

ENVIRONMENTAL ENERGY ALLIANCE OF NEW YORK

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May 19, 2017

Andrew McKeon, Executive Director
RGGI, Inc.
90 Church Street, 4th Floor
New York, NY 10007

Comments submitted by email to info@rggi.org.

Dear Mr. McKeon,

I am pleased to write on behalf of the Environmental Energy Alliance of New York, LLC (“the Alliance”; participating members identified below) to provide comments related to the April 20 RGGI stakeholder webinar. Alliance members own and operate electric generating and transmission and distribution facilities located throughout New York State and, in some instances, across the nation and the globe. The operations of Alliance members contribute to the reliability of the State’s electric grid and to the economic well-being of New York State.

The Alliance was unable to prepare extensive comments to meet the requested submittal date of April 27 given our obligation to review the new program materials, prepare a response and receive approval from our members. Our comments address ramifications of the policy alternatives proposed against the uncertainties introduced by the last set of program changes. We have only three years of experience with the programmatic changes that were made in the 2012 review; it seems prudent to observe and to measure some longer-term trends prior to making substantial changes. Secondly, the analysis presented herein shows that the programmatic changes prior to any 2020 adjustments will create an unprecedented allowance scarcity. How the auctions and the secondary market will respond to the first-ever scarcity situation is an unknown. In addition, changes to the compliance entity share is a component of the program for which there is no experience. Finally, until we understand the consequences of these changing allowance ownership patterns we suggest there should be no changes to the Cost Containment Reserve in the post-2020 time frame.

Central Hudson Gas & Electric Corporation
*Consolidated Edison Company of New York, Inc.**
*Dynegy Power LLC.**
*Eastern Generation**
*National Grid**
*New York Power Authority**
New York State Electric & Gas Corporation

*NRG Energy, Inc.**
Orange & Rockland Utilities, Inc.
PSEG Long Island.
Rochester Gas & Electric Corporation
*Roseton Generating, LLC**
*Selkirk Cogen**
*TransCanada**

In previous shareholder comments we have suggested it is premature to make major changes to the RGGI program design post-2020. The opportunity for significant emission reductions that were driven primarily from the declining use of coal and residual oil for economic reasons will not be available in the region, suggesting that future emission reductions will be more difficult and costly. The programmatic changes prior to 2020 may create an allowance scarcity; how the auctions and the secondary market will respond to the first-ever scarcity situation is unknown. Further, as we present below, the diminished share of allowances held by compliance entities is an additional aspect of the RGGI program with unknown consequences. If a paucity of allowances in the accounts of compliance entities drives the allowance price up enough to trigger the cost containment reserve, the Alliance concerns about this issue will have been validated. Until we see the market dynamics and ratepayer impacts, it is premature to consider removing the cost containment reserve, as some stakeholders recently advocated.

Allowance Ownership

In the EPA acid rain and various NOx trading programs, allowances were primarily awarded to affected sources based on historical operation. As a result, the bank contained allowances that affected sources deemed surplus because of control equipment installations, and changes in operating patterns. The bank was supplemented by unit retirements after those sources had established an operating bank of allowances to provide margin for future operating variations and potential monitoring problems. Non-compliance entities either purchased these surplus allowances or procured allowances from other sources (e.g., Acid Rain Program auctions offered a limited number of allowances). The primary motive for most non-compliance entities to purchase allowances was for investment purposes but there were also entities that purchased allowances to retire for environmental reasons. To date the environmental retirement purchases in these EPA cap and trade programs have been relatively small compared to the budgets and did not affect allowance prices.

Ownership of allowances in the RGGI bank is different than the ownership of allowances in the EPA cap and trade allowance banks. In the RGGI program allowances are auctioned and compliance entities have to purchase them to operate so they have different strategies than for other programs. Alliance members purchase allowances based on projected needs primarily for the current compliance period and to a much more limited extent for the future. There are three reasons for this approach: accounting practices, tying up capital, and changing assets. The simplest accounting approach is to purchase allowances needed for the next tracking period, and debit that expense as operations use the allowances. Purchasing allowances far in advance of planned use complicates that accounting but, more importantly, ties up significant capital that cannot be used elsewhere. Finally, it is clear that the landscape of ownership, regulatory pressures and fuel costs changed over the course of RGGI and it is becoming increasingly difficult to accurately project future utilization of the fossil units. For these reasons, compliance entities will tend not to purchase allowances for compliance purposes beyond the current compliance period. There is no reason to expect that additional changes will not occur relative to current expectations so there is an incentive for compliance entities to minimize the RGGI allowance purchase horizon.

There is another related point relative to allowance ownership. Alliance members purchase allowances for their own use. Any sales of allowances to other organizations is purely incidental to the company goal of getting the allowances necessary for compliance at the lowest possible cost given the existing and projected pricing.

RGGI Allowance Status

The Potomac Economics [Report on the Secondary Market for RGGI CO₂ Allowances - Q4 2016](#) allowance status summary states:

- There were 234 million CO₂ allowances in circulation.
- Compliance-oriented entities held approximately 142 million of the allowances in circulation (61 percent).
- Approximately 144 million of the allowances in circulation (62 percent) are believed to be held for compliance purposes.

These data can be used to determine how the first and second control period interim allowance adjustments will impact the allowance bank by 2020 (Table 1a). Because the Potomac Economics report was released at the end of February we assume that their estimate of 234 million CO₂ allowances in circulation accounts for both the 2015 and 2016 end-of-year retirement of allowances accounting for 50% of the emissions in those years. In order to reflect the actual bank of allowances minus emissions we should also remove the other 50% of the 2015 and 2016 emissions (82.6 million tons) as we know those allowances will be needed for compliance in 2018 as shown in the 2016 row in Table 1a. Note that when this is done the share of allowances held for compliance purposes drops to 40%.

In Table 1b, for the period 2017 to 2020, the emissions were assumed equal to the IPM projections for the Reference Case without the Clean Power Plan (DRAFT_Results_RGGI_2017_Reference_Case_No_CPP.xls) in 2017 and 2020 and interpolated for 2018 and 2019. The difference between those projected emissions and the adjusted budget cap represents the change in the allowance bank. As currently designed, the allowance bank will be drawn down due to the interim control period adjustments such that we expect that at the end of the fourth compliance period in 2020 the allowance bank will be 62 million tons, which is only about three quarters of the expected emissions for that year.

Table 2 forecasts of the size of the allowance bank also using the projected emissions from the IPM reference case, just as in Table 1. The reference case allowance allocations extend the final 2020 allotment out to 2030. The allowance allocations from the three policy scenarios proposed at the April 20, 2017 stakeholder meeting are also presented. For each case the cumulative allowance bank is tracked in the total bank column. The allowance margin is the proportion of the total bank to the projected emissions expressed as a percentage. Note that when the total allowance bank goes below zero the emissions are greater than the allowances available and RGGI is out of compliance.

Two issues are raised by these projections: the appropriate size of the allowance bank and the unintended consequences of the compliance entity share of allowances.

Table 1a: Projected Allowance Bank and Compliance Entity Share of Bank

Year	Emissions or IPM Projections	Allowance Allocations	Change in Bank	Total Bank	Compliance Entity %	Compliance Allowances
2016	80,624,392	64,615,467	-16,008,925	151,000,000	40%	61,000,000
2017	83,000,000	62,452,795	-20,547,205	130,452,795	31%	40,452,795
2018	82,000,000	60,344,190	-21,655,810	108,796,985	17%	18,796,985
2019	81,000,000	58,288,301	-22,711,699	86,085,286	-5%	-3,914,714
2020	80,000,000	56,283,807	-23,716,193	62,369,093	-44%	-27,630,907

Table 1b: Changes if the CCR is triggered each year 2017-2020

Year	Emissions or IPM Projections	Allowance Allocations	Change in Bank	Total Bank	Compliance Entity %	Compliance Allowances
2017	83,000,000	72,452,795	-10,547,205	140,452,795	36%	50,452,795
2018	82,000,000	70,344,190	-11,655,810	128,796,985	30%	38,796,985
2019	81,000,000	68,288,301	-12,711,699	116,085,286	22%	26,085,286
2020	80,000,000	66,283,807	-13,716,193	102,369,093	12%	12,369,093

Over the course of the stakeholder process, it is clear that there is no consensus on the ideal or appropriate size of the allowance bank. Advocates for more reductions want a smaller bank so that reductions occur sooner. Proponents of higher allowance prices want to reduce the size of the bank because fewer available allowances should drive the price up. However, there are reasons that the bank should not get too small. First, emissions are directly proportional to operating times which are strongly related to weather-related demand or other system contingencies. Therefore, affected sources want to have sufficient banked allowances in their accounts to be able to supply power in periods of increased demand. In addition, companies prefer to have a small surplus in their accounts in order to address any monitoring problems and adjustments to final emission totals that may be identified by the EPA after the quarterly data submittal.

Alliance member companies consider compliance the highest priority and the only way to insure that is to only generate emissions at a rate that is less than the quantity of allowances in hand. Theoretically, a compliance entity could generate electricity (and emissions) and subsequently purchase allowances in the marketplace but if the marketplace is dominated by non-compliance entities, two serious potential consequences could arise. First, affected sources may be forced to purchase allowances from an entity that knows the company has a compliance obligation and charge an exorbitant amount for the allowances. This, in turn, has two downsides: the windfall of money will not be invested in energy efficiency as is done with RGGI auction proceeds (i.e., there is no societal benefit to those higher priced allowances) and eventually the price will be passed on to ratepayers. Second, a company could choose not to generate electricity because they don't have the allowances and that will affect power system operation; in the worst case it could affect reliability.

Table 2: Projected Allowance Bank and Compliance Entity Share of Bank for Reference and Policy Scenario Allowances and Reference Emissions

Year	Projected Emissions	Reference Case			Policy Scenario #1			Policy Scenario #2			Policy Scenario #3		
		Allowance Allocations	Total Bank	Allowance Margin %	Allowance Allocations	Total Bank	Allowance Margin %	Allowance Allocations	Total Bank	Allowance Margin %	Allowance Allocations	Total Bank	Allowance Margin %
2021	79,333,333	78,175,215	61,210,975	77%	71,220,835	54,256,595	68%	70,075,000	53,110,760	67%	70,439,082	53,474,842	67%
2022	78,666,667	78,175,215	60,719,523	77%	69,266,455	44,856,383	57%	67,800,000	42,244,093	54%	67,702,949	42,511,124	54%
2023	78,000,000	78,175,215	60,894,738	78%	67,312,075	34,168,458	44%	65,525,000	29,769,093	38%	64,966,816	29,477,940	38%
2024	77,000,000	78,175,215	62,069,953	81%	70,357,695	27,526,153	36%	63,250,000	16,019,093	21%	62,230,683	14,708,623	19%
2025	76,000,000	78,175,215	64,245,168	85%	68,403,315	19,929,468	26%	60,975,000	994,093	1%	59,494,550	-1,796,827	
2026	75,000,000	78,175,215	67,420,383	90%	66,448,935	11,378,403	15%	58,700,000	-15,305,907		61,758,417	-15,038,410	
2027	74,666,667	78,175,215	70,928,931	95%	64,494,555	1,206,291	2%	56,425,000	-33,547,574		59,022,284	-30,682,793	
2028	74,333,333	78,175,215	74,770,813	101%	62,540,175	-10,586,867		54,150,000	-53,730,907		56,286,151	-48,729,975	
2029	74,000,000	78,175,215	78,946,028	107%	60,585,795	-24,001,072		51,875,000	-75,855,907		53,550,018	-69,179,957	
2030	73,666,667	78,175,215	83,454,576	113%	58,631,415	-39,036,324		49,600,000	-99,922,574		50,813,885	-92,032,739	

In summary, the results outlined in the two tables presented here show that these issues have to be addressed in any future changes to the RGGI program. The appropriate size of the allowance bank could become an issue if the projected emission reductions necessary to achieve compliance are more difficult to achieve than the RGGI modeling projections for all three policy scenarios indicate. In all of those scenarios there will not be enough allowances available to cover expected emissions in the reference case. Importantly these projections show that the comfortable operating margin that has been present throughout RGGI to date will begin to disappear. The Alliance believes that a buffer of 15% for operational variations and another 5% for monitoring problems represents the minimum acceptable compliance entity margin and therefore recommends that any plan to reduce or to eliminate the bank should take into account the retention of an appropriate level of banked allowances in the overall system so as to allow compliance entities to meet their allowance requirements at a reasonable cost. The compliance entity share of the market is an even more pressing concern. Table 1a shows that the compliance entity share of allowances could be less than 20% as soon as 2018 and Table 1b shows that even if the Cost Containment Reserve is triggered each year from 2017 to 2020 the compliance entity share of the allowances will be less than the recommended 20% by 2020. This trend shows that compliance entities will have to go to the non-compliance entities to obtain enough allowances to operate.

We appreciate the opportunity to comment on the RGGI program design elements discussed above. Thank you for your time and consideration.

Sincerely,

A handwritten signature in cursive script that reads "Sandra Meier". The signature is written in black ink on a light green rectangular background.

Sandra Meier, PhD
Director, Generation Services
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