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Agenda Item: 8I

STATE OF NEW JERSEY

Board of Public Utilities
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Newark, NJ 07102
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CLEAN ENERGY

IN THE MATTER OF A GREEN HOUSE GAS EMISSION PORTFOLIO STANDARD AND OTHER REGULATORY MECHANISMS TO MITIGATE LEAKAGE	)))	ORDER DOCKET NO. EO08030150

(SERVICE LIST ATTACHED)

BY THE BOARD:

I. Background

The Regional Greenhouse Gas Initiative ("RGGI") caps carbon dioxide ("CO2") emissions for electric power generators within a ten-state region (the "RGGI Region") that includes Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont (together, the "RGGI States"). The cap applies to all fossil-fueled electric generating units in the RGGI Region with a nameplate capacity of at least 25 megawatts ("RGGI Generator").

Under RGGI, the RGGI States issue emissions credits, known as "allowances." Each RGGI Generator must obtain and use one allowance for each ton of CO2 it emits. The number of allowances issued equals the number of tons of CO2 emissions allowed under the cap (currently, 564 million tons for the three-year period from January 1, 2009 through December 31, 2011). As a result, total emissions from all RGGI Generators together cannot legally exceed the cap.

Instead of allocating allowances directly to generators, the states are selling the bulk of the allowances through an auction. Once the allowances are sold, they are actively traded on a secondary market. The price of an allowance in that market essentially becomes the cost for a generator to emit a ton of CO2.

Unlike generators within the RGGI region, generators outside the region ("Non-RGGI Generators") do not incur a cost to emit CO2. Generators in the RGGI region,

especially in the three RGGI states in PJM (Maryland, Delaware, and New Jersey), compete at an economic disadvantage with non-RGGI generators in states such as Pennsylvania, Ohio, and West Virginia.

PJM dispatches generators based on the price at which they offer to sell their electricity, calling on generators in order of increasing price. That price depends heavily on the cost of generating the electricity, which in turn depends heavily on the cost of fuel and to a much lesser extent the cost of emitting air pollutants such as sulfur dioxide, nitrogen oxides, and CO2.

Since RGGI Generators incur a cost to emit CO2, and Non-RGGI Generators do not, there has been some concern that the RGGI Generators would be dispatched less and that the RGGI states would import more power from Non-RGGI Generators. RGGI is therefore one potential cause of "leakage" of emissions, with efforts to reduce emissions here potentially being undermined by an increase of emissions associated with the power that we import. Concern about leakage is particularly acute in the PJM system, because of all the power regions represented in RGGI (PJM, NY ISO, and ISO New England), PJM is the only region with a mix of both RGGI and non-RGGI states. PJM includes three RGGI states (New Jersey, Delaware, and Maryland), ten non-RGGI states (Pennsylvania, Virginia, West Virginia, and portions of Indiana, Illinois, Kentucky, Michigan, North Carolina, Ohio, and Tennessee), and the non-RGGI District of Columbia.

Two laws related to greenhouse gas emissions and leakage were passed by the Legislature and signed by the Governor. The Global Warming Response Act, L. 2007, c.112[1], signed in July 2007, set targets for reducing "statewide greenhouse gas emissions." This term is defined to include not only greenhouse gas emissions inside New Jersey but also emissions associated with imported electricity. The Global Warming Response Act also required the Board to adopt rules establishing a greenhouse gas emissions portfolio standard or another regulatory mechanism to mitigate "leakage," if New Jersey implemented an interstate or regional agreement to reduce statewide greenhouse gas emissions related to electric generation; New Jersey has done so by beginning to implement RGGI. "Leakage" is defined to mean "an increase in greenhouse gas emissions related to [electric] generation sources located outside of the State that are not subject to a state, interstate or regional greenhouse gas emissions cap or standard that applies to generation sources located within the State." N.J.S.A. 48:3-87(i).

A second law, signed in January 2008, L. 2007, c. 340, or "RGGI Law"),[2] gave the Commissioner of the New Jersey Department of Environmental Protection ("DEP") and the Board's President the authority to enter an agreement with appropriate representatives to further the goals of the Global Warming Response Act. The RGGI Law also set a deadline of July 1, 2009 for the Board to promulgate the leakage mitigation measure required by the Global Warming Response Act, but specified that

[1] Codified at N.J.S.A. 26:2C-37 to -44, and in amendment to N.J.S.A. 48:3-87.
[2] Codified at N.J.S.A. 26:2C-45 to - 57 and N.J.S.A. 48:3-98.1, and amending N.J.S.A. 48:3-87

energy efficiency measures would not satisfy the Board's obligation, "unless the Attorney General or the Attorney General's designee determines that a greenhouse gas emissions portfolio standard would unconstitutionally burden interstate commerce or would be preempted by federal law."

II. Summary of Action

This Order memorializes action taken by the Board at its December 17, 2008 agenda meeting. For the reasons discussed below, and after careful consideration of input received from various interested parties, the Board will seek to mitigate leakage by aggressively supporting actions that we expect will make New Jersey more self-sufficient in satisfying its energy needs, furthering the energy and environmental goals of the October 2008 Energy Master Plan ("EMP") while reducing our need to import electricity. This approach focuses on the development and management of New Jersey's local electricity infrastructure, while ensuring that electricity generated outside New Jersey is treated on an equal footing with electricity generated within our borders.

Specifically, the Board will seek to mitigate leakage with the following actions and will propose and adopt such regulatory mechanisms as it deems to be helpful in effectuating these actions:

- Continuing efforts to achieve the renewable portfolio standards, especially for renewables such as solar, which bring particular local benefits to New Jersey and are therefore required to be interconnected with the New Jersey electric distribution system;
- Striving to surpass the current renewable portfolio standards with more emphasis on renewable technologies that will specifically benefit New Jersey;
- Recasting the solar renewable portfolio standard as a 2,120-gigawatt-hour-per-year requirement by 2020;
- Supporting the installation of at least 1,000 megawatts of offshore wind electric generation by 2012, and at least 3,000 megawatts by 2020;
- Supporting the installation of 1,500 megawatts of new cogeneration capacity in New Jersey by 2020;
- Reducing peak demand for electricity through new and expanded demand response programs and through demand response efforts targeted to large customers, which will also help in reducing the need for additional transmission infrastructure that would normally lead to additional imports of generation from outside the RGGI region; and
  In evaluating petitions for new or expanded electric transmission infrastructure under N.J.S.A. 40:55D-19, seeking Board approval of transmission lines that would substitute for the need to get municipal approvals or potentially override disapprovals by municipalities, ensure that a record is developed that explores the expected impacts of the transmission project on leakage.

III. Procedural History

By Order dated February 27, 2008 ("February 2008 Order"), the Board ordered that a proceeding be convened to begin a public stakeholder process to develop answers to the following nine questions ("Stakeholder Questions"):

1. Is RGGI expected to cause an increase in imports of electricity into New Jersey from electric generating units located outside the RGGI region? If so, to what extent?

2. How would such an increase in imports of electricity affect "statewide greenhouse gas emissions," as defined in the Global Warming Response Act, P.L. 2007, c.112, to include not only in-state greenhouse gas emissions but also greenhouse gas emissions associated with electricity generated outside the State but consumed in the State?

3. To what extent is RGGI expected to cause a difference in the cost of producing electricity between electric generating units located in New Jersey and hypothetical identical units located in PJM outside the RGGI region? This information should be developed for coal-fired electric generating units, oil-fired units, combined-cycle units fueled by natural gas or oil, and simple-cycle units fueled by natural gas or oil.

4. What measures, besides a Greenhouse Gas Emissions Portfolio Standard ("GHG EPS") are available to mitigate leakage? Should the Board consider alternatives such as:

    a. A carbon procurement adder, which would require electric power suppliers and basic generation service providers to incorporate into their evaluation of different electricity procurement options a "shadow price" reflecting a cost of carbon emissions that power plants outside the RGGI region would incur if they were subject to RGGI;

    b. A requirement that, for service to New Jersey customers, long-term power purchases by an electric power supplier or basic generation service provider meet a specific carbon dioxide emission rate;

    c. An overall cap on emissions associated with electricity provided at retail by each electric power supplier or basic generation service provider;

    d. The creation of certificates to be issued for each megawatt-hour generated by an electric generating unit that uses one RGGI allowance for each ton of carbon dioxide it emits, coupled with a requirement for all electric power suppliers and basic generation service providers to hold a specified number of such certificates.

5. What is the experience of other states in implementing a GHG EPS, or other measures to mitigate leakage?

6. For each measure proposed to mitigate leakage:

   a. To what extent would the measure be expected to affect the retail price of electricity in New Jersey?

   b. To what extent would the measure be expected to mitigate leakage?

   c. What work is involved in developing and implementing the measure, and what is the estimated cost of the development and implementation?

7 How can a New Jersey GHG EPS, or other measure to mitigate leakage, be designed so that it does not merely shift cleaner megawatt-hours to the portfolios of New Jersey electric power suppliers and basic generation service providers, without actually affecting electric generation or the emissions associated with it? Will this result in a cost to New Jersey ratepayers without a corresponding environmental benefit?

8. How can New Jersey best track emissions associated with in-state consumption of electricity generated inside or outside the State, and effectively monitor compliance with a GHG EPS or other regulatory mechanism?

9 For any effective measure to mitigate leakage, how can regulations to implement that measure best be designed in a way that does not conflict with the Interstate Commerce Clause of the United States Constitution, Art. 1, sec. 8?

Staff held three informal GHG emissions leakage mitigation stakeholder meetings, on April 30, 2008, June 5, 2008, and July 8, 2008. All three meetings were held in the Board's Hearing Room in Newark, New Jersey. The Board held one legislative-type hearing presided over by Commissioner Joseph L. Fiordaliso on July 29, 2008.

Stakeholders were also encouraged to submit written comments. The written comments have been posted on the Board's clean energy website at: http://www.njcleanenergy.com/rggi-working-group. Parties that submitted written comments include:

- New Jersey Business & Industry Association ("NJBIA")
- Consolidated Edison Solutions and Consolidated Edison Energy (together, "CES/CEE")
  Independent Energy Producers of New Jersey ("IEPNJ")
- New Jersey Department of the Public Advocate ("NJ Public Advocate")

- PSEG Services Corporation, on behalf of its affiliate PSEG Power LLC (together, "PSEG")
- Regulatory Assistance Project ("RAP")
- American Coalition for Clean Coal Electricity ("ACCCE")

IV. Responses to the Board Questions

As noted above, the Board posed nine questions in its Order directing Staff to commence the stakeholder process. Stakeholders provided responses to the questions, in discussions at the informal meetings and public hearing, and in written comments as well. The Board has carefully considered those responses and has come to the conclusions described below.

A. Increase in Electricity Imports Due to RGGI

Question 1 asked parties to address whether RGGI is expected to cause an increase in imports of electricity from non-RGGI areas into New Jersey and if so, to what extent.

Stakeholders generally agreed that leakage would tend to increase as the RGGI allowance price increases (if all other factors affecting leakage were unchanged), because a higher allowance price would create a larger difference in costs between RGGI Generators and otherwise identical Non-RGGI Generators.

PSEG and the IEPNJ stated that RGGI will cause a net increase in imports of electricity into New Jersey from electric generating units located outside the RGGI region. PSEG refers to the Integrated Planning Model ("IPM") used by ICF Consulting ("ICF"), which predicts net imports will increase from 26% to 35% under RGGI by 2021 based on a CO2 price of $6.35/ton (nominal). IEPNJ states that the nature of PJM's economic dispatch will increase generation from non-RGGI states since New Jersey generators will have to increase their electricity bid prices to reflect the costs of RGGI compliance.

The NJ Public Advocate and CES/CEE take the position that it is not clear whether RGGI will materially impact imports of electricity from generation outside the RGGI region into New Jersey. The NJ Public Advocate adds that many confounding and potentially contradictory factors, such as weather patterns, can affect the amount of electricity consumed and/or imported.

The Board takes note of the modeling results cited by PSEG and the IEPNJ, as well as the uncertainties cited by the NJ Public Advocate and by CES/CEE, and concludes that there is little, if any, certainty about the extent to which RGGI will cause leakage. The Board also notes that in the first two auctions of RGGI allowances, the price has ranged from $3.07 to $3.38 per ton.

The Board also takes notice of modeling prepared by PJM Interconnection,[3] regarding the effect of planned transmission upgrades on the amount of electricity to be generated in various zones within PJM, and concludes that a substantial increase in imports of electricity will result from the implementation of those upgrades even if there is a uniform nationwide CO2 cap-and-trade program that replaces RGGI. PJM's modeling, which assumed the existence of such a nationwide program and did not assume that RGGI would continue to exist, predicted substantial decreases in the amount of electricity generated in the zones for Atlantic City Electric Company, Jersey Central Power & Light Company, and Public Service Electric and Gas Company; conversely, the modeling also showed large increases in generation in zones with large concentrations of coal-based generation such as American Electric Power Company, Allegheny Power Company, and Dayton Power & Light Company.

The Board **FINDS** that, all other factors being equal, leakage will tend to be greater as the price of RGGI allowances increases. However, the Board **FINDS** that it cannot determine whether RGGI will cause an increase in imports of electricity or the extent of such an increase, because the existence or extent of such an increase will depend heavily on factors beyond RGGI. Such factors could include the weather, fuel prices, transmission upgrades, the willingness to finance and build new or expanded generation, among other things. In addition, based on the PJM modeling discussed above, the Board **FINDS** that it is possible for new or expanded transmission lines to result in increased imports.

B. Change in Statewide Greenhouse Gas Emissions

Question 2 asks how much an increase in electricity imports would affect in-State GHG emissions and also GHG emissions associated with electricity generated outside the State but consumed in the State (together, "Statewide Greenhouse Gas Emissions").

PSEG states that it is difficult to determine with precision how much of the GHG reduction the modeling predicts comes from the RGGI cap itself or from other policy options modeled, because the RGGI modeling includes a package of policy options to mitigate GHG emissions. PSEG references the ICF model which predicts that RGGI, energy efficiency, and renewable energy policies would cause New Jersey in-state GHG emissions to decrease by 4.5 million tons per year by 2021. The ICF model also predicts that increased generation from areas outside of RGGI (due to leakage) would increase the RGGI region's GHG emissions by 5.0 million tons per year.

IEPNJ states that increased production and increased GHG emissions from non-New Jersey generators will result from RGGI.

The NJ Public Advocate states that any increase in imported electricity to New Jersey will dilute the benefits of RGGI. However, the NJ Public Advocate maintains that it is uncertain whether RGGI implementation will cause such an increase.

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[3] PJM Interconnection, "Market Simulation Results, 2008 Generation and Load Scenario," presented to PJM Transmission Expansion Advisory Committee, August 20, 2008.

CES and CEE state that because PJM assigns the average emissions rate of the "residual" generation outside the RGGI region to net imports in New Jersey, and also because this residual mix will be affected by changes in generation mix and fuel utilization outside the RGGI region, the calculated impact of imports will be impacted by factors other than those directly attributed to the implementation of RGGI.

Considering the difficulty in projecting the effect of RGGI on imports of electricity, and the difficulty of determining exactly which generating units outside New Jersey would increase their operations to provide such increased imports, the Board **FINDS** that it cannot predict with any certainty how RGGI will affect Statewide Greenhouse Gas Emissions. There are many variables and any attempt to predict a change in GHG emissions would necessarily require speculative assumptions that would not likely result in an accurate prediction. The Board further **FINDS** that it is possible for new or expanded transmission lines to result in increased Statewide Greenhouse Gas Emissions.

C. Cost Impacts

Question 3 asked parties to identify to what extent RGGI is expected to cause a difference in the cost of producing electricity between electric generating units located in New Jersey and hypothetical identical units located in PJM outside the RGGI region.

In response, PSEG provided the following table illustrating, for various types of generating units, the additional cost that a RGGI Generator would incur per dollar of RGGI allowance price (stated below as the "Bid Price Increase"):

	Heat Rate (MMBtu/MWh)	CO2 Rate (lbs/MMBtu)	Bid Price Increase ($/MWh)
Coal	10.0	207	$1.04
Oil-Steam	11.0	165	$0.91
CC-Gas	7	116	$0.41
CT-Gas (old)	13.0	116	$0.75

The NJ Public Advocate noted that RGGI modeling conducted by ICF reflected that electricity rates within RGGI states would increase by 1-3% or by $1-5MWh over the period from 2009 to 2015.

CES/CEE stated that, due to significant transmission connections both among the individual RGGI states and between the RGGI and non-RGGI regions, any approaches made only by New Jersey, other than those aimed at encouraging clean generation and demand response, to mitigate potential leakage are not likely to provide any environmental benefit and, instead, would merely burden New Jersey ratepayers with additional costs.

The Board **FINDS** that RGGI will increase the cost for RGGI Generators to produce electricity in New Jersey, without affecting the cost for Non-RGGI Generators. The

Board further **FINDS** that, as illustrated in the table presented by PSEG, the increase in cost to a RGGI Generator will depend upon an arithmetical calculation involving three variables: the RGGI Generator's heat rate (that is, the amount of heat produced from the combustion of fuel needed to generate a megawatt-hour of electricity), the rate of CO2 emissions associated with the combustion of the RGGI Generator's fuel, and the price of a RGGI allowance.

D. Leakage Mitigation Options

Question 4 asked stakeholders to identify what measures, other than a GHG EPS, are available to mitigate leakage, and asked whether the Board should consider alternatives such as a carbon procurement adder, a carbon procurement emissions rate (limit on emissions rate of power supplied to a Load Serving Entity ("LSE") through long-term power purchase agreements), and an emissions portfolio standard. The measures submitted by Stakeholders, in addition to the alternatives outlined in Question 4, are identified and summarized below. The Board will address and consider each measure and alternative in the discussion on Question 7 and 9 below.

1. PSEG Carbon Abatement Program ("CAP")

PSEG's proposed CAP would essentially create a new source of revenue for RGGI Generators that would help to offset their costs of RGGI compliance. The CAP would create a requirement for LSEs serving New Jersey customers to obtain and use a set number or percentage of Carbon Abatement Certificates ("CACs"). The CACs would be earned by generating units that used RGGI allowances to compensate for their CO2 emissions. The CAP would not limit eligibility for CACs to RGGI Generators, but would also allow Non-RGGI Generators that choose to opt in to the program and use RGGI allowances to compensate for their CO2 emissions to earn CACs as well.

The regulatory requirement for LSEs to use CACs would give the CACs a monetary value. The ability of generators to earn CACs for each MWh of electricity they produce, and to sell the CACs, would provide the generators with additional revenue for producing electricity. This additional revenue would help to offset the increased cost of production attributable to RGGI compliance, presumably reducing leakage by reducing the difference in cost between RGGI Generators and Non-RGGI Generators.

2. Regulatory Assistance Project

The RAP proposes to require each New Jersey LSE to certify that RGGI allowances were used to cover the emissions associated with each MWh of its retail sales in New Jersey. RAP states that this policy would effectively extend the cap to cover power supply that is either generated within the RGGI region or serving load within the RGGI region.

The RAP states that its proposal would impose no additional costs on LSEs for electricity that they purchase from RGGI Generators, since those generators will already be using RGGI allowances to comply with RGGI. For increased CO2 emissions associated with electricity imported from outside of the RGGI region, the LSE, or an intermediary between the LSE and the Non-RGGI Generator, would have to obtain and retire allowances. The intended effect is to mitigate leakage by eliminating an incentive for the LSE to purchase electricity from Non-RGGI Generators in order to avoid RGGI-related costs.

3. Consolidated Edison Solutions and Consolidated Edison Energy

CES/CEE proposed that the Board aggressively pursue broad clean fuel and energy efficiency programs to reduce GHG emissions and electricity use. By increasing the amount of clean generation produced in New Jersey, such as wind, solar, combined heat and power, geothermal, tidal, etc., the Board would directly decrease the amount of electricity that would need to be produced by fossil fuel generation plants, thereby directly decreasing GHG emissions. Also, by decreasing the amount of electricity used through demand response and energy efficiency, the Board would directly decrease GHG emissions because the fossil fuel generators would not be dispatched as often. Such an approach would reduce the need for the transmission lines being planned from western PJM where coal is abundant to eastern PJM, which should serve to mitigate leakage. This approach is also consistent with existing efforts and the April 2008 draft of the Energy Master Plan.

4. The New Jersey Department of the Public Advocate

The NJ Public Advocate recommended that the Board communicate to the Legislature the inconsistency of a statutory obligation to implement a regulatory mechanism to mitigate leakage without being able to include the single and largest likely policy measure that could satisfy the Legislature's intent, energy efficiency. The NJ Public Advocate pointed to a multi-state RGGI working group's final report recommending energy efficiency as the key policy measure RGGI states should pursue to mitigate leakage ("RGGI Final Report on Leakage").[4] Further, the NJ Public Advocate requested that the Board seek an amendment to the Act, and that the Board work with stakeholders to implement coordinated energy polices, as proposed in the EMP, that will result in increasing energy efficiency as quickly as possible.

The NJ Public Advocate stated that none of the policy options presented would be effective in preventing leakage and reducing GHG emissions. The NJ Public Advocate maintained that in order to be effective, the proposed GHG programs would either

[4] See "Potential Emissions Leakage and the Regional Greenhouse Gas Initiative (RGGI), Final Report of the RGGI Emissions Leakage Multi-State Staff Working Group," March 2008 at http://www.rggi.org/docs/20080331leakage.pdf

violate the U.S. Constitution's Commerce Clause or impose high costs on New Jersey ratepayers.

5. New Jersey Business & Industry Association

The NJBIA commented that if the Board is considering allowing the imposition of additional costs to be recovered through the Basic Generation Service ("BGS") auction, that there is a discrepancy between the RGGI compliance timeline and the BGS auction. Therefore, the NJBIA states that ratepayers would be better served if the Board delayed the consideration of leakage until there are more known factors, such as the RGGI allowance pricing and environmental indicators. Essentially, the NJBIA is concerned about the increasing costs of electricity and states that any leakage mitigation strategy should be considered at a later date when the Board can make a more informed decision and understand the ramifications of leakage as well as cost implications for New Jersey ratepayers.

6. American Coalition for Clean Coal Electricity

ACCCE does not support piecemeal state or regional climate change programs, and believes that such programs should be preempted under comprehensive federal legislation. ACCCE does support enactment of national cap-and-trade climate change legislation covering all emitting sectors.

ACCCE stated a belief that a GHG EPS option appears to be unconstitutional under the Interstate Commerce Clause. ACCCE explained that New Jersey obtains slightly more than one-half of its electric generation from non-emitting nuclear sources and that its average CO2 emissions in pounds per MWh is well below those of most other RGGI states and all of the states to the west and south that provide power imports to New Jersey through PJM. ACCCE argued that a GHG EPS set by New Jersey to achieve its share of the RGGI cap would plainly discriminate against the higher carbon electric sources such as coal-based electricity in adjacent states such as Pennsylvania that now provide much of New Jersey's electricity. ACCCE stated that it is unlikely that New Jersey could demonstrate any climate-related environmental benefit from GHG EPS.

7. Other alternatives outlined in Question 4

A. Carbon Procurement Adder

A Carbon Procurement Adder is an analytical tool that requires an LSE planning its electricity supply resource acquisitions to incorporate a "shadow price" for carbon emissions into its financial analysis of different investment options.

B. Carbon Procurement Emissions Rate

A Carbon Procurement Emissions Rate is a limit placed on the emissions rate of power supplied to an LSE through a long-term power purchase agreement. This would mean that all long-term power purchases would need to meet a specific CO2/MWh emissions rate and that no electricity supplied through bilateral contracts with suppliers could exceed this emissions rate. A Carbon Procurement Emissions Rate mechanism would apply to all new, long-term power supply contracts with the rate based on a certain technology such as coal, or on an average emissions rate of some category of generation units.

C. Greenhouse Gas Emissions Portfolio Standard

A GHG EPS would require an LSE to meet an average, output-based emissions standard (lbs. CO2/MWh) for the portfolio of supply resources the LSE uses to provide retail electricity. A GHG EPS would impose a market signal on LSEs that lower-emitting generation is a valuable commodity.

D. Load Based Emissions Cap

A Load Based Emissions Cap would place a cap on absolute emissions related to all electricity delivered for sale to retail customers by an LSE. An emissions cap would most likely be based on the LSE's historic electricity purchases and related emissions.

The Board notes that it can also directly address leakage by pursuing actions set forth in the Energy Master Plan. Developing clean local electric generation will give New Jersey direct control over its CO2 emissions and can reduce the need to import electricity generated by plants with higher CO2 emissions rates. Additionally, reducing peak demand can help to reduce the need for new or expanded transmission lines that would support greater reliance on power plants with a higher average CO2 emission rate than the electric generation fleet in New Jersey.

The Board considered each of the above proposals in conjunction with the nine questions outlined in the stakeholder process. Therefore, the Board's conclusions will be noted after the Board's discussion of the questions.

E. Other States' Efforts to Mitigate Leakage

Question 5 requested that parties address the experience that other states have had in addressing leakage.

The NJ Public Advocate notes that the California Public Utilities Commission initiated a carbon procurement adder in December 2004, and that California applies an emission standard of 1100 lb/MWh to all long-term contracts to both in-state and out-of-state

suppliers. The NJ Public Advocate noted, however, that both of these measures may cause contract shuffling in New Jersey, whereby electricity with lower greenhouse gas emissions is allocated to a different market area, but the total quantity of electricity generation does not change.

PSEG indicated that it does not know of any comparable state GHG EPS mechanism. PSEG states that the California electricity market can not be compared to the complex interaction between and among RGGI jurisdictional applicability, NJ greenhouse gas emissions, and PJM interstate market conditions.

F. Retail Prices

Question 6 requested interested parties to address, for each measure proposed to mitigate leakage, the following:

1. To what extent would the measure be expected to affect the retail price of electricity in New Jersey?
2. To what extent would the measure be expected to mitigate leakage?
3. What work is involved in developing and implementing the measure and what is the estimated cost of the development and implementation?

PSEG stated that under its proposal, the requirement for LSEs to obtain carbon abatement certificates would result in modest cost increases, but claims that ratepayers would also benefit from lower wholesale power prices. PSEG also stated that it is difficult to determine with any level of specificity the extent to which its proposal would increase costs. This is because the value of the certificates would be factored into a RGGI Generator's bid price, causing the generator to submit a lower bid into the PJM auction. Therefore, at times when a RGGI Generator is on the margin and therefore sets the spot market price, the spot market price paid to all generators in PJM will be lower due to the negative variable cost associated with the value from certificates. The Board notes that when a Non-RGGI Generator is on the margin, the costs that ratepayers incur due to the carbon abatement certificates would not be offset by any corresponding decrease in the spot market price at those times.

PSEG stated that the biggest cost drivers of its proposal will be the value of the underlying RGGI allowances, the amount of certificates that LSEs will be required to obtain, and the mitigating effect of the program on wholesale power prices. According to PSEG, certificates should trade in a range determined by the value of RGGI allowances.

The NJ Public Advocate believes that there would be an increase in retail rates for all options (carbon procurement adder, requirement of long-term contracts to meet specific emissions rate, emissions cap at retail level, and the PSEG proposal).

CES and CEE noted that cost would increase to customers under the PSEG or RAP proposals.

NJBIA stated that the RGGI auction was projected to trade allowances between $2-3 a piece, but that side market trades are reportedly occurring at $8 an allowance. Since New Jersey was not scheduled to participate in an auction until December 2008, NJBIA believed that it was not possible to determine with any degree of accuracy the increases in electricity costs.[5]

The Board **FINDS** that each of the proposals discussed above would be likely to increase costs to customers. In addition, each of the proposals would require additional administrative resources to develop a regulatory program, to administer such a program, to monitor compliance and to take necessary enforcement actions.

G. Tracking Emissions

Question 8[6] requested that commenters explain how New Jersey can best track emissions associated with in-state consumption of electricity generated inside or outside the State, and effectively monitor compliance with a GHG EPS or other regulatory mechanism.

PSEG stated that it is infeasible for New Jersey to track emissions associated with in-state consumption of electricity generated outside of the State because the distinction between "out of state" versus "in state consumption of electricity generated outside of the State" in the framework of the PJM operated wholesale power market does not exist. PJM dispatches units based on economics, and power flows freely across state lines without consideration of state borders. When a unit in New Jersey is called on by PJM, it is not called to serve load in New Jersey, but rather to meet load on PJM's system.

Similarly, ACCCE stated that it would be extremely difficult to track emissions. It argued that portfolio standards similar to those used for renewable energy supplies cannot be easily applied when power suppliers have large and diverse generation portfolios with a continually changing mix of emissions. ACCCE explained that emission estimates often use a history of regional averages and may be overly conservative, but that an enforceable emissions portfolio standard would require current and accurate emissions data.

The NJ Public Advocate submitted that Board Staff should work with PJM to require that the following components be tracked through PJM's Generation Attribute Tracking System ("GATS"):

- Amount of electricity sold into New Jersey from RGGI PJM states;

[5] The Board notes that as of the date of this Order, three RGGI allowance auctions have been held, resulting in prices of $3.07 in the first auction, $3.38 in the second auction, and $3.51 in the third auction.
[6] Questions 7 and 9 are considered together below.

- Amount of electricity sold into New Jersey from non-RGGI PJM states;
- Amount of electricity sold into New Jersey from RGGI non-PJM states;
- Amount of electricity sold from New Jersey to RGGI PJM states;
- Amount of electricity sold from New Jersey to non-RGGI PJM states;
- Amount of electricity sold from New Jersey to RGGI non-PJM states;
- For each of the six categories above, allocate the GHG emissions to the amount of electricity;
- For each of the six categories above, identify the plant name and municipality for each generation asset; and
- For each of the six categories above, identify the type of contract and GHG attributes.

The NJ Public Advocate maintains that this information would help assess and evaluate electricity imports into New Jersey and the associated environmental effects. The NJ Public Advocate states that the information gathered and compiled from GATS should be in a format that is useful to the public, policy makers and stakeholders. Other than tracking the attributes via GATS, the NJ Public Advocate states that the Board should consider recommending the adoption of rule changes in PJM to assess the degree to which implementation of RGGI has contributed to any changes in generation dispatch.

The Board **FINDS** that, although it will be difficult to track emissions associated with in-state consumption of electricity generated inside or outside the state, the Board should seek to do so via the GATS system.

H. Effectiveness and the Commerce Clause

Two key questions that the Board sought to resolve in the stakeholder process are central to the evaluation of each proposed measure to mitigate leakage. Question 7 asked stakeholders to respond to the following:

> How can a New Jersey GHG EPS, or other measure to mitigate leakage, be designed so that it does not merely shift cleaner megawatt-hours to the portfolios of New Jersey electric power suppliers and basic generation service providers, without actually affecting electric generation or the emissions associated with it? Will this result in a cost to New Jersey ratepayers without a corresponding environmental benefit?

Question 9 asked:

> For any effective measure to mitigate leakage, how can regulations to implement that measure best be designed in a way that does not conflict with the Interstate Commerce Clause of the United States Constitution, Art. 1, sec. 8?

The answers to these questions must be considered together. The greatest challenge in developing and implementing measures to mitigate leakage, especially when New

Jersey is currently acting alone, is to make the measure effective in mitigating leakage without significantly risking a violation of the Interstate Commerce Clause.

For the reasons discussed below, the Board **FINDS** that, if New Jersey is alone in implementing any or all of the specific proposals described above, no such proposals can be effective in mitigating leakage without significant litigation risks over the consistency of such an approach with the Interstate Commerce Clause.

1 PSEG Carbon Abatement Program Proposal

As discussed above, PSEG proposed a CAP, a measure that would seek to mitigate leakage by decreasing or eliminating the difference in cost that RGGI would create between a RGGI Generator and an identical Non-RGGI Generator.

PSEG stated that for any leakage mitigation system to be effective, it must affect unit dispatch in PJM. PSEG argues that any "certificate only" trading program that does not influence dispatch may simply result in attribute shuffling, or the practice where electricity with lower greenhouse gas emissions is allocated to a different market area without any actual improvement to the environment. PSEG states that its CAP proposal would impact unit dispatch in PJM by providing an incentive to operate lower emitting units, thus resulting in an environmental benefit for its cost.

PSEG stated that its proposal, if carefully implemented, would not conflict with the Interstate Commerce Clause. PSEG reasoned that the purpose of the program is to prevent an increase in CO2 emissions resulting from RGGI leakage. It further argued that because the regulatory effect of the program is neutral, it would not be subject to heightened scrutiny under an Interstate Commerce Clause analysis. PSEG further claimed that the program is not facially discriminatory because, as written, it allows all generators to participate voluntarily if they wish. PSEG reasoned that the program meets the balancing test set forth in Pike v. Bruce Church Inc., 397 U.S. 137, 90 S. Ct. 844, 25 L.Ed. 2d 174 (1970), because the program would effectuate the State's legitimate public interest in reducing CO2 emissions while having only incidental effects on interstate commerce. PSEG argued that the program's effects on interstate commerce are clearly outweighed by its environmental benefits.

Having carefully considered the PSEG CAP proposal, the Board believes that it would face the following choice: either allow RGGI Generators in some or all of the other RGGI States to earn CACs or prohibit them from doing so. Without other RGGI states expressing significant interest in adopting the PSEG proposal, allowing RGGI Generators in the other RGGI states to participate in these programs would be most likely to cause the problem outlined in the Board's February 2008 Order commencing the stakeholder process: "shift[ing] cleaner megawatt-hours to the portfolios of New Jersey electric power suppliers and basic generation service providers, without actually affecting electric generation or the emissions associated with it."

Specifically, if RGGI Generators in the other RGGI states can earn CACs but only New Jersey LSEs had any reason to purchase them, the supply of CACs would substantially exceed demand. An excess supply of CACs would decrease their value, making it difficult or impossible to make up for costs of complying with RGGI for New Jersey RGGI Generators unless New Jersey were to increase the requirements for New Jersey LSEs to hold CACs enough to make up for the missing demand from all the states where RGGI Generators could earn CACs. This approach would dramatically increase the cost that New Jersey customers would bear to mitigate leakage.

Prohibiting RGGI Generators outside of New Jersey from earning certificates could help to balance the supply and demand for certificates. However, such an approach involves significant risks in litigation over its consistency with the Interstate Commerce Clause.

The Commerce Clause gives Congress the authority "to regulate Commerce with foreign nations, and among the several States." U.S.C.A. Const. Art. I, §8, cl.3. The Supreme Court has established that, not only does the Commerce Clause empower the federal government to proactively regulate commerce, it also has negative implications which can act to restrict a state's ability to implement laws that discriminate against interstate commerce. Thus, the dormant aspects of the Commerce Clause restrict states from taking actions that discriminate against interstate commerce. A two step approach has developed in Supreme Court jurisprudence for analyzing potential violation of the Commerce Clause. First, a determination must be made as to whether the state law or regulation is facially discriminatory, that is, if on its face, the law discriminates against interstate commerce. Such laws are seen as motivated by pure economic protectionism and are virtually per se invalid. Philadelphia v. New Jersey, 437 U.S. 617, 98 S. Ct. 2531, 57 L. Ed. 2d 475 (1978); C & A Carbone, Inc. v. Clarkstown, 511 U.S. 383, 114 S. Ct. 1677, 128 L. Ed. 2d 399 (1994). In this context, "discriminatory" means differential treatment of in-state and out-of-state economic interests that benefit the former while placing a burden on the latter. Oregon Waste Sys v. Department of Environmental Quality, 511 U.S. 93, 114 S. Ct. 1345, 128 L. Ed. 2d 13 (1994). If the law or regulation is facially discriminatory, and thus per se invalid, such invalidity can only be overcome by a showing that the state has no other means to advance a legitimate local purpose. Maine v. Taylor, 477 U.S. 131, 106 S. Ct. 2440, 91 L. Ed. 2d 110 (1986). This is based on a state's broad authority to protect the health and safety of its citizens and the integrity of its natural resources. Such a burden, however, is still difficult to overcome.

If the PSEG proposal precluded out-of-state RGGI Generators from participating, it would likely be viewed as facially discriminatory, since it would directly provide for differential treatment between in-state and out-of state generators based purely on their location. It would be treating out-of-state RGGI Generators differently so as to benefit in-state RGGI Generators and would likely be viewed as economic protectionism.

The impacts on interstate commerce could be significant, because RGGI Generators in New Jersey would have revenues, in the form of tradable certificates, to help offset their cost of obtaining RGGI allowances, while RGGI Generators outside New Jersey would

not. These revenues would, to some extent, level the playing field between New Jersey RGGI Generators and Non-RGGI Generators; RGGI Generators in other RGGI states, however, would have no access to such revenues and would therefore have no mitigation of the cost of their RGGI allowances. This would work to the detriment of RGGI Generators in other states. For these reasons, it is likely that the PSEG proposal would be considered facially discriminatory if it precluded out-of-state RGGI Generators from participating. Thus, it would be subject to strict scrutiny and likely would be per se invalid. While Maine v. Taylor, supra, allows the State to show that there are no other means to advance a legitimate local purpose, the State here does have other means of advancing its local purpose.

The Board therefore **CONCLUDES** that if RGGI Generators located outside New Jersey were precluded from earning certificates, the preclusion would create significant risks in litigation over the consistency of such an approach with the Interstate Commerce Clause.

The Board recognizes, however, the PSEG proposal, as presented, does not preclude RGGI Generators in other states from earning certificates as they use RGGI allowances. Neither does it preclude Non-RGGI Generators from earning certificates; rather, it allows Non-RGGI Generators to opt in voluntarily, and earn certificates if they retire RGGI allowances to compensate for their CO2 emissions. Thus, the PSEG proposal would not be considered facially discriminatory since it allows out-of-state generation to be on equal footing with in-state generation.

Should the PSEG proposal be considered facially neutral with only incidental interference with interstate commerce, it is likely to be upheld as long as it "regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." Pike v. Bruce Church, Inc., supra; Huron Cement Co. v. Detroit, 362 U.S. 440, 80 S. Ct. 813, 4 L. Ed. 2d 852 (1960). There remains a fair amount of risk in applying the balancing test to a PSEG proposal with a voluntary opt-in provision, since states that wished to voluntarily opt-in would nonetheless have to be a PJM net exporter. In addition, states that voluntarily opted-in would be forced to participate in RGGI, or pay an equivalent of a RGGI allowance, in order to create certificates. Therefore, while participation may be voluntary, it is essentially limited to PJM net exporters. It also forces non-RGGI states to either join RGGI, for the creation of certificates, or pay for the equivalent of RGGI allowances.

In addition to the remaining legal risks, if the PSEG proposal were to allow all RGGI Generators to earn certificates, it would not be effective in mitigating leakage. If RGGI Generators in the other RGGI States are not precluded from earning certificates, and only New Jersey LSEs have a requirement to purchase the certificates, then the supply of certificates can be expected to exceed demand substantially. New Jersey could increase demand, by substantially increasing the requirements for the amount of certificates that New Jersey LSEs must hold. However, increasing those requirements

enough to compensate for the lack of corresponding requirements in other RGGI States would be likely to unacceptably increase the cost that New Jersey customers would bear to mitigate leakage.

The Board therefore **FINDS** that, as presented, the PSEG proposal would not be effective in mitigating leakage if New Jersey is the only state that implements it. Instead, its most likely effect would be to shift cleaner megawatt-hours to the portfolios of New Jersey electric power suppliers and basic generation service providers, without actually affecting electric generation or the emissions associated with it.

2. RAP Proposal

Like the PSEG proposal, the RAP proposal would seek to mitigate leakage by decreasing or eliminating the difference in cost that RGGI would create between a RGGI Generator and an identical Non-RGGI Generator. Unlike the PSEG proposal, the RAP proposal would not provide additional revenue to New Jersey RGGI Generators to decrease or eliminate the cost difference; instead, the RAP proposal would have New Jersey LSEs bear an additional cost for importing electricity from outside New Jersey.

The RAP proposal would require LSEs serving New Jersey customers to certify that RGGI allowances were used in connection with all of the power that the LSE purchased for sale to New Jersey customers. Power from RGGI Generators inside or outside New Jersey would appear to satisfy this requirement, since those generators will be using RGGI allowances to comply with RGGI; for increased CO2 emissions associated with imports from Non-RGGI Generators, the LSE itself would most likely have to obtain and retire allowances. This requirement would impose an additional cost on power purchased from Non-RGGI Generators, and decrease or eliminate the difference in cost that RGGI would create between a RGGI Generator and an identical Non-RGGI Generator. RAP noted that the initial caps and goals for New Jersey could be set at a level that takes into account historic imports and historic local generation.

RAP stated that the program would survive a Commerce Clause challenge because it is not protectionist in nature. The RAP's white paper stated: "...controlling greenhouse gases provides external benefits to non-RGGI states; this is not an example of parochial interests seeking to avoid environmental harms by imposing them on others - quite the opposite." RAP also stated that by treating imports as sources on the same basis as RGGI generation, the proposal is not discriminatory in intent or effect. However, RAP warned that it is important that the initial cap and allocation be set so as to include imported sources from the outset, on the same basis as in-region sources, and that there should be no pre-set limit on imports in order to have a non-discriminatory effect.

Despite the differences between the PSEG proposal and the RAP proposal, the RAP proposal shares similar shortcomings that would prevent it from being effective in mitigating leakage while also assuring consistency with the Interstate Commerce Clause. No other states have expressed significant interest in implementing the RAP proposal. As a result, the RAP proposal and the PSEG proposal create similar choices

for the Board. The PSEG proposal would have the Board choose between allowing RGGI Generators outside New Jersey from being eligible to earn CACs, and precluding them from doing so. Likewise, the RAP proposal would have the Board choose between requiring LSEs serving New Jersey customers to retire RGGI allowances to cover emissions associated with power from RGGI Generators outside New Jersey, and relieving them from that requirement.

If the RAP proposal were to require LSEs to retire allowances with respect to electricity purchased from non-New Jersey RGGI Generators – generators that are already using RGGI allowances - it would likely be viewed as facially discriminatory. The proposal would put New Jersey in the position of requiring New Jersey LSEs to impose differential treatment between in-state RGGI Generators and out-of state RGGI Generators based purely on their location. The differential treatment would make purchases of electricity from New Jersey RGGI Generators more attractive than purchases from RGGI Generators in other states.

The Board therefore **CONCLUDES** that it cannot require LSEs to retire allowances with respect to electricity purchased from RGGI Generators located outside New Jersey, without creating significant risks in litigation over the consistency of such an approach with the Interstate Commerce Clause.

If the Board does not apply the allowance retirement obligation to electricity purchased from RGGI Generators outside New Jersey, then the supply of electricity that places no additional requirements on the LSE would substantially exceed demand. The result would be to shift megawatt-hours from RGGI Generators to the portfolios of LSEs serving New Jersey customers, without actually affecting electric generation or the emissions associated with it.

Therefore, the Board **CONCLUDES** that if the RAP proposal does not require LSEs to retire RGGI allowances with respect to electricity purchased from RGGI Generators outside New Jersey, then it would not be effective in mitigating leakage if New Jersey is the only state that implements it.

3. Other alternatives outlined in Stakeholder Question 4

Carbon Procurement Adder. A Carbon Procurement Adder requires an LSE planning its electricity supply resource acquisitions to incorporate a "shadow price" for carbon emissions into its financial analysis of different investment options.

A Carbon Procurement Adder is unlikely to significantly impact the dispatch of generation in New Jersey. In a restructured electricity market like New Jersey, most electricity purchases in the regional wholesale market do not specify the generation facility from which the electricity will be supplied. Even if the contract does identify a specific facility, the supplier will likely vary output from different facilities and even from different suppliers on the basis of the wholesale market economics to maximize financial returns. Since the generators themselves face no direct carbon compliance

obligation or cost adder, the carbon procurement adder would not preclude emissions leakage due to a real-time re-dispatch of the regional power system. Therefore, a Carbon Procurement Adder would not likely be effective in mitigating leakage.

Carbon Procurement Emissions Rate. A Carbon Procurement Emissions Rate places a limit on the emissions rate of power supplied to an LSE through a long-term power purchase agreement. This would mean that all long-term power purchases would need to meet a specific CO2/MWh emissions rate and that no electricity supplied through bilateral contracts with suppliers could exceed this emissions rate. A Carbon Procurement Emissions Rate mechanism would apply to all new, long-term power supply contracts with the rate based on a certain technology such as coal, or on an average emissions rate of some category of generation units.

Although California has attempted to implement a Carbon Procurement Emissions Rate, this approach is unlikely to be effective in New Jersey. New Jersey is part of a regional transmission grid operated by PJM Interconnection, with regional wholesale markets designed and administered by PJM, in an area that stretches as far west as Illinois and as far south as North Carolina; within PJM, load is concentrated not only in New Jersey, but also in southeastern Pennsylvania, Delaware, Maryland, the District of Columbia, and northern Virginia. As a result, generators with high emission rates seeking long-term contracts can contract with LSEs or utilities in states other than New Jersey, while the long-term sales from lower-emitting generators can be contractually assigned to New Jersey; the result is likely to be paper transactions that show compliance with a New Jersey Carbon Procurement Emissions Rate, but bring no real change in what generators are built in PJM or how much they run. In contrast, California accounts for such a large share of the load in the western third of the continental United States that this "contract shuffling" may be more difficult.

Greenhouse Gas Emissions Portfolio Standard. A GHG EPS would require an LSE's entire portfolio of electricity supply to meet an average emissions standard. Under a GHG EPS, a generator's low carbon dioxide emissions rate would be a valuable and marketable attribute that, with a large enough market value, could conceivably cause that lower-emitting generator to be dispatched ahead of a higher-emitting generator that would have a cost advantage in the absence of a GHG EPS.

However, as is the case with the PSEG and RAP proposals, if New Jersey is the only state with a GHG EPS, the supply of "clean" attributes throughout the PJM region will almost certainly exceed New Jersey LSEs' demand for such attributes, resulting in little, if any, market value for such attributes. As a result, a New Jersey-only GHG EPS is unlikely to have any real effect on what generators run, or how much they run. It therefore cannot be expected to mitigate leakage.

Load-Based Emissions Cap. A Load-Based Emissions Cap would place a cap on absolute emissions related to all electricity delivered for sale to retail customers by an LSE. Once again, if New Jersey is the only state to impose such a cap, it cannot be expected to mitigate leakage because the supply of "clean" attributes from lower-

emitting generators will almost certainly exceed New Jersey LSEs' demand for such attributes.

For the reasons discussed above, the Board **CONCLUDES** that a carbon procurement adder, a carbon procurement emissions rate, a GHG EPS, and a load-based emissions cap, separately or in combination, would not be effective in mitigating leakage without creating significant risks in litigation over the consistency of such an approach with the Interstate Commerce Clause.

V. Discussion and Determination

In October 2008, Governor Corzine released the Energy Master Plan. The EMP outlines a series of energy-related challenges that New Jersey faces:

- Growth in the supply of electricity has not been keeping up with the growth in demand.
- The price of energy has increased substantially over the past few years, has become increasingly volatile, and these trends are expected to continue. Without action, our contribution to global warming and other pollutants will continue to increase.
- The State has much less authority over the supply and price of electricity than it used to.

The EMP then outlines actions to address these challenges, while serving the following goals:

- Maximize energy conservation and energy efficiency.
- Reduce peak electricity demand.
- Strive to exceed the current Renewable Portfolio Standard ("RPS") and meet 30% of the State's electricity needs from renewable sources by 2020.
- Develop a 21st century energy infrastructure.
- Invest in innovative clean energy technologies and businesses to stimulate the industry's growth in New Jersey.

Additionally, while mindful of the Board's statutory obligations under the Act, the Board notes its consideration of the RGGI Final Report on Leakage,[7] in which the multi-state RGGI Staff working group recommended that RGGI States:

> pursue a leakage mitigation approach of aggressive increases in investment in energy efficiency market transformation programs, and the implementation and expansion of complementary policies such as building energy codes and appliance and equipment efficiency standards that

[7] "Potential Emissions Leakage and the Regional Greenhouse Gas Initiative (RGGI): Final Report of the RGGI Emissions Leakage Multi-State Staff Working Group to the RGGI Agency Heads," March 2008, http://www.rggi.org/docs/20080331leakage.pdf (accessed April 30, 2009).

accelerate the deployment of end-use energy efficiency technologies and measures.[8]

While energy efficiency measures alone do not satisfy the Act's leakage mitigation requirement, the Board supports the conclusions of the RGGI Staff working group that energy efficiency measures would effectively serve to mitigate leakage. Therefore, in addition to the other measures adopted herein, the Board will also pursue certain energy efficiency measures to mitigate leakage.

As discussed at length above, the Board has considered the proposals submitted in the stakeholder process, including but not limited to the PSEG CAP and the RAP program, as well as additional mechanisms aimed at mitigating leakage. As noted above, the Board **FINDS** that these various proposals have flaws, in that they would either be ineffective at this time, or would have significant risk of violating the Interstate Commerce Clause. Therefore, the Board **FINDS** that New Jersey can serve the goals of the EMP and take effective action to mitigate leakage, as required in the Act, by aggressively supporting actions to make New Jersey more self-sufficient in satisfying its energy needs, without seeking to impose disadvantages on out-of-state electric generation. Such actions will further the energy and environmental goals of the EMP while reducing our need to import electricity, thereby serving to mitigate leakage.

The Board **DIRECTS** Board Staff to immediately begin developing for the Board's consideration the regulatory mechanisms to effectuate these actions to mitigate leakage, pursuant to N.J.S.A. 48:3-87(c)(2):

A. Renewable Energy

The Board will continue efforts to achieve the renewable portfolio standards ("RPS"). The RPS currently require that by 2020, 2.12% of our electricity will come from solar electric generation, 20% will come from Class I renewable energy, and 2.5% will come from Class II renewable energy. The Board notes that it has already taken important steps toward that goal by adopting regulations that increase the solar alternative compliance payment ("SACP"), set forth an eight-year schedule for the SACP, and establish a process to provide continued long-term certainty for the SACP; extending the trading life for solar renewable energy certificates ("SRECs"); and widening eligibility for projects that can earn SRECs.[9]

The Board will strive to surpass the current renewable portfolio standards with more emphasis on renewable technologies that will specifically benefit New Jersey. For example, solar electric generation connected to an electric distribution system serving New Jersey is particularly helpful in preserving the reliability of our electricity supply. Offshore wind generation located close to the load centers along the New Jersey shore promises similar benefits.

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[8] Id. at 9.
[9] 41 N.J.R. 1261(a), (March 16, 2009).

Consistent with the Energy Master Plan, the Board **DIRECTS** Staff to hold stakeholder discussions regarding the development of rules that will (i) recast the solar renewable portfolio standard as a 2,120-gigawatt-hour-per-year requirement by 2020, and (ii) support the installation of at least 1,000 megawatts of offshore wind electric generation by 2012, and at least 3000 megawatts by 2020.

B. Combined Heat and Power

The EMP calls for the development of 1,500 megawatts of new combined heat and power capacity in New Jersey by 2020. The Board **DIRECTS** Staff to develop for the Board's issuance a solicitation to offer financial assistance for combined heat and power projects, including, without limitation, the use of monies in the Retail Margin Fund authorized to be used for such financial assistance.[10] Although that direction shall take effect immediately, the Board further **DIRECTS** Staff to develop for the Board's consideration proposed regulations that set out the ways the Retail Margin Fund will be used for the purposes of mitigating leakage.

C. Reducing Peak Demand for Electricity

Reducing peak demand for electricity will help in reducing the need for additional transmission infrastructure that would normally lead to additional imports of generation from outside the RGGI region. To this end, the Board has already undertaken certain efforts to increase demand response programs.[11] The Board **DIRECTS** Staff to continue working with electric distribution companies and other interested parties to develop new and expanded demand response programs for the Board's consideration, and to continue developing demand response efforts targeted to large customers.

D. Evaluating Transmission Projects

N.J.S.A. 40:55D-19 provides that neither the Municipal Land Use Law nor any ordinance or regulation made under the authority thereof, will apply to:

> a development proposed by a public utility for installation in more than one municipality for the furnishing of service, if upon a petition of the public utility, the Board of Public Utilities shall after hearing, of which any municipalities affected shall have notice, decide the proposed installation of the development in question is reasonably necessary for the service, convenience or welfare of the public.

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[10] L. 2009, c. 34, amending N.J.S.A. 48:3-51 et seq.

[11] See the Board's July 1, 2008 Order, In the Matter of Demand Response Programs for the Period Beginning June 1, 2009 – Electric Distribution Companies Programs, Docket No. EO08050326, directing New Jersey electric distribution companies to submit proposals for demand response programs, and, In the Matter of Demand Response Programs for the Beginning June 1, 2009 – Market-Based Programs, Docket No. EO08060421. inviting the energy community to submit market-based demand response programs. See also the Board's December 10, 2008 Order, In the Matter of Demand Response Programs for the Period Beginning June 1, 2009 – Electric Distribution Companies, Docket No. EO08050326, adopting a modified demand response working group proposal.

Public utilities may seek a decision under N.J.S.A. 40:55D-19 for improvements to the electric transmission system across multiple municipalities. As discussed above, the Board found that it is possible for new or expanded transmission lines to result in increased imports of electricity and increased Statewide Greenhouse Gas Emissions. Accordingly, the Board **DIRECTS** that in any proceeding under N.J.S.A. 40:55D-19 in which the development proposed by a public utility is an electric transmission facility, Staff shall seek information from the parties to enable the Board to evaluate the effect of the development upon Statewide Greenhouse Gas Emissions. Although that direction shall take effect immediately, the Board further **DIRECTS** Staff to develop for the Board's consideration proposed regulations for the Board to consider issuing that provide further detail for this requirement.

DATED: 5/4/09

BOARD OF PUBLIC UTILITIES
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I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities