TECHNICAL SUPPORT DOCUMENT

FOR

AMENDMENTS TO COMAR 26.09

MD CO_2 Budget Trading Program

OCTOBER 25, 2010

PREPARED BY:

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I. INTRODUCTION

1. Primary Purpose of the Amendments

The purpose of this action is to amend regulations under COMAR 26.09, Maryland CO_2 Budget Trading Program, with regard to the following:

1. Definitions;
2. Eligibility for Participation in the Voluntary Renewable Set-aside Account (VERSA);
3. Submission Date for the VERSA;
4. Voluntary Renewable CO_2 Emissions Factor;
5. Additional Evaluation in the Two Year Review for the VERSA; and
6. Removal of Power Purchase Contract Requirement in the VERSA.

2. Background

A. The Healthy Air Act

The Healthy Air Act was signed into law on April 6, 2006 and required Maryland to join the Regional Greenhouse Gas Initiative (RGGI) by July 2007. Maryland joined RGGI by signing RGGI's multi-state Memorandum of Understanding (MOU) on April 20, 2007. The Department subsequently adopted Code of Maryland Regulations (COMAR) 26.09.01 to .03, implementing the "Maryland CO_2 Budget Trading Program,", which became effective on July 17, 2008. COMAR 26.09.04 ("Auctions") became effective as a permanent regulation on August 25, 2008.

B.The Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative is comprised of ten states in the Northeast and Mid-atlantic regions who provide market-based carbon dioxide (CO_2) cap and trade programs designed to reduce CO_2, a greenhouse gas, emissions from fossil fuel-fired electricity generators with a nameplate capacity of 25 megawatts or greater. RGGI currently is comprised of Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Maryland comprise the RGGI region. The RGGI states each require electricity generators to have acquired, through regional auction or secondary market transactions, one CO_2 allowance for every ton of CO_2 emitted over a three-year compliance period. Auction proceeds fund state energy efficiency programs that result in lower CO_2 emissions through reduced electricity demand. The RGGI states conducted the first quarterly regional auction in September 2008, and the regional compliance program began in January 2009.

The electricity generation sector is a major contributor to climate change because a large amount of CO_2 is released during the combustion of fossil fuels. With this in mind, RGGI set a cap of 188,076,976 tons of CO_2 emissions for the region, based on averaged emissions from eligible electricity generators over 2000 to 2002. Each RGGI state is annually apportioned CO_2 allowances from the regional cap equivalent to the number of tons of CO_2 emissions from eligible sources in that state. Maryland will receive 37,503,983 CO_2 allowances for each year

from 2009 through 2014. Between 2015 and 2018, Maryland will annually receive 2 ½ percent fewer CO2 allowances as the RGGI cap reduces by 10% during that time.

C. The Voluntary Renewable Energy Set-Aside Account

a. Background

Imposing a cap on carbon dioxide creates an incentive to generate electricity in ways that do not emit carbon dioxide (e.g., renewable energy). However, in a carbon-capped environment, electricity generation from additional renewable energy facilities does not inherently reduce the emissions of carbon dioxide associated with fossil-fuel fired electricity generation. This is because the production of electricity by non-carbon emitting sources does not lower the carbon cap or the number of allowances auctioned. Therefore, conventional fossil-fuel electricity generators can continue to emit carbon dioxide as long as there are adequate CO_2 allowances available.

The reduction of CO_2 emissions through renewable energy programs is a primary goal of the RGGI program. In order to encourage the voluntarily purchase of electricity that has a demonstrated greenhouse gas benefit and decrease the number of CO_2 allowances to be auctioned, the Maryland Department of the Environment (the Department) annually allocates CO_2 allowances from the Maryland CO_2 Budget Trading Program to a Voluntary Renewable Set-Aside Account (VERSA). The Maryland CO_2 Budget Trading Program regulations establish general provisions for the VERSA. Each of the RGGI states sets aside approximately 1% of their annual apportionment, which equates to approximately 350,000 CO_2 allowances in Maryland.

b. Renewable Energy Credits

A person (as defined in COMAR 26.9.01.01) in Maryland may elect to voluntarily provide payment for renewable energy or may generate on-site electricity from renewable energy to cover all or a proportion of his/her electricity needs. The person may provide payment for renewable electricity to an electricity supplier, a retail marketer, or a renewable energy facility that, in return, purchases an equivalent number of megawatt-hours of renewable energy credits (REC). The person may also create RECs for every megawatt-hour of electricity generated from renewable energy if the person has been permitted to be a renewable energy facility.

A REC is a credit equal to the generation attributes of one megawatt-hour of electricity derived from a Tier 1 or a Tier 2 renewable source, as defined by the Public Utility Companies Article, Annotated Code of Maryland (PUC Article). Tier 1 resources include solar, wind, qualifying biomass, methane from a landfill or a waste water treatment plant, geothermal, ocean, fuel cells powered by methane or biomass, and small hydroelectric plants. Tier 2 sources include hydroelectric power other than pump-storage generation and waste-to-energy facilities. A regional transmission organization called Pennsylvania Jersey Maryland Interconnection, LLC (PJM) coordinates the movement of wholesale electricity in the PJM region (all or parts of 13 states and the District of Columbia). PJM created a General Attribute Tracking System (GATS) in response to states regulatory requirements, such as in Maryland; this database collects and

tracks information regarding the attributes of electricity generation supplied and sold within the regional wholesale electricity market. Tracked attributes include characteristics such as fuel mix, emissions profile, and state renewable energy program qualification.

The RECs acquired for participation in the VERSA must meet the same criteria as those RECs eligible for Maryland's Renewable Portfolio Standard (RPS), a compliance program implemented by the Maryland Public Service Commission (PSC). However, RECs acquired for the purpose of complying with the RPS are not eligible for the VERSA.

c. Retirement of RECs

The person, electricity supplier, retail marketer, or renewable energy facility voluntarily accumulates RECs (by purchase or creation) equal to at least 1 ton of CO_2. The person, electricity supplier, retail marketer or renewable energy facility then retires the RECs through a one-way transfer to a specific sub-account in GATS and, in exchange, the Department will retire the equivalent tonnage of CO_2 as demonstrated by CO_2 allowances.

For every 2000 pounds of avoided CO_2 represented by the retirement of voluntarily purchased RECs, the Department will permanently retire one CO_2 allowance from the VERSA to the CO_2 Allowance Retirement Account. CO_2 allowances allocated to the VERSA and not retired to the CO_2 Allowance Retirement Account by December 31 of each year will be auctioned during the next calendar year. The Department is required to review the number of CO_2 allowances allocated to the VERSA every two years.

d. Reporting

The Department is directed to administer the VERSA through the Maryland CO_2 Budget Trading Program, Code of Maryland Regulations (COMAR) 26.09.01 to .04. A person in Maryland, electricity supplier, retail marketer, or renewable energy facility submits documentation to the Department depicting the retirement of voluntary RECs to the Department by a specific date each year. The applicant must submit specific documentation generated by GATS confirming the one-way transfer of RECs to a Reserve Subaccount. The documentation from GATS verifies to the Department that the RECs cannot be reused. Documentation must also include a letter of intent for participation in the VERSA and provide information from GATS on fuel type and usage, vintage years, and location of REC generation. This information is necessary to confirm the eligibility of the source of REC generation and to ensure that there is no double counting of RECs used for the VERSA.

In response to stakeholder input, the Department has removed the requirement for a VERSA participant to submit a copy of the purchase contract that shows the date when the renewable energy purchase began. The original purpose of requiring an electricity purchase contract was to encourage additional renewable generation. However, the purchase of electricity and RECs are separate transactions; furthermore, the Department acknowledges the important role of REC retail marketers (also known as REC aggregators) in motivating additional renewable energy generation in the PJM region.

II. OVERVIEW OF THE AMENDMENTS

This proposed action includes the following requirements:

This proposed action includes the following requirements:

1. Definitions

In Chapter 01, the Department modified the definition of "Electricity supplier" to have the same meaning that term is given in Public Utilities Company Article, §1-101(j), Annotated Code of Maryland; "Renewable energy" to have the same meaning that term is given in Public Utilities Company Article, §7-701 (l) and (m), Annotated Code of Maryland; "Renewable energy credit (REC)" to have the same meaning that term is given in Public Utilities Company Article, §7-701(i), Annotated Code of Maryland; and "Renewable energy portfolio standard (RPS)" to have the same meaning that term is given in Public Utilities Company Article, §7-701(j), Annotated Code of Maryland. The amendments to the above definitions, in response to revised language in the PUC Article that becomes effective January 1, 2011, ensure that the definitions in the MD CO_2 Budget Trading Program remain consistent with the PUC Article's definitions in the future. Instead of revising these definitions each time amendments occur in the PUC Article, the Department is replacing the language of its definitions with references to the PUC Article.

The Department added definitions for "Renewable energy facility" and "Renewable on-site generator" to Chapter 01. The Department defined "Renewable energy facility" to have the same meaning that term is given in COMAR 20.61.01.03B(11). The Department defined "Renewable on-site generator" to have the same meaning that term is given in Public Utilities Company Article, §7-101(k), Annotated Code of Maryland. Addition of these definitions was a result of the Department's 2010 VERSA stakeholder process.

The Department also added definitions for "CO_2 emissions factor", "Voluntary renewable CO_2 emissions factor", and "Retail marketer" to Chapter 01. The definitions for "CO_2 emissions factor" and "Voluntary renewable CO_2 emissions factor" were included to specifically identify the process that converts RECs to tons of CO_2. The definition of "Retail marketer" was included as a result of the 2010 VERSA stakeholder process, when it was identified that REC aggregators may not be included in PSC's definition of "Electricity supplier".

The Department modified the definition of "Global warming potential (GWP)" in Chapter 01 to correct a typographical error. "Radioactive" was changed to "radiative."

2. Eligibility for Participation

The original language in COMAR 26.09.02.08(A) limited participation for the VERSA to persons purchasing renewable electricity from an electricity supplier. The Department now has a better understanding at this point of electricity markets and the voluntary REC market. The Department understands that the purchase of renewable electricity distributed to the PJM grid and the purchase of RECs are predominantly separate financial transactions. It also understands that the purchase of RECs does motivate renewable electricity generation. As a result, the

Department has now modified the eligibility language for the VERSA to reflect three potential scenarios for persons located in Maryland to participate in the VERSA. First, a person voluntarily pays an electricity supplier or retail marketer to purchase RECs. Second, a person voluntarily pays a renewable energy facility for its RECs. Third, a person is a renewable energy facility that can generate RECs.

In addition, "a person or their authorized representative" was replaced throughout this regulation with "a person, electricity supplier, retail marketer or renewable energy facility" since any of these could be located in Maryland and could retire voluntary RECs for participation in the VERSA.

3. Submission Date

The Department had established a submittal date of April 1 each year for all documentation for participation in the VERSA for the current calendar year; this date was a result of a 2008 stakeholder process. However, the April 1 submission date is not convenient since the voluntary REC market allows RECs from the first quarter of the current year (up to March 31) to be eligible for reporting with the past calendar year. Amending the date to July 1 provides adequate time for potential VERSA participants to prepare their submissions.

4. VERSA CO_2 Emissions Factor for the Retirement of RECs

The VERSA currently outlines calculation methodology for a CO_2 emissions factor using data from the Environmental Protection Agency's Emissions and Generation Resource Integrated Database (eGRID). eGRID is broken out into regions, with Maryland located in multiple regions. eGRID data captures the generation resource mix from nearly 2,000 electricity generating companies and nearly 5,000 power plants across the United States and, by using this data, provides emissions profiles, including CO_2, for each region. The most recent eGRID data, published in 2007, incorporates data from calendar year 2005. The original VERSA language specified that the number of CO_2 allowances to be retired by the Department shall equal the number of megawatt hours of renewable energy represented by the RECs submitted to the Department, multiplied by the CO_2 output emissions rate in this eGRID region. The CO_2 output emissions rate is calculated annually by the North American Electric Reliability Council.

Since there has been a significant change to the profile of electricity generation and fuel mix in the Mid-Atlantic region since 2005, the Department favorably responded to stakeholder input to revisit the decision to use eGRID for calculating CO_2 output emissions. The Department has explored calculating a CO_2 emissions factor using PJM Environmental Information Services (EIS) emission rates and is satisfied with the change. EIS, through the GATS database, provides an annual summary of environmental and emissions attribute reporting and tracking, including a full regional fuel mix and emissions factors for CO_2 and criteria pollutants. GATS was developed to support regulatory disclosure requirements for compliance programs such as Maryland's RPS.

The Department agreed with stakeholder comments from the 2010 VERSA stakeholder process that a switch from using eGRID data to using GATS data to calculate a CO_2 emissions factor was appropriate for reasons outlined below:

A. Data from GATS is published annually, usually by mid-March, whereas eGRID data is complied and published every few years; current eGRID data is over 4 years old.

B. The PJM region is different from the eGRID regions; all of Maryland is located within PJM's region whereas Maryland is depicted to be separated into different eGRID regions.

C. Data used to calculate emission rates from GATS includes full fuel mix from data of 13 other states and the District of Columbia which is appropriate in the VERSA scenario since Maryland annually imports 30% of its consumed electricity from other PJM states. Since Maryland imports electricity from the coal-heavy PJM region, motivating renewable energy projects within the PJM territory is in alignment with the Department's VERSA goals. Each megawatt-hour of electricity from renewable energy transferred into the PJM region displaces a megawatt-hour of electricity, and resulting CO_2 emissions, from conventional fossil fuel generation. Most of the states delivering electricity to the PJM region have a higher percentage of coal-fired generation than Maryland, which has the highest of the RGGI states.

D. Use of GATS to calculate a CO_2 emission factor allows the VERSA to more accurately align with Maryland's RPS, which uses GATS to track compliance RECs. This is important since the VERSA references many of PSC's definitions and a reporting requirement for the RPS.

E. Since the Department does not hold primary regulatory authority over electricity or REC markets in Maryland and does not claim expertise in these arenas, it would be an extremely complex and extensive process for Department staff to verify the authenticity and eligibility of non-GATS created RECs. The other RGGI ISOs, such as the NY-ISO and the NE-ISO, have recently identified the need to incorporate revisions into their respective data tracking systems in order to address the complexity of recognizing and verifying 'out-of-ISO' created RECs. GATS and the PSC have processes in place for the importation and recognition of non-GATS created RECs; once recognized by GATS and the PSC, these RECs could then be eligible for Maryland's RPS. Using GATS for REC accounting in the VERSA simplifies the process for the Department by eliminating eligibility for non-GATS created RECs that have not been recognized by GATS and the PSC.

The Department developed a CO_2 emission rate per megawatt-hour using 2009 GATS data. Table 1 below depicts data which is the from the PJM full fuel mix. The Department first calculated a full fuel mix CO_2 emissions factor by adding together the product of multiplying the averaged CO_2 emissions associated with the megawatt-hours of a specific fuel provided to the PJM grid and then dividing that total by the total megawatt-hours provided to the PJM grid. The result was a CO_2 emissions factor of 1,137 lbs of CO_2 (0.5156 metric tons) per megawatt-hour for the full fuel mix.

Table 1. CO_2 Emissions Factor

Year	Fuel	# of	Percentage by Fuel	Carbon Dioxide

		Certificates		
2009	Biomass - Other Biomass Solids	734	0.000107	0.000060
2009	Captured Methane - Coal Mine Gas	36,184	0.005273	0.060465
2009	Captured Methane - Landfill Gas	1,762,673	0.256851	0.315523
2009	Coal - Bituminous and Anthracite	297,609,868	43.366681	865.449325
2009	Coal - Sub-Bituminous	39,918,612	5.816802	130.344908
2009	Coal - Waste/Other	11,554,046	1.683616	38.329062
2009	Gas - Natural Gas	65,432,366	9.534578	90.186273
2009	Gas – Other	11,718	0.001708	0.030633
2009	Hydro - Conventional	7,771,156	1.132386	0.000000
2009	Nuclear	249,261,967	36.321592	0.000000
2009	Oil - Distillate Fuel Oil	163,884	0.023881	0.457179
2009	Oil - Jet Fuel	160	0.000023	0.000480
2009	Oil - Kerosene	7,257	0.001057	0.023527
2009	Oil - Residual Fuel Oil	1,525,636	0.222310	4.538867
2009	Other	258	0.000038	0.000770
2009	Solar - Photovoltaic	3,723	0.000543	0.000000
2009	Solid Waste - Municipal Solid Waste	4,115,062	0.599633	7.323816
2009	Solid Waste - Tire Derived Fuel	19,158	0.002792	0.021803
2009	Wind	5,695,439	0.829920	0.000000
2009	Wood - Black Liquor	446,015	0.064992	0.128839
2009	Wood - Wood/Wood Waste Solids	927,961	0.135219	0.009603
		686,263,877	100.000000	1,137.22
				lbs CO_2//MwH

Since RGGI's primary goal is to reduce CO_2 emissions from fossil fuel electricity generation, the Department determined it was appropriate for the VERSA to use a specific emissions factor representing the displacement of emissions from a megawatt-hour of conventional fossil fuel generation with a megawatt-hour of renewable generation. Using the 2009 GATS data, the Department zeroed out non-fossil fuel electricity generation sources as depicted in Table 2. This resulted in a Voluntary Renewable CO_2 Emissions Factor of 1,856 lbs CO_2 (0.8417 metric tons) per megawatt-hour. The Voluntary Renewable CO_2 Emissions Factor will be used to represent the amount of CO_2 displaced from conventional fossil fuel generation by one megawatt-hour of renewable generation as depicted through the creation and subsequent retirement of a voluntary REC.

Table 2. Voluntary Renewable CO_2 Emissions Factor

Year	Fuel	# of Certificates	Percentage by Fuel	Carbon Dioxide
2009	Biomass - Other Biomass Solids	0	0.000000%	0.000000
2009	Captured Methane - Coal Mine Gas	0	0.000000%	0.000000
2009	Captured Methane - Landfill Gas	0	0.000000%	0.000000
2009	Coal - Bituminous and Anthracite	297,609,868	70.799184%	1,412.907422
2009	Coal - Sub-Bituminous	39,918,612	9.496342%	212.797309
2009	Coal - Waste/Other	11,554,046	2.748622%	62.574914
2009	Gas - Natural Gas	65,432,366	15.565875%	147.235489
2009	Gas – Other	11,718	0.002788%	0.050011
2009	Hydro - Conventional	0	0.000000%	0.000000
2009	Nuclear	0	0.000000%	0.000000
2009	Oil - Distillate Fuel Oil	163,884	0.038987%	0.746378

2009	Oil - Jet Fuel	160	0.000038%	0.000784
2009	Oil - Kerosene	7,257	0.001726%	0.038409
2009	Oil - Residual Fuel Oil	1,525,636	0.362938%	7.410022
2009	Other	0	0.000000%	0.000770
2009	Solar - Photovoltaic	0	0.000000%	0.000000
2009	Solid Waste - Municipal Solid Waste	4,115,062	0.978943%	11.956650
2009	Solid Waste - Tire Derived Fuel	19,158	0.004558%	0.035594
2009	Wind	0	0.000000%	0.000000
2009	Wood - Black Liquor	0	0.000000%	0.000000
2009	Wood - Wood/Wood Waste Solids	0	0.000000%	0.000000
		420,357,767	100.000000%	1855.75
				lbs CO_2//MwH

Note: If the Department receives RECs from renewable energy sources with residual GHG emissions, such as biomass, the Department would calculate an appropriate emissions factor for them.

5. Additional Evaluation in the Two Year Review

During the 2010 VERSA stakeholder process, the PSC expressed concerns regarding competition for use of RECs between a compliance program, such as the Maryland RPS, and a voluntary program, such as the VERSA. The PSC indicated that the competition for RECs between such programs could drive up the price of RECs, ultimately increasing the cost to ratepayers since electricity suppliers pass the cost of purchasing compliance RECs through to ratepayers.

At this time, there is a greater supply of eligible Tier 1 RECs, with the exception of solar RECs, and Tier 2 RECs in the PJM region than there is a current combined demand by compliance and voluntary programs. However, more states are requiring RPS or RPS-type compliance programs, which could shift this curve in the future. To ensure that the PSC's concerns are adequately addressed as the Maryland RPS compliance obligations increase in coming years, the Department included a specific requirement to evaluate the availability of RECs for the Maryland RPS and potential impacts on ratepayer costs within its two year review process.

6. Removal of Power Purchase Contract Requirement

As stated earlier, the original language in COMAR 26.09.02.08 was drafted to limit participation in the VERSA to persons purchasing renewable electricity from an electricity supplier. One of the reasons for this was to ensure that the electricity supplier had entered into a power purchase agreement with the renewable energy facility. The Department believed at the time that the power purchase agreement was important to motivate additional renewable energy in the PJM region. The Department also believed that it was important to only allow eligibility of RECs purchased directly from a renewable energy facility.

Since the Department now better understands how the REC market operates, it acknowledges the important role of retail marketers of RECs (also known as REC aggregators). The bundling of sufficient RECs for purchase by an electricity supplier through retail marketers provides capital to finance renewable energy projects and does motivate additional renewable energy in the PJM region. For most of these voluntary REC purchases, the electricity supplier or retail marketer does not make the decision to also enter into a power purchase agreement with the renewable

energy facility. Therefore the Department has removed the requirement for submitting a copy of the power purchase agreement.

III. Response to PSC concerns

During the 2010 VERSA stakeholder process, PSC expressed concerns about the Department allowing, what they indicated to be, 'double-counting' of emissions related to RECs and CO_2 allowances under the VERSA. Currently there are electricity suppliers that offer voluntary REC purchasing programs for ratepayers. Ratepayers choose to pay extra in their monthly bill and the electricity supplier purchases RECs on behalf of these voluntary payments. Marketing for these renewable products includes retirement of the REC and the REC retirement is reported annually by the electricity supplier to the PSC under COMAR 20.61.04.

According to the PSC, the Department should not allow participation in the VERSA for RECs retired by an electricity supplier that were purchased under existing voluntary REC market products. The PSC indicated that criteria for eligibility for participation in the VERSA should be consistent with criteria, such as additionality, required by national voluntary offsets programs. Under the additionality requirement, there would have to be additional voluntary REC purchases, additional renewable energy generation or additional REC-related emissions reductions occurring beyond what was already in place for these market products. The PSC indicated that CO_2 emissions reductions from the Department retiring a CO_2 allowance on behalf of a retired REC purchased under an existing market product failed to result in additional REC retirements compared to what was already occurring under existing market product REC retirements. The PSC recommended that the Department not retire CO_2 allowances on behalf of retirement of RECs from existing market products. Instead the Department should require electricity suppliers to develop separate market products resulting in the purchase and retirement of additional RECs that could then be eligible for participation in the VERSA.

The PSC also expressed concern that electricity suppliers with voluntary REC purchasing programs could gain REC market power over electricity suppliers without voluntary REC purchasing programs. By advertising that RECs purchased under existing market products would also be used for the VERSA, the Department could leverage additional interest in voluntary participation in these market products. Electricity suppliers could then choose to purchase more expensive compliance RECs with voluntary payments from ratepayers.

The Department appreciates the PSC's active participation in the 2010 VERSA stakeholder process. The PSC's expertise and understanding of the electricity market and REC markets has been vital for the Department to develop a functional program involving the voluntary purchase of RECs. However, the Department does not share PSC's concerns regarding 'double-counting' or potential impacts for allowing eligibility under the VERSA for RECs retired from existing market products for several reasons.

As stated previously, in an emissions-capped environment, the development of additional renewable electricity generation facilities, and subsequently created RECs representing megawatt-hours of renewable electricity, does not inherently reduce the CO_2 emissions associated with fossil fuel electricity generation. This is because the production of electricity by

non-carbon emitting sources does not lower the regionally set emissions cap or reduce the number of CO_2 allowances available for auction. Therefore, conventional fossil-fuel electricity generators can continue to emit carbon dioxide as long as there are adequate CO_2 allowances available. Retirement of a CO_2 allowance for every avoided ton of CO_2 from renewable energy generation is necessary to ensure that the void left by the retired REC is not displaced by emissions generated by conventional fossil fuel generation.

National voluntary offsets markets require projects to meet specific criteria, such as an additionality test, to ensure that there is no double-counting. An additionality test requires a demonstration that the benefits for the project are in addition to business as usual and not used for more than one purpose. The voluntary offsets markets involve national database registries for tracking the reduction 'credits' and for approving methodologies for calculating emissions reductions or sequestration rates. A third-party verification process is required for each emissions reductions project to ensure that the reported potential emissions reductions are real. However, the VERSA is not an offsets type program nor is it part of a national market. The VERSA is a voluntary component of a mandatory state compliance program. It does not involve third-party verification nor does it award CO_2 allowances as a type of 'credit'. Since the VERSA is not part of an offsets program, it is a Department decision whether to allow RECs purchased under existing market products to be eligible under the VERSA or not. The Department has decided to include RECs purchased under existing market products because of a surplus of CO_2 allowances in the RGGI regional cap, the surplus of RECs in the PJM region, other RGGI states criteria for their VERSAs, the cost for an electricity supplier to develop an additional market product, and the opportunity to acknowledge an electricity supplier that has initiated voluntary REC purchasing programs in advance to any federal or state requirement.

The RGGI regional emissions cap was developed with an additional 4% of CO_2 allowances beyond actual 2000 to 2002 averaged emissions. This decision was a result of electricity supplier concerns about availability of adequate CO_2 allowances for compliance and for potential cost impacts on ratepayers if there were to be an inadequate supply of CO_2 allowances. However, an economic recession, inexpensive natural gas prices, and extremely mild weather in the Northeast and Mid-Atlantic for 2009 resulted in greatly reduced demand for electricity. This scenario has resulted in the potential for reduced demand for CO_2 allowances by electricity generators for 2010 and 2011; most electricity generators purchase CO_2 allowances during the auctions based on actual quarterly emission projections. Because of this, there are minimal concerns at this point by state regulators and electricity suppliers about the existence of an adequate supply of CO_2 allowances through auction and the secondary market to cover actual emissions.

The Department allocates approximately 350,000 CO_2 allowances to the VERSA annually. Any CO_2 allowance not retired on behalf of retired voluntary RECs is transferred to the Consumer Energy Efficiency Account in the subsequent calendar year to be auctioned. The provision to auction unretired VERSA CO_2 allowances was one of many policy decisions to provide confidence to stakeholders that there would be adequate CO_2 allowances available to the electricity generators for the compliance demonstration. Since the current supply of CO_2 allowances exceeds the potential demand during this compliance period, the Department would prefer to retire VERSA CO_2 allowances in order to reduce the supply of potentially un-purchased

CO_2 allowances in the remaining compliance period auctions. Retirement of CO_2 allowances on behalf of retired voluntary RECs will also assist in incentivizing additional renewable energy in the PJM region even though there is currently more supply than demand of RECs.

Nine out of ten RGGI states have a VERSA in state regulation. While each state's VERSA has variations, there are similarities between them. Each state with a VERSA allocates approximately 1% of its annual apportionment to its VERSA. For 2009, no state retired the full allocation in its VERSA. All other VERSA states allow RECs from existing market products to be eligible for participation. This data indicates that there is active interest in participation by electricity suppliers and REC aggregators in the RGGI VERSA programs but that the voluntary REC market in the region participating in VERSA programs is not large enough to equal 1% of the RGGI cap (18.8 million CO_2 allowances). In addition, it is appropriate for the Department to allow RECs from an electricity supplier or REC aggregator from existing market products to be eligible for participation in the VERSA since it is allowed in other RGGI states.

In Section II (2) above, there is a brief discussion of PSC's concern that the competition for RECs to satisfy the RPS compliance program and for RECs purchased for voluntary market products could cause negative ratepayer impacts. Since there is greater supply of RECs in the PJM region than current demand, there is small concern at this point for negative impacts to ratepayers. Including RECs from existing market products as eligible for participation in the VERSA would not negatively impact ratepayers through competition with the RPS compliance program. However, the Department has included a requirement to biennially look at the possible negative impacts to ratepayers from competition for RECs between a mandatory RPS compliance program and from existing voluntary market products eligible for the VERSA.

There is another perspective for allowing RECs from an electricity supplier already marketing a voluntary renewable program to be eligible for the VERSA. The Department is not averse to rewarding an 'early actor' for actions in advance of developing state programs, such as the VERSA, that provides environmental benefit. In this case, the reward would be allowing the retired RECs purchased by the electricity supplier on behalf of voluntary payments by ratepayers for renewable energy to be eligible for participation in the VERSA. The environmental benefit is evidenced by displaced megawatt-hours, as well as the associated emissions, of conventional fossil fuel generated electricity with megawatt-hours, and avoided emissions, from renewable energy.

Finally, the Department acknowledges that it would be expensive for an electricity supplier to create a new market product in order to be eligible to participate in this program. With the current supply of RECs greater than demand, it would be difficult to incentivize additional renewable generation, additional ratepayer interest, and a successful market product merely on the basis of participation in the VERSA. However, the Department would expect electricity suppliers that would want to participate in the VERSA to appropriately acknowledge participation in the VERSA with their product marketing by a certain date.

IV. COMPARISON OF THE REGULATIONS TO FEDERAL STANDARDS

No federal regulation currently exists for the control of CO_2 emissions from the burning of fossil fuels for electricity generation. The Maryland regulations, as a part of the larger RGGI regional process, are among the first regulations of its kind in the country.

V. AFFECTED SOURCES[1]

These regulations affect fossil fuel-fired generating units at the following plants:

Owner	Plant	Location	Fuel
AES Enterprise	Warrior Run	Allegany County	Coal
Allegheny Energy	R P Smith	Washington County	Coal
Con Edison Development & Old Dominion Electric Cooperative	Rock Springs	Cecil County	Natural Gas
Constellation Power	Brandon Shores	Anne Arundel County	Coal
	C P Crane	Baltimore County	Coal
	Gould Street	Baltimore City	Natural Gas
	Perryman	Harford County	Oil/Natural Gas
	Riverside	Baltimore County	Oil/Natural Gas
	Herbert A Wagner	Anne Arundel County	Coal/Oil/Natural Gas
	Westport	Baltimore City	Natural Gas
Mirant	Chalk Point	Prince George's County	Coal/Natural Gas
	Dickerson	Montgomery County	Coal/ Natural Gas
	Morgantown	Charles County	Coal
Severstal Steel	Sparrows Point	Baltimore County	Natural Gas/Blast Furnace Gas
New Page	Luke Mill	Allegany County	Coal
NRG Energy	Vienna	Dorchester County	Oil
Panda Energy	Brandywine	Prince George's County	Natural Gas

VI. ENVIRONMENTAL & HEALTH IMPACTS OF AMENDMENTS

The amendments to this subtitle are minor. There is no expected environmental or health impacts associated with these amendments.

[1] Maryland Department of Natural Resources, Power Plant Research Program (PPRP), *Electricity in Maryland Fact Book*, August 2006, http://esm.versar.com/pprp/factbook/Fact%20bk%2006%20std.pdf, accessed, 12/10/07.

VII. ECONOMIC IMPACT

The amendments to this subtitle are minor and are for the purposes of clarification only. There is no expected economic impact on small business with these amendments.