### **Administrative Procedures – Proposed Coversheet**

#### **Instructions:**

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the "Rule on Rulemaking" adopted by the Office of the Secretary of State, this proposed filing will be considered complete upon the submission and acceptance of the following components:

- Proposed Rule Coversheet
- Adopting Page
- Economic Impact Statement
- Public Input Statement
- Scientific Information Statement (if applicable)
- Incorporated by Reference Statement (if applicable)
- Clean text of the rule (Amended text without annotation)
- Annotated text (Clearly marking changes from previous rule)

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of the proposed coversheet form will be used to generate a notice of rulemaking in the newspapers of record. Publication of notices will be charged back to the promulgating agency based on the word count of the notices.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Rule Title:	Amendments	to	Vermont	CO2	Budget	Trading	Program	
Regulation		_	4			*		
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·	(signature)	-				(dat	te)	

Printed Name and Title:

Deb Markowitz, Secretary, Agency of Natural Resources

RECEI	VED BY:
	· ·
	Proposed Rule Coversheet
	Adopting Page
	Economic Impact Statement
	Public Input Statement
	Scientific Information Statement (if applicable)
	Incorporated by Reference Statement (if applicable)
	Clean text of the rule (Amended text without annotation)
	Annotated text (Clearly marking changes from previous rule)
	ICAR Approval received by E-mail.

#### 1. TITLE OF RULE FILING:

Amendments to Vermont CO2 Budget Trading Program Regulations

#### 2. ADOPTING AGENCY:

Agency of Natural Resources

#### 3. PRIMARY CONTACT PERSON:

(A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

Name: Elaine O'Grady

Agency: Agency of Natural Resources

Mailing Address: Vermont Dept. of Environmental Conservation, Air Pollution Control Division, Davis Building - 2nd Floor, One National Life Drive

Montpelier, VT 05620-3802

Telephone: 802 343 - 7221 Extension:

Fax: 802 828 - 1250

E-Mail: elaine.ogrady@state.vt.us

Web URL(WHERE THE RULE WILL BE POSTED):

http://www.anr.state.vt.us/air/htm/ProposedAmendments.htm

#### 4. SECONDARY CONTACT PERSON:

(A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

Name: Dick Valentinetti

Agency: Agency of Natural Resources

Mailing Address: Vermont Dept. of Environmental Conservation, Air Pollution Control Division, Davis Building - 2nd Floor, One National Life Drive

Montpelier, VT 05620-3802

Telephone: 802 760 - 7992 Extension: Fax: 802 828 - 1250

E-Mail: dick.valentinetti@state.vt.us

#### 5. LEGAL AUTHORITY / ENABLING LEGISLATION:

(THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).

10 V.S.A. §558 and 30 V.S.A. §255

#### 6. CONCISE SUMMARY (150 words or Less):

The proposed rule would amend the Vermont CO2 Budget Trading Program Regulations, which implement the Regional Greenhouse Gas Initiative (RGGI) in Vermont, to reflect revisions made to the RGGI model rule. The RGGI states (CT, DE, ME, MD, MA, NH, NY, RI, and VT) updated the model rule to incorporate recommendations that resulted from a comprehensive program review, including a decision to lower the regional cap from 165 million tons to 91 million tons in 2014 and maintain a 2.5% annual cap reduction thereafter. The proposed amendments would modify Vermont's base CO2 budget for 2014-2020; establish interim control periods; expand the forest offset category to include reforestation, improved forest management, and avoided conversion; move existing offset project standards from a procedure into the rules; and make minor formatting changes and updates. Note that changes to the RGGI auction provisions are not included because the Public Service Board oversees the sale of and proceeds from CO2 allowances.

#### 7. EXPLANATION OF WHY THE RULE IS NECESSARY:

RGGI is a multi-state cap and trade program to reduce CO2 emissions from fossil fuel-fired power plants, which was established by a Memorandum of Understanding (MOU) signed by the RGGI states in 2005. As called for by the 2005 MOU, the RGGI states recently conducted a comprehensive program review. Following this rigorous review, the RGGI states recommended several changes to improve the program, incorporated these changes into an updated model rule, and committed to revising their state laws and regulations implementing RGGI in a manner that is substantially consistent with the model rule. To fulfill that commitment and to satisfy the requirements of 30 V.S.A. §255(c), which directs the Agency of Natural Resources to establish by rule annual carbon budgets for emissions for the electric power sector that are consistent with the 2005 RGGI MOU and subsequent program reviews, the Agency is proposing amendments to the Vermont CO2 Budget Trading Program Regulations.

## 8. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

Environmental and energy advocates, electricity generators, distribution companies, independent system operators (ISOs) such as ISO New England, non-electric generator business interests, consumer representatives, offset stakeholders, government stakeholders, other stakeholders and individuals interested in reducing greenhouse gas emissions.

#### 9. BRIEF SUMMARY OF ECONOMIC IMPACT(150 words or Less):

A macro-economic impact study of the updates to the RGGI program concluded that the impacts on the economies of the participating RGGI states would be small and generally positive. Investments of RGGI proceeds are expected to produce minor boosts to gross state product, employment, and real income. In Vermont these benefits will largely result from investments in fossil fuel energy efficiency. On a regional basis, electric ratepayers are expected to experience modest increases in their electric bills. These increases are expected to be even smaller in Vermont than the rest of the region since the state receives a large portion of its electricity from sources that do not rely on fossil fuels. Improvements in end-use electric efficiency from other state programs will also help minimize any adverse impacts on customer bills. In addition, the proposed amendments to RGGI will provide numerous unquantifiable public health and environmental benefits from reduced emissions to Vermont and the region.

#### 10. A HEARING IS SCHEDULED

#### 11. HEARING INFORMATION

(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION NEEDED FOR THE NOTICE OF RULEMAKING.

Date: 7/29/2013

Time: 06:00 PM

Location: Auditorium in the Pavilion Office Building, 109 State Street, Montpelier, Vermont

Run Spell Check

cap and trade

greenhouse gas

Regional Greenhouse Gas Initiative

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## **Administrative Procedures – Adopting Page**

#### **Instructions:**

This form must be completed for each filing made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

- TITLE OF RULE FILING: Amendments to Vermont CO2 Budget Trading Program Regulations
- ADOPTING AGENCY: Agency of Natural Resources
- 3. AGENCY REFERENCE NUMBER, IF ANY:
- 4. TYPE OF FILING (Please choose the type of filing from the dropdown menu based on the definitions provided below):
  - **AMENDMENT** Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
  - **NEW RULE** A rule that did not previously exist even under a different name.
  - **REPEAL** The removal of a rule in its entirety, without replacing it with other text.

This filing is AN AMENDMENT OF AN EXISTING RULE

5. LAST ADOPTED (PLEASE PROVIDE THE TITLE AND LAST DATE OF ADOPTION FOR THE EXISTING RULE):

Vermont CO2 Budget Trading Program Regulations adopted in 2008.

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## Administrative Procedures - Economic Impact Statement

#### Instructions:

In completing the economic impact statement, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule. This form must be completed for the following filings made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

Rules affecting or regulating public education and public schools must include cost implications to local school districts and taxpayers in the impact statement (see 3 V.S.A. § 832b for details).

The economic impact statement also contains a section relating to the impact of the rule on greenhouse gases. Agencies are required to explain how the rule has been crafted to reduce the extent to which greenhouse gases are emitted (see 3 V.S.A. § 838(c)(4) for details).

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I conclude that this rule is the most appropriate method of achieving the regulatory purpose. In support of this conclusion I have attached all findings required by 3 V.S.A. §§ 832a, 832b, and 838(c) for the filing of the rule entitled:

Rule Title: Amendments to Vermont CO2 Budget Trading Program

Regulations

(signature)

, on

date

Printed Name and Title:

Deb Markowitz, Secretary, Agency of Natural Resources

BE AS SPECIFIC AS POSSIBLE IN THE COMPLETION OF THIS FORM, GIVING FULL
INFORMATION ON YOUR ASSUMPTIONS, DATABASES, AND ATTEMPTS TO GATHER OTHER
INFORMATION ON THE NATURE OF THE COSTS AND BENEFITS INVOLVED. COSTS AND
BENEFITS CAN INCLUDE ANY TANGILBE OR INTANGIBLE ENTITIES OR FORCES WHICH WILL
MAKE AN IMPACT ON LIFE WITHOUT THIS RULE.

#### 1. TITLE OF RULE FILING:

Amendments to Vermont CO2 Budget Trading Program Regulations

#### 2. ADOPTING AGENCY:

Agency of Natural Resources

#### 3. CATEGORY OF AFFECTED PARTIES:

LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES

POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS

AND BENEFITS ANTICIPATED:

Based on modeling, monthly bills for electric ratepayers are expected, on a region-wide average, to be about 0.3% more expensive for residential customers, 0.8% more expensive for commercial customers, and 1.0% more expensive for industrial customers compared to a scenario without the proposed rule. These increases are expected to be even smaller in Vermont than the rest of the region since the state receives a large portion of its electricity from sources that do not rely on fossil fuels. Improvements in end-use electric efficiency from other state programs will also help minimize any adverse impacts on customer bills. Overall, the proposed amendments are expected to have generally positive long-term economic impacts on Vermont and the other states participating in RGGI. Through investment of proceeds in initiatives such as end-use energy efficiency and renewable energy, the program is projected to bring modest regional boosts to gross state product, employment, and real personal income, including: additional \$8.2 billion in gross state product across the region; 124,800 job-years spread across the region; and a \$6.8 billion increase in real personal income across the region. For additional information about the estimated costs and anticipated benfefits of the proposed rule, please see Attachment A.

#### 4. IMPACT ON SCHOOLS:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS:

Like other ratepayers, public schools may experience a modest increase in their electric bills as described in the section entitled "Potential Impacts to Ratepayers" (see attachment A). Any increased costs will likely be passed on to the taxpayers and post-secondary students that fund the public school system.

#### 5. COMPARISON:

COMPARE THE ECONOMIC IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

One alternative would be for Vermont to not accept the amendments to the RGGI program. This would likely result in Vermont's exit from the program altogether. However, this option is in direct conflict with the mandate of 30 V.S.A. § 225(c), and the RGGI Memorandum of Understanding (MOU) signed by Vermont and the other participating RGGI states in 2005. Both 30 V.S.A. § 225(c) and the MOU direct the Agency to participate in the RGGI program and to adopt rules establishing a cap and trade program to reduce the carbon dioxide emissions from power plants. As discussed below, the proposed rule does not impose requirements on small businesses. Consequently, it is not relevant to consider an alternative rule with separate requirements for small businesses.

#### 6. FLEXIBILITY STATEMENT:

COMPARE THE BURDEN IMPOSED ON SMALL BUSINESS BY COMPLIANCE WITH THE RULE TO THE BURDEN WHICH WOULD BE IMPOSED BY ALTERNATIVES CONSIDERED IN 3 V.S.A. § 832a:

The proposed rule only applies to fossil fuel-fired electric generating units that have a nameplate capacity equal to or greater than 25 megawatts. In Vermont, there are only two facilities, both gas turbines, that meet this criterion. There is a biomass exclusion (50% or more) that exempts the McNeil generating unit. The facilities subject to the proposed rule are owned by the City of Burlington and Green Mountain Power, which do not meet the definition of small business set forth in 30 V.S.A. § 801(b)(12). Thus, a flexibility statement is not required because the proposed rule does not provide "for the regulation of a small business."

7. GREENHOUSE GAS IMPACT: EXPLAIN HOW THE RULE WAS CRAFTED TO REDUCE THE EXTENT TO WHICH GREENHOUSE GASES ARE EMITTED, EITHER DIRECTLY OR INDIRECTLY, FROM THE FOLLOWING SECTORS OF ACTIVITIES:

#### A. TRANSPORTATION —

IMPACTS BASED ON THE TRANSPORTATION OF PEOPLE OR PRODUCTS (e.g., "THE RULE HAS PROVISIONS FOR CONFERENCE CALLS INSTEAD OF TRAVEL TO MEETINGS" OR "LOCAL PRODUCTS ARE PREFERENTIALLY PURCHASED TO REDUCE SHIPPING DISTANCE."):

The proposed rule intends to reduce greenhouse gas emissions from the electric power sector. It is unlikely that the rule will effect greenhouse gas emissions from the transportation sector.

#### B. LAND USE AND DEVELOPMENT —

IMPACTS BASED ON LAND USE AND DEVELOPMENT, FORESTRY, AGRICULTURE ETC. (e.g., "THE RULE WILL RESULT IN ENHANCED, HIGHER DENSITY DOWNTOWN DEVELOPMENT." OR "THE RULE MAINTAINS OPEN SPACE, FORESTED LAND AND /OR AGRICULTURAL LAND."):

The proposed rule allows regulated power plants to offset carbon dioxide emissions through investment in reforestation, improved forest management, or avoided forest conversion. Thus it is possible the rule could lead to increased sequestration of carbon in Vermont forests. However, regulated units under the current rule have not extensively used emissions offsets. If that trend continues, it is unlikely that the proposed rule will have significant impact on greenhouse gas emissions from the land use and development sector.

#### C. BUILDING INFRASTRUCTURE —

IMPACTS BASED ON THE HEATING, COOLING AND ELECTRICITY CONSUMPTION NEEDS (e.g., "THE RULE PROMOTES WEATHERIZATION TO REDUCE BUILDING HEATING AND COOLING DEMANDS." OR "THE PURCHASE AND USE OF EFFICIENT ENERGY STAR APPLIANCES IS REQUIRED TO REDUCE ELECTRICITY CONSUMPTION."):

Pursuant to 30 V.S.A. § 225, Vermont is required to invest all proceeds from the sale of carbon dioxide allowances to provide "the maximum long-term benefit to Vermont consumers." Currently, 98% of revenues from allowance sales are dedicated to improving fossil fuel energy efficiency. Vermont expects to continue to invest in such programs under the updated rule. Energy efficiency measures reduce energy consumption and thus avoid the emission of greenhouse gases related to energy production.

#### D. WASTE GENERATION / REDUCTION —

IMPACTS BASED ON THE GENERATION OF WASTE OR THE REDUCTION, REUSE, AND RECYCLING OPPORTUNITIES AVAILABLE (e.g., "THE RULE WILL RESULT IN

REUSE OF PACKING MATERIALS." OR "AS A RESULT OF THE RULE, FOOD AND OTHER ORGANIC WASTE WILL BE COMPOSTED OR DIVERTED TO A 'METHANE TO ENERGY PROJECT'."):

The proposed rule intends to reduce greenhouse gas emissions from the electric power sector. It is unlikely that the rule will affect greenhouse gas emissions from waste generation/reduction.

#### E. OTHER —

IMPACTS BASED ON OTHER CRITERIA NOT PREVIOUSLY LISTED: Electric Power Generation - The proposed rule is directly designed to reduce greenhouse gas emissions from the electric power generation sector. The rule would lower the existing cap on the quantity of carbon dioxide that may be emitted from fossil fuel-fired electric generating units with a capacity greater than 25 megawatts. This cap will be reduced by 2.5% each year from 2015 to 2020. Region wide this is expected to reduce carbon dioxide emissions by up to 90 million tons by 2020.

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#### **ECONOMIC IMPACT STATEMENT: ATTACHMENT A**

#### A. Introduction

This rule is being proposed to amend the Vermont rules implementing the Regional Greenhouse Gas Initiative (RGGI). RGGI is a multi-state regional initiative to design and implement a mandatory cap-and-trade program to reduce carbon dioxide emissions from fossil fuel-fired power plants in the eastern United States. A cap-and-trade program is a flexible, market-based approach to achieving real emissions reductions at the lowest possible cost. After the initial three-year control period, RGGI was subject to an extensive program review. A number of updates to the program were subsequently proposed based on suggestions outlined in the review. The primary amendment to the RGGI program is the reduction of the regional cap on CO<sub>2</sub> emissions from 165 million tons to 91 million tons in 2014. Other smaller changes included a revised cost containment strategy, a shorter timeframe to acquire emissions allowances, and an expanded ability to offset carbon emissions through forest management.

To estimate the potential impact of the amended RGGI program on the economies of participating states, a macro-economic impact study was conducted. The study used a computer model called the Regional Economic Models, Inc. (REMI). The model determined that the economic impacts of the updated RGGI program were very small and generally positive.

#### B. General Benefits

The REMI analysis determined that the updates to the RGGI program would produce modest boosts to gross state product, employment, and real personal income. Considering a 3% discount rate, the REMI analysis estimated that the changes would produce:

- An additional \$8.2 billion in gross state product across the region;
- An additional 124,800 job-years spread across the region; and
- A \$6.8 billion increase in real personal income across the region.

The proposed updates to the RGGI program will also provide numerous unquantifiable benefits to Vermont and the other participating RGGI states, including:

- Further reduction in emissions of gases that contribute to climate change
- Continued investment in energy efficiency in the region, both in end-use electricity and natural gas, heating oil and propane efficiency. Improved efficiency means fewer dollars spent on energy and less dependence on foreign oil and gas. It also means a reduction in other pollutants from the electric sector such as mercury, nitrogen oxides, and sulfur dioxide.

- Promotion of non-emitting forms of electric generation, such as renewable energy.
- Increased interest in the development of new technologies to scrub carbon from the emissions stream, and store carbon where it will not be harmful to the climate.
- Actions taken to address the challenge of climate change now will avoid the costs of doing nothing to ward off more significant changes in climate in the future.

#### C. Potential Impacts to Ratepayers

Residential, commercial, and industrial ratepayers are likely to be affected by the proposed rule. The Integrated Planning Model (IPM), a nationally recognized modeling tool, was used to evaluate the impacts of the proposed rule on ratepayers of each customer class. The model determined that over the period 2012 – 2020, the proposed rule would slightly increase average monthly electricity bills for each customer class. The model found that monthly bills would, on average, be about 0.3% more expensive for residential customers, 0.8% more expensive for commercial customers, and 1.0% more expensive for industrial customers compared to a scenario without the rule. These estimates include a consideration for expected changes in electric load and energy consumption based on investments in electric energy efficiency. As these potential price increases are relatively modest, the RGGI program is still projected to have a net positive economic impact on the participating states, as described under "General Benefits."

The estimates produced by the IPM are region-wide averages. There are a couple of reasons why the updated RGGI program is likely to have different impacts in Vermont. To begin with, Vermont currently receives approximately two thirds of its electricity from sources that do not rely on fossil fuel. Hydro Quebec provides a third of the state's electricity, while nuclear plants, local hydro projects, wind projects, methane, and biomass facilities contribute smaller percentages. As a result, the predicted increase in electricity prices should be less dramatic in Vermont than in states that rely more heavily on fossil fuel-fired generation facilities.

Vermont also differs from other RGGI states in how it invests proceeds from the sale of CO<sub>2</sub> allowances. Vermont currently invests 98% of its proceeds in fossil fuel efficiency programs, and expects to continue to invest in such initiatives. In contrast, about 47% of all proceeds generated from RGGI throughout the region are invested in electric efficiency. The estimated electricity bills from the IPM are adjusted to reflect this regional investment in electric efficiency. Since Vermont is investing in fossil fuel energy efficiency instead of electric efficiency, the regional benefits from RGGI funded electric efficiency investments would not apply to Vermont. However, this is unlikely to result in visibly larger increases in electric bills in Vermont. The state already has an established electric efficiency program independent of RGGI funding. This is one of the main reasons

that RGGI proceeds support fossil fuel efficiency as opposed to electric efficiency. Under 30 V.S.A. § 225, Vermont is required to invest all proceeds from the sale of CO<sub>2</sub> allowances to provide "the maximum long-term benefit to Vermont consumers." As effective electric efficiency programs are already well established in Vermont, investments in fossil fuel energy efficiency provide an additional benefit to Vermont consumers.

#### D. Potential Impacts to Regulated Businesses

As with the existing rule, the proposed amendments to the RGGI program would apply only to fossil fuel-fired electric generating units that have a nameplate capacity equal to or greater than 25 megawatts. In Vermont, there are only two facilities meeting this criterion: (1) Burlington Electric Department's gas turbine, and (2) Green Mountain Power's Berlin 5 generator. There is a biomass exclusion (50% or more) that exempts Burlington's McNeil generating plant. The proposed amendments include three main revisions that could have economic consequences for the regulated units:

- As with the existing rule, these units will be required to hold enough CO<sub>2</sub> allowances to cover their emissions at the end of each three-year compliance period. The interim control period included in the updated rule would also require units to hold allowances at the end of each individual year equivalent to 50% of emissions in that year. It is possible that the reduced flexibility of this shortened timeframe would slightly increase the cost of obtaining allowances. It is likely that any increased costs related to the acquisition of allowances would be passed on to consumers.
- Additionally, the amendments to the RGGI program would provide an expanded ability to offset carbon emissions through forest management. Units subject to regulation would be able to offset emissions through reforestation, improved forest management, or avoided forest conversion. These new options would enhance the ability of regulated units to implement emissions reductions in the most economically efficient way possible.
- Most significantly, the updated RGGI program would markedly decrease the
  total number of carbon allowances available beginning in 2014. This decline is
  expected to increase the cost to regulated units of obtaining allowances. It is
  likely that any increased costs related to the acquisition of allowances would be
  passed on to consumers.

#### E. Potential Impacts to Government Entities

Like other ratepayers, state and local government entities may experience a modest increase in their electric bills as described above in the section entitled "Potential Impacts on Ratepayers." The impact to Burlington Electric, which is municipally owned, is discussed above. In addition, the Agency of Natural Resources, the Public Service

Board, and the Department of Public Service will incur some costs in implementing the proposed amendments to the rule.

#### F. Conclusion

The proposed amendments to the RGGI program will allow Vermont to make continued progress toward its objective of reducing CO<sub>2</sub> emissions in an economically efficient manner. Although the amendments may result in small burdens on regulated units and electric ratepayers, they are expected to have generally positive long-term impacts on the economies of Vermont and other participating states. Through investment of proceeds in initiatives such as end-use energy efficiency and renewable energy, the program is projected to bring modest regional boosts to gross state product, employment, and real personal income (as described under "General Benefits"). Furthermore, the proposed rule, if adopted, will continue to satisfy the requirements of 30 V.S.A. § 225 and the Memorandum of Understanding signed by Vermont in 2005.

#### Sources:

Summary of RGGI Model Rule Changes (Feb. 2013), available at: <a href="http://www.rggi.org/docs/ProgramReview/FinalProgramReviewMaterials/Model-Rule Summary.pdf">http://www.rggi.org/docs/ProgramReview/FinalProgramReviewMaterials/Model-Rule Summary.pdf</a>

Updated RGGI Model Rule, available at: <a href="http://www.rggi.org/docs/ProgramReview/FinalProgramReviewMaterials/Model-Rule FINAL.pdf">http://www.rggi.org/docs/ProgramReview/FinalProgramReviewMaterials/Model-Rule FINAL.pdf</a>

Regional Investment of CO<sub>2</sub> Allowance Proceeds, 2011 (Nov. 2012), available at: <a href="http://www.rggi.org/docs/Documents/2011-Investment-Report.pdf">http://www.rggi.org/docs/Documents/2011-Investment-Report.pdf</a>

REMI Economic Impact Analysis, Assumptions and Results: 91 Cap Bank Potential Scenario (Feb. 7, 2013), available at: <a href="http://www.rggi.org/docs/ProgramReview/February11/13-02-11-REMI.pdf">http://www.rggi.org/docs/ProgramReview/February11/13-02-11-REMI.pdf</a>

IPM Potential Scenario Customer Bill Analysis (revised Jan. 14, 2013), available at: <a href="http://www.rggi.org/docs/ProgramReview/January8/13">http://www.rggi.org/docs/ProgramReview/January8/13</a> 01 08 Customer Bill Analysis REVISED.pdf

Analysis Group: The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States: Review of First Three-year Compliance Period) (Nov. 15, 2011), available at:

http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic Impact RGGI Report.pdf

## Administrative Procedures – Public Input Statement

#### **Instructions:**

In completing the public input statement, an agency describes what it did do, or will do to maximize the involvement of the public in the development of the rule. This form must be completed for the following filings made during the rulemaking process:

- Proposed Rule Filing
- Final Proposed Filing
- Adopted Rule Filing
- Emergency Rule Filing

#### 1. TITLE OF RULE FILING:

Amendments to Vermont CO2 Budget Trading Program Regulations

#### 2. ADOPTING AGENCY:

Agency of Natural Resources

3. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:

The proposed amendments would adopt improvements to the RGGI program that were developed by the RGGI participating states as part of a comprehensive program review. This effort was supported by an extensive regional stakeholder process that engaged the regulated community, environmental nonprofits, consumer and industry advocates, other organizations with technical expertise in the design of cap-and-trade programs, and other interested stakeholders. The Participating RGGI States have been working with program review stakeholders since 2010, convening over 12 stakeholder meetings, webinars and learning sessions. All of the stakeholder materials are available at: http://www.rggi.org/design/program\_review/materials-bydate. Additional information about the RGGI program review is available at: http://www.rggi.org/design/program\_review. The Agency intends to hold a public hearing on the proposed Public Input Statement. Page 2

rule amendments. Details about the hearing will be made available in public notices as required by the Administrative Procedure Act. Additionally, the proposed rule and the rule adoption schedule will be available online at the Air Pollution Control Division's website.

4. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

Numerous people and organizations have been or will be involved in the development of the proposed amendments, including: environmental and energy advocates, electricity generators, distribution companies, ISO, non-electric generator business interests, consumer representatives, offset stakeholders, government stakeholders, other stakeholders and individuals interested in reducing greenhouse gas emissions.

Run Spell Check

# Administrative Procedures – Incorporation by Reference Statement

#### Instructions:

In completing the incorporation by reference statement, an agency describes any materials that are incorporated into the rule by reference and why the full text was not reproduced within the rule.

This form is only required when a rule incorporates materials by referencing another source without reproducing the text within the rule itself (e.g. federal or national standards, or regulations).

Copies of incorporated materials will be held by the Office of the Secretary of State until adoption or formal withdrawal of the rule is complete. Materials will be returned to the agency upon completion of the rule.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person.

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I certify that the text of the matter incorporated has been reviewed by an official of the agency. I further certify that the agency has the capacity and intent to enforce the rule entitled:

Rule Title: Amendments to Vermont CO2 Budget Trading Program Regulations

(signature)

Printed Name and Title:

Deb Markowitz, Secretary, Agency of Natural Resources

#### 1. TITLE OF RULE FILING:

Amendments to Vermont CO2 Budget Trading Program Regulations

#### 2. ADOPTING AGENCY:

Agency of Natural Resources

3. DESCRIPTION (DESCRIBE THE MATERIALS INCORPORATED BY REFERENCE);

40 CFR 72.2 (as in effect on June 1, 2013) http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&SID=288e0c664db29a3ca93473f4d75dcb8f&rgn=d iv5&view=text&node=40:17.0.1.1.1&idno=40#40:17.0.1.1. 1.1.1.2

40 CFR Part 75 (as in effect on June 1, 2013) http://www.ecfr.gov/cgibin/retrieveECFR?gp=&SID=63a01b6e3d9c82b9366fd85e6d90 f2d1&r=PART&n=40y17.0.1.1.4

Section 2.1 of appendix A of 40 CFR Part 75 (as in effect on June 1, 2013) http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=128edcea96f3beb8355d93cbc1ca922a&rgn=div5&view=text&node=40:17.0.1.1.4&idno=40#40:17.0.1.1.4.8.1.7.6

Appendix B of 40 CFR Part 75 (as in effect on June 1, 2013)

http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&SID=128edcea96f3beb8355d93cbc1ca922a&rgn=d iv5&view=text&node=40:17.0.1.1.4&idno=40#40:17.0.1:1. 4.8.1.7.7

Appendix D of 40 CFR Part 75 (as in effect on June 1, 2013)

http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&SID=128edcea96f3beb8355d93cbc1ca922a&rgn=d iv5&view=text&node=40:17.0.1.1.4&idno=40#40:17.0.1.1. 4.8.1.7.9

All portions of appendix G of 40 CFR Part 75, except for equation G-1 in 40 CFR Part 75 (as in effect on June 1, 2013)

http://www.ecfr.gov/cgi-bin/text-

idx?c=ecfr&SID=128edcea96f3beb8355d93cbc1ca922a&rgn=d iv5&view=text&node=40:17.0.1.1.4&idno=40#40:17.0.1.1.4.8.1.7.12

ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition)-2010 Energy Standard for Buildings Except Low-Rise Residential Buildings

http://www.techstreet.com/searches/377523 (\$125.00)

Regional Greenhouse Gas Initiative Offset Protocol U.S. Forest Projects (June 2013)

http://www.rggi.org/docs/ProgramReview/\_FinalProgramReviewMaterials/Forest Protocol FINAL.pdf

Air Conditioner Contractors of America (ACCA) Manual J: Residential Load Calculation (Eight Edition-Full) https://www.acca.org/Files/?id=68

ANSI/ACCA 5 QI - 2007 "HVAC Quality Installation Specification"

http://www.energystar.gov/ia/home\_improvement/home\_contractors/QI\_Verification\_Protocols.pdf

2012 International Energy Conservation Code Supplement

http://publicecodes.cyberregs.com/icod/iecc/2012/index.htm?bu=IC-P-2012-000014&bu2=IC-P-2012-000019

International Performance Measurement & Verification Protocol, Volume I: Concepts and Options for Determining Energy and Water Savings (IPMVP), "Option B. Retrofit Isolation" and "Option D. Calibrated Simulation."

http://www.nrel.gov/docs/fy02osti/31505.pdf

IPMVP "Option C. Whole Facility" http://www.nrel.gov/docs/fy02osti/31505.pdf

ASHRAE Guideline 14-2002, Measurement of Energy and Demand Savings

https://www.ashrae.org/standards-research--

technology/standards--guidelines/titles-purposes-andscopes

International Performance Measurement & Verification Protocol, Volume III: Concepts and Options for Determining Energy Savings in New Construction (IPMVP), "Option D. Calibrated Simulation." http://www.nrel.gov/docs/fy02osti/31505.pdf

RESNET National Energy Rating Technical Standards and National Home Energy Rating Technical Guidelines, 2013 (Chapter 3 and Appendix A of 2013 Mortgage http://www.resnet.us/professional/standards/mortgage

EPA 160.3 testing method (U.S.EPA Method Number 160.3, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)) http://infotrek.er.usgs.gov/pls/apex/f?p=119:38:256350439355045::::P38\_METHOD\_ID:5215

U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010, Annex 3, Table A-162 (U.S. EPA, April 2012)

http://www.epa.gov/climatechange/ghgemissions/usinventoryreport/archive.html

American Society of Agricultural and Biological Engineers (ASABE) standard (ASAE D384.2, March 2005) https://www.nemi.gov/apex/f?p=237:1:1499789030308543

USEPA Method Number 160.4, Methods for the Chemical Analysis of Water and Wastes (MCAWW) (EPA/600/4-79/020)

http://infotrek.er.usgs.gov/pls/apex/f?p=119:38:25635 0439355045::::P38 METHOD ID:5215

4. OBTAINING COPIES: (EXPLAIN HOW THE MATERIAL(S) CAN BE OBTAINED BY THE PUBLIC, AND AT WHAT COST):

The ANSI/ASHRAE/IESNA Standard 90.1 (SI Edition)-2010 Energy Standard for Buildings Except Low-Rise Residential Buildings costs \$125.00 and is available

for purchase at

http://www.techstreet.com/searches/377523 (\$125.00) All of the other documents are available at no costs at the websites cited above.

In addition, hard copies of all documents are available for viewing by contacting the Air Pollution Control Division.

5. MODIFICATIONS (PLEASE EXPLAIN ANY MODIFICATION TO THE INCORPORATED MATERIALS E.G., WHETHER ONLY PART OF THE MATERIAL IS ADOPTED AND IF SO, WHICH PART(S) ARE MODIFIED):

No modifications have been made to the matter incorporated, except that equation G-1 in Appendix G of 40 CFR Part 75 is not incorporated.

6. REASONS FOR INCORPORATION BY REFERENCE (EXPLAIN WHY THE AGENCY DECIDED TO INCORPORATE THE MATERIALS RATHER THAN REPRODUCE THE MATERIAL IN FULL WITHIN THE TEXT OF THE RULE):

The Agency did not reproduce the incorporated material in full in the text of the rule due to the length of the material. In addition, with respect to the ANSI/ASHRAE/IESNA Standard 90.1-2004, there are licensing restrictions.

- 7. THE INCORPORATED MATERIALS HAVE BEEN REVIEWED BY THE FOLLOWING OFFICIAL OF THE AGENCY:

  The incorporated materials have been reviewed by staff in the Agency's Air Pollution Control Division, on behalf of Air Pollution Control Director, Richard A. Valentinetti.
- 8. THE ADOPTING AGENCY REQUESTS THAT ALL COPIES OF INCORPORATED MATERIALS

  BE RETURNED TO THE AGENCY

Run Spell Check