

Shawn Konary NRG Energy, Inc.

An NRG Energy Company

Ms. Nicole Singh Executive Director Regional Greenhouse Gas Initiative Inc. 90 Church Street, 4th Floor New York, New York 10007

Delivery: email to: nicole.singh@rggi.org

Subject:2016 Regional Greenhouse Gas Initiative ("RGGI")Program Review and Clean Power Plan ("CPP") Comments

Ms. Singh,

NRG Energy, Inc.'s operating subsidiaries ("NRG") respectfully submit these comments to the Regional Greenhouse Gas Initiative Inc. ("RGGI") regarding the RGGI's request for comments on its 2016 Program Review and RGGI's alignment with the United States Environmental Protection Agency ("EPA") Clean Power Plan ("CPP"). Our comments address RGGI's questions and provide additional constructive comments and suggestions on the functional implementation of RGGI as an option for States to comply with the CPP.

NRG is one of the largest power generation, renewable energy and retail electricity providers. Our generating stations provide approximately 50,000 Megawatts ("MW") of generation capacity nationwide, our retail and thermal subsidiaries serve more than 3 million customers in 16 states, NRG has invested over \$3 billion on environmental improvements creating more than 8,000 new jobs via coal to gas conversions, repowering, emissions control projects, and renewable projects including solar and wind generation. Within RGGI, NRG owns and operates units that participate in the RGGI market in Delaware, Maryland, New York, Connecticut, and Massachusetts, representing approximately 13,000 MWs of electric generating capacity. NRG also owns and operates assets in the PJM, New York, and New England Independent System Operator ("ISO") markets, which represent approximately 24,000 MWs.

Please note, these comments only reflect the RGGI 2016 Program review, responses to the RGGI inquiry, and RGGI's relationship as a compliance option with the CPP. These comments do not represent any state specific implementation concerns nor do they holistically represent comments on the CPP. Section I describes NRG's approach to addressing climate change. Section II responds to RGGI specific questions and Section III describes as a stakeholder, improvements that would make RGGI more effective for both the region and implementation within a national platform.

Section I – NRG Is a Leader in Reducing Carbon Emissions.

NRG shares the goals of RGGI and the CPP in reducing greenhouse gas ("GHG") emissions, maintaining state sovereignty, and increasing opportunities for the development of renewable energy projects. At NRG, we embrace the concern that climate change is a significant environmental challenge—and we are working to be part of the solution. We believe future energy production can be both low carbon and low cost, and we are committed to make this vision a reality. We are moving clean energy forward with solar advancements including the Ivanpah Solar Electric Generating System, at 370 MW one of the largest concentrating solar thermal facilities in the world, wind investments, and integrated technologies such as carbon sequestration at our larger coal facilities and advancing the electric vehicle market. Nationally, NRG is among the leaders in the development of renewable energy projects in the power sector, including solar and wind power generation with more than 1,000 MWs of solar projects in operation and 1,600 MW in development.

Beyond the clean energy revolution, at NRG we strive to be an environmental leader in our industry, minimizing the impact from conventional generation by repowering our generation fleet with cleaner technologies, and operating our existing plants at or better than emission standards established by environmental regulations. In the northeast, we have invested more than \$3 Billion in air quality control systems at our largest generating stations resulting in significant reductions in emissions, specifically SO2, NOx, Hg, and particulate matter at facilities including Morgantown, Chalk Point, Dickerson (Maryland) Indian River (Delaware), Avon Lake (Ohio), Cheswick (Pennsylvania), and Sayreville (New Jersey). With respect to our conventional power generation fleet, we continue to identify opportunities to repower our plants and reduce our carbon footprint. Some examples include; conversions at the NRG Energy Center Dover (Delaware; complete), New Castle and Shawville (Pennsylvania; in progress), as well as retirements of assets at the Indian River Generating Station (Delaware) and Werner and Glen Gardener (New Jersey).

In concert with traditional generation, our Green Mountain Energy subsidiary, the Nation's largest "green" retail power marketer, provides 100-percent renewable electricity options to customers in 8 states. In addition, NRG is opening new horizons for people to improve their lives and the environment with clean energy including unique rooftop solar solutions for homes and businesses, publicly-available electric vehicle charging infrastructure, and new smart energy products and services giving customers the power to manage their energy use or use only clean energy; all ways that NRG is delivering on our promise to provide energy sustainably.

NRG's commitment to a clean energy, lower carbon future is clear. Our significant investments in solar energy, repowering of existing facilities, post-combustion carbon capture and sequestration, advanced energy-efficiency measures, and electric vehicle charging systems, have all been carried out through a combination of our own investment and initiative in concert with thoughtful and effective state and federal policies. Our goal to reduce our carbon emissions 50% by 2030 and 90% by 2050, announced in November 2014, exceeds that of any other company in the power industry. In sum, NRG is part of the solution.

Section II – RGGI Stakeholder Feedback Request

This section addresses the stakeholder feedback specifically responding to the list of questions provided by the RGGI.

1. **Question** – The RGGI states are seeking stakeholder comments and feedback on using the CPP mass goals and comment on the potential advantages of different state plan pathways.

Response – NRG supports flexibility for any state to develop their unique compliance plan and the CPP option for State Measures. "State measures" plans are advantageous for two fundamental reasons; first, they allow states the flexibility to adapt plans that are specific to their current generation mix and resource options to offer the lowest cost and most efficient means to achieve the same goal. Second, they allow state enforceability on generators and other resources as a matter of state law while providing "backstop" measures to assure compliance if needed.

In contrast to traditional compliance from either unit-specific rates or mass-based cap and trade, state measures would apply a "holistic" approach to a state plan; an approach that could address regional reliability, contractual and economic treatment of stranded assets and timelines for their pending retirements. This approach considers access to associated resources and regionally-specific constraints (pipeline, land, weather, etc.) and encourages renewable development. Further, State measures allow States to go beyond pure generation supply obligations by including other industries and programs such as using (or modifying) renewable portfolio standards goals, measurable conservation and efficiency programs and other CO2 reduction concepts that align with the CPP's building block approach used to develop its best system of emission reductions ("BSER"). By applying other mechanisms, it these measures allow changing technology and market forces to better support reductions while limiting the impact to reliability, generators, and end users. Traditional rate-based or mass-based compliance places the entire burden on generators and system operators.

To assure compliance, any State measures plan would include enforceable "backup" emission limits (in rate-based or mass-based form) if the adopted State measures plan was not successful. This backup can be flexible as well which can include a mass-based program such as the RGGI program as a backstop compliance mechanism.

We recognize that the 9 member states currently prefer to use the RGGI as a compliance mechanism to satisfy the CPP obligations that will arise in 2022. Further, we recognize that independent of the CPP, RGGI is seeking comments on its 2016 Program Review and the cost and benefits of adjusting its goals. In regard to the CPP, RGGI or any mass-based program should be a viable compliance option however not "the only compliance option". We recommend that each RGGI State review its state-specific structure and apply a State measures plan that may or may not be based on RGGI. Further, we suggest that the RGGI states collectively seek the 2018 plan extension to better understand what

non-RGGI states are planning to better align with a national program and to evaluate and determine which options are better for each RGGI State.

2. Question – The RGGI states are seeking stakeholder comments on the RGGI states emission goals post-2020 and pursuing additional emission reductions post-2020. **Response** – Elaborating on our response to question 1, any reduction to the planned 2020 RGGI budget should not be considered. As stated, NRG supports state flexibility however we do not support regional program constraints that restrict such state flexibility including mandating compliance mechanisms or implementing regional-based targets that exceed the carefully-considered CPP goals, which balance cost, reliability and environmental benefits. We commend the RGGI efforts as it has helped position the States within the RGGI region to achieve their CPP obligation. However, any further reduction of its current or post 2022 goals would only penalize the RGGI states (and their residents) for early reductions. This would disadvantage each State's generation resources adding to the concerns of additional "leakage" caused by displaced resources and economic disparity to the region from high energy costs, lost industry and associated jobs, and a reduction of local tax bases. Specifically, we agree that the RGGI states must achieve the CPP goals however any further reductions of the cap should not be considered at this time.

In addition, our approach for CPP implementation is to achieve a level playing field. We realize that the CCP design is not "perfect" nor can it assure a level playing field. We also realize that many variables in the CPP design result in some disproportionate obligations. However, any further regional restrictions or cap reduction that are more stringent than the CPP targets would undermine the concept of an equitable, national program that seeks to establish common obligations as it would place additional burdens on only one region. EPA has taken great care in seeking to create an equitable, national program that includes budgets for every State. These budgets flow from EPA's assessment of many factors including current and planned generation and EPA's desire to minimize collateral damage from a program that can create "winners and losers". As a result, any material deviation from EPA's carefully considered budgets would disturb EPA's assessment and disadvantage the owners of generation in the 9 RGGI states as well as consumers.

The RGGI states have been the leaders in creating a carbon market and catalyst for a national program while absorbing program "growing pains" and economic disparity between the RGGI and the non-RGGI states. These costs arguably were justified to prod the federal government to act, which it has now done. Any further "beyond CCP Target" reductions would impose greater costs without concomitant benefits

The RGGI's existing 2020 cap of 78M tons is already less than the cap mandated by the CPP established at a 79M/80M ton 2030 target. Further, because the set of sources that must comply with RGGI is greater than the set of sources required to comply with the CPP (RGGI includes simple cycle and new units) the RGGI cap is significantly more stringent. Further, the true RGGI 2020 cap of 78M tons does not reflect the banked allowance adjustment of 139M tons over 7 years which results in a 2020 adjusted cap of only 56M tons, 30% lower than to CPP by 2020. Because the effective cap is already

reduced to 56M tons and the costs to generators and consumers in RGGI would far exceed the benefits, we believe that no further reductions are justified as. (See additional comment on banked allowances, Section III-D). We agree that RGGI states must achieve the CPP goals however any region specific cap reductions should not be considered within the next RGGI control period or even within the CPP control period.

3. Question – The RGGI states are seeking stakeholder comments and feedback on how the cost containment reserve (CCR) has worked to date and the current design of the CCR. Reply – The CCR creates additional CO₂ allowances that are only available for sale if CO₂ allowance prices exceed certain price levels – \$4 in 2014, \$6 in 2015, \$8 in 2016, and \$10 in 2017, rising by 2.5 percent each year thereafter. The use of the CCR in 2014 and 2015 is an indication that the current RGGI allowance budget is too stringent and another reason that further reductions are not justified or feasible. RGGI's current price of \$7.50 is already near the 2016 target with the expectations that it will increase. NRG supports continuation of the reserve but encourages the RGGI to analyze the impact of the CCR on price and modify if required.

In addition to the CCR, NRG recommends the implementation of a price cap mechanism. A price cap would protect RGGI participants from exorbitant compliance prices and negative impacts to market participants as well as consumers. A price cap would be in addition to the current CCR rules (or tied to it), and would act as a final long-term or short-term CCR. We suggest the price cap could be in the form of an Alternative Compliance Payment (ACP), where market participants could, as needed, satisfy a portion of their RGGI compliance requirement by paying the ACP in lieu of buying and retiring RGGI Carbon Allowances.

Another alternative for setting a price cap would be to link it to the CCR. The CCR is a mechanism to "add allowances" to the market to offset supply/demand price increases that can have a material impact on generation cost, rate payer exposure, and reliability. As a second "line of defense", a price cap could be considered if the CCR price were triggered (releasing allowances) and the cap set at the next price threshold. For example, as the priced exceeded \$6.00 in 2014 and the CCR triggered, the cap would be set at \$8.00 (the 2016 price) and fixed until 2016. This short term solution reduces market volatility and provides short term planning for generators and ISO planners. Beyond a short-term price, we believe that longer term caps would benefit RGGI as well as a national market. However we realize price caps are currently not an option in the CPP and that further defining the optimal price (like setting NOx allowance pricing based on the cost per ton for controls) would be difficult to establish and might require a "longer term evaluation" before establishing. With this understanding, at a minimum, price caps could be applied in RGGI beginning in 2018 using the CCR as a reference and sunset when (and if) the CPP goes into effect.

4. **Question** – The RGGI states are interested in hearing stakeholder comments on whether any of the CCR design elements should be reviewed and how the CCR and RGGI cap should work together when developing a CPP compliance pathway.

Reply – Elaborating on our response to Question 3, the reserve's conceptual design should not fundamentally change with the exception of a price cap. However in

alignment with the CPP, and assuming the CCR program continues; the RGGI would need to adjust the cost thresholds to align with the new CPP market (assuming one common market). Further, before implementation the RGGI must assure CCR allocations not be available to any non-obligation sources or sources beyond the border of the RGGI. We recommend the same concept for any RGGI allowance and advocate compliance obligation entities only participation when the CPP goes into effect. NRG does support the concept of the CCR as an addition to the allowance budget only if similar to the current program. However if establishing a CCR must come from within the existing budget, it serves no purpose, in fact does the opposite as it is intended and should not be considered. In the event the RGGI does lower its regional cap (which is not suggested), perhaps a regional CCR could be establish from that specific reduction.

5. **Question** – The RGGI states are seeking stakeholder comments and feedback on the RGGI offsets program including potential improvements, additional offset categories, acceptance of offsets allowances not generated from projects located in the RGGI states or listed on offset registries, and the continuation of the offsets program within the bounds of the CPP.

Reply – NRG does not believe the current offset program is effective and suggests it be revised in the 2016 Program Review. The allowed percentage of 3.3% is low and the complexity in application is a disincentive as demonstrated by the fact that no offsets have been awarded in any of the RGGI states. We appreciate that these offset requirements were developed to ensure that offset projects represent CO₂-equivalent emissions reductions that are real and can be quantified and include five project categories "eligible" for offset allowances. These include Landfill methane capture and destruction / Sulfur hexafluoride (SF₆) reductions / Sequestration of carbon (reforestation, forest management) / Reduction or avoidance of CO₂ emissions from energy efficiency in the building sector / Avoided methane emissions from agricultural manure management operations. However the process is complex and not certain as it includes a consistency application (to the offset generating state and RGGI), ongoing monitoring, and additional verification requirements. Projects that have been deemed consistent with state regulatory requirements must then submit ongoing monitoring and verification reports demonstrating the achievement of CO₂-equivalent emissions reductions or carbon sequestration prior to any award of CO₂ offset allowances by a RGGI State. In addition projects must provide assurance that they are achieving emissions reductions that would not otherwise have occurred in the absence of RGGI's offset provisions. As currently implemented, the offset program is not realistically an option.

To correct this, the use of offsets and their verification process must be simplified and include additional options for applicability. Specifically, in the northeast as many facilities have been closed or subject to closure (due to higher cost, efficiency, and age), they should qualify to generate early emission reduction credits (ERCs) because these closures do provide direct and permanent reductions. Similar to the Clean Air Act for criteria pollutants, if a location is in non-attainment of a particular NAAQS, RGGI should allow closures to generate ERCs that can be used for either compliance or for new generation developed within RGGI states. This provision is in alignment with the CPP proposed model rule.

6. **Question** – The RGGI states are seeking stakeholder comments and feedback on the compliance process, including the interim control periods and possible improvements to the compliance process.

Reply – The current control period timelines are well designed and require no adjustment. However, in 2022, they will not align with the CPP and an adjustment will be required. The RGGI would need to extend the 2018 control period to include 2021 and reset in 2022. We recommend only one control period plan be implemented in 2022 to support trading ready market alignment and simplify compliance obligations.

7. **Question** – Please provide comments on whether the RGGI control periods should align with the CPP interim step periods. If so, what are your suggestions for aligning with the CPP (e.g. extend the RGGI fourth control period to 2018-2021)?

Reply – Refer to Question 6. In line with common market dynamics, every State and thus every market should maintain the same control period. Any fluctuation of control periods leads to incompatible markets, distortion of supply/demand/surrender price signals, and complexity in managing compliance obligations. Extending the 2018 control period to include 2021 is the best seamless option to align with the CPP.

8. **Question -** The RGGI states are seeking stakeholder comments on how best to address the fact that the RGGI cap includes emissions from more regulated sources than the CPP for compliance.

Reply – Applicability needs to be further aligned in the RGGI and the CPP and the "systematic use" of RGGI (or California Compliance Instrument Tracking System Service (CCITS)) as a compliance mechanism. Because program applicability differs, simple-cycle units and new generation (not included in the CPP) are potentially advantaged in the non-RGGI states which can result in the continued deterioration of RGGI generation assets without replacement and an economic disadvantage for existing sources. To address this disparity, RGGI could either amend its regional cap (increase it beyond the applicable CCP cap) or address applicability. We recommend that amending the internal RGGI cap to maintain new units and account for existing simple cycle combustion turbines is the best option. The allowance addition (in RGGI) can be accounted for by utilizing the banked allowance adjustment gap (post CPP implementation) to allocate allowances to these sources. As an option, we recommend the following source specific options for new sources and existing sources.

New Units – To align with the CCP, new units in RGGI should be treated similarly to those in the CPP to align with the CPP (equal playing field concept). However, RGGI must recognize that differential treatment and disparity between new and existing units directly contradicts the equal playing field goal within RGGI and while parity with the CPP is desired, it is not equitable. To ameliorate this irreconcilable conflict, RGGI should continue to require new sources with its program. Otherwise as new generation is incentivized within RGGI states; it would displace existing regional sources and eliminate local jobs (construction/generation/support), while providing no national reduction/change in CO₂ emissions. Further the RGGI should consider the New Source Complement provided in the CPP and within a mass based compliance plan, each RGGI state should include the voluntary New Source Complement option.

Existing Units – Simple-cycle units in the RGGI should receive an allocation to align with existing sources in non RGGI states (exempt in CPP) and to compete equally with new sources in the event RGGI does not adjust applicability (to amend the rules to exclude CTs) . Disadvantaged RGGI simple cycle units (with the exception of local constraints) would be displaced by both non-RGGI sources or new RGGI sources and again only result in no real reduction in national CO_2 emissions. Allocation would allow RGGI to maintain its current program while protecting regional resources, rate payers, and regional reliability.

Cap Adjustment – In the event source applicability does not change, the current cap should be revised to align with the CPP applicable sources. Only the applicable RGGI units based on CPP applicability would account for the current 79M ton cap allotted by EPA, however either a supplemental allocation (to be calculated) would need to be added to the base CPP applicable cap or allocations for new and existing simple cycle CTs must be provided. Basically within RGGI there would be two caps, one for CPP applicable units and the other for RGGI applicable units. Non-CPP sources would comply with only the RGGI cap and allowances would be sold as RGGI allowances at whatever price the CPP market maintains. We understand that other states such as New York are considering a similar option as noted in recent their comments.

9. **Question** – States can use several strategies to comply with the CPP, including the deployment of renewable energy and improvements in energy efficiency. The CPP also includes a Clean Energy Implementation Program ("CEIP") program that a state may choose to participate in. Given the fact that the RGGI states auction most of the CO₂ allowances, the RGGI states are seeking stakeholder comments on whether the RGGI states should participate in the CEIP program.

Reply – NRG supports the concept of the CEIP however within a specific state, options and opportunities may be limited based on qualifications and available locations. We suggest that the RGGI endorse the CEIP concept for renewable developments however, and allow states to relax the criteria which can act as a barrier to development as projects need to begin construction after State Plans are submitted and in service by 2020 and efficiency projects have to be within certain qualified low income areas. Obviously site selection, acquisition, brownfield remediation (if required), permitting and construction would challenge any project in meeting the timeline, especially in the case of having to commence construction after September 6, 2018 and still be "on line" by January 1, 2020. For this reason RGGI should work with EPA to allow state specific flexibility including removing the timeline and assuring preferential treatment in low income areas does not disadvantage renewable investment in other non-qualifying areas.

10. Question – The RGGI states are seeking stakeholder comments and suggestions on the possibility of increasing the size of the current RGGI market/RGGI participating states. The RGGI states are seeking comments on possible advantages and how the RGGI states could best pursue this option.

Reply – NRG does not recommend the expansion of RGGI. Rather, we support the adoption of independent State Measures Plans as a compliance mechanism for the CPP. For the duration before CPP implementation, NRG believes that expansion of states to participate within RGGI would not be beneficial unless it is on a voluntary basis and

these new states align with ISO jurisdictions to assure each generator within the given ISO is subject to the same requirements to eliminate disparity among generators. However this would require RGGI to include the New England and New York ISO as well as PJM in its entirety. As we have experienced, this would be difficult to achieve especially within the short duration before the CPP, not practical and no measurable benefit could be realized from this concept. In addition, if expansion occurred, the same leakage concerns from new RGGI / Non-RGGI borders would have to be resolved. We do believe alignment with other current CO2 markets such as the CCITS and Canadian Markets should be considered which would expand the market and possibly reduce compliance costs within RGGI.

11. **Question** – The RGGI states are seeking stakeholder comments and feedback on improvements to RGGI COATS to enhance the user experience or to help prevent user error.

Reply – NRG does not have any material comments on the existing tracking system independent of the CPP. However, once the CPP is effective, either one common tracking system must be established or independent systems must have common currency and seamless trading-ready mechanics, in which "a ton of emissions must equal a ton of emissions" in any tracking system. Conversely, a patchwork of incompatible state/region plans can lead to market manipulation, perverse localized incentives, economic distortions, and complexity in monitoring various markets (assuming market monitoring). For simplicity, we recommend RGGI, CCITS, and EPA work together to define one common trading and tracking system (e.g. Acid Rain Program/Clean Air Interstate Rule ("CAIR")/Cross State Air Pollution Rule ("CSAPR") and develop transition plans to protect assets held (allowances) and provide a common market. To do this RGGI and CCITS would have to lead the design or compromise their current tracking system design to promote a uniform system.

Section III – Additional Program Area Comments

A. National Program Objectives - NRG supports a national program, the CPP provides an opportunity for this platform.

NRG supports a national program with state-specific design options to assure a level playing field for every state economy and every state generation resource. The CPP provides an opportunity for this platform. We recognize RGGI and its effort to act as a model rule for a national program to reduce CO₂ emissions and introduce the concept of a mass-based compliance mechanism. However, we do not believe any regional based constraints should apply that detract from EPA's program design. As stated in our response to Question 2, any deviation from a national program such as regional boundaries or reduced caps defeat the purpose of a national program and removes apparent broader program/market efficiency. Limited areas bound by region such as RGGI or programs incompatible with other regions would be disadvantaged because trading opportunities would be restricted and disproportional to other larger regional (national) programs, would result in disproportional

compliance requirements add unnecessary compliance risk, and would possibly result in high compliance costs. Because the RGGI is an established and successful program, the RGGI leadership and other regional initiative leaders, must endorse and accept the benefits of a national program, avoid restrictions from a regionally restricted based program and work to implement best practices for a seamless and efficient national program which includes the option for the State Measures Plan.

B. RGGI Compliance Option – NRG supports State Measures Plans and the ability to use RGGI as a compliance option.

NRG supports State Measures Plans and the ability to use various options to develop state-specific compliance plans. We understand that each RGGI State has considered opting to use only RGGI as its primary compliance mechanism. We recommend the RGGI states do not automatically implement RGGI as its only compliance option and instead consider the State Measures approach for the reasons stated in our response to Question 1 to assure program efficiency. In addition, we recommend RGGI states request extensions for State Implementation Plans to further review the developing CPP options and approaches by other Non-RGGI states before making any commitment on compliance options. This is necessary to assure what the RGGI states do for compliance better aligns in a national program with what the Non-RGGI states select.

C. Liquid Markets – NRG supports a national trading program with common intrastate trading-ready markets.

If rate-based or mass-based options were selected, NRG recommends a national trading program to improve liquidity. Common interstate trading-ready markets with no restrictions are necessary to achieve high liquidity.

We encourage state measures as the primary option for every state. However, we recognize that trading programs will be implemented as a primary option for many states or as backup measure to state measures plans. To achieve this, a common trading-ready approach would help create efficient and cost-effective compliance for facilitating interstate trading. The CPP allows a mass-based model rule and/or rate-based model rule. EPA presents both of these model rules as "ready-for-interstate trading," which means that all states adopting the mass-based model rule would be able to trade with one another and all states adopting the rate-based model rule would be allowed to trade with one another. EPA envisioned a "commonality in the allowance currency", and criteria surrounding the trading program. However, without adjustments this does not appear to be the case. This will require RGGI and the CCITS to modify their program to align with a national program once designed. Specifically every RGGI state must have the opportunity to participate in a national trading reading program. We encourage RGGI to embrace alignment and "do what it takes" to support a common program.

The concept for a liquid market is similar to EPA's tradition of implementing interstate trading compliance approaches including the Ozone Transport Region trading program, the NOx Budget Trading Program under the NOx SIP Call, CAIR

and CSAPR, the Regional Haze Program, and the Acid Rain Program. Each of these programs was designed to facilitate interstate compliance through mass-based trading programs and was successful in cost-effectively reducing emissions. Carbon dioxide is well-suited for national regulation under a program that facilitates a broad regional or multi-state compliance system, while promoting economic and administrative efficiency. A common market would further benefit contiguous ISOs that dispatch EGU systems and may import and/or export electricity. Compliance structures that recognize such multi-state dynamics are advantaged only when they allow for interstate coordination to mitigate some of the interstate dynamics and market inefficiencies that could result if regions or states take isolated regulatory approaches.

D. CO₂ Target Adjustments / Banked Allowances – RGGI should not reduce its cap or targets within the 2016 Program Review or for the CPP.

RGGI has been a leader in addressing climate change, achieved early reductions of 45% by 2014 (eight years ahead of the CPP), and targets a 63% reduction by 2020 (two years before the CPP even begins). To keep the RGGI states in parity with the Nation, RGGI must realize any additional reduction potential may be limited compared to other States because its reduction program has already been implemented. For these reasons and those stated in our reply to Question 2, RGGI as a region, should not reduce its cap or targets within the 2016 Program Review or for the 2030 CPP target.

With regard to the RGGI cap and trade strategy, we recognize that RGGI and the CPP seek to achieve CO₂ reductions and to promote investment in energy efficiency, renewable energy and CO₂ abatement technologies. However, from our experience it is clear that the RGGI's cap and trade program has not been the primary catalyst in reducing GHG or resulted in power sector investments. CO₂ reductions have come from a free market deploying new, cleaner energy resources within the region, in both the wholesale power and transportation sectors which aligns to the objectives of the state measures approach. Since the electric industry was restructured in 1999, CO₂ emissions from the power generation sector in the RGGI states have dropped 45%, well ahead of RGGI's initial goal of 10% and far exceeding the CPP goal for a 30% reduction form 2005 emissions by 2030. As a result of this "free market" CO₂ reduction, in the 2012 Program Review RGGI reduced the cap of 165M tons to 91M tons (45% reduction) was required to keep the program viable in the CO_2 market and to avoid allowance cost to remain at the established price floor. Further, RGGI included a 2.5% annual reduction which will result in a cap of 78M tons in 2020, an overall 53% reduction from its 2012 cap and a 58% reduction from its original cap in 2009. Please note, RGGI's 2020 cap of 78M tons is already less than the CPP cap for the combined RGGI states of 79M tons by 2030. Further, RGGI reduces the cap from 2014-2020 to adjust for banked CO₂ allowances that were already in circulation. The RGGI adjusted cap in 2020 is approximately 56 million, about 70% of the CPP. Because the planned and effective caps are already well below the CPP, any adjustment is not justified and would create further inefficient disconnects between RGGI and the CPP.

With regard to banking, we have noted that RGGI maintains a bank of allowances purchased by generators for current or pending compliance use. Because these allowances have been purchased with the promise they would retain their value as a compliance mechanism, the RGGI must preserve banked allowances for use in the pending RGGI control periods and implementation with the CPP until the reserve is exhausted. We request RGGI consider allowing the use of banked allowances beyond 2020 and for compliance within the CPP program.

E. Market Applicability – Re-evaluate approach to market participants, including additional / tighter limits on auction participation and imposing maximum inventory positions for non-compliance entities.

As the RGGI cap declines, the fundamental value of allowances and the associated compliance burden on generators increases as simple supply and demand economics place upward pressure on pricing. However, without other market restrictions, such supply / demand tightening can attract speculative financial activity that leverages this upward momentum to increase prices far beyond their fundamental equilibrium values. When the RGGI market was created, supply was high and prices were low which limited the interest of speculators. However, as reflected in RGGI's own Market Monitor Reports, speculative activity has greatly increased since the Program Review completed in early 2013. As compared to the early years of the program there is now significantly more opportunity for market intervention and speculation that can run counter to the intended efficient operation of the RGGI market.

For this reason, we believe the 2016 Review should include a review and evaluation of its auction process including market participation in general, the effectiveness of market monitoring mechanisms, and measures such as those applied by the California Air Resources Board and the Massachusetts Department of Energy Resources. These measures would include evaluating additional limits on the auction process, who (and to what extent) can participate, and tightening the maximum bid sizes for non-compliance entities. Furthermore, and perhaps of even greater importance, we would suggest applying limits on inventory positions for noncompliance entities. We believe such "holding limits," in conjunction with the aforementioned auction limitations, can help to maintain adequate liquidity in the market while materially reducing the incentive and ability of motivated actors to drive prices away from equilibrium values.

F. Modeling – NRG recommends a review of the reference case scenarios.

We have reviewed the assumption in the reference case and "high level", found two material areas of concern. The first is assumptions on new generation and retirements, and we believe that some facility representations are not accurate. We realize that any modeling input is dynamic and there is a time at which the model is run and becomes "static" for the purpose of policy or regulation development. We request that additional review of the reference case assumptions continue and remain dynamic as long as possible. In addition to facility information, we recommend RGGI include implementation of the CPP in its federal regulatory review on Federal Environmental Policies. We recognize the next RGGI control period would occur before the CPP however, planning and positioning before the CPP will occur during this time and have an effect on the regulatory landscape as well as generation planning. This further supports the need for RGGI to seek the extension in submitting CPP compliance plans.

We appreciate the opportunity to provide these comments and recommendations. If you have any questions or require any additional information, please contact me at (617) 529-3874 or shawn.konary@nrg.com or David Bacher at (302) 540-0327 or david.bacher@nrg.com.

Sincerely yours,

Kang

Shawn Konary Senior Director Environmental – East Region

Copies: Walter Stone, Vice President, Environment David Bacher, Senior Regional Manager, East Region File