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 To: RGGI Staff Working Group and other RGGI Stakeholders
 From: Derek Murrow & Heather Kaplan, Environment Northeast Larry DeWitt, PACE Energy Project
 Date: November 19, 2004
 Re: ENE Draft RGGI Model Rule Outline, Key Issues, and Next Steps for Modeling

The RGGI stakeholder process has been underway for a number of months and we have talked as a group about numerous design elements, but we have not talked about what a complete program for the Northeast might consist of. Because so many of the design elements are interrelated and decisions about one may have a large impact on others, we felt it would be useful to the process to prepare a model rule outline that pulls together the various issues under a more comprehensive framework.

The model rule outline is meant as a discussion piece and as a starting point for the modeling that will be done over the coming weeks and months. We look forward to discussing it with other groups and making adjustments based on the modeling or other information we receive.

This memo also includes a discussion of what the next steps should be for electricity sector modeling of the cap and trade program.

Thanks for your review and consideration of this approach as we collectively work towards making RGGI a success.

#### **RGGI Model Rule Outline**

The draft model rule is attached to this memo and contains both an outline of what a comprehensive policy might look like and a short discussion of how we arrived at our recommendations. Because the model rule outline does not prioritize any elements of the program, we wanted to highlight some of the design elements that we think are most important:

#### Cap Level and Design

• *We propose that the cap achieve a 25% reduction in emissions from today's levels by 2020.* This cap would exceed the NEG/ECP and state targets in order to produce credible emissions reductions while allowing some flexibility for limited off system emission reductions and a potential cap decline circuit breaker.

- The cap should be designed to progress from today's emissions levels to the 2020 target through regular reductions (every 2 years) to put us on the right trajectory towards the long term emissions reduction goals.
- The cap design could include a circuit breaker that would hold the cap level flat in subsequent periods if average allowance prices exceeded the circuit breaker price; our current thinking is that this price should be at least \$30/ton CO<sub>2</sub>.

#### Allowance Apportionment and Allocation

- Allowances should initially be distributed equally between consumers and generators with the portion that goes to generators declining over time.
- The 50% of allowances targeted towards consumers should be used to reduce the overall cost of RGGI through support for energy efficiency programs and other programs that develop the clean energy technologies of the future or benefit consumers; the percentage should grow by 5% per allocation period.

#### Flexibility Mechanisms and Offsets

- Banking should be allowed but borrowing should not be permitted
- Offsets, or off system emissions reductions, could be included as long as they are not within the capped system (gird connected electricity projects within the RGGI region)
- Offsets should be limited in quantity to 1% of a plant's total emissions in the second compliance period and increase by an additional 1% in subsequent periods (assuming the cap decline is what we present here).
- Offsets must be real and equal to an on-system emission reduction; they must be verifiable permanent and provide ancillary environmental benefits.

#### IPM Modeling – Next Steps

The IPM modeling results for the reference case, as presented at the November 12 stakeholder meeting appeared to be reasonable, but we encourage the state working group to share the final details associated with the reference case run. A thorough reference case review is extremely important since all future runs will build off of this base case and stakeholders need to have some confidence that the model is properly representing the Northeast wholesale electric market. In our first memo on RGGI modeling (dated April 6, 2004) we outlined a list of essential model results that we believe ICF should report for each modeling run. It will be important for stakeholders to see both the reference case results and the final reference case assumptions document and have an opportunity to submit comments to the state working group.

In order to judge the performance and viability of the RGGI program and the model rule, we are proposing a number of additional IPM modeling runs be completed that build on the reference case run.

The following is a short-list of the runs we believe are essential to the process, with our highest priority runs listed first and highlighted in bold below.

Run 1:	<i>Basic CO<sub>2</sub> cap with a decline to 25% below today's emissions by 2020</i> (see model rule outline for design; include banking)		
Run 2: Run 1 (25% by 2020) with the leakage policy imposed (imports treated as a			
Run 3:	Run 2 (25% by 2020 and leakage policy) with efficiency resources chosen by the model		
	to achieve zero load growth across the RGGI region (use ACEEE efficiency resource		
	and cost numbers to build efficiency 'model plants' but limit the selection of efficiency		
	projects to the number needed to keep load growth at zero)		
Run 4:	Run 3 with offsets allowed up to the percentage limit by facility (significantly more		
	discussion is needed on how offset price curves will be developed and what project types		
	will be available)		
Run 5:	Run 4 with the RPS requirements expanded in every state to ramp up from the current		
	assumptions to 20% by 2020 (incremental renewables)		
Run 6:	Run 4 but have the model choose all cost effective efficiency resources and not be limited		
	to zero load growth (may need to limit the quantity slightly by year so not all resources		
	are chosen in early years)		
Run 7:	Run 4 but increase cap decline to 30% below today's emissions by 2020		
Run 8:	Run 4 but decrease cap decline to 20% below today's emissions by 2020		
Run 9:	Run 4 but change the cap decline to begin at 5% below today's emissions and ramp down		
	to 25% below by 2020		
Run 10:	Run 4 with a high fossil fuel energy forecast		

We believe these runs will properly bound the potential environmental benefits and economic impact of the RGGI program and it will be essential to model at least this many policy elements.

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## Model Rule Outline

DRAFT – November 19, 2004



MODEL RULE OUTLINE REGULATED UNITS		COMMENTS	
	<b>Phase 1:</b> Fossil fuel-fired electricity generating <i>facilities</i> with a combined thermal and electric nameplate capacity $\ge 25$ MW – we strongly recommend that the states group units and regulate at the facility level (include all units at an electric generating facility/plant)	In order to ensure environmental integrity the RGGI program should include all units at an eligible facility to avoid increased dispatch or construction of units under 25 MW	
-	<b>Phase 2:</b> Within four years of the start of RGGI expand to other stationary sources and smaller electric generating facilities		
GREE	NHOUSE GASES REGULATED		
	Phase 1: Direct emissions of carbon dioxide (CO <sub>2</sub> )		
-	<b>Phase 2:</b> Within four years of the start of RGGI expand to other greenhouse gases		
REGIO	ONAL EMISSIONS CAP		
	<b>Initial Cap Level:</b> The initial cap should be equal to the average annual emissions from the regulated facilities over the years 2000 to 2004; the first cap period should extend over a two-year period from 2008 to 2009	Emissions from the RGGI region in 1990 and today are approximately equal (See Figure 1 and ENE's memo to stakeholders on historical emissions); the cap should be set based on the most recent years because 1990 emissions data is of poor quality	
	<b>Cap Reduction Over Time:</b> The cap should decline at a rate to achieve a <b>25% reduction from today's emissions by 2020</b> – every two years by 4.2% of the initial cap level (2.1% per year) with the first cap reduction in the 2010 and 2011 period – See Figure 1 & 2 and Table 1	The program will be more efficient if the distribution of allowances, cap decline, and compliance periods are on the same timeline; a short time period – two years – will help establish the market price, ensure that updating has an impact, and through frequent cap reductions illustrate that the program is working; the cap level that ENE is recommending slightly exceeds the various targets identified by the participating states, understanding that the circuit breaker could delay the rate of cap decline	

The circuit breaker price needs to be set above the anticipated allowance price – at a level that would have a significant impact on the electricity market; if the circuit breaker price is set too low, the cap will not decline with time. If the cap is not aggressive, then there is no need for a circuit breaker of any kind. The $30/ton CO_2$ is a minimum and preliminary and will be influenced by modeling results.
See attached consumer allocation description and rationale; apportionment should be based on population to reward efficient energy users and to recognize that consumers will be paying for the program
See below for output based rationale; apportionment among states of the allowances going to generators should be consistent with the way generators are allocated allowances by the states

#### STATE LEVEL ALLOCATION

**Consumer Allocation:** The details of the consumer allocation should be left up to the individual states with the following guidance: states should fund programs and strategies that would reduce the long-term costs of the RGGI program; these programs should include supporting cost-effective energy efficiency and electricity conservation up to its economic potential; additional allowances could be used to fund clean energy programs, rebates to customers, support for voluntary clean energy marketing claims, and the costs of administering the RGGI program. Functionally the allowances would be distributed to the entity running the program, such as a distribution company that is administering conservation and efficiency programs. The entity would sell the allowances and use the proceeds to expand their programs. Some states may also be able to allocate

See attached consumer allocation description and rationale (previously known as a Public Benefits Allocation). A large portion of the allowances should be allocated to programs that reduce the total cost of the RGGI program – in the near term energy efficiency and in the longer term support for other zero emitting technologies. This is the best way to ensure the program has the smallest impact on consumers. There is also a legitimate concern that companies who incur lower compliance costs will gain windfall profits from increased electricity prices; the best way to mitigate windfall profits is by limiting the distribution of free allowances to generators.



allowances directly to efficiency program administrators, such as NYSERDA or Efficiency Vermont, who would sell the allowances and use the proceeds to support additional or expanded programs.	
<b>Generator Allocation:</b> Allowances should be distributed to generators for the two year compliance period based on electricity output (all regulated, fossil electric generating facilities with a thermal and electric nameplate capacity $\geq$ 25 MW) with updating. The details of the allocation methodology should be left up to the states but we encourage states to use a fuel neutral approach; the state should allocate the same number of allowances per MWh to new entrants based on an estimated capacity factor in the upcoming compliance period	Output based allocation rewards the production of the product we are purchasing – electricity; other allocation schemes based on emissions reward the more polluting generators and will not create the incentives we need to achieve long-term emissions reductions.
DATA COLLECTION AND EMISSIONS REGISTRY	
<b>Emissions Monitoring and Measurement Protocols:</b> The existing acid rain and NOx emissions reporting procedures as contained in EPA 40 CFR Part 72 and 75 should be used; the same fuel use based emissions factors, methodologies, and quality control should be used for units that currently do not report to EPA (may not need fuel flow meters – consider NOx average fuel use methods)	We should build on EPA's existing reporting methods as most companies already report in this fashion or are very familiar with the methodology, which can be expanded to cover other sources
<b>Reporting Guidelines:</b> The states should create a regional emissions registry to collect data for RGGI and other related programs. RGGI reporting should be quarterly or not less than annual; regulated units should report emissions for all years beginning with the year 2000; all emissions data should be readily available to the public through a regional or state web site	
ALLOWANCE TRACKING AND COMPLIANCE PERIODS	
Allowance Tracking: Allowances will be issued by the individual states but their ownership needs to be tracked regionally through a database similar to EPA's allowance tracking system, including public disclosure of ownership; the average price of allowances as reported by multiple brokerage companies should be used to determine whether the circuit breaker price has been exceeded over a two-year period	



	<b>Compliance Period:</b> The compliance period should be consistent with the cap design and allocation scheme – a two year period beginning with 2008	
FLEXIB	ILITY MECHANISMS	
	Banking: unlimited banking should be allowed	
	Borrowing: Borrowing should NOT be permitted	Enough flexibility is created through multi-year compliance periods, unlimited banking, and offsets.
	<ul> <li>Offsets: Offsets could be included in the program but on a limited basis, assuming the cap is aggressive. Offsets do not need to be included in the first phase of RGGI if the cap starts at today's emissions levels, but if they are included, the following is a suggested framework for the program. Inclusion of a sector or project type in the offsets program should not imply in any way that the sector might be exempt from other or expanded GHG policies in the future.</li> <li>Quantity: The RGGI program is designed to reduce emissions within the electricity sector; therefore the quantity of offsets used within the program should have an explicit limit <ul> <li>In the first compliance period the cap is set at current emissions levels and no offsets should be included; time is also needed to establish the allowance market</li> <li>In the second compliance period (2010-2011) the number of offsets used for compliance period (2010-2011) the number of offsets used for compliance should be limited to 1.0% of total emissions from a facility in that compliance period (e.g. if a facility emitted 1,000,000 tons, offsets could account for 10,000 tons and allowances would have to account for 990,000 tons)</li> <li>In subsequent periods the maximum percentage accounted for by offsets would increase by 1% per compliance period (e.g. 2% in Period 3, 3% in Period 4, etc)</li> </ul> </li> <li>Environmental Integrity: Any offset projects should meet the highest standard of environmental integrity such that they achieve real, verifiable and permanent reductions in greenhouse gas emissions beyond standard industry practice, and provide real ancillary environmental benefits</li> </ul>	Emissions from other sectors should primarily be addressed through other regulatory programs. Offsets within RGGI are generally designed to reduce the cost of the program, buffer against allowance price spikes, and allow for experimentation in other sectors, and should thus be limited Allowing for a 1% increase in offsets ensures that emissions reductions occur in the electric sector but that the offsets pool increases with time; this is also consistent with the CDM rules for industrialized countries; see Figure 2 for a graphic presentation of this trend Agencies should not be in the position of limiting the offset projects included in the program. They should approve all eligible offsets and it should be up to the companies to purchase offsets and trade allowance and offsets between facilities to address the offset limit. Standardized guidelines and protocols associated with environmental integrity (permanence, additionality, leakage, measurements, verifiability, etc) should be developed in collaboration with regulators, stakeholders, and the potential regional oversight group – this is likely to occur after the development and passage of the RGGI model rule The offsets outline developed by the state working group appears to make sense as a process for developing a short list of near and mid- term offset project types, but the details probably can be excluded from the RGGI model rule
	<ul> <li>Scope: Start with project types we have experience with and for</li> </ul>	Grid connected energy projects such as conservation or the addition of



which we can develop adequate rules and performance standards based on existing experience

- Suitable Project Types: direct emissions reductions from non-regulated sources that are not likely to be covered in Phase 2 of the program; and sequestration (forest, agriculture, geologic, etc)
- Non-Suitable Project Types: indirect electricity projects such as energy efficiency, renewables, or nuclear uprates would not qualify because they are not outside the system
- Limit offsets to the RGGI region the revenue from the program should stay within the region and other states should not get the financial benefit of participation in the RGGI offsets market unless they are included in the full RGGI program
- Oversight:
  - We encourage the RGGI states to establish a regional body, with representation from the state working group and other stakeholder groups, that develops all rules and procedures for offsets
  - The regional body would also oversee the approval process, making recommendations to individual state regulators for all offsets projects
- Procedures:
  - Guidelines and protocols should be developed by offset project type with standardized baselines
  - Third party verification should be used once protocols are approved and verifiers should be certified by the regional body
  - Guidelines for initial offset project types should be completed by the beginning of the second trading period (2010)
  - These guidelines must be established before an offset unit is recognized by the program; early compliance offsets could be allowed if they meet the requirements of the program
  - New offset project types should be encouraged and the guidelines and protocols should be developed using pilot projects
- Accounting:
  - Offset projects should first be approved by the regulatory

zero emitting sources such as renewables do not lead to real emissions reductions beyond what the cap will deliver; states should promote them through the consumer allocation and not allow them to qualify as offsets. The cap level sets the quantity of emissions from the electricity sector across the region.



<ul> <li>body and then be registered in a database with unique identifiers assigned to each approved reduction (ton)</li> <li>The offset database should track ownership of each offset unit (unit)</li> <li>An offset should be equal to an allowance (one ton)</li> <li>Offsets could be traded and banked for future compliance periods</li> <li>Cost Recovery: The offset development, management, and program costs should be covered through fees to offset applicants and not through the consumer allocation</li> </ul>	
REGULATORY REVIEW AND PENALTIES	
The state environmental compliance agencies in each state should be responsible for reviewing the compliance of regulated facilities; financial penalties should be set for non-compliance that are an order of magnitude higher than allowance prices	The penalties for non-compliance should be set high to ensure the integrity of the program environmentally and ensure a viable and predictable market for allowances.
COMPETITIVENESS ISSUES AND LEAKAGE	
<ul> <li>Leakage (tentative recommendation): In order to account for environmental and economic leakage, power imports from outside the RGGI region should be treated as a source</li> <li>Purchasers of imported power should be required to hold allowances equal to the emissions generated in producing the power outside the region, but serving load within the RGGI region</li> <li>Any Load Serving Entity (LSE) within the RGGI region supplied by a generator located outside of the RGGI region, would have to hold and retire allowances that equal the total imported power times the marginal emissions rate from the exporting region (Imported Tons of CO<sub>2</sub> = MWh Imported X tons CO<sub>2</sub>/MWh)</li> <li>The regulated entity for this aspect of the RGGI program would be the LSE either the distribution companies for standard offer or franchise service or competitive suppliers depending on the situation in each state</li> <li>The supplier would have to maintain an account to track imported power and the source of that power</li> </ul>	If leakage is shown to be an issue based on the modeling being done by the RGGI state working group, then the state working group should consider including this policy fix in those states where leakage or power imports from outside the RGGI region is an issue. This recommendation is based on work by ENE, NRDC, and RAP. More research may need to be done in order to assess how this policy would function within the PJM power pool.



<ul> <li>A marginal emissions rate for the control area would be used for imports from outside the RGGI region; actual emissions could be used from individual projects developed directly as a result of long term power purchase agreements</li> <li>Importers of power should also be allocated allowances on an output basis: LSEs could receive an allocation based on their average imports in the previous two year compliance period</li> </ul>	
<b>Other Competitiveness Issues:</b> States should strive to distribute allowances on the same basis to keep the playing field level and not unfairly benefit or penalize generators	











Figure 2: Proposed CO<sub>2</sub> Cap Levels with Time Regional Greenhouse Gas Initiative





Table 1: Proposed CO 2 Cap Levels w/ Time				
Regional Greenhouse Gas Initiative				
Compliance / Allocation	Allowances	Potential Offsets		
2 Year Period	(Short Tons CO2)	(Short Tons CO2)		
	240.000.000			
2000 & 2005	240,000,000	2,200,200		
2010 & 2011 2012 & 2013	229,920,000 219,840,000	2,299,200		
2012 & 2015	213,040,000	6 292 800		
2016 & 2017	199.680.000	7.987.200		
2018 & 2019	189,600,000	9,480,000		
2020 & 2021	179,520,000	10,771,200		
2022 & 2023	169,440,000	11,860,800		
2024 & 2025	159,360,000	12,748,800		
Assumptions:				
<ul> <li>2 Year Compliance / Allocation Period</li> </ul>				
<ul> <li>25% Decline in Emission from Today's Levels by 2020 (~2.1% per year)</li> </ul>				
<ul> <li>Offsets limited but growing by 1% of total emissions in each period</li> </ul>				
beginning w/ Period 2				
<ul> <li>Actual cap starting point should be based on new data collected for 2000-2004</li> </ul>				
(120 million tons/year used as an example, based on reference case modeling)				









Regional Greenhouse Gas Initiative

### **Consumer Allowance Allocation**

Developing an equitable methodology for allocating allowances is one of the most important decisions the State Working Group will make in designing the Regional Greenhouse Gas Initiative. RGGI will be successful only if the states secure meaningful emission reductions from the electric generating sector without harming system reliability or imposing unreasonable costs on consumers. The discussion below sets forth the rationale for concluding that the most equitable and efficient way for states to achieve these goals is to use a substantial portion of allowances to drive investment in energy efficiency and support other initiatives that will reduce the overall cost of the program.

#### CONSUMER ALLOWANCE ALLOCATION

#### **Apportionment of Regional Cap Among States**

States should earmark fifty percent of the allowances under the regional cap for consumer benefit, and apportion those allowances to states on the basis of total population. As the cap level declines with time, the consumer allocation should increase at a rate of five percent per compliance period (assuming two-year compliance periods). States should apportion the remainder of the cap on the basis of generation, and update this apportionment for each compliance period.

#### **State Level Allocation**

The Model Rule can leave the details of the consumer allocation up to the individual states but should strongly recommend that states use consumer allowances to fund programs and strategies that will reduce the overall long-term cost of RGGI, including cost-effective energy efficiency and electricity conservation up to its economic potential. States could use additional allowances to fund clean energy programs, expand low-income protection programs, provide rebates to customers, support voluntary clean energy marketing claims, and cover RGGI administrative costs.

States could implement a consumer allocation simply by giving allowances to the T&D utilities and having the Public Service Commissions direct them to sell the allowances and distribute the funds to energy efficiency program administrators, or return them to customers in the form of rebates. Some states may also be able to allocate allowances directly to efficiency program administrators, such as NYSERDA or Efficiency Vermont, who would sell the allowances and use the proceeds to support additional or expanded programs.

#### POLICY RATIONALE

The following are some key issues to consider regarding why a consumer allocation is so important:

# A consumer allocation will reduce the total cost of the program.

The best way to achieve an aggressive  $CO_2$  cap at low cost is to keep demand growth for electricity as low as possible. Reducing consumption of electricity saves consumers money and keeps the price of  $CO_2$ allowances low, as less energy has to be produced to meet consumer demand. The IPM modeling conducted to date (NY & CT) has already shown that expanded conservation and efficiency programs will reduce the impact that RGGI may have on wholesale power prices and wholesale gas prices, as well as the cost of allowances.

States could minimize consumer costs by setting a very high cap or by allowing regulated entities to invest in low cost (and possibly environmentally suspect) offsets in lieu of making any reductions in the electric sector. However, RGGI will only be successful if states minimize the cost for consumers while maintaining their commitment to meaningfully reduce GHG reductions in the electric sector. They can do this most effectively by using consumer allowances to keep demand curves low. While rebates will certainly benefit consumers, the IPM modeling has demonstrated that keeping demand curves flat will provide even greater benefits. If states can do this they can bring the impact of RGGI on wholesale electricity prices to zero. Since current policies and system benefit charge funds are not adequate to achieve flat demand curves, states must ensure that investments supported with consumer allowances are additive and do not simply displace existing funds.

It is crucial to note that while consumer allowances will deliver the same benefit as increasing system benefit charges, they have the opposite effect on rates, because they reduce the rate impact of RGGI, while using the value of allowances, not new charges on consumers, to increase funding for energy efficiency.

#### The cap level and decline determine the economic outcome, with allocation being of much smaller importance.

There are limited opportunities to reduce GHG emissions at fossil plants. Some plants can improve plant efficiency or fuel switch, but for the most part the sector will comply with a cap by reducing output at some high-emitting plants and increasing generation at cleaner plants. Over time there will be some winners and losers among generators. The facilities that emit the most CO<sub>2</sub> per unit of electricity will bear higher costs than lower emitters unless they respond to RGGI market signals and improve efficiency or invest in cleaner generation. The cap level and a facility's emissions profile will determine whether that facility increases or decreases output, and whether its owner will buy or sell allowances. The number of allowances the company is given for free will not affect these decisions. A "loser" in the RGGI program will generally be a facility that runs less because it is too dirty and not a facility that does not receive enough free allowances.

All generating companies acknowledge that they will pass on their allowance costs to customers. The cap creates demand for  $CO_2$  allowances and because the allowances are tradable they have value either for a facility's own compliance or for sale to another facility. This opportunity cost means facilities will build the cost of allowances into their bid prices and pass those costs on to consumers. The consumers will pay for most of the costs of the cap and trade program but at the lowest possible cost through market-based trading. All generators are compensated for their cost of allowances through the price they receive for electricity generation.

#### Allocating allowances to generators for free will improve corporate profitability at the expense of consumers and the environment.

Allocating allowances to generators for free will not increase plant operations or improve reliability; the cap will dictate whether or not it is economic for a plant to operate and states and RTOs/ISOs will ensure reliability as they always have, with mechanisms such as must run payments and efforts to reduce load growth. However, the allocation methodology chosen by states will affect corporate profitability.

With the deregulation of the electric industry in most of the region, states took themselves out of the business of regulating power plant profitability. States do not require plants to return excess profits to customers when natural gas prices or other factors increase market clearing prices and, ultimately, revenues; generators get to keep those profits. Similarly, states should not be in the business of requiring consumers to bail out generators whose compliance costs reduce profitability. Such a system would create the worst of both worlds for consumers: they would reap none of the benefits of the deregulated marketplace but continue to shoulder the costs. Generators now cover their up and down risks. Regulatory risks are well known, including the risk of carbon regulation, which has been on the horizon for many years.

States must also consider financial loss at individual plants in the context of overall plant and corporate profitability. States should evaluate losses for any plant against gains from increased wholesale electricity prices caused by the RGGI cap, natural gas price increases, unusually high peak prices or unusually long periods of peak demand. States should not give any allowances to plants whose revenues from these sources are greater than their compliance costs. States should also evaluate such losses against gains at other plants owned by the same company. Regardless of the financing structure for any individual plant, states should not use allowances to subsidize compliance for a company at one plant if the company is reaping windfall profits at another, whether such windfall is due to an increase in wholesale electricity prices caused by RGGI or any other factor.

#### FREQUENTLY ASKED QUESTIONS

**Plant Shutdowns:** If states do not give most of the allowances to generators for free, won't it cause companies to reduce output at certain plants or even shut them down?

As explained above, it is the cap (and the associated wholesale electricity price and allowance costs) that will determine whether or not it is economic for a plant to operate at any given time. Giving allowances to generators free of charge will not affect this decision.

**Long-Term Fixed-Price Contracts:** Won't consumer allowances penalize generators that have long-term contracts and are unable to increase their prices and pass allowance costs onto customers?

This would be true if RGGI went into effect immediately, but RGGI is not likely to begin until 2008, at which point almost all contracts will have expired. Most contracts do not extend beyond three years, with the exception of some nuclear contracts that are not affected by the program; new contracts can accommodate RGGI going forward. Carbon dioxide regulation has been publicly contemplated for many years, and associated regulatory risk appropriately rests with those who have signed multi-year contracts.

**Electric Reliability:** *Will facilities that must run to support load pockets, voltage, or other reliability issues be put out of business by the RGGI program?* 

Must-run facilities already receive negotiated payments to ensure that they provide critical services. These payments would not go away and new systems such as capacity payments would ensure that critical facilities remain solvent. The grid operators will continue to ensure a reliable grid; over time increased conservation and efficiency, new facilities, and improved transmission will improve reliability and should reduce the need for must-run facilities.

#### **Environmental and Economic Leakage:** Will

differences in wholesale power prices between the RGGI region and bordering power pools increase imports of power from outside the region and have negative environmental and economic impacts?

While it is true that leakage could occur, states can adopt policy fixes (such as regulating imports as a source) to solve this problem in regions where it proves to be one. Leakage is not related to the allocation of allowances. **Regulated v. Unregulated Wholesale Markets:** *Will regulated states (New Hampshire and Vermont) allow increased costs to be passed through to consumers?* 

The costs of the RGGI program will represent a new but small compliance cost for regulated utilities and rates should be adjusted to reflect this. Regulated utilities participate in the regional wholesale market and should thus receive allowances in the same manner and volume as they do in other states.

#### **NEXT STEPS**

In order to fully assess the impacts of a consumer allocation and, in particular, the impacts of expanded conservation and efficiency programs, the State Working Group should complete the following assessments:

Quantify the existing levels of conservation and efficiency funding and economic potential in each state: this will allow the modeling to reflect what is already being done and how much more conservation and efficiency potential exists.

**Conduct a RGGI IPM modeling run that looks at realistic expansion of conservation and efficiency programs in every state to achieve zero load growth:** this modeling run will illustrate the impacts of aggressive conservation and efficiency programs on power and allowances prices and how much money they will save, allowing for either lower allowances prices or more aggressive cap levels.

**Determine the final size of the consumer allocation:** Once we know how much energy efficiency is in place and how much additional efficiency is necessary to achieve zero load growth, we will know how many consumer allowances are needed to bridge the gap.

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