reporting CO_2 mass emissions pursuant to this part. For purposes of complying with such requirements, the definitions in 9VAC5-140-6020 and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and CEMS in 40 CFR Part 75 shall be replaced by the terms "CO_2 budget unit," "CO_2 authorized account representative," and CEMS, respectively, as defined in 9VAC5-140-6020. For units not subject to an Acid Rain emissions limitation, the term "administrator" in 40 CFR Part 75 shall be replaced with "the department or its agent." Owners or operators of a CO_2 budget unit who monitor a non-CO_2 budget unit pursuant to the common, multiple, or bypass stack procedures in 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16 (b)(2)(ii)(B) as pursuant to 40 CFR 75.13, for purposes of complying with this part, shall monitor and report CO_2 mass emissions from such non-CO_2 budget unit according to the procedures for CO_2 budget units established in this article.

B. The owner or operator of each CO_2 budget unit shall meet the following general requirements for installation, certification, and data accounting.

1. Install all monitoring systems necessary to monitor CO_2 mass emissions in accordance with 40 CFR Part 75, except for equation G-1. Equation G-1 in Appendix G shall not be used to determine CO_2 emissions under this part. This may require systems to monitor CO_2 concentration, stack gas flow rate, O_2 concentration, heat input, and fuel flow rate.

2. Successfully complete all certification tests required under 9VAC5-140-6340 and meet all other requirements of this section and 40 CFR Part 75 applicable to the monitoring systems under subdivision 1 of this subsection.

3. Record, report and quality-assure the data from the monitoring systems under subdivision 1 of this subsection.

C. The owner or operator shall meet the monitoring system certification and other requirements of subsection B of this section on or before the following dates. The owner or operator shall record, report and quality-assure the data from the monitoring systems under subdivision B 1 of this section on and after the following dates.

1. The owner or operator of a CO_2 budget unit, except for a CO_2 budget unit under subdivision 2 of this subsection, shall comply with the requirements of this section by January 1, 2020.

2. The owner or operator of a CO_2 budget unit that commences commercial operation July 1, 2020 shall comply with the requirements of this section by (i) January 1, 2021; or (ii) the earlier of 90 unit operating days after the date on

which the unit commences commercial operation, or 180 calendar days after the date on which the unit commences commercial operation.

3. For the owner or operator of a CO_2 budget unit for which construction of a new stack or flue installation is completed after the applicable deadline under subdivision 1 or 2 of this subsection by the earlier of: (i) 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue; or (ii) 180 calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue.

D. Data shall be reported as follows.

1. Except as provided in subdivision 2 of this subsection, the owner or operator of a CO_2 budget unit that does not meet the applicable compliance date set forth in subsection C of this section for any monitoring system under subdivision B 1 of this section shall, for each such monitoring system, determine, record, and report maximum potential (or as appropriate minimum potential) values for CO_2 concentration, CO_2 emissions rate, stack gas moisture content, fuel flow rate, heat input, and any other parameter required to determine CO_2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3), or section 2.4 of appendix D of 40 CFR Part 75 as applicable.

2. The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date set forth in subdivision C 3 of this section for any monitoring system under subdivision B 1 of this section shall, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures in Subpart D, or appendix D of 40 CFR Part 75, in lieu of the maximum potential (or as appropriate minimum potential) values for a parameter if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction or installation under subdivision C 3 of this section.

a. CO_2 budget units subject to an acid rain emissions limitation or CSAPR NO_X Ozone Season Trading Program that qualify for the optional SO_2, NO_X, and CO_2 (for acid rain) or NO_X (for CSAPR NO_X Ozone Season Trading Program) emissions calculations for low mass emissions (LME) units under 40 CFR 75.19 and report emissions for such programs using the calculations under 40 CFR 75.19, shall also use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with these regulations.

b. CO_2 budget units subject to an acid rain emissions limitation that do not qualify for the optional SO_2, NO_X, and CO_2 (for acid rain) or NO_X (for CSAPR NO_X Ozone Season Trading Program) emissions calculations for LME units under 40 CFR 75.19, shall not use the CO_2 emissions calculations for LME units under 40 CFR 75.19 for purposes of compliance with these regulations.

c. CO_2 budget units not subject to an acid rain emissions limitation shall qualify for the optional CO_2 emissions calculation for LME units under 40 CFR 75.19, provided that they emit less than 100 tons of NO_X annually and no more than 25 tons of SO_2 annually.

3. The owner or operator of a CO_2 budget unit shall report net electric output data to the department as required by Article 5 (9VAC5-140-6190 et seq.) of this part.

E. Prohibitions shall be as follows.

1. No owner or operator of a CO_2 budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required CEMS without having obtained prior written approval in accordance with 9VAC5-140-6380.

2. No owner or operator of a CO_2 budget unit shall operate the unit so as to discharge, or allow to be discharged, CO_2 emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this article and 40 CFR Part 75.

3. No owner or operator of a CO_2 budget unit shall disrupt the CEMS, any portion thereof, or any other approved emissions monitoring method, and thereby avoid monitoring and recording CO_2 mass emissions discharged into the

atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this article and 40 CFR Part 75.

4. No owner or operator of a CO_2 budget unit shall retire or permanently discontinue use of the CEMS, any component thereof, or any other approved emissions monitoring system under this article, except under any one of the following circumstances:

a. The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this article and 40 CFR Part 75, by the department for use at that unit that provides emissions data for the same pollutant or parameter as the retired or discontinued monitoring system; or

b. The CO_2 authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 9VAC5-140-6340 D 3 a.

9VAC5-140-6340. Initial certification and recertification procedures.

A. The owner or operator of a CO_2 budget unit shall be exempt from the initial certification requirements of this section for a monitoring system under 9VAC5-140-6330 B 1 if the following conditions are met:

1. The monitoring system has been previously certified in accordance with 40 CFR Part 75; and

2. The applicable quality-assurance and quality-control requirements of 40 CFR 75.21 and appendix B and appendix D of 40 CFR Part 75 are fully met for the certified monitoring system described in subdivision 1 of this subsection.

B. The recertification provisions of this section shall apply to a monitoring system under 9VAC5-140-6330 B 1 exempt from initial certification requirements under subsection A of this section.

C. Notwithstanding subsection A of this section, if the administrator has previously approved a petition under 40 CFR 75.72(b)(2)(ii), or 40 CFR 75.16(b)(2)(ii)(B) as pursuant to 40 CFR 75.13 for apportioning the CO_2 emissions rate measured in a common stack or a petition under 40 CFR 75.66 of this chapter for an alternative requirement in 40 CFR Part 75, the CO_2 authorized account representative shall submit the petition to the department under 9VAC5-140-6380 A to determine whether the approval applies under this program.

D. Except as provided in subsection A of this section, the owner or operator of a CO_2 budget unit shall comply with the following initial certification and recertification procedures for a CEMS and an excepted monitoring system under appendix D of 40 CFR Part 75 and under 9VAC5-140-6330 B 1. The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR 75.19 or that qualifies to use an alternative monitoring system under Subpart E of 40 CFR Part 75 shall comply with the procedures in subsection E or F of this section, respectively.

1. For initial certification, the owner or operator shall ensure that each CEMS required under 9VAC5-140-6330 B 1 (which includes the automated DAHS) successfully completes all of the initial certification testing required under 40 CFR 75.20 by the applicable deadlines specified in 9VAC5-140-6330 C. In addition, whenever the owner or operator installs a monitoring system in order to meet the requirements of this article in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20 is required.

2. For recertification, the following requirements shall apply.

a. Whenever the owner or operator makes a replacement, modification, or change in a certified CEMS under 9VAC5-140-6330 B 1 that the administrator or the department determines significantly affects the ability of the system to accurately measure or record CO_2 mass emissions or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b).

b. For systems using stack measurements such as stack flow, stack moisture content, CO_2 or O_2 monitors, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the administrator or the department determines to significantly change the flow or concentration profile, the owner or operator shall recertify the CEMS according to 40 CFR 75.20(b). Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.

3. The approval process for initial certifications and recertification shall be as follows. Subdivisions a through d of this subdivision apply to both initial certification and recertification of a monitoring system under 9VAC5-140-6330 B 1. For recertifications, replace the words "certification" and "initial certification" with the word "recertification," replace the word "certified" with "recertified," and proceed in the manner prescribed in 40 CFR 75.20(b)(5) and (g)(7) in lieu of subdivision e of this subdivision.

a. The CO_2 authorized account representative shall submit to the department or its agent, the appropriate EPA Regional Office and the administrator a written notice of the dates of certification in accordance with 9VAC5-140-6360.

b. The CO_2 authorized account representative shall submit to the department or its agent a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63.

c. The provisional certification date for a monitor shall be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitor may be used under the CO_2 budget Trading Program for a period not to exceed 120 days after receipt by the department of the complete certification application for the monitoring system or component thereof under subdivision b of this subdivision. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 CFR Part 75, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of receipt of the complete certification application by the department.

d. The department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under subdivision b of this subdivision. In the event the department does not issue such a notice within such 120-day period, each monitoring system which meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application will be deemed certified for use under the CO_2 Budget Trading Program.

(1) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, then the department will issue a written notice of approval of the certification application within 120 days of receipt.

(2) If the certification application is incomplete, then the department will issue a written notice of incompleteness that sets a reasonable date by which the CO_2 authorized account representative shall submit the additional information required to complete the certification application. If the CO_2 authorized account representative does not comply with the notice of incompleteness by the specified date, then the department may issue a notice of disapproval under subdivision (3) of this subdivision. The 120 day review period shall not begin before receipt of a complete certification application.

(3) If the certification application shows that any monitoring system or component thereof does not meet the performance requirements of 40 CFR Part 75, or if the certification application is incomplete and the requirement for disapproval under subdivision (2) of this subdivision is met, then the department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the department and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality assured data beginning with the date and hour of provisional certification. The owner or operator shall follow the procedures for loss of certification in subdivision e of this subdivision for each monitoring system or component thereof, which is disapproved for initial certification.

(4) The department may issue a notice of disapproval of the certification status of a monitor in accordance with 9VAC5-140-6350 B.

e. If the department issues a notice of disapproval of a certification application under subdivision d (3) of this subdivision or a notice of disapproval of certification status under subdivision d (3) of this subdivision, then:

(1) The owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR 75.20(a)(5)(i) or 40 CFR 75.20(g)(7): (i) for units using or intending to monitor for CO_2 mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 CFR 75.19, the maximum potential hourly heat input of the unit; or (ii) for units intending to monitor for CO_2 mass emissions using a CO_2 pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO_2 and the maximum potential flow rate of the unit under section 2.1 of appendix A of 40 CFR Part 75.

(2) The CO_2 authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with subdivisions a and b of this subdivision; and

(3) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

E. The owner or operator of a unit qualified to use the low mass emissions excepted methodology under 9VAC5-140-6330 D 3 shall meet the applicable certification and recertification requirements of 40 CFR 75.19(a)(2), 40 CFR 75.20(h) and this section. If the owner or operator of such a unit elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the certification and recertification requirements in 40 CFR 75.20(g).

F. The CO_2 authorized account of each unit for which the owner or operator intends to use an alternative monitoring system approved by the administrator and, if applicable, the department under Subpart E of 40 CFR Part 75 shall comply with the applicable notification and application procedures of 40 CFR 75.20(f).

9VAC5-140-6350. Out-of-control periods.

A. Whenever any monitoring system fails to meet the quality assurance/quality control (QA/QC) requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or appendix D of 40 CFR Part 75.

B. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under 9VAC5-140-6340 or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the department or administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subsection, an audit shall be either a field audit or an audit of any information submitted to the department or the administrator. By issuing the notice of disapproval, the department or administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the initial certification or recertification procedures in 9VAC5-140-6340 for each disapproved monitoring system.

9VAC5-140-6360. Notifications.

The CO_2 authorized account representative for a CO_2 budget unit shall submit written notice to the department and the administrator in accordance with 40 CFR 75.61.

9VAC5-140-6370. Recordkeeping and reporting.

A. The CO_2 authorized account representative shall comply with all recordkeeping and reporting requirements in this section, the applicable recordkeeping and reporting requirements under 40 CFR 75.73 and with the requirements of 9VAC5-140-6080 E.

B. The owner or operator of a CO_2 budget unit shall submit a monitoring plan in the manner prescribed in 40 CFR 75.62.

C. The CO_2 authorized account representative shall submit an application to the department within 45 days after completing all CO_2 monitoring system initial certification or recertification tests required under 9VAC5-140-6340 including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f).

D. The CO_2 authorized account representative shall submit quarterly reports, as follows:

1. The CO_2 authorized account representative shall report the CO_2 mass emissions data for the CO_2 budget unit, in an electronic format prescribed by the department unless otherwise prescribed by the department for each calendar quarter.

2. The CO_2 authorized account representative shall submit each quarterly report to the department or its agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR 75.64. Quarterly reports shall be submitted for each CO_2 budget unit (or group of units using a common stack), and shall include all of the data and information required in Subpart G of 40 CFR part 75, except for opacity, heat input, NOx, and SO_2 provisions.

3. The CO_2 authorized account representative shall submit to the department or its agent a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

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

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

c. The CO_2 concentration values substituted for missing data under Subpart D of 40 CFR Part 75 do not systematically underestimate CO_2 emissions.

9VAC5-140-6380. Petitions.

A. Except as provided in subsection C of this section, the CO_2 authorized account representative of a CO_2 budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the administrator under 40 CFR 75.66 and to the department requesting approval to apply an alternative to any requirement of 40 CFR Part 75. Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with this article only to the extent that the petition is approved in writing by the administrator, and subsequently approved in writing by the department.

B. Petitions for a CO_2 budget unit that is not subject to an Acid Rain emissions limitation shall meet the following requirements.

1. The CO_2 authorized account representative of a CO_2 budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the administrator under 40 CFR 75.66 and to the department requesting approval to apply an alternative to any requirement of 40 CFR Part 75. Application of an alternative to any requirement of 40 CFR Part 75 is in accordance with this article only to the extent that the petition is approved in writing by the administrator and subsequently approved in writing by the department.

2. In the event that the administrator declines to review a petition under subdivision 1 of this subsection, the CO_2 authorized account representative of a CO_2 budget unit that is not subject to an Acid Rain emissions limitation may submit a petition to the department requesting approval to apply an alternative to any requirement of this article. That petition shall contain all of the relevant information specified in 40 CFR 75.66. Application of an alternative to any requirement of this article is in accordance with this article only to the extent that the petition is approved in writing by the department.

C. The CO_2 authorized account representative of a CO_2 budget unit that is subject to an Acid Rain emissions limitation may submit a petition to the administrator under 40 CFR 75.66 and to the department requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 CFR 75.72 or a CO_2 concentration CEMS used under 40 CFR 75.71(a)(2). Application of an alternative to any such requirement is in accordance with this article only to the extent the petition is approved in writing by the administrator and subsequently approved in writing by the department.

9VAC5-140-6390. Reserved.

9VAC5-140-6400. Reserved.

Article 9 - Auction of CO_2 CCR and ECR allowances.

9VAC5-140-6410. Purpose.

The following requirements shall apply to each allowance auction. The department or its agent may specify additional information in the auction notice for each auction. Such additional information may include the time and location of the auction, auction rules, registration deadlines, and any additional information deemed necessary or useful.

9VAC5-140-6420. General requirements.

A. The department's agent will include the following information in the auction notice for each auction:

1. The number of CO_2 allowances offered for sale at the auction, not including any CO_2 CCR allowances;

2. The number of CO_2 CCR allowances that will be offered for sale at the auction if the condition of subdivision 1 of this subsection is met;

3. The minimum reserve price for the auction; and

4. The CCR trigger price for the auction.

5. The maximum number of CO_2 allowances that may be withheld from sale at the auction if the condition of subsection D 1 of this section is met;

6. The ECR trigger price for the auction.

B. The department's agent will follow these rules for the sale of CO_2 CCR allowances.

1. CO_2 CCR allowances shall only be sold at an auction in which total demand for allowances, above the CCR trigger price, exceeds the number of CO_2 allowances available for purchase at the auction, not including any CO_2 CCR allowances.

2. If the condition of subdivision 1 of this subsection is met at an auction, then the number of CO_2 CCR allowances offered for sale by the department or its agent at the auction shall be equal to the number of CO_2 CCR allowances in the Virginia auction account at the time of the auction.

3. After all of the CO_2 CCR allowances in the Virginia auction account have been sold in a given calendar year, no additional CO_2 CCR allowances will be sold at any auction for the remainder of that calendar year, even if the condition of subdivision 1 of this subsection is met at an auction; and

4. At an auction in which CO_2 CCR allowances are sold, the reserve price at for the auction shall be the CCR trigger price.

5. If the condition of subdivision 1 of this subsection is not satisfied, no CO_2 CCR allowances shall be offered for sale at the auction, and the reserve price for the auction shall be equal to the minimum reserve prices.

C. The department's agent shall implement the reserve price as follows: (i) no allowances shall be sold at any auction for a price below the reserve price for that auction; and (ii) if the total demand for allowances at an auction is less than or equal to the total number of allowances made available for sale in that auction, then the auction clearing price for the auction shall be the reserve price.

D. The department's agent will meet the following rules for the withholding of CO_2 ECR allowances from an auction.

1. CO_2 ECR allowances shall only be withheld from an auction if the demand for allowances would result in an auction clearing price that is less than the ECR trigger price prior to the withholding from the auction of any ECR allowances.

2. If the condition in subdivision 1 of this subsection is met at an auction, then the maximum number of CO_2 ECR allowances that may be withheld from that auction will be equal to the quantity shown in Table 140-5B of 9VAC5-140-6210 E minus the total quantity of CO_2 ECR allowances that have been withheld from any prior auction in that calendar year. Any CO_2 ECR allowances withheld from an auction will be transferred into the Virginia ECR Account.

9VAC5-140-6430. Consignment auction.

In accordance with Article 5 (9VAC5-140-6190 et seq.) of this part, conditional allowances shall be consigned by the CO_2 budget source to whom they are allocated or DMME to each auction on a quarterly pro rata basis in accordance with procedures specified by the department. At the completion of the consignment auction, a conditional allowance shall become an allowance to be used for compliance purposes.

Please summarize all comments received during the public comment period following the publication of the NOIRA, and provide the agency response.

Commenter	Comment	Agency response
1. General support (92 commenters)	General support for the regulatory action was expressed.	Support for the regulatory action is appreciated.
2. Advanced Energy Economy Institute (AEE Institute)	By implementing a carbon reduction policy with a flexible design that allows for a variety of technologies and services for that best suit the state, Virginia has the opportunity to modernize its electric grid for the benefit of consumers and the economy to accelerate a transition to a higher performing grid that is reliable, resilient, and affordable. To achieve those improvements, Virginia must continue to invest in 21st century electricity generation and grid technologies. Luckily, these same technologies will also lower carbon emissions. Forty such technologies are detailed in *Advanced Energy Technologies for Greenhouse Gas Reduction*. Renewable energy and energy efficiency are cost-effective mechanisms for carbon reduction but also expected to grow strictly on the basis of cost. The levelized cost of electricity for utility-scale wind and solar has declined such that these technologies are increasingly competitive. Renewable energy purchases that were once driven by state policies are increasingly made based on economics. Generation from zero- and low-carbon-emitting technologies can be used to meet baseload generation. These resources can integrate with variable renewable energy and also complement each other both technologically and economically, allowing the electricity system to provide reliable, low-carbon energy.	DEQ agrees that renewable energy and energy efficiency are important elements in the reduction of carbon emissions. Although advanced energy programs as discussed by the commenter are recognized as important tools in the control of carbon emissions, they must be addressed in other, more appropriate venues. Electricity and energy policy in Virginia is primarily regulated and overseen by the Department of Mines, Minerals and Energy (DMME) and the State Corporation Commission (SCC).

	High voltage direct current transmission can facilitate the integration of renewable energy technologies and reduce transmission line losses 30-50% compared to traditional alternating current systems. Demand response also provides grid benefits, including firm capacity reserves, system-wide peak shaving when demand is high, and ancillary services to facilitate the integration of renewable resources in a low-carbon manner. Demand response can directly reduce CO_2 emissions by more than 1% through peak load reductions and provision of ancillary services, and that it can indirectly reduce CO_2 emissions by more than 1% through accelerating changes in the fuel mix and increasing renewable penetration. Demand response can strengthen reliability. It also provides cost-effective alternatives to meeting peak demand, both locally and at the wholesale level, and can improve reliability while reducing peak power costs. Neighboring states are reducing energy costs for their customers through the deployment of utility peak-shaving demand response programs. These programs boost the local economy, as the majority of program payments are given to participating local businesses and organizations (e.g. school districts). Distributed resources can also provide grid benefits such as reduced congestion and increased reliability. These resources include distributed generation such as residential/commercial solar and wind, CHP, waste energy recovery, and fuel cells. Similarly, energy efficiency reduces congestion and peak demand, and reduces the impacts of changes in the capacity associated with retiring EGUs. Advanced grid technologies can	

	help integrate and manage the growing diversity of renewable, low-emitting and traditional fossil generation. Energy storage also helps integrate renewables and reduces the need for peaking power plants–leading to fewer emissions–and thermal units to provide ancillary services such as frequency regulation and spinning reserves, allowing these traditional units to operate at more efficient heat rate blocks leading to fewer emissions. Plug-in electric vehicles (PEVs) can be an important component to aid in GHG reduction and grid support as market penetration continues. PEVs both reduce emissions and provide grid energy storage. These advanced energy technologies can ensure that deployment of these technologies will have no significant adverse impacts on grid reliability and cost. In a recent report, AEE Institute described the grid benefits of the transforming energy sector. As the energy revolution sweeps the United States, greater fuel diversity has provided us with more options to meet our energy needs while maintaining, if not improving, reliability. *Changing the Power Grid for the Better* argues that incorporating more renewable energy, fast-ramping natural gas generation, a range of demand management techniques, and new resources like energy storage--rather than a return to a singular reliance on baseload resources--is the foundation of electric power system reliability. Advanced energy technologies and services will help Virginia balance cost, energy system performance, environmental, and public health considerations. These technologies are also well established in the U.S.	

	and global marketplaces.	
3. AEE Institute	DEQ has discretion to distribute allowances in its state plan, either a) to Emitting Generating Units (EGUs); b) eligible resources; or c) both. Consider allocating allowances to all emission reduction measures, not just EGUs. This will ensure that the allowance allocation remains technology neutral and encourages competition among emission reduction measures, allowing for both existing future technologies to serve as compliance mechanisms. Although an auction method for distributing allowances as currently employed by other carbon allowance systems including RGGI is not permissible under state law, a variation of allowance allocation that distributes to the load-serving entity or an updating output-based allocation could serve as a good alternative.	A consignment auction with updating output-based allocation has been selected as the mechanism for distributing and utilizing allowances. Consignment auctions are revenue neutral, and will enable Virginia to link to RGGI while recognizing its own energy distribution requirements.
4. American Council for an Energy-Efficient Economy (ACEEE)	Energy efficiency is an important strategy to reduce emissions. As it lowers electricity use, energy efficiency avoids emissions of CO_2 and other harmful pollutants, often at lowest cost. ACEEE estimates that if Virginia placed a cap on CO_2 emissions to reduce pollution 30% by 2030, Virginia could realize 100% of pollution reductions through energy efficiency policies and programs. As DEQ considers approaches to distributing allowances under a trading program, keep in mind that the selected approach will affect both CO_2 emissions and compliance costs during and after the compliance period. It is therefore essential for the success and long-term viability of the trading program that the method of allowance distribution drive lasting and cost-effective emission reductions. Energy efficiency is often the lowest-cost option to meet CO_2	DEQ agrees that energy efficiency is an important factor in the reduction of carbon emissions; energy efficiency efforts in the state are managed by the Department of Mines, Minerals and Energy (DMME). The RGGI states have proposed, as of this writing, a regional cap trajectory that will provide an additional 30% cap reduction by the year 2030, relative to 2020 levels. The proposed regional program changes include the addition of an Emissions Containment Reserve (ECR) wherein states can withhold allowances from auction if emission reduction costs are lower than projected. The proposed ECR is an innovative way to adaptively respond to supply and demand in the market. When this program is finalized, Virginia will align the regulation to meet any new requirements of RGGI states.

	reduction goals, and deployment should be encouraged under a CO_2 trading program. In an allowance trading program, CO_2 reductions from energy efficiency will help electric generating units (EGUs) meet the state's CO_2 emissions limit by reducing electricity production. However, this does not mean that energy efficiency deployment will increase - even when it is more cost-effective than other CO_2 reduction options. Current market and regulatory barriers to investment in energy efficiency can hinder its use as a compliance strategy in a trading program. DEQ should consider using methods for allowance distribution to help address these barriers to energy efficiency deployment. We do not recommend a historical approach to allowance distribution, where allowances are given away to covered EGUs, as this is the least effective option. A historical approach does not promote the most cost-effective emission reduction measures in the state, such as energy efficiency.	
5. ACEEE	Auctions held by the state or another entity allow EGUs to purchase the allowances needed for compliance. The revenues from the sale of allowances can then be reinvested in activities that further reduce emissions, such as energy efficiency. RGGI has successfully distributed almost all allowances through regional auctions, with the largest portion of revenues reinvested in energy efficiency programs. According to RGGI, these investments are projected to save participants $3.62 billion on energy bills and avoid 12.9 million short tons of CO_2 pollution. As DEQ develops provisions to trade allowances through a multi-state trading program, joining RGGI and adopting the approach of auctioning allowances and reinvesting proceeds into energy efficiency programs and other purposes should	DEQ agrees that a revenue-neutral consignment auction is the best means of achieving compliance, and the regulation has been developed with this approach.

	be strongly considered. While a revenue-raising auction provides many benefits, there are other approaches for allowance distribution that would incentivize lasting CO_2 reductions and engage the private sector to invest in energy efficiency. A consignment auction will influence market responses in a similar way as a revenue-raising auction. Allowances are allocated for free, and recipients are then required to sell those allowances and use the revenue to repurchase the amount needed for compliance. This approach could avoid the need for legislative approval, and provide a transparent price signal and promotes long-term, cost-effective strategies to reduce CO_2 emissions.	
6. ACEEE	An updating output-based allocation rewards measures that deliver lasting CO_2 reductions. Allowances are distributed on the basis of electricity generated or demand avoided, relative to the amount of pollution emitted or fuel consumed. The allocation formula should be updated regularly to track generation and savings from efficiency, and reward future progress toward CO_2 reductions. This approach fosters technology-neutral competition, allowing energy efficiency project developers or investors to earn allowances alongside covered EGUs. It provides a transparent and predictable price signal, and ensures the activities that reduce the most CO, will receive the greatest number of allowances.	DEQ agrees that an updating output-based allocation approach will be the most effective means of reducing CO_2 and have designed the new program accordingly.
7. ACEEE	Set-asides allow for a portion of allowances to be budgeted for certain programs, such as energy efficiency. The amount of available allowances is capped at a certain percentage of the total allowance pool, therefore if the cap is exceeded certain projects will not be fully compensated for their	DEQ agrees that energy efficiency is an important factor in the reduction of carbon emissions; energy efficiency efforts in the state are managed by the Department of Mines, Minerals and Energy (DMME).

	contributions. While set-asides provide an incentive for qualified energy efficiency projects, the total allowances available are likely too small to allow for significant investment.	
8. Appalachian Power Company (APCo)	APCo has demonstrated leadership in making carbon reductions over the past decade and will continue to deploy clean energy sources over the coming decades. As such, we feel that it is not in the best interest of Virginia to develop incremental carbon policies to intervene in an already ongoing transformation of the electric sector. On May 1, APCo filed its annual IRP with the Virginia SCC. In addition to projected load changes, IRPs are updated at regular intervals for changing market conditions as well as other external factors, including achieving potential environmental requirements. Such long-term plans--beyond any near-term 'actionable period'--can and do shift as such conditions warrant. APCo is required to provide an IRP that encompasses a 15-year forecast period (in this filing, 2017-2031). This IRP has been developed using the Company's current long-term assumptions for: customer load requirements; commodity prices; supply-side alternative costs; and demand-side program costs and impacts. In addition, APCo considered the effect of environmental rules and guidelines, such as the CPP, which could add significant costs and challenges to operations. State plans to implement this uncertain rule may not be finalized, let alone approved, for years. In preparing the IRP, APCo analyzed multiple scenarios, with differing commodity pricing conditions, as well as multiple internal load conditions. APCo has also	APCo's carbon reduction efforts are recognized and appreciated. DEQ does not agree that linking Virginia's CO_2 action to a broader CO_2 trading program could result in less control over Virginia's emissions trajectory and economic well-being. Joining RGGI is administratively practical and transparent, while meeting the important goal of reducing carbon emissions that are already having a detrimental economic impact to the state. Acting in concert with a program proven to reduce carbon emissions cost effectively will enable Virginia to reduce emissions while protecting the state's economic interests. The commenter's concerns are well-taken, however, we believe that this is the best approach in moving forward with the most certainty and least risk.

	conducted analyses that address certain aspects of compliance with the CPP. The 2017 APCo IRP suggests that APCo will not be integrating any new fossil resources into its system over the next 15 years. All incremental load increases are assumed to be met through installation of cost-effective wind and large-scale solar, both of which would provide customers with emissions-free energy, as well as the prospect of additional demand side management measures. The IRP also suggests that APCo may retire its remaining fossil units within Virginia by 2026. At such point that these units would be retired APCo would be left with a Virginia-domiciled generating fleet that is 100% carbon emissions free. In light of the transition that APCo has made and will continue to make in its generating fleet with respect to emission reductions and generation diversification, APCo encourages DEQ and the board to recognize that planning practices already in place, such as the IRP process, can be appropriate means to establish a carbon reduction pathway. Given that the current Virginia regulatory process is robust and that CO_2 emissions have trended significantly downward, it not is in the state's best interest to take action on a small subset of emissions sources to address a concern that is global in nature. Linking Virginia's CO_2 action to a broader CO_2 trading program such as RGGI could ultimately result in Virginia having less control over its emissions trajectory and economic well-being. APCo is committed to working to ensure any regulatory action will be workable and equitable for APCo customers.	
9. Audubon	Climate change poses serious	The commenter's concerns are well taken.

Society of Northern Virginia	public health risks. In Northern Virginia, hotter summers make it more difficult to meet air quality standards. Our area is also vulnerable to vector-borne diseases, particularly Lyme Disease. We also face increased risks of flooding along the tidal Potomac and an increase in the number and intensity of extreme weather events. Extreme weather events also threaten our water and wastewater infrastructure, adding to the cost of public service. As shown by the shifting peak bloom date of the cherry trees in Washington, D.C., climate change is also disrupting ecosystems in Northern Virginia, putting pressure on migratory birds, whose reproduction is closely linked to the timing of spring. Climate change can cause a mismatch in the timing of food supplies and the birds and other wildlife that depend on them. The National Audubon Society's 2014 report concluded that global warming is the greatest threat to birds and other wildlife, that global warming's impacts could lead to the loss of 1/4 to 1/3 of all species on Earth, including many bird species. Carbon emissions from power plants will magnify these risks. We urge DEQ to draft stringent, science-based emission caps that move the state toward greater use of cleaner, renewable energy sources.	The purpose of this regulatory action is to meet the ED 11 requirement to control carbon emissions, and we believe that the proposal will meet that end.
10. CarbonShare.org	My comments focus on design elements of a carbon pricing system. The most comprehensive and easiest to administer point of regulation would be upstream. An upstream system would require only upstream companies to hold permits. They would be the buyers at the permit auction. An upstream system is the most comprehensive, and requires the least amount of administration from DEQ. An upstream system would also encompass transportation fuels, an	Linking to the successful, well-established RGGI program utilizing a revenue-neutral consignment auction has been selected as the most efficient and expeditious means of reducing carbon pollution in Virginia. Unlike the "nonregulated" RGGI states, Virginia is a "regulated" state and as such relies on the Virginia SCC to safeguard Virginia's electricity consumers. In other words, the distinct regulatory roles of DEQ and the SCC work in harmony such that pollution will be reduced from electric generating units while protecting the users of that electricity.

	important source of emissions. Because of the European Emissions Trading System (ETS) choice of administrative (free) allocations to emitters based on historic emissions instead of auctioning, the ETS had to figure out the change to the baseline to the aviation industry due to the volcano in Iceland. Virginia would have to recalculate free allocations to industry after every perturbation in the fuel and electricity markets. The ETS is overallocated, and the price of permits is low, yielding few emission reductions. By auctioning, Virginia could avoid subjecting DEQ to lobbying and political manipulation that free allocation entails. Administratively, it would be easier to just let companies figure out for themselves how many permits they need and let them buy them for themselves at auction. Auctioning is an important lesson from California's Cap & Trade program. The auction and price floor are primary factors contributing to the success the program has had thus far. The program would have had the disappointing results of the ETS without them. However, the California program is not perfect. It has missed opportunities to increase the amount of allowances auctioned, reducing the free allowances to industrial emitters, and returning more revenues collected back to households. Return carbon price revenues to households as a "climate dividend." The best way to return the value to consumers is through a dividend. The formula to do so is simple: auction allowances and return the funds to people. One problem with using funds on large infrastructure projects to reduce emissions is that the	

	emission reductions may reduce the price of allowances, or change relative price of emissions between sectors, but result in no net emission reduction because the reductions achieved only create space for new emissions from other sectors under the cap. In other words, the space below the cap created by the infrastructure investment is simply filled up by emissions in other sectors. The goal of a carbon pricing program is not to build big capital projects. It is to provide an economic incentive to Virginians to change their economic behavior. Behavior change is better accomplished by returning the funds to Virginia households through a dividend. Spending revenues only on projects would neglect the regressive impacts of a carbon price on low-income families. Fossil fuel companies may use the sky, but we all own it together. It's a Commons. The equitable ownership of the commons should be a central theme in the design of a cap and trade system. The fossil fuel industry and other large emitters should pay to use the atmosphere. If the sky belongs to us all, but its use becomes limited, then companies who use the sky should compensate citizens for its use. As long as pollution is free and has no price, companies may externalize those costs onto society. In many areas of environmental policy, fees on companies are used to raise funds to pay for clean-up and also made less-polluting alternative technologies more cost-effective. Technology alone is insufficient – We need an escalating carbon price: 1) Price on carbon 2) Dividends returned to people 3) Political acceptability for higher price on carbon 4) Actually affecting economic choices across all sectors,	

	giving incentives to companies to produce lower carbon products, and for people to buy them 5) New technologies, transform the economy.	
11. Ceres BICEP (Business for Innovative Climate and Energy Policy) Network	An emissions trading program should create policy certainty and be stringent enough to send a strong and clear market signal for the transition to a low-carbon economy. Businesses need strong market signals and policy certainty in order to make decisions and investments for the long run. The program must be strong enough to drive emissions reductions and incentivize the uptake of clean energy. In addition, the program's design must be well thought-out and able to stand up to legal challenges in order to further foster certainty in the electricity market. A strong emissions reduction program would also encourage utilities to move in the direction their investors and customers increasingly want them to go. This year, an unprecedented size and scope of investors have engaged with investor-owned electric utilities, encouraging them to take climate change into account in their business decisions.	By linking to RGGI, Virginia will be taking part in a proven effective emissions reduction program that addresses the goals listed by the commenter.
12. Ceres	Linking emissions reduction programs with neighboring states would benefit Virginia ratepayers. A larger emissions trading market, as opposed to a one-state market, would create greater flexibility for compliance and more opportunities to achieve cost-effective emissions reductions. Interstate emissions trading markets have proven to be workable and economically feasible for participating states. RGGI, for example, is designed so that the participating states are able to maintain their autonomy and decide on their own whether to remain in the program and how to invest their RGGI auction revenues. RGGI	DEQ agrees that interstate emissions trading markets are a workable and economically feasible means of reducing emissions. Joining RGGI will enable Virginia to use that market mechanism to reduce carbon emissions.

	states that have had the most economic and emissions-reduction success to-date are those that reinvest the largest portion of their auction revenues in clean energy projects and programs. Programs such as revolving loan funds, utility energy efficiency programs, and other innovative financing initiatives provide a smart option for reducing electricity bills while simultaneously helping states meet their carbon reduction goals. As early adopters of clean energy technologies, RGGI states have been able to unlock the economic benefits of the clean energy economy—innovation, investment, and jobs—very effectively. Virginia has an opportunity to reap the benefits of the clean energy economy as well.	
13. Ceres	An emissions reduction program should aim to maximize benefits to ratepayers through increased investments in renewable energy and energy efficiency. Virginia has an opportunity to seize the benefits of increasingly low-cost clean energy technologies and the investments, local jobs, and tax revenue that accompany the transition to a low-carbon economy. Clean energy can lower electricity costs and provide a valuable hedge against the volatility of fossil fuel prices. Meanwhile, energy efficiency investments can provide quick paybacks, reduce overall demand for energy, and decrease energy bills. While auctioning emissions credits would provide an effective source of funding for reinvestments, if emissions credits are allocated, they should be allocated in a way that incentivizes investment in clean energy and the most cost-effective means of reducing emissions. Likewise, any value or revenue derived from the allocation or auctioning of credits should be used primarily to incentivize renewable	DEQ agrees that renewable energy and energy efficiency are important factors in the reduction of carbon emissions. Also noted elsewhere is the observation that Virginia is a "regulated" state and as such relies on the Virginia SCC to safeguard Virginia's consumers. The distinct regulatory roles of DEQ and the SCC work in harmony such that pollution will be reduced from electric generating units while protecting the users of that electricity. Renewable energy and energy efficiency projects are under the purview of the primary state agency for such projects, DMME.

	energy and energy efficiency projects; such projects will best benefit ratepayers and the economy and will contribute to further emissions reductions in Virginia. An advisory board including legislators and key stakeholders would be prudent to determine the structure of allowance allocations. Furthermore, in order to protect Virginia's forests and foster a truly sustainable low-carbon economy, qualifying renewable energy projects should not include forest biomass for electricity projects.	
14. Ceres	Virginia should simultaneously unlock policy barriers to clean energy deployment. Thanks to Governor McAuliffe, Virginia has made strides in renewable energy deployment in recent years—but there is still significant untapped potential for energy efficiency and renewable energy investments. The state should remove barriers to corporate procurement of renewable energy. BICEP Network members and other major companies are increasingly making sustainability commitments and using renewable energy to power their operations. Clean energy allows businesses to hedge against the volatility of fossil fuel prices, lock in fixed rates, and reduce energy bills. Today, more than 63% of the Fortune 100 and nearly half of Fortune 500 companies have made commitments to reduce GHG emissions, procure more renewable energy, or invest in energy efficiency. By allowing large customers to participate in power purchase agreements, community solar projects, direct arrangements, third-party solar leasing, commercial clean energy financing, and cost-competitive, utility-administered green tariff programs (among other options), Virginia can continue to attract corporate investments while	The SCC manages Virginia's electric generating and distribution, and the Department of Mines, Minerals and Energy (DMME) manages energy efficiency and renewable energy projects.

	simultaneously lowering emissions. Furthermore, Virginia ratepayers could enjoy lower electricity bills by unlocking barriers to utility-administered energy efficiency projects and programs. Energy efficiency is low-hanging fruit in Virginia. The state has substantial opportunities to reduce energy waste. While the largest 30 electric utilities in the U.S. are saving, on average, almost 1% of retail sales annually through utility energy efficiency programs, Virginia's largest electric utility, Dominion Energy, only helped customers save 0.1% of sales in 2014.6 As a result, Virginia's utility energy savings are among the lowest in the country, causing ratepayers and businesses to miss out on the cost savings associated with decreased energy use.	
15. Chesapeake Physicians for Social Responsibility (83 signatures)	A well-designed program to reduce CO_2 emissions from power plants will allow Virginia to realize economic, environmental and public health benefits. Such a program will lead to reductions in the emissions of a large array of hazardous pollutants from coal-fired power plants, providing immediate public health benefits. Evidence shows that a well-designed carbon reduction program will help reduce electricity bills, boost local economies, and create local jobs. Reducing carbon emissions will help slow the pace of climate change, which is a threat to public health and the economy of Virginia. This array of benefits has already been realized by the states that participate in RGGI, a program that has been reducing CO_2 emissions from power plants since 2009. RGGI has achieved an impressive reduction in pollution even as the economies of the member states grew. Between 2009-2014, RGGI states received $1.79 billion from	ED 11 directs the department to develop a regulation that is "trading-ready" to allow for the use of market-based mechanisms and the trading of CO_2 allowances through a multi-state trading program, and we believe that linking to RGGI is the most realistic and effective means to accomplish this.

	the quarterly auctions of pollution allowances and have invested $1.37 billion. Most of these funds were spent to increase energy efficiency and support renewable energy, which created 30,000 job-years and produced additional economic benefits. Investments in energy efficiency programs have saved consumers $618 million on their electricity bills, and will provide future benefits of over $4.5 billion as the investments in energy efficiency continue to save power. By ensuring that the carbon regulation is trading-ready, Virginia will have the opportunity to join RGGI. One study estimates that by joining RGGI, Virginia could bring in $2.8 billion of revenue by 2030. This would mean more resources to protect the coastline, stronger energy efficiency programs, an increase in the use of renewable energy, more jobs, and better health outcomes.	
16. Dominion	To the extent the state pursues the development of state-specific regulations to address CO_2 emissions from power plants by establishing a statewide emissions cap, we generally support the concept of designing a program that would allow for emissions averaging and trading and would position the program to be trading-ready with linkages to either existing or future multistate trading programs as put forth by ED 11. However, we do not believe the directive compels the state to join a particular multi-state program, such as RGGI, and urge the state to proceed cautiously but thoroughly in evaluating whether direct participation in existing trading programs would meet state environmental and energy goals and ensure the continued diversity, reliability and affordability of electricity.	ED 11 directs the department to develop a regulation that is "trading-ready" to allow for the use of market-based mechanisms and the trading of CO_2 allowances through a multi-state trading program, and we believe that linking to RGGI is the most realistic and effective means to accomplish this.
17. Dominion	The baseline and targets must accommodate for the dynamics of	Recent data shows that there is a general trend away from energy imports. Regardless, an

	power imported into Virginia. The baseline must reflect and account for the fact that Virginia is a net importer of energy from more carbon-intensive out-of-state resources. The emission targets must allow for reasonable expansion of lower-emitting cleaner generation in the state to address energy needs and reduce imports of electricity in accordance with state energy policy. Setting a stringent cap on already cleaner generation in Virginia absent a similar level of reductions from neighboring states would increase the cost burden to Virginia generators and would likely encourage lower cost electricity imports from out-of-state sources that are more carbon-intensive and not subject to a carbon cost adder. This could result in the unintended consequence of curtailing or limiting the dispatch of highly efficient and lower emitting NGCC facilities in Virginia and encouraging the dispatch of higher emitting resources in neighboring states. With federal regulations currently stayed and under administrative review, few states outside of the RGGI program and along the west coast have or are proceeding with definitive carbon regulations. This includes all of the remaining states that are part of the PJM Interconnection (except Maryland and Delaware which are part of RGGI), which is the regional transmission organization that operates the wholesale electric grid in the mid-Atlantic region. At a minimum, any consideration of reduction targets for Virginia should include an evaluation of what surrounding states are doing in the absence of federal requirements and impacts that may have on power markets, trading opportunities, leakage and economic growth.	updating output system incentivizes in-state generation, thus also addressing leakage. Indeed, the RGGI program is designed to track and avoid leakage through routine program review. DEQ agrees that other state and federal actions are important, and these activities are closely monitored and tracked. There is nothing to be gained by ignoring activities and trends outside the state, the PJM Interconnection, RGGI, and elsewhere. The baseline year is currently set at 2020, which will ensure that the Brunswick and Greensville units will be accounted for. Market-based programs are technology-neutral: a cap is set, and affected units have the flexibility to use whatever means they prefer to meet that cap. The commenter may consider any emissions reduction opportunities.

	The baseline must also account for emissions from new generation projects, such as Dominion's Brunswick and Greensville natural gas-fired combined cycle (NGCC) facilities that have already received air permits and either already commenced commercial operation or are under construction. These facilities, each with capacity in excess of 1,300 MW, will operate some of the most efficient NGCC units with the most stringent GHG limits in the country and will serve as base load facilities. These units are critical in transitioning to a cleaner and less-carbon intensive generating fleet in Virginia. Emission targets should be based on the deployment of existing, commercially available technologies. Dominion continues to analyze emissions reduction opportunities and finds that the following measures hold the potential for ongoing emission improvements: • Heat rate efficiencies at existing coal-fired units; • Capacity improvements at existing NGCC units; • Maximize the dispatch from carbon-free nuclear and renewable sources first and then from lower-carbon NGCC units and other dispatchable resources; • Co-firing coal units with natural gas where economical at appropriate units with proximity to natural gas pipelines; Efficiency improvements within the electric transmission and distribution system; • Deployment of smart grid technologies such as voltage optimization software platforms. We are also evaluating pumped hydroelectric storage, to be powered at least in part by renewable energy, as an additional energy supply for the state.	
18. Dominion	Although the intent of the Governor's directive is to set	The intent of the regulation is to enable Virginia to link to RGGI, which establishes

	Virginia on a path to regulating carbon in the absence of federal action and the apparent demise of EPA's CPP, it does not, nor should it compel the state to establish emission targets equivalent to levels that would have been imposed under the CPP. We believe that the mass-based carbon emissions target EPA established under the CPP underestimated potential future growth to meet energy demand and was the most costly compliance alternative identified in the company's IRP. This type of program, particularly if implemented without flexible program designs including interstate trading, would be constraining for a state like Virginia which forecasts economic growth and an electric capacity deficit. Although established at the state-level, the limits required under the CPP presumed and envisioned a robust nationwide emissions trading program. Virginia should not impose more stringent emission reduction requirements to address a global environmental issue while other surrounding states we compete with economically have no established emission reduction goals or requirements. To the extent the CPP-based emission caps are considered, the caps should not be more stringent than the levels that would have been imposed under the CPP.	CO_2 emission reduction targets independently of the CPP or any other federal programs.
19. Dominion	The program should allow for realistic timeframes to achieve emission reduction goals. This will provide needed time for the ramp-up of new renewables, energy efficiency programs, and infrastructure improvements in order to maintain the state's fuel diversity and its goal to become more energy independent. Reduction goals and implementation timelines must avoid premature retirement of remaining existing coal not otherwise shut down for	DEQ has worked diligently to ensure that its proposed timeframes are realistic.

	compliance with other regulatory requirements.	
20. Dominion	The program must also recognize the critical role of extending the operation of Virginia's existing fleet of carbon-free nuclear generation. U.S. Nuclear Regulatory Commission (NRC) licenses for Dominion's existing nuclear stations begin to expire in 2032. The loss of approximately 3,500 MW of existing zero-emitting nuclear would significantly complicate compliance with any carbon reduction program in the post-2030 timeframe. To achieve electric output compatible with Dominion's North Anna and Surry nuclear power stations would require over 98,000 acres of solar panels. In addition, generation from nuclear units provide a critical and stable source of electricity in all weather conditions and are increasingly needed to maintain the reliability of the electric grid. Dominion is working with the NRC on evaluating and applying the current regulations as the basis for nuclear units to apply for a subsequent license extension to operate beyond 60 years. These existing regulations will be supported with enhancements to existing license renewal tools and guidance documents, adding additional aging-related system reviews and associated upgrades. The continued operation of these zero-emitting resources will require significant financial investments that are comparable to building new combined cycle gas units, the only other large base load source of generation, yet with the associated carbon emissions	As discussed elsewhere, the market-based cap-and-trade program is technology neutral. Although DEQ recognizes the value of all low- and zero-carbon generating sources, DEQ is specifically tasked with regulating fossil fuel generation.
21. Dominion	The state's reduction targets should not be based on a presumption that energy efficiency potential from policies in neighboring states can be repeated and achieved in Virginia. Energy efficiency programs historically have been financed by	Dominion's energy efficiency programs are recognized and appreciated.

	utilities. Dominion continually works to achieve operating efficiencies in our existing generating units to get more output with fewer emissions. We also offer a number of end-use energy savings programs to our customers. We continue to build upon our best in class energy efficiency and energy assistance program facilitated by the Governor's 2015 amendments to Senate Bill 1349 requiring the establishment of an energy assistance and weatherization program to serve low-income, elderly, and disabled customers as well as veterans. There remains significant potential for energy savings from consumer-side energy efficiency program and we remain committed to expanding participation in the current programs and offering consumers more choices to achieve energy savings. However, the expansion and consumer use of these programs depends on state laws and regulations that allocate resources and approve of demand-side programs. In Virginia, energy efficiency and demand side management programs must be approved by the SCC based on cost-benefit studies and strict measurement and validation processes. The ultimate successes of energy efficiency programs are generally within the control of the customer, not the utility. While utilities offer a range of consumer-friendly energy efficiency programs, they must nevertheless be prepared to serve their native load should such programs not be as successful as hoped. Accordingly, the state target should be based on well thought out and reasonable expectations of achievable energy savings and the compliance timelines must provide adequate time for the development,	

	approval and implementation of the energy efficiency programs required to achieve such objectives.	
22. Dominion	Renewable energy needs to be part of the solution and additional renewable generation sources of solar, on-shore and off-shore wind and pumped hydroelectric renewable energy with back-up generation support from our highly efficient natural gas units have a strong place in our future investment strategy. In 2013, Dominion had no generation from solar or on-shore wind sources. The company now has 423 MW of large-scale solar in Virginia either in operation, under construction, or under development, including power purchase contracts. All together, these facilities will produce enough electricity at peak output to power 105,000 homes. Our analysis shows that this rapid expansion of renewable energy, particularly highly cost effective solar energy, will continue to increase rapidly. Renewable energy, however, has some challenges. It requires a reliable source of backup for when it is not available. While we continue to see advancements with respect to battery storage technology, further innovation is needed to achieve both the scale and cost-effectiveness necessary for storing the vast amount of electricity that would be required for renewables to reliably power our economy. Natural gas is the lowest cost, cleanest and most reliable form of dispatchable generation to complement the integration of renewabIes to the electric grid. We will need our gas plants more and more to ramp up and down as Virginia grows its solar fleet. As noted previously, Virginia is home to some of the most efficient NGCC units with the most stringent GHG	Dominion's efforts to promote renewable energy are recognized and appreciated. There are indeed issues associated with renewable resources that, as discussed elsewhere, are more appropriately dealt with by other agencies (such as SCC and DMME) in a different context from this specific regulatory action.

	limits in the country. This technology will also serve to provide baseload generation to replace retiring coal plants. Another issue with renewables is the vast amount of land needed to produce sufficient power to meet energy needs. For example, 1 MW solar requires about 8 acres of real estate. In addition, significant grid improvements will be needed to accommodate growth in renewable energy. All of these challenges should be factored into assumptions regarding the expansion capability of renewable energy onto the electric grid in setting emission reduction targets.	
23. Dominion	The company is also examining the needed grid improvements to accommodate growth in renewable energy. Grid modernization is a national trend, and Dominion has taken an important first step with its strategic undergrounding program, an industry leading initiative to improve reliability which has received legislative support and approval from Governor McAuliffe in both 2014 and 2017 legislation. Building on these grid modernization efforts offers the opportunity to both better accommodate renewable energy and to improve customer reliability.	Dominion's grid improvement efforts are recognized and appreciated.
24. Dominion	In setting emission targets for the EGU sector, the state must recognize and account for the role and opportunity electrification of other sectors of the economy, such as transportation and cities, can play to reduce carbon emissions economy wide in the state. For example, Virginia intends to devote a significant amount of the environmental trust funds provided under the recent Volkswagen Consent Decree with EPA for promoting clean transportation technologies including the deployment of zero emission vehicle supply equipment, such as electric vehicle charging stations, as	DEQ agrees that the reduction of carbon must be approached holistically. The specific purpose of the regulatory proposal is to address one element of that goal.

	well as repowering large and medium-sized freight trucks, school and transit buses, port drayage trucks, locomotives, ferries and airport ground support and cargo handling equipment. Sale focus on the electric generation sector and establishing too stringent an emission cap on in-state generation could impact the ability of the state to holistically reduce carbon from other sectors of the economy.	
25. Dominion	In terms of affected EGUs subject to compliance obligations, the regulations should limit compliance applicability only to fossil fuel-fired EGUs that are greater than or equal to 25 MW. Small combustion turbines and boilers below this threshold should not be subject to compliance obligations under the program. This is consistent with many existing federal and state-level EGU-based emission reduction programs including EPA's Acid Rain program, CSAPR, MATS, and the northeast RGGI program. In addition, the program should not impose any compliance obligations upon units that burn biomass as their primary fuel. No emissions attributed to biomass firing should require allowances. This would be consistent with EPA's approach in developing the CPP which did not include biomass generation in establishing the baseline and state emission reduction targets and did not require biomass units to hold emission allowances or surrender emission rate credits under the proposed mass-based and rate-based model trading rules. This compliance exemption should also apply to the emissions apportioned to the burning of biomass for fossil fuel-fired units that co-fired with biomass. In 2013, Dominion made significant investments to converted three 51 MW units that used coal to 100%	The proposal limits compliance applicability only to fossil fuel-fired units that are greater than or equal to 25 MW, as is consistent with RGGI. Biomass-only units are not covered by this regulation, as it applies only to fossil fuel-fired generation. Fossil fuel-fired units that co-fire biomass must account for their CO_2 emissions and obtain allowances accordingly.

	biomass, encouraged by EPA's prior determination that biomass was carbon neutral for PSD permitting. Close proximity to an ample supply of waste wood biomass as well as EPA's "carbon-neutral" policy for permitting under the PSD effective at that time were key economic drivers for these projects. Given Dominion's significant investment in renewable wood waste and forest residuals biomass, it is important for our customers that biomass emissions be considered carbon neutral.	
26. Dominion	The state program should provide for maximum compliance flexibility including the following: • Use of emission trading with unlimited banking of allowances. The state should explore trading opportunities with other states and, where feasible, allow for linkages with other state programs to maximize market-based trading options. • Allow for multiple-year averaging to demonstrate compliance with any interim and final target. This concept was allowed in the final CPP and the RGGI programs allow for a tiered surrender of allowances over a three-year period. • Allow flexible resource options for use in demonstrating compliance with emission reduction requirements. These options should include: co-firing coal with natural gas or biomass; uprates at existing nuclear units; demand side and supply-side energy efficiency improvement programs, including voltage optimization and other electricity transmission and distribution efficiency improvements; generation from pumped storage.	Linking to RGGI will allow for these compliance flexibility goals.
27. Dominion	Although we have experience with RGGI though current and former assets in New England, we have serious concerns about potentially implementing the RGGI program in Virginia. • Although RGGI states have	As discussed elsewhere, linking to RGGI--a well-established, effective program--is the best means of quickly addressing carbon pollution in the most efficient way possible. ED 11 specifically tasks DEQ with controlling carbon generation by linking to an established state trading program, and the

	reduced carbon, the level of reductions achieved that can be attributed to RGGI itself is questionable. Emission reductions nationwide, including in Virginia, have been comparable to the reductions achieved in the RGGI states and have been primarily driven by fuel economics (low gas prices) and the corresponding shift from coal to natural gas as well as lower load growth due to the 2008 recession. • Although allowance prices in RGGI are currently around $3.50/ton CO_2, the program is under an ongoing review and the RGGI states are exploring mechanisms that would set a trigger price, below which a certain amount of allowances would be held back from the auction in an effort to reduce amount of the allowance bank, increase the price and force more emission reductions. • RGGI is considering increasing the stringency of the regional emissions cap post-2020, reducing the cap by as much as 3.5 to 5% per year. Currently, the cap is reduced by 2.5% per year. • We have concerns about leakage if Virginia were to join RGGI and that our generating resources may not get dispatched if they are priced higher than other assets. As noted previously, we sell and buy our power into the PJM market which, with the exception of Maryland, consists of states that, to date, are not considering and have not developed or implemented carbon regulations. Accordingly, most other generators in the PJM market would not be subject to a carbon cost adder that generating units in Virginia would incur. This could result in curtailing or limiting the dispatch of lower emitting NGCC facilities in Virginia and encouraging the dispatch of higher emitting resources in neighboring states.	only such reasonably available and operating trading program is RGGI. One of RGGI's attractive features is that it is committed to ensuring a stable price structure, and utilizes routine program reviews to identify and improve means of accomplishing this goal. The commenter correctly states that RGGI is currently undergoing program review and the cap is being reconsidered. As of this writing, a regional cap trajectory that will provide an additional 30% cap reduction by the year 2030, relative to 2020 levels; the cap is expected to be, at this point, 3.5%. The proposed changes also include the addition of an Emissions Containment Reserve (ECR) wherein states can withhold allowances from auction if emission reduction costs are lower than projected. DEQ agrees that leakage is a concern; however, RGGI is structured such that leakage is monitored for and the program is adjusted as needed. As discussed elsewhere, an updating output system incentivizes in-state generation, thus also addressing leakage. RGGI is also designed to minimize economic impacts and keep compliance costs low, and DEQ believes that the market-based trading mechanisms in the proposal will accomplish the same. Routine program review will identify and correct problems should they occur.
28.	A strong market-based mechanism	The proposal will enable the implementation

Environmental Defense Fund (EDF)	for reducing carbon pollution from electric generating facilities will enable Virginia to achieve significant and cost-effective emission reductions. Market-based mechanisms that enable compliance with sector or economy-wide limits on CO_2 emissions with tradable compliance instruments are a cost-effective approach to achieve carbon pollution reductions with flexibility for regulated entities to pursue the lowest-cost abatement opportunities. EDF encourages DEQ to incorporate such a market-based mechanism into their regulatory proposal, setting a clear cap on carbon pollution from both new and existing units, issuing tradable allowances for every ton of carbon under the cap, and requiring owners of affected units to hold an allowance for every ton of carbon emitted. The regulation should cover all existing and new electric power facilities in Virginia that emit CO_2. Further, although this regulation will apply only to electric power facilities in Virginia, EDF encourages DEQ to pursue a market-based program design with flexibility to accommodate economy-wide expansion, noting electric power facilities contributed 30% of Virginia's CO_2 emissions in 2014. • DEQ should set stringent carbon emission limits over a transparently determined baseline. Emission limits (the cap) should result in concrete reductions in CO_2 emissions from the electric power sector below a business-as-usual baseline over the course of the program. DEQ should work with stakeholders to incorporate robust and reliable assumptions into a credible energy and economic modeling framework to establish a business-as-usual emissions baseline and to analyze the impacts	of a strong, market-based mechanism for controlling carbon, i.e., linking to RGGI and establishing a consignment auction. The benefits of such an approach, as discussed by the commenter, are recognized. DEQ agrees that the reduction of carbon must be approached holistically. The specific purpose of the regulation is to address one element of that goal. As discussed elsewhere, leakage is an issue that is addressed by the updating output approach, which incentivizes in-state generation. RGGI also monitors for leakage via its regular program review process. Other market-based programs may become attractive in the future and will be considered at the appropriate time; at this stage, linking with RGGI is the most secure and reasonable approach.

	of the policy in comparison to the baseline. The cap should ensure meaningful reductions in carbon pollution that safeguard public health and mitigate the impacts of climate change. • Data on prices, carbon emissions, and compliance behavior should be transparent and accessible. Transparent market design and implementation is important to assure fairness and certainty, and reduce transaction costs for market participants. Stakeholders, evaluators, and members of the public should be able to assess the progress toward achieving real emission reductions over time, along with other metrics of the program's success. For example, RGGI posts the results of its quarterly auctions, secondary markets, and yearly emissions data, and California posts a variety of market information about its program. • DEQ should evaluate program features that will mitigate leakage of emissions to surrounding states, including engaging with other states in the same market region on robust and aligned program design. Emissions leakage, or increases in carbon emissions in surrounding states due to shifting of facilities or other factors, would weaken effectiveness of the program in achieving real emission reductions. • EDF also encourages DEQ to explore program design features that can facilitate efficiencies through linkages with other market-based carbon reduction programs, including but not limited to RGGI. Virginia could develop a regulatory proposal aligned with the RGGI model rule and seek to formally join the RGGI program as a full participant, or could instead explore linkage opportunities where Virginia is not a full participant but DEQ accepts RGGI allowances for compliance with the Virginia program. Virginia should evaluate	

	both options, as well as to evaluate opportunities to align a carbon regulatory framework in Virginia with carbon reduction efforts in additional states, particularly those states that are part of the PJM energy market. Virginia should also explore the potential to integrate with or use existing trading platforms.	
29. EDF	DEQ should engage with and address concerns of environmental justice and disadvantaged communities throughout development and implementation of the program. EDF urges DEQ to meaningfully engage with disadvantaged communities--including communities situated near fossil fuel-fired power plants and communities with higher concentrations of low-income people, people of color, and otherwise vulnerable groups--throughout the process, by providing ample and accessible opportunities for public comment and other means of participation. DEQ should analyze impacts of the program on these communities and incorporate their recommendations to ensure the program does not impose disproportionate burdens on communities already vulnerable to the impacts of air pollution, climate change, and other factors.	DEQ will, as provided in the Public Participation Guidelines, provide opportunity for public comment on the impacts of the proposal. It is important to note that CO_2 is not a criteria pollutant and is thus not subject to a health-based standard. Unlike a conventional criteria pollutant such as NO_X or SO_2, CO_2 disperses quickly and does not create "hot spots" or localized problems. Fossil fuel-fired units are also subject to a host of other regulatory and permitting requirements that control emissions of criteria pollutants. Ultimately, the control of CO_2 will reduce global warming impacts and concomitant welfare impacts on disadvantaged communities. Also note that Virginia is a "regulated" state and as such relies on the Virginia SCC to safeguard Virginia's electricity consumers.
30. Lena Lewis	The cap must be set to reduce carbon emissions significantly. Virginia is a part of the Climate Alliance of States that have pledged to uphold the Paris Climate agreement, under which the U.S.'s was to reduce GHG by 26% of 2005 levels by 2025. This level of reduction puts Virginia on a path toward an 80% reduction. This pledge should determine the setting of the Virginia's carbon cap. Given that no other regulation has been put forward yet to reduce carbon emissions or other GHG emissions from other sectors of Virginia's economy, the majority of emissions cuts must come from the electricity	The cap will be set to reduce carbon emissions significantly, as consistent with the RGGI program. The updating output approach as well as the RGGI program review process will ensure that Virginia's carbon reductions are monitored and demonstrate continual effectiveness.

	sector. Some business-as-usual projections indicate that power sector carbon emissions will drop even without regulation. However, decreasing the rate of yearly emissions will not avert climate change if the emissions per year exceed the capacity to remove CO_2 from the atmosphere. The purpose of the cap is to put downward pressure on carbon emissions. The cap should decrease predictably and annually so that utilities can make long-term plans to reduce carbon. Reliable data is essential to setting the cap and allocating emission allowances effectively. Data must be sourced and analyzed by an independent, objective entity.	
31. Lena Lewis	Allowances should be distributed so that new generators, especially those that do not emit CO_2, are able to enter the market on a level playing field with incumbent generators. Locking in allowance distribution based on historic emissions rates of incumbent generators would fail to shift Virginia's power sector to lower carbon emissions in a fair, effective, or economically efficient manner. Distributing allowances based on updated energy output rather than on historic carbon emissions would create the incentive to lower carbon emissions. Each year, an energy generator would receive carbon allowances proportional to the previous year's energy output, while decreasing over time as the cap is lowered. Generators that generate a lot of low-carbon energy would receive more allowances than they would need, and could earn revenue by selling allowances to generators that emit more carbon. As the cap is lowered and allowances become more expensive, high-carbon generators will have the financial incentive to find a less carbon-intensive method of electricity generation.	Consistent with RGGI, the proposal is based on an updating output distribution approach, not historical. The benefits of an updating output approach are discussed elsewhere. Generally, Virginia's program will align with RGGI and its 3-year program review in order for the programs to operate in sync and, therefore, efficiently and effectively. Conditional allowances will be distributed to CO_2 budget units and DMME. These conditional allowances will then be consigned into auction, after which the conditional allowance becomes an allowance to be used for compliance purposes. DEQ agrees with the commenter that linking with RGGI will minimize leakage and stabilize costs. Linking to a market will increase the number of allowance trades, which will lead to price discovery of the true value of an allowance and increase economic efficiency; this is also true of the proposed consignment auction for the distribution of allowances.

	Energy output should be measured based on electricity consumed by customers, rather than all electricity generated by the supplier. This encourages generators to burn only enough fuel to meet consumer demand, while discouraging them from burning excess fuel for the purpose of increasing the next year's allocation of allowances. Generators receiving free allowances from the government must be required to sell all of their allowances, and then buy back their needed allowances. Linking with a preexisting carbon market would minimize emissions leakage and reduce costs to ratepayers, assuming that revenue is used to benefit ratepayers. Linking to a market will increase the number of allowance trades, which will lead to price discovery of the true value of an allowance and increase economic efficiency.	
32. Lena Lewis	The size of one carbon allowance, the timing of allocation distribution, the 3-year period in which power plants have to retire their allowances, a price floor, a program review, and other characteristics should synch with RGGI's schedule and parameters. Virginia must work with RGGI states to ensure that linking with their carbon market does not adversely affect their own emissions reductions or economies. Program review at regular intervals is needed to ensure that the cap is at an effective level to apply pressure to reduce carbon emissions and to improve program design.	By linking to RGGI, Virginia is committing to meet RGGI's overall structure and goals, including program review.
33. Lena Lewis; SELC	Allocation of tradable carbon allowances should be designed to lower carbon emissions in an economically efficient manner while also protecting residents from increased energy costs. Investor-owned utilities need to use revenues from allowance sales to keep rates low for customers, rather	As discussed elsewhere, the energy market is regulated in Virginia by the SCC. The EO 57 Work Group recommended that the Governor convene an Environmental Justice Advisory Council (EJAC); see the response to comment 29.

	than add to their profits. Co-ops can use their allowance revenues to the benefit of their member-owners. The creation of a new market means the creation of new revenue. In no way should this revenue be permitted to increase investor-owned utility profits at the expense of ratepayers. Allowance recipients must consign all of their allowances to an auction. Allowances can be granted to generators based on the previous year's electricity output (not carbon emissions), and generators would be required to sell all of their allowances. Generators that use carbon-intensive sources would have to buy back allowances from the market. Generators with lower-carbon or zero-carbon sources would not have to buy back so many allowances from the market, lowering their costs and increasing their revenue. Utilities must be required to report revenue from the carbon market to the SCC, and then apply that revenue toward offsetting the costs of buying allowances, thus keeping electricity rates as low as possible. Some of the revenue from allowance sales may need to be designated to offset the disproportionate effect of higher electricity rates on low-income customers. Any utility company claiming that carbon allowances are causing their electricity rates to increase must use carbon-market revenue to create utility-funded programs paying for energy efficiency improvements for low-income customers. Should electricity rates pass a certain threshold, utility companies should be required to provide direct assistance on electricity bills of low-income customers. Positive or neutral Impact on frontline communities is essential.	

	As the cap for carbon emissions is lowered, it will create additional benefits of reducing associated co-pollutants that cause health problems in communities close to their source. DEQ needs to listen to and address the concerns of environmental justice advocates.	
34. Lena Lewis	Allowances should be fully bankable. Once generators have sold their allocated allowances, allowance owners should be permitted to save their allowances to use or sell when the price increases. Reducing emissions today will have the biggest environmental impact. CO_2 stays in the atmosphere a long time, and GHGs create an ever-accelerating greenhouse effect. If an owner of an allowance banks it, that is one unit of CO_2 not released today, which is more beneficial than a unit of CO_2 not released in the future. Virginia must have a reliable long-term market so that generators, utilities, residents and traders on the secondary market can make long-term plans to reduce carbon. Faith in continued existence of carbon cap-and-trade will reduce price volatility, encourage banking, and encourage investment in long-term in emissions reduction strategies . Transparency of prices, emissions, and compliance behavior will protect residents and build trust in the efficacy of the system. Buyers, sellers, and interested observers need to know prices on both the primary and secondary markets. The public needs proof that the program is working to lower emissions over time. For example, RGGI posts the results of its quarterly auctions, secondary markets, and yearly emissions data.	The benefits described by the commenter will be realized in Virginia through linkage with RGGI.
35. Lena Lewis	Allowances should be fully tradable between power plants and any public or private entity, including individuals, both in-state and out-of-state. More trading leads to price	A consignment auction has been determined to be the best method of dealing with allowances in Virginia.

	discovery and a more economically efficient use of allowances.	
36. Lena Lewis	Units that co-fire eligible biomass should be required to purchase allowances for all CO_2 emitted. The climate will react the same way to increased concentrations of CO_2, irrespective of its source. Likewise, waste-to-energy units that burn otherwise recyclable trash should fall under the same regulations.	Units that co-fire eligible biomass will be required to purchase allowances for all CO_2 emitted. Waste-to-energy units are not addressed in the RGGI model rule, and DEQ believes it is not appropriate to cover them in this rule at this time.
37. Lena Lewis	Carbon offsets are needed in addition to emissions reductions, not in place of them.	Although carbon offsets are allowed for, they have never been used in RGGI. Offsets were therefore not considered for the Virginia program.
38. LoudounPACE	Create rules that require reduction of use of all energy from Virginia's carbon producing power plants and reduces carbon pollution from those plants. Address disproportionate environmental and financial effects experienced by vulnerable communities by developing and promoting residential PACE programs to dramatically reduce energy consumption, thus lowering carbon footprints and energy costs. Grow the economy and reduce carbon pollution by maximizing investments in energy efficiency. Delete requirements for RECs and replace them with cost indexed carbon credits. Low cost per credit carbon reduction should sell for highest prices, preferably solar and wind. Work toward a Virginia carbon tax and dividend plan as put forward by the Citizens Climate Lobby.	Linking to RGGI will effect carbon pollution reductions from Virginia's power plants. Other suggestions offered by the commenter are not directly germane to the goal of meeting ED 11 and linking with RGGI. Because RGGI is a market-based cap-and-trade program, the commenter's other suggestions are best addressed via the SCC and DMME. Additionally, consumer concerns are also discussed in greater detail in the response to comment 29.
39. Joy Loving	Monies derived from the cap must not go to the utilities, but should be distributed to all Virginians, with the following exceptions: A. Specify that the funds be designated for programs through which utilities will provide direct fuel assistance to those in need. B. Require utilities to establish and maintain effective energy efficiency programs enabling customers to cost-effectively reduce their energy usage; such programs should provide on-bill financing for such customers and should provide to	A consignment auction is revenue neutral, which is why it was selected for the Virginia program. Utility programs as described by the commenter are directly managed by the SCC and DMME.

	those in need no/low cost energy efficiency upgrades. C. Require utilities to establish programs to offer options for renewable energy, including customer-owned community solar and other distributed renewable energy methods. Authorize utilities to facilitate customer participation through such mechanisms as on-bill financing. D. Require utilities to fund resilience programs to enable vulnerable communities to prepare for and ameliorate the worst effects of severe weather and other consequences of climate disruption. E. Require utilities to establish re-training to employees displaced by the transition from fossil fuel to renewable programs, by sponsoring and funding educational opportunities in affected communities, working through the Virginia colleges and universities. The regulations must provide that utilities cannot charge customers who participate in any of these programs extra fees such as standby charges, net metering caps, or similar disincentives. If monies from the cap don't flow to utilities, then the state of Virginia should establish the programs described above.	
40. Joy Loving	Examine all available models for regional and state cap and trade or fee and dividend programs to identify strengths and weaknesses. Such programs include RGGI, the Western Climate Initiative, Southwest Climate Change initiative, etc. Work to find the best design from all models. Consult with PJM and representatives of all of its utilities, including municipals and co-ops.	It has been determined that linking to RGGI will be the most expeditious, practical, and effective means of reducing carbon emissions via a trading program. Although future participation in other programs is not ruled out and may occur at some later date when conditions warrant, ED 11 currently requires that Virginia link to RGGI.
41. Natural Resources Defense Council (NRDC)	The emissions limit must reduce emissions significantly below business-as-usual over the course of the program. To determine business-as-usual emissions and annual reduction levels, reliable, non-biased data and projections	Virginia is linking to RGGI, which, at this time, has proposed a regional cap trajectory that will provide an additional 30% cap reduction by the year 2030, relative to 2020 levels.

	must be used to establish a baseline that is not artificially high, and to set a cap and meaningful annual reductions that protect human health. DEQ should rely on transparent estimations of least-cost estimates of what Virginia's business-as-usual emissions will likely be in year 1 of the program. Similarly, DEQ should avoid biased emissions projections that appear to be set unrealistically high.	
42. NRDC	Ensure the economic efficiency of the program by directing allowance value to consumer benefit, rather than toward utility or generator profit. Avoid imposing costs on ratepayers by awarding allowances directly to emitting generators for free. Doing so would allow the ultimate price of those allowances to flow to ratepayers in the form of higher wholesale electricity costs, while providing an unreasonable windfall profit to generators. To ensure economic efficiency and a transparent, undistorted allowance price that levels the playing field for all generators, and to achieve maximum economic efficiency for citizens through allowance allocation, a standing Clean Energy Virginia Stakeholder Advisory Group should be established. The group's purpose would be to ensure the overall program and use of revenue is functioning transparently, efficiently, and effectively.	Virginia's consignment auction is revenue neutral. Also note that Virginia is a "regulated" state and as such relies on the Virginia SCC to safeguard Virginia's consumers. The distinct regulatory roles of DEQ and the SCC work in harmony such that pollution will be reduced from electricity generating units while protecting the users of that electricity.
43. NRDC	Maximize the environmental and climate change benefits of the program while avoiding market distortions and program inefficiency by including carbon emissions from forest-derived biomass generation within the carbon program and related emissions budgets. When establishing the statewide limits on CO_2, ensure that emissions from the combustion of forest-derived biomass to produce electricity - either through cofiring	Consistent with RGGI, biomass-only generating units are not covered by this rule. Fossil fuel-fired units that co-fire biomass must account for their CO_2 emissions and obtain allowances accordingly.

	or in stand-alone plants - fall under the statewide emissions cap. EGUs that burn forest-derived biomass must hold allowances equal to stack emissions from that combustion, for several reasons. Forest-derived biomass is not a carbon neutral fuel and its emissions cannot be discounted based on anticipated future mitigation through forest regrowth or avoided decay. In addition, forest sustainability certification schemes or other standards offer little information about carbon emissions from biomass burning and are in no way a proxy for carbon neutrality. Moreover, interstate trading of allowances with RGGI states does not prevent Virginia from including biomass under its own carbon emissions limit.	
44. NRDC	Ensure integrity of the program is not eroded by emissions leakage by designing an economically efficient program with minimal market distortions; that maximizes consumer benefits through efficiency investments; and drives significant levels of in-state renewable energy development. These will deliver least-cost carbon reductions and lessen the impact of carbon prices on carbon-based power flows across state lines. Leakage can be minimized through development of Virginia's untapped, clean resources like solar and energy efficiency. As indicated in NRDC's modeling, imports of electricity decrease under a carbon limit, rather than increase, largely due to a buildout of native energy resources, rather than more costly electricity imports. Achieving this energy independence helps prevent leakage by obviating the need for electricity from outside the state. To ensure the program does not inadvertently lead to increased fossil-based electricity imports from out-of-state, DEQ should establish an annual program review process for the duration of the program, to	As discussed elsewhere, the output updating approach will encourage in-state power development, thus reducing the possibility of leakage; RGGI's program is review is also designed to detect and address leakage issues.

	assess whether interstate power flows are shifting as a result of the carbon price. This work could be incorporated into the Clean Energy Virginia SAG.	
45. NRDC	Allowances should comport with and be fully tradable on RGGI's pre-existing platform, which has low administrative costs and robust cybersecurity.	RGGI's platform does have low administrative costs and robust security, which is one of RGGI's several attractive features.
46. NRDC	Climate change is a fundamental environmental justice issue, as coastal communities and low-income communities ultimately bear the worst brunt of its impact. Therefore, the program should make significant cuts to CO_2 and ensure the consumer and energy efficiency benefits flow to the low-income citizens most impacted by climate change and energy costs. Additionally, because CO_2 is not harmful in locally higher concentrations, and there do not appear to be specific Virginia plants in proximity to at-risk communities whose capacity factors would increase under a carbon program, a carbon market in Virginia appears unlikely to create hot spots in frontline communities. As the cap for carbon emissions is lowered, it can also create additional benefits of further reducing associated co-pollutants in communities close to their source. The regular program review must incorporate an environmental justice review, to confirm that local co-pollutants are being reduced as predicted and that the program is not imposing an impact on any local community.	As discussed in the response to comment 29, the EO 57 Work Group recommended that the Governor convene an Environmental Justice Advisory Council (EJAC). Also note that CO_2 standards are not a health-based, and that CO_2 does not create localized pollution problems; rather, control of CO_2 will help control global warming and its impacts on disadvantaged communities. The commenter correctly asserts that CO_2 is not harmful in locally higher concentrations. Additionally, routine program reviews provide the opportunity for any affected communities to bring attention to any potential issues.
47. NRDC	Any new market will need to be adjusted to ensure it is functioning efficiently and is driving significant and additional carbon pollution reductions. Program reviews can ensure that the cap is set at the correct level to reduce carbon emissions well beyond business as usual, while maximizing the	Virginia's program will undergo internal review on a regular basis, compatible and consistent with RGGI's program review process.

	development of a clean energy economy in the state. Virginia's program should undergo internal review on a regular basis, consistent with RGGI.	
48. NRDC	NRDC retained ICF International to conduct NRDC's analysis of a RGGI-linked Virginia carbon cap and subsequent reductions, by utilizing ICF's Integrated Planning Model. NRDC's modelling indicates that capping carbon in Virginia with a well-designed program will significantly reduce carbon emissions, and at the same time drive significant economic benefits for families and ratepayers; promote energy diversity and independence; and improve public health by lowering total co-pollutants across the state.	These objectives will be achieved via linkage with RGGI.
49. NRDC	The program should be assessed by the consumer benefit delivered from such a plan: all emissions allowances have a dollar value as "discovered" in the marketplace. In a freely-transferrable market, a dollar value for emissions allowances will develop without government intervention. After allowance allocation, buyers and sellers, often with the help of emissions brokers, set a market price. The market then leaves plant owners with 2 options: (1) maintain emissions levels and purchase allowances or (2) reduce emissions levels and sell allowances to other plant operators for whom it is more cost effective to purchase allowances. In this market-based approach, the emissions reductions occur where cost-effective, and the allowances flow to the plants that will use them in a way that minimizes overall costs, while ensuring flexibility and reliability. Regardless of how the allowance was procured, the dollar value of each held allowance must be included by generators in their wholesale market bids to PJM. The	Virginia's participation in RGGI is posited on a revenue-neutral consignment auction. Also note that Virginia is a "regulated" state and as such relies on the Virginia SCC to safeguard Virginia's electricity consumers.

	value of allowances utilized by carbon emitters are then recouped by the generator when the electricity is sold. If DEQ does not design a carbon regulation and allocation method that ultimately delivers that allowance value back to the consumer, such a giveaway would serve as a publicly-subsidized windfall to generators, while consumers are saddled with higher costs. The program should be judged by the standard of whether or not the inherent full market value of allowances can be recovered from the generator that receives the electricity payment, and then reinvested in rebates, renewable energy, energy efficiency, and other investments that minimize compliance costs and maximize benefits to Virginia families. Conversely, the program should not allow the market value of allowances to accrue directly to generators as windfall profit, with no benefit to consumers to offset the higher wholesale electricity cost.	
50. NRDC	DEQ must decide in advance how it will initially allocate allowances. DEQ should ensure the inherent market value of the allowances accrues to Virginians and the Virginia economy, rather than result in a windfall to generators by distributing them to polluters for free; such an outcome would equate to customers in Virginia transferring millions of dollars from their pockets to the balance sheets of generators. For example, according to the projected carbon allowance price of $3.90 in 2030, the value of Virginia's allocated 23.5 million allowances in 2030 would be over $90 million in that year. Generators will likely claim that they need allowances to fund their investments in equipment to reduce emissions, but because they are reimbursed for the allowance cost in the wholesale market, free allocation would result in "double	Conditional allowances in the Virginia program will be allocated to fossil fuel-fired units as they are the regulated entity in the program. Consumer protections and energy efficiency efforts are under the purview of the SCC and DMME.

	payment," at the expense of the consumer.	
51. NRDC	DEQ could allocate allowance value on a pro rata basis to consumers via a consignment auction on behalf of electric distribution companies. Allowances would be distributed based on each company's percentage of total state load. In this approach, the dollar value of the allowances (as determined in the consignment auction) can return to electric billpayers via their distribution company, under the oversight of state regulators and other oversight bodies. The allowances are allocated on a pro rata basis to consumers via the distribution companies, based on each company's percentage of total state load. How those allowances are utilized would be overseen by the SCC, in consultation with DEQ, utilities, efficiency providers, DMME, consumer advocates, and other stakeholders. Given the range of generator types and ownership structures, allowances should be sold in a transparent and open manner, with regulated monopoly generators competing in an open, transparent market with merchants. Sale and transfer of money from any one regulated monopoly affiliate to another should be supervised by the SCC. The SCC would ensure that revenues from any allowances sold accrue to utility bill payers' benefit. The SCC likely has sufficient authority to decide directly how the allowance revenues are utilized, to ensure maximum ratepayer benefit. Such benefits could take the form of cost-effective energy efficiency investment to lower customer bills (as well as further reduce carbon emissions from that distribution company); direct bill crediting; or investment in the most cost-effective zero-emissions resources to further reduce emissions and thus	The SCC, as the commenter correctly asserts, monitors generation and related consumer issues.

	free up additional allowances. In RGGI, there have been significant benefits delivered to consumers as a result of investments of allowance proceeds. In the event Dominion or APCo must purchase allowances to meet the permitting obligations of one of their generators, SCC oversight can assure that such a decision to comply was the least-cost means available to the utility for meeting its generator's emissions obligations. Municipal boards and co-op boards would serve in a similar capacity, ensuring that any revenues or costs associated with allowances serve the best interests of their bill payers. Merchant generators would be assured access to allowances through sale of allowances by the distributions companies and the subsequent open allowance market. This approach is preferred for its efficiency. Administratively, DEQ already has experience with a similar NO_X allowance allocation and auction. Oversight bodies (the SCC and muni and co-op boards) are in place to ensure that allowance costs and related generation and compliance decisions are prudently incurred, and that any revenues are re-invested in such a way that serves the bill payers' best interests.	
52. NRDC	Another approach to maximize economic value of allowances is to allocate them to all generators of electricity or electric savings, including fossil generators, non-emitting generators, and verifiable energy efficiency providers. The marketplace would determine the allowance prices, with additional revenue through allowance trading and the energy markets flowing from higher carbon emitters to zero-emitting resources. In that way, the value of the allowances flows indirectly to the consumer, through the lower energy costs of additional	In order to meet the requirements of ED 11 and to link with RGGI, only fossil fuel generators are subject to the rule. Consumer protection is the purview of the SCC, not DEQ. Note that no new source set-aside is being proposed. This will ensure a level playing field for renewable energy projects when they enter the market.

	zero-emitting resources and additional energy efficiency. However, electricity customers would not directly receive the benefit of allowance-related revenue, nor receive the benefit of oversight of the disposition of such revenues.	
53. NRDC	Allocation of allowances directly to fossil emitters would allocate allowances directly to fossil generators, based on each generator's share of total emissions. This is the least economical method, because neither the state nor the bill payers recover any value; that value remains a windfall to generators and utilities. While the value of allowances would be included in PJM wholesale bids, no mechanism exists to ensure that recouped value is returned to the final electricity customer. This windfall would create transfer payments from customers to generators. If DEQ pursues this approach, it should be acknowledged that the state has made a direct decision to transfer the potential $90 million value of allowances in 2030 from the businesses and families of the state directly to the pockets of the power plant owners.	As discussed elsewhere, Virginia's consignment auction will be revenue neutral and no windfalls of any kind are expected. It is the role of the SCC role is to ensure that electricity customers are protected.
54. Southern Environmental Law Center (SELC) and the Virginia League of Conservation Voters	The regulation should cover any electric power facility that emits CO_2, regardless of fuel type, size, or date of construction and operation. EO 11 clearly states that the proposed regulation should "abate, control, or limit CO_2 emissions from electric power facilities." The only way to meaningfully achieve reductions in total statewide carbon emissions is to cover all sources of carbon emission. If the regulation covers only currently-operating power plants, it will create a market perversion that incentivizes shifting generation to new power plants that the regulation does not cover. Not only will this shift undercut the fundamental purpose of reducing total emissions, it will also impose	As required by ED 11 and RGGI, fossil fuel-fired electric generation is the only type of generation covered by the rule; however, also note that there is no new source set-aside. By linking to RGGI, all fossil fuel-fired carbon-emitting electric generating units above 25 MW will be required to comply with the cap. Fossil fuel-fired units that co-fire biomass must account for their CO_2 emissions and obtain allowances accordingly.

	wholly unnecessary construction costs on Virginia electric customers as power generators invest billions of dollars of capital in otherwise redundant power plants. Likewise, the regulation should be blind to fuel type. To ensure complete reductions, the regulation should apply with equal force to any power plant that emits carbon. Finally, the regulation's scope should apply more broadly than the federal CPP. As can be seen from Dominion's 2017 IRP, it now proposes to build between 1,374 MW and 2,290 MW of new gas-powered combustion turbines (CTs). CTs are far less efficient than state-of-the art natural gas combined cycle plants, but because the now-defunct CPP did not apply to CTs, there existed a perverse incentive to build less-efficient power plants solely because they fell outside the CPP's orbit. DEQ should not allow this regulation to create similar market distortions and should cover all substantial carbon-emitting power plants. For instance, DEQ could follow RGGI and require all carbon-emitting power plants above 25 MWs to comply with the cap.	
55. Sierra Club	The rule should apply to both new and existing sources and implement a declining mass-based cap that reduces CO_2 emissions from covered electric generation.	In order to link to RGGI, the proposal meets these criteria.
56. Sierra Club	The cap should decline steadily from the beginning of the program, and early CO_2 reductions should be incentivized. The aggregate cap should reduce emissions by the greater of (a) 33-40% from 2015 levels by 2030 or (b) the level required to join a trading regime. The rule should require continued steady reductions through 2050 (to 80-95% of 2015 levels) subject to the possibility that the rate of reduction may be adjusted based upon experience new scientific	The RGGI states have proposed, as of this writing, a regional cap trajectory that will provide an additional 30% cap reduction by the year 2030, relative to 2020 levels. The proposed regional program changes include the addition of an Emissions Containment Reserve (ECR) wherein states can withhold allowances from auction if emission reduction costs are lower than projected. The proposed ECR is an innovative way to adaptively respond to supply and demand in the market. When this program is finalized, Virginia will align the regulation to meet any new requirements of RGGI states.

	evidence. An annual reduction of the cap for new and existing generation by approximately 1MM tons from a starting point based on 2015 emissions from covered sources illustrates a reasonable reduction path for interim (2030) and long-term (2050) purposes. Long-term investments (40-60 years for much generation) need long-term guidance.	
57. Sierra Club	The basic elements of the proposed rule should be compatible with the operations and standards of RGGI. This would include the definitions of allowances (one short ton of CO_2), retirements matching emissions, adoption of key elements of RGGI's tracking and accounting system, etc. This would enable Virginia generators to trade within the state from the start (whether or not we join or link to RGGI), and within RGGI if a linkage or membership agreement is reached. Creating an incompatible program would be costly and not trading ready.	The commenter is correct that linking to RGGI is desirable, and that has been selected as the optimal path forward.
58. Sierra Club	Allowances can be allocated in several possible ways. We recommend that allowances be auctioned to all generators, with revenues being allocated among utilities or others in a manner that helps to achieve the rule's objectives. Some allowances should be held in reserve for possible distribution in order to stabilize markets or address other emergencies.	Conditional allowances will be allocated to the covered units via an update output approach. As discussed elsewhere, RGGI has built various protections into the program, such as the ECR, to ensure a stable market. Conditional allowances will be distributed to CO_2 budget units and DMME for consignment an auction, after which the conditional allowance becomes an allowance that can be used to demonstrate compliance.
59. Sierra Club	Program progress must be closely monitored and reported. This includes, for example, for results (prices, transfers, banks, and emissions), procedures and unintended consequences (e.g., pollution hot spots, market manipulation, emergencies, etc.). There should be periodic evaluations and, if needed, amendments should be made to reflect market experience and to improve outcomes.	DEQ agrees that program progress must be closely monitored and reported. RGGI's review process is robust and transparent, which is one of the reasons linking to RGGI is desirable.
60. Sierra Club	Efforts should be made to join or	Linking to RGGI has been determined to be

	link to a mass-based trading market, such as RGGI. A larger market will lower the costs and provide greater flexibility for market participants.There is no merit to the suggestion that RGGI is problematic because its members retail rates are higher than Virginia's. If anything, their higher energy prices will put downward pressure on CO_2 prices that markets will tolerate and that would benefit a lower cost state such as Virginia. Nor would there be loss of control as RGGI is a voluntary, collaborative organization.	the best path forward for effectively controlling carbon emissions.
61. Sierra Club	The final rule should be completed in 2018 and implemented in 2019.	The regulation is being developed as expeditiously as possible under the requirements of the Administrative Process Act.
62. Sierra Club	Issues pertaining to leakage – growth in GHG emissions incentivized but not covered by the rule – should be addressed in separate proceedings.	As discussed elsewhere, there are several safeguards built into the proposal and consistent with RGGI that will limit leakage.
63. Sierra Club (1,269 sponsored emails)	I am glad to see Virginia taking steps to cut carbon pollution to combat climate change, despite Trump's continued attacks on environmental protections. I am eager to see the state produce a strong, equitable, and scientifically sound plan to reduce greenhouse gas emissions. I request that DEQ use its authority to: Create a rule based on the strongest available science that significantly reduces carbon pollution from Virginia's power plants; ensure that Virginia residents benefit from any profits from carbon standards, especially front-line communities; address the disproportionate environmental burdens experienced by vulnerable communities; grow the clean energy economy by maximizing investments in zero-carbon wind, solar, and energy efficiency; and provide accessible public hearing opportunities in the evenings in multiple parts of the state to ensure all Virginians can fully participate in the rule-making process.	Support for the regulatory action is appreciated.
64. 350 Central	Support limiting carbon pollution of	Virginia is linking to RGGI, which is a well-

Virginia	power plants via a cap and trade program. The rule should use the best science available, and set up a capping system that will reduce carbon emissions over time as stringently as RGGI does, after a short lead-in period, in order to be effective. A rule that mandates that allowances received must be traded rather than directly used would be preferable. Apportionment of allowances should be based on amount of power supplied to ratepayers the previous year, not on emissions, and non-fossil fuel plants should receive allowances equally with fossil fuel plants. If possible, the rule should mandate that the net financial benefits of trading allowances be returned to the ratepayers.	established, effective cap-and-trade program. As discussed elsewhere, conditional allowances will undergo a consignment auction in order to become an allowance that can be used to demonstrate compliance.
65. University of Virginia Environmental and Regulatory Law Clinic	The Clinic presented to the Governor's EO 57 Work Group on "Opportunities to Address Carbon Pollution Under Existing State Law." The Clinic followed its presentation by submitting written comments to the Work Group. State law establishes a process for the adoption of regulations that are more stringent than applicable federal requirements. See Va. Code § 10.1-1308 A. Correspondingly, the federal Clean Air Act contains a states' rights savings clause, which allows states to promulgate their own, more stringent, air pollution regulations. See 42 USC 7416. The Act's citizen suit provision, 42 USC 7604(e), confirms that federal law does not restrict any right to enforce state standards. The Clinic's comments, however, also caution that establishing a multi-state trading program might present challenges, especially if the program were directly regulating out-of-state sources in a manner that conflicted with the law of the source state. In North Carolina, the Fourth Circuit found that regulated sources covered by a state-specific program must be within the state's	Virginia will not be regulating out-of-state electric generating units.

	boundaries: "only source state law … could impose more stringent emission rates than those required by federal law on plants located in those … jurisdictions." The court relied, in part, on International Paper Company v. Ouellette, which held that the Clean Water Act "precludes a court from applying the law of an affected State against an out-of-state source. … If a New York source were liable for violations of Vermont law, that law could effectively override both the permit requirements and the policy choices made by the source State." The state would need to consider the impact of this case law as it evaluates options for developing a trading-ready program that accounts for CO_2e allowances in a multi-state trading program. Dominion's Mount Storm Power Station in West Virginia, for example, might need to be excluded from such a program.	
66. Virginia Conservation Network (551 sponsored emails)	As Virginians, we appreciate the initiative taken by Governor McAuliffe/support Governor McAuliffe's leadership in the fight against climate change, but we know our work does not stop here. We request that DEQ use its authority to: Create a rule--based on the strongest available science--that significantly reduces carbon pollution from Virginia's power plants; ensure that Virginians--not utilities--benefit from any profits from carbon regulations; address the disproportionate environmental effects experienced by our most vulnerable communities; and reduce carbon pollution by incentivizing investments in zero-carbon solar, wind and energy efficiency.	Support for the regulatory action is appreciated.
67. Virginia Conservation Network (349 sponsored emails)	I am glad to see Virginia taking steps to cut carbon pollution in an effort to comply with the Paris Climate Accord. I am very excited for the state to create a plan that provides an equitable and just cap that will significantly reduce	Support for the regulatory action is appreciated.

	greenhouse gas emissions. To ensure that the policy best benefit Virginians, DEQ should: create a rule based on the strongest available science that significantly reduces carbon pollution from Virginia's new and existing power plants; ensure that Virginians--not utilities--benefit from any profits from carbon regulations especially our frontline communities; address the disproportionate environmental effects experienced by our most vulnerable communities; grow the economy and reduce carbon pollution by maximizing investments in zero-carbon wind, solar, and energy efficiency; and provide a transparent and accessible public process where all concerned Virginians can fully participate in the rulemaking process.	
68. Virginia League of Conservation Voters (214 sponsored emails)	I'm writing today to voice my support of a regulation in Virginia that cuts carbon pollution from power plants and allows us to trade carbon allowances with other states. With no help coming from the federal level in addressing climate change, it's up to states like Virginia to act. By cutting carbon emissions in Virginia, we have the opportunity to protect public health and safety while also creating jobs in the carbon-neutral renewable energy and energy efficiency sectors. And because we're joining up with a coalition of other states with carbon caps, action we take here in Virginia is greater than the sum of its parts. Carbon trading also creates the opportunity to bring revenue back to the state to aid in clean energy deployment and resiliency, money we shouldn't leave on the table or gift to our utilities. I urge you to proceed with a strong regulation that shows Virginia is a leader in addressing climate change and takes its responsibility seriously.	Support for the regulatory action is appreciated.
69. Virginia Poverty Law Center (VPLC)	The VPLC is glad there will be more opportunities for jobs and growth moving forward. We hope	The consignment auction under which allocations will be traded is designed to be revenue neutral. In other words, utilities will

	that low-income Virginians will benefit from the jobs and opportunities, not be left behind in the new energy economy. This is an opportunity to help those struggling to find well-paying jobs to secure a brighter future. We will not comment on how to allocate carbon credits or the levels or limits on those allocations. Our comments focus on what happens if and when there are excess credits when Virginia participates in a regional CO_2 trading system. We are not experts in energy, but from our analysis, there may be a day when Virginia utility monopolies have an excess of credits which when sold, would generate revenue. If funds are generated from the sale of such credits, any regulation should contemplate how those funds are used. What happens to the funds generated is of keen interest to us. Regulations should ensure such proceeds should not be ceded to the utility monopolies for distribution to their shareholders, rather, any proceeds should be returned to the electricity consumers, particularly low-income rate-payers. Whether by programs that help with energy efficiency, or direct rebates on bills, the regulations should return any excess profits go to the consumer. As energy costs are expected to increase over time, the VPLC has been working to ensure more programs are in place to help weatherize and make homes of low-income families more energy efficient to help stabilize utility costs. We believe that either programs that help with energy efficiency, or direct rebates to consumers, should be the focus of any funds generated by trading.	be allocated a share of conditional allowances that they must sell into the auction, and auction revenue is returned to the consignee. The consignment auction helps set the price of an allowance, not realize profits. While DEQ agrees that protecting electricity customers is important, that role properly belongs to the SCC.
70. Virginia Clinicians for Climate Action	A warming world poses significant risks to human health: extreme weather events; heat illness; air pollution; allergies; food and water contamination and infectious diseases. These effects are felt disproportionately in vulnerable	The commenter's concerns are well taken. EO 57 and ED 11 are a direct result of concern around these issues, which is why DEQ has begun the process of preparing a regulation that will control carbon pollution in Virginia via linkage to RGGI. Support for the regulatory action is appreciated.

	populations, including children, the elderly and the disadvantaged. Federal Agencies have issued reports and programs that address the health threats posed to humans by a changing climate. Leading national medical organizations including the American College of Physicians, American Academy of Pediatrics, American Public Health Association, and others have published statements and resolutions recognizing the threat that the changing climate poses to human health and promoting physician engagement. Health systems and hospitals in Virginia are vulnerable to extreme weather events and storm surges, which can significantly compromise patient safety and access to care. Regions of coastal Virginia, some of which are sites of major military installations, are at high risk to sea level rise and storm surge associated with climate change. Climate change is likely affecting plant and animal species in Virginia. Reported cases of several vector-borne diseases increased by 2-14 fold between 2006-2015 in Virginia. Changes in the natural world ultimately affect the health, prosperity and quality of life. Summer heat is becoming more oppressive in Virginia and heat-related injury is a cause of illness and death in Virginians, with young athletes, outdoor workers and the elderly at particularly elevated risk. For these reasons, Virginia Clinicians for Climate Action, a coalition of over 100 clinicians across the state, supports the Governor's plan as protective of public health.	
71. Jon Ward	I encourage Virginia to implement a CO_2 cap-and-trade system that includes an Emissions Containment	The RGGI states have proposed, as of this writing, a regional cap trajectory that will provide an additional 30% cap reduction by

	Reserve, such as that being discussed among the RGGI states, to reduce the allotment of CO_2 allowances if their price falls to a specified level, incentivizing the market to reduce emissions below the cap if market conditions allow. In working with other states in setting the cap's aggressiveness, recognizes the particular vulnerability of Virginia's tourist, fishing, military, and agricultural industries to worsening climate change and sea-level rise. Follow and regularly adapt to guidance from global climate-science experts as to the level of emissions reduction needed to restrict GHG concentrations to internationally agreed upon targets. Consider well-to-plant methane leakage in the calculation of GHG emissions attributable to power plants. Direct proceeds of CO_2 allowance sales to energy-efficiency projects and fossil-industry-worker retraining, and not to electric utilities. Utilities earn a return on equity to cover risks such as regulatory changes, and Virginia utilities have continued to build gas and coal plants in the face of climate consensus and clear likelihood of future federal and state regulations.	the year 2030, relative to 2020 levels. The proposed regional program changes include the addition of an Emissions Containment Reserve (ECR) wherein states can withhold allowances from auction if emission reduction costs are lower than projected. The proposed ECR is an innovative way to adaptively respond to supply and demand in the market. When this program is finalized, Virginia will align the regulation to meet any new requirements of RGGI states. This proposal is a CO_2 rule, not a greenhouse gas rule, and as such methane will not be addressed in this rulemaking. Methane may be addressed in other venues in the future as appropriate. Energy efficiency projects are managed and evaluated by DMME. Utilities are governed by the SCC.

High Priority Violations (HPVs) For The Fourth Quarter 2017

NOV's Issued from July through September

BRRO	**Goodyear Tire and Rubber Company - Danville** Danville, Virginia Registration No. 30106	**Discovery Date:** 8/25/2017 **Alleged Violation**: Facility failed to document differential pressure readings on grinder.	**NOV:** Issued 8/29/2017
SWRO	**Dominion – Virginia City Hybrid Energy Center** St. Paul, Virginia Registration No. 11526	**Discovery Date:** 8/10/2017 **Alleged Violation**: Facility failed to analyze biomass fuel for all pollutants as required by permit.	**NOV:** Issued 9/25/2017

Consent Orders issued from July through September

BRRO	**Dynax America Corp USA** Roanoke, Virginia Registration No. 21279	**Discovery Date:** 5/9/2017 **Alleged Violation**: Constructed new process line prior to DEQ issuance of a permit.	**NOV:** Issued 6/1/2017 Consent Order effective 7/6/2017 including $3,300.00 civil charge.
BRRO	**Radford Army Ammunitions Plant** Radford, Virginia Registration No. 20656	**Discovery Date:** 2/10/2017 **Alleged Violation:** Failed to meet MACT DDDDD deadline; Failed stack test for PM, HCL and CO; Opacity exceedances for First and Second Quarters 2017	**NOV:** Issued 2/15/2017, 4/21/2017, 5/11/2017, 6/22/2017 Consent Order effective 8/3/2017 including $263,335.00 civil charge.
NRO	**Dominion – Leesburg Compressor Station** Leesburg, Virginia Registration No. 71978	**Discovery Date**: 12/9/2016 **Alleged Violation**: Failed stack test for Formaldehyde.	**NOV:** Issued 2/2/2017 Consent Order effective 7/28/2017 including $44,573.00 civil charge.
NRO	**Kinder Morgan Southeast Terminals – Newington 2** Lorton, Virginia Registration No. 70234	**Discovery Date:** 12/7/2016 **Alleged Violation:** Excess VOC emissions due to failure to reset legs on tank after maintenance.	**NOV:** Issued 6/21/2017 Consent Order effective 9/29/2017 including a $38,395.50 civil charge.
NRO	**Trae-Fuels LTD** Bumpass, Virginia Registration No. 41057	**Discovery Date:** 6/9/2015 **Alleged Violations:** PM emissions from transfer points on conveyor system; ongoing violations of facility's fugitive dust plan; exceedance of visible emissions limit from Earth Care Dryer exhaust stack; record-keeping	**NOV:** Issued 6/19/2015, 1/28/2016 Consent Order effective 8/14/2017 including $40,000.00 civil charge and extensive corrective action plan.
SWRO	**INGENCO Bristol Plant** Bristol, Virginia Registration No. 11733	**Discovery Date:** 3/29/2017 **Alleged Violation:** Reported exceedance of SO2 limit in Annual Title V Report.	**NOV:** Issued 1/24/2017, 4/14/2017 Consent Order effective 9/11/2017 including $19,702.00 civil charge and corrective action plan.
VRO	**HP Hood** Winchester, Virginia	**Discovery Date:** 2/23/2017 **Alleged Violation:**	**NOV:** Issued 3/29/2017 Consent Order effective 7/11/2017

	Registration No. 81359	Construct and operate without a permit.	including $33,124 civil charge

Consent Orders in Development – Previously Reported NOV's

BRRO	**Ingevity Virginia Corporation** Covington, Virginia Registration No. 20329	**Discovery Date:** 7/8/2016 **Alleged Violations:** Failed to meet required control efficiency for on valveless regenitive thermal oxidizers during stack test.	**NOV:** Issued 10/25/2016
BRRO	**Volvo Group North America LLC – NRV Plant** Dublin, Virginia Registration No. 20765	**Discovery Date:** 2/23/2017 **Alleged Violation:** Failed to meet 100% capture requirement per PSD permit, failed to meet hourly CO emission limit in PSD permit.	**NOV:** Issued 4/19/2017
BRRO	**Wolverine Advanced Materials - Blacksburg** Blacksburg, Virginia Registration No. 20763	**Discovery Date:** 10/6/2016 **Alleged Violations:** Failure to provide temperature records for thermal oxidizers on Lines 2 and 4 for 174 days out of 182 day reporting period.	**NOV:** Issued 10/26/2016
BRRO	**Wolverine Advanced Materials – Cedar Run** Blacksburg, Virginia Registration No. 21240	**Discovery Date:** 10/6/2016 **Alleged Violations:** Failure to provide temperature records for 106 days for Line 5 catalytic oxidizer and for 151 days of the Line 6 catalytic oxidizer out of 182 day reporting period.	**NOV:** Issued 10/26/2016
PRO	**Chaparral Virginia Incorporated** Petersburg, Virginia Registration No. 51264	**Discovery Date:** 4/25/2016 **Alleged Violation:** Failed to provide operational, compliance (including emissions) and maintenance records, substantially interfering with DEQ's ability to determine compliance with TV permit.	**NOV:** Issued 6/29/2016
PRO	**Kinder Morgan Southeast Terminals – Richmond Terminal** Richmond, Virginia Reg. No. - 50258	**Discovery Date**: 12/7/2016 **Alleged violation**: Excess VOC emissions due to failure to reset legs on tank after maintenance.	**NOV**: Issued 4/21/2017
VRO	**O-N- Minerals (Chemstone) Co. – Winchester Lime Plant**	**Discovery Date:** 9/15/2016 **Alleged Violation:** Failed stack test for PM10 and	**NOV:** Issued 2/17/2017

	Clear Brook, Virginia Registration No. 80504	PM2.5.	
VRO	**O-N Minerals (Chemstone) Company – Winchester Lime Plant** Clear Brook, Virginia Registration No. 80504	**Discovery Date:** 3/30/2017 **Alleged Violation:** Exceeded annual limestone throughput.	**NOV:** Issued 5/31/2017