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Regional Greenhouse Gas Initiative, Inc.
90 Church Street, 4th Floor
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VIA Email: info@RGGI.org

Re: Comments in Response to November 17, 2015 Stakeholder Meeting

Dear RGGI Inc. and RGGI State Commissioners and Staff:

The Pace Energy and Climate Center (“Pace”), a clean energy think tank located at Pace University’s School of Law, is pleased to submit the following comments in response to the Regional Greenhouse Gas Initiative (“RGGI”) November 17, 2015 Stakeholder Meeting.

In **Section I** of these comments, we discuss several of the topics identified in the document entitled “Key Items for 2016 Program Review Stakeholder Discussions: Program Elements and Clean Power Plan” (“Program Elements”).ⁱ As an overarching comment, the future RGGI cap should be set at a level to help ensure states are on the path to reaching their individual climate pollution reduction goals. Nearly every state in the RGGI region has committed to substantially reducing their economy-wide greenhouse gas (“GHG”) emissions over the next several decades. Aggressive power sector reductions must be implemented if RGGI States are to meet these targets.

In **Section II**, Pace makes a number of recommendations on the Integrated Planning Model (“IPM”) RGGI Reference Case Assumption Leanings. Among our recommendations, we urge ICF and RGGI Inc. to incorporate clean distributed energy resource deployment scenarios as part of New York’s Reforming the Energy Vision (“REV”) proceeding into the reference case, as well as New York’s goals to reach 50 percent renewable generation by the year 2030.

Section I.

The following comments address the specific items listed in the Program Elements document.

1) EPA CPP State Plan Approaches – Continue the Mass-Based Approach

Pace supports the use of a mass-based, emissions standards approach for both existing and new sources as the compliance pathway with the U.S. Environmental Protection Agency’s

(“EPA”) Clean Power Plan (“CPP”). The mass-based approach—consistent with the current RGGI model—has many advantages. Since 2008, RGGI has helped reduce the emissions of harmful carbon dioxide (“CO₂”) pollution from the power sector by more than 40 percent. RGGI’s innovative cap, trade, and invest structure has also yielded \$1.3 billion in net economic benefits to the region during the second compliance period.ⁱⁱ Similar benefits were demonstrated for the first compliance period.ⁱⁱⁱ The mass-based approach ensures a specific level of emissions reductions, which rate-based approaches do not. Under a rate-based approach, economic growth and increased electricity demand may result in a lower rate of CO₂ emissions but an actual increase in the overall tons of pollution sent into the atmosphere.

The RGGI States have already built the infrastructure and invested a significant amount of time and ratepayer funds into creating RGGI. Furthermore, the regulated community has nearly seven years of experience with the current mass-based effort, including participating in auctions, banking allowances, and meeting compliance obligations.

While Pace would carefully review analyses calling for a switch to a rate-based approach, extremely compelling evidence would be required to support a change in direction from the current model. While we remain interested in analyzing the state measures approaches to the extent that we are able to, we support the current pathway using an emissions standards approach with the possibility of linking with other “trading ready” programs.

2) CO₂ Emissions Reductions – Set Future RGGI Cap To Help Achieve State Climate Goals

Consistent with the Program Elements paper, Pace’s preliminary analysis (Figure 1 below) shows that when added together, the 2030 CO₂ mass-based target for the nine states under the CPP is slightly higher than the RGGI cap currently set for 2020. Under the base RGGI budget, the existing 2030 CPP target would be approximately 858,000 tons higher than the 2020 RGGI cap.^{iv}

While meeting the CPP target may be relatively straightforward for the RGGI States through the current cap, Pace encourages RGGI Commissioners and Staff to establish a cap that requires additional reductions.

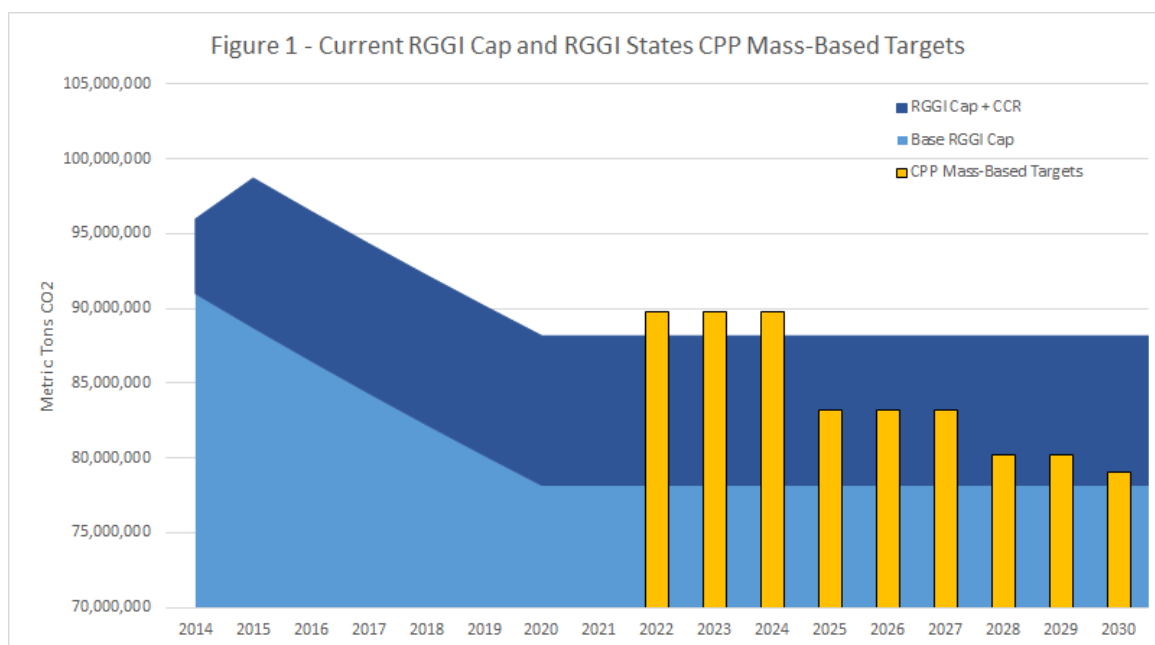
State regulators must set RGGI on a path toward achieving their own economy-wide climate pollution reduction goals. Nearly every state in RGGI has committed to substantially reducing their economy-wide CO₂ emissions over the next several decades. In New York State, for example, Governor Andrew Cuomo adopted three ambitious clean energy goals earlier this year. In June 2015, New York committed to reducing greenhouse gas emissions by 40 percent below 1990 levels by the year 2030. New York also committed to obtaining 50 percent of the state’s electricity from renewable sources and increasing building efficiency 23 percent by 2030.

While reaching these goals will not be possible through climate pollution reductions in the electricity sector alone, states such as New York should strive to achieve the greatest amount of reductions as possible from this sector. This would alleviate pressure on other sectors that may find it more costly to achieve similar levels of reductions.

Although some will argue that the power sector has already significantly reduced emissions and should not be called upon for additional reductions, evidence suggests that power sector reductions are the most cost effective. A McKinsey & Company report analyzing GHG abatement costs and potential in the United States found more than half of the abatement potential under \$50 per ton of CO₂ equivalent in the Northeast is in the power sector. In other

words, achieving emission reductions from the power sector will generally be cheaper than reductions elsewhere.

Pace’s preliminary analysis shows that the cap on emissions from the power sector must be significantly more aggressive to keep New York State on the path to achieving the 40 by 2030 goal. We recommend that the RGGI States adopt a new cap that requires *at least a 2.5 percent per year reduction in region-wide GHG emissions*. Continuing a 2.5 percent reduction in the RGGI cap per year would increase power sector emission savings by 23 percent over the savings achieved by only meeting the regional CPP target. The RGGI States should also model more aggressive cap reductions to have a full understanding of the potential costs and benefits of even deeper CO₂ emissions reductions.



3) RGGI Flexibility Mechanisms – They May Not Be Needed

RGGI incorporates several flexibility mechanisms into its design including the Cost Containment Reserve (“CCR”), offsets, and allowance banking. Some of these components may need to be revisited to ensure compliance with EPA’s targets.

As an overarching comment, these flexibility mechanisms were designed to operate in a closed, nine-state system. But the possibility of linking with other “trading ready” mass-based efforts may decrease the need to maintain RGGI’s current flexibility mechanisms in future program designs. Simply put, carbon markets with more “liquidity” may provide the additional flexibility that these policy tools were once intended to provide.

a) In the previous section, we argued that States should set the future RGGI cap at a level to put them on a path to achieving their economy-wide climate pollution reduction goals. At the bare minimum, they must revisit the CCR to ensure compliance with EPA’s requirement. Without any changes, the current CCR mechanism has the potential to increase the overall RGGI cap above EPA’s 2030 target (as well as 2025-2029 interim goals) as shown in the dark blue shading in Figure 1. It is unlikely that EPA would approve state plans or a joint state compliance plan with this mechanism in place.

The easiest solution may be to eliminate the CCR altogether. The CCR was originally established to protect the market from unforeseen events that could dramatically increase the price of emission allowances. As part of CPP compliance, however, many states are likely to set up mass-based programs that will be “trading ready.” The likely emergence of new mass-based state programs may provide the market “liquidity” to respond to unforeseen events that had not existed in a nine-state context. If the mechanism, however, is maintained by the RGGI States, the RGGI cap would need to be lowered at a level below EPA’s target to accommodate the potential release of CCR allowances.

b) RGGI also allows for up to 3.3 percent of compliance obligations to be met by offset allowances, although no offsets have been awarded by New York or any of the other RGGI States to date. Offsets, similar to the CCR, have the potential to increase the overall cap above EPA’s targets. While the easiest solution may be to eliminate this flexibility mechanism as well, if the offset mechanism is maintained by the RGGI States, similar to the CCR, the RGGI cap would need to be lowered to a level below the EPA’s target to accommodate the potential use of offsets.

c) State regulators also sought comments on adjusting the RGGI program’s control periods to better coincide with EPA’s compliance period timeline. We support extending the fourth RGGI control period (currently 2018-2020) by an additional year. Furthermore, we see no need to revisit the non-compliance penalties at this time.

4) RGGI Regulated Sources – Include The Current Group Of Sources

We support maintaining the existing RGGI structure that ensures that more electric generating units are subject to the RGGI cap than would be under the CPP. Simple cycle natural gas electric generating units and biomass plants should continue to be subject to the RGGI program. In addition, Pace remains interested in expanding the number of sources covered by RGGI beyond the electric sector, as both a way to control emissions and achieve state climate pollution reduction goals as well as decrease compliance costs.

5) EPA Promoting Renewable Energy and Energy Efficiency - Pursue a Modified CEIP

The final CPP also incentivizes states to reduce emissions prior to the EPA program start date of 2022 through an effort called the Clean Energy Incentive Program (“CEIP”). CEIP aims to spur early investment in renewables and install demand-side energy efficiency in low-income neighborhoods. Under the CEIP states would award additional allowances in a mass-based program and emission rate credits (“ERCs”) in rate based program to eligible projects. A pool of allowances or ERCs created by the EPA would match these allowances awarded at the state level. EPA also proposes to offer two ERCs or allowances for avoided generation by using demand side energy efficiency in low-income communities. The emphasis on further investment in low-income neighborhoods is welcome, especially given that low-income customers spend a greater portion on their income on meeting their energy needs.

As currently proposed, however, the additional federal pool of allowances made available through the CEIP has the potential effect of increasing CO₂ emissions in states that set up a program. The existence of the separate federal pool of allowances increases the total number of allowances available for compliance entities. Instead, RGGI States should consider ways to reward early action and investment in low-income communities without inflating the RGGI cap.

The RGGI States should consider setting aside a pool of allowance from within the state cap equivalent to the size of both the state and federal pool. This set aside would be “allocated” from future RGGI caps. RGGI States would then petition EPA to retire their allocation of federal allowances. Renewable energy or energy efficiency projects would then apply to receive the set-aside RGGI allowances based on the completion of eligible projects. The mechanism would provide the subsidy to early-action renewable energy projects and demand-side energy efficiency in low-income neighborhoods consistent with the intent of the federal program, but it would avoid emissions inflation within the RGGI States or across the country.

6) Broadening the RGGI Market/Increasing Trading Partners - Recognize the Challenges & Opportunities of Linkage

The CPP may provide an impetus for other states to join RGGI or for linking RGGI to other established mass-based programs. Expanding the cap-and-trade program would be beneficial because it would increase the ability of the participating states to achieve emission reductions in a more economically efficient manner. Each additional state or region would add more facilities from which emission reductions might be obtained at a cheaper cost than would otherwise have been possible.

Once again, Governor Cuomo showed tremendous leadership in October 2015 when he announced his desire to establish a North American carbon market. At a speech delivered at Columbia University, Governor Cuomo signaled his interest in linking New York’s market with others in California and Canada.

However, linking carbon markets creates challenges as well as opportunities. If the CPP creates a push for RGGI expansion, there may be a desire by new entrants to leverage the emission reductions already achieved by early-acting RGGI States to achieve their own CPP targets. If the current RGGI States maintain a 2.5 percent annual cap reduction, they will be 20 million tons below the regional CPP target by 2030. If the cap is not adjusted adequately when new states or regions are added to RGGI, this 20 million ton surplus could be consumed by newly admitted entities that have not achieved the same degree of emission reductions as the RGGI States have garnered over the past decade. In other words, national emissions would be higher than if additional entities were not admitted.

If RGGI adds new states or regions, the adjusted cap should maintain an equivalent stringency based upon a baseline year. For example, the 2015 RGGI cap of 88.7 million tons CO₂ represents an approximately 40 percent decrease of power sector emissions for the RGGI States from 1990 levels. If another state were added to RGGI in 2015, the cap increase should be approximately 60 percent of the new state’s 1990 power sector emissions regardless of the state’s current level of emissions. If, for example, Pennsylvania joined RGGI, the subsequent cap increase should be no more than 62.9 million tons, which is an approximately 40 percent reduction from the state’s 1990 power sector emissions.

An additional consideration regarding the linking of programs involves how new emissions sources are treated. A mass-based plan that includes both existing and new sources should not link to mass-based plans that cover only existing sources. Failure to match up compatible markets-based platforms would potentially leave a major source of emissions off the regulators’ table and would encourage a preference to invest only in new sources.

In the end, linking RGGI to new programs must be carefully considered. We look forward to working with the RGGI States to consider these questions as the program review continues.

7) RGGI CO2 Allowance Auctions & Tracking Systems - Continue Auctioning Allowances

Once again, Pace expresses its support for emissions allowance auctioning as the mechanism for allocating most RGGI program allowances. As recognized by all the states during the previous RGGI design discussion, electric generators will charge for air pollution allowances even if they receive them for free. Regardless of whether generators obtain them from an auction or from a direct allocation, they will include the current market value of those allowances in their bids to be dispatched. The generators are operating on solid market principles when they do so, valuing the allowances they received for free as an “opportunity cost.” The RGGI States have already acknowledged that freely allocated allowances constitute “sunk benefits” for fossil fuel generators and could result in windfall profits for these firms. By contrast, auctioning allowances ensures that the value of the authorization to emit pollution accrues to the public. No changes should be made to current auctioning practice.

Section II.

Pace makes a number of recommendations on the IPM RGGI Reference Case Assumption Leanings. The IPM RGGI Reference Case is vital in informing the setting of the RGGI cap by projecting the likely future demand for fossil-fuel generation and thus the amount of allowances that would be required to cover the emissions associated with this generation. For this reason, it is vital that current initiatives and investments that will reduce demand on the bulk power system are adequately included in the modeling exercise. Failing to account for these initiatives would overestimate fossil-fuel generation demand and lead to an erroneously inflated cap.

8) Incorporate NY REV Deployment Into the RGGI Cap

A key initiative that will reduce demand on the bulk power system is New York’s landmark REV proceeding. REV aims to unleash competitive forces that will invest in distributed energy resources (“DER”) including small-scale distributed generation, energy efficiency, and intelligent energy management systems across the state. The net effect of this effort will reduce energy and peak demand on regulated generators by either reducing energy consumption or increasing self-generation. The final Generic Environmental Impact Statement for REV and the closely associated Clean Energy Fund (“CEF”) estimates that the initiatives will lead to between 3.2 to 6.5GW of peak demand reduction and between 6.4 and 15.8 GWh of energy demand reduction.^v

Pace recommends ICF work closely with New York to incorporate these expected impacts of REV into the regional energy and peak demand assumptions. Through the leadership of Governor Cuomo, New York is committed to the success of REV, and the omission of these impacts in the modeling exercise could threaten the environmental benefits of the initiative if it results in an inflated cap.

9) Incorporate NY Large Scale Renewables Deployment

In addition to REV, New York is undertaking several other initiatives to meet the State’s 50 percent renewable energy by 2030 goal including the NY-Sun and Large-Scale Renewables programs. On December 2, 2015 Governor Cuomo directed the New York Department of Public Service (“DPS”) to “establish a Clean Energy Standard for the State” that will make the State’s

clean energy goal an enforceable mandate.^{vi} The exact details of this standard will be delineated in the forthcoming proceeding, but it is clear that New York is serious about renewables deployment. Already, the State has initiated other efforts to speed renewables adoption. NY-Sun is an approximately \$1 billion commitment to solar development in New York State. The NY-Sun Operating Plan projects that the 3,000 MW goal of NY-Sun will be reached by 2023 resulting in 3,522,726 MWh of annual generation.^{vii} The specific implementation details of the Large-Scale Renewables program are still pending, but a report from NY DPS Staff on potential implementation options estimated up to 3.4GW of additional wind capacity installed in the state by 2028 through the program.^{viii} These efforts will significantly reduce demand on the bulk power system, and thereby reduce the demand for emission allowances under RGGI. Pace again recommends that ICF work closely with New York to incorporate these impacts into the regional energy and peak demand assumptions.

10) Factor in the Investment of RGGI Proceeds

Finally, the investment of RGGI proceeds into energy efficiency and clean and renewable energy programs should also be adequately accounted for in the IPM Reference Case. In their February 2014 report, RGGI Inc. estimates that RGGI proceed investments in state programs through 2012 will offset 8.5 million MWh of electricity generation, which will avoid 8 million tons of CO₂ pollution.^{ix} There is no indication that as long as RGGI exists in its current form, RGGI proceeds will not continue to be invested in energy efficiency and clean energy programs. There will continue to be an ever-increasing amount of energy and emissions savings from these investments. Pace recommends ICF incorporate these future savings into the regional energy and peak demand assumptions.

11) Conclusion

We appreciate the opportunity to submit comments on the RGGI Stakeholder Meeting. We look forward to the continuation of the program review and working with the RGGI States to consider many important program changes. Questions about these comments should be directed to David Gahl (dgahl@law.pace.edu) or by telephone at (518) 487-1744.

Respectfully submitted,



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Notes:

ⁱ Available at: https://www.rggi.org/docs/ProgramReview/2016/11-17-15/Key_Discussion_Items_11_17_15.pdf

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- ⁱⁱ The Analysis Group. The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States: Review of RGGI's Second Three-Year Compliance Period. (July 14, 2015). Available at: http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_july_2015.pdf
- ⁱⁱⁱ The Analysis Group. The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States: Review of the Use of RGGI Proceeds from the First Three-Year Compliance Period (November 15, 2011). Available at: http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/economic_impact_rggi_report.pdf
- ^{iv} If additional Cost Containment Reserve (CCR) Allowances are released, however, the RGGI cap could potentially exceed the CPP target.
- ^v New York State Department of Public Service. Final Generic Environmental Impact Statement in CASE 14-M-0101 - Reforming the Energy Vision and CASE 14-M-0094 - Clean Energy Fund. (February 2015) Available at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B9E35CB6F-9B7D-4220-9CD4-B254C0FB4551%7D>
- ^{vi} Andrew M. Cuomo. Letter to Audrey Zibelman, CEO of New York State Department of Public Service. (December 2015). Available at: https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/Renewable_Energy_Letter.pdf
- ^{vii} NYSERDA. NY-Sun 2016-2023 Operating Plan. (May 2015). Available at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BF5DA32B6-FB3F-4F7E-BBCB-609B41E0FAC4%7D>
- ^{viii} NYSERDA. Large-Scale Renewable Energy Development in New York: Options and Assessment. (June 2015). Available at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B26BD68A2-48DA-4FE2-87B1-687BEC1C629D%7D>
- ^{ix} RGGI Inc. Regional Investments of RGGI CO2 Allowance Proceeds, 2012. (February 2014). Available at: <http://www.rggi.org/docs/Documents/2012-Investment-Report.pdf>