AES Thames, LLC
141 Depot Road
Uncasville, CT 06382

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Michele Totten
Connecticut Department of Environmental Protection Bureau of Air Management
79 Elm Street
Hartford, Connecticut, 06106-5127

Michele.Totten@po.state.ct.us

Subject: AES Comments on R.C.S.A. Section 22a-174-31 - Control of Carbon Dioxide Emissions/Carbon Dioxide Budget Trading Program (section 31)

AES Corporation including AES Thames has been an active stakeholder since the inception of the RGGI stakeholder process. Our input has been guided by the desire to have the program ultimately developed to provide a reasonable balance of environmental, energy, and economic policies. Further, that the program provides a solid foundation for a national program and the right market signals for new infrastructure requirements. Going forward, AES firmly believes that Connecticut and the northeast's energy profiles require a balance of generation fuel types, expansion of renewable assets, and increased energy conservation. In these comments, we focus primarily on the issue of treatment of generation resources with long term contracts. For the reasons outlined herein, we encourage Connecticut to follow the example of New York, Maryland, and New Jersey and to revise the Connecticut program design, to provide for a similar treatment of AES Thames, the state's only contracted facility.

If you have any questions please contact me at 607/272-5970, ext. 1116.

Sincerely,

Chris Wentlent, Director
Regulatory Affairs

In accordance with the Connecticut Department of Environmental Protection (DEP) proposed rule to implement RGGI, AES Thames respectfully submits these comments.

AES Corporation is one of the world's largest global power companies, with operations in 26 countries on five continents. We were one of the first generating companies in the world to voluntarily offset carbon dioxide emissions through forest sequestration projects, develop holdings in wind farms across the globe, have significant businesses in the creation of greenhouse gas offsets, and over the next ten years plan to invest $10 billion in CO2 offset, renewable energy, ethanol, solar power, coal-to-liquid technology, and carbon capture projects. However, it should be noted, to date, carbon capture and sequestration remain in the development phase. No viable CO2 capture and sequestration technology alternative currently exists.

AES Corporation supports the development of a properly structured market-based greenhouse gas program on the national level. We believe the program should be expansive to all economic sectors, utilize effective market-based mechanisms, provide equitable allowance allocation to affected sources, and provide liberal utilization of certified CO2 offsets while available technology solutions are being developed. However, in the interim, we will support a similar well-structured regional greenhouse gas initiative that properly balances environmental, economic development and energy needs.

AES Thames Overview

The AES Thames power plant, located in Uncasville, Connecticut, has been in commercial operation since early 1990. The facility provides 181,000 kW of electricity to the customers of Connecticut Light and Power and also provides up to 100,000 pounds of steam per hour to the neighboring Smurfit Stone Container paper mill. The steam provided is integral to the recycling of about 450 tons per day of cardboard that otherwise would likely be sent to local or regional landfills for disposal.

AES Thames employs 55 people directly, and Smurfit Stone Container employs 110 people. We are also the largest taxpayer in the town of Montville, paying approximately $1,500,000 in annual property taxes and purchase a number of goods and services to support the facility from surrounding businesses. We are actively involved in various civic organizations and provide financial support to many non-profit organizations.

Our facility has operated in excess of 92% capacity factor since 1990 and regularly provides reliable baseload performance for the Connecticut energy grid. This is particularly important during the winter months when the natural gas transmission system is subject to a higher likelihood of delivery curtailments. Finally, the coal technology used at AES Thames (circulating fluidized bed) makes it the cleanest operating coal-fired facility in New England.

Beginning in 1989, AES Thames was one of the first companies in the United States to offset CO2 emissions through a **voluntary** carbon sequestration project, through CARE Guatemala. This project was entered into prior to the facility even starting commercial operation. We have contributed approximately $2.25 million to this project, and estimate our support has resulted in approximately 500,000 tons of CO2 being sequestered. An overview of the project is attached for your review.

The facility's current power purchase agreement (PPA) terms, developed in 1998, charge rates at approximately a 45% discount, on average, from current market prices. This pricing benefit, along with our environmental performance and co-generation of steam, and electric system reliability benefits (fuel diversity) makes AES Thames an important asset to the state of Connecticut and the ISO-NE.

The existing AES Thames' PPA expires in mid-2015 and does not provide for pass-through of any proposed RGGI-required CO2 allowance costs or allow for the capture of any market-based price increase. This is not surprising since the idea for RGGI was not even proposed by New York State until 2003, and the New England governors, including Connecticut first issued a Climate Change Action Plan in August 2001, years after AES signed its PPA. Accordingly, the issue of most concern to AES Thames is a transitional one. Once the contract expires, AES Thames will be in a position to include the cost of its allowances in its market bid and at least, realize the cost recovery of the CO2 cost of the marginal unit setting the market clearing price. Based on our knowledge, AES Thames is the only generation facility in the State with a long term PPA.

AES Thames appreciates the fact that the current proposed regulation includes a set-aside for combined heat and power applications, like the AES Thames plant. Unfortunately, that set aside would only allow approximately 5% of AES Thames total requirement to be met Based on past baseload operations at AES Thames, and ICF RGGI modeling CO2 allowance price forecast, we anticipate that the RGGI program could effectively impose a fee on the facility of approximately $3 million annually. Depending upon the actual

auction price, this cost impact could increase. This amounts to approximately 18% of AES Thames annual operating budget.

We respectfully request that the final CT RGGI rule include a Long Term Contracted Plant provision that is consistent in structure to how other RGGI states have resolved the contract plant issue. Other large RGGI states with plants under long term contracts have provided a transitional path for those facilities that entered into long term contracts prior to the development of the RGGI program. Fairness and equity, as well as the impact that the RGGI program may have on the reliability and fuel diversity of Connecticut's electrical energy system, requires that some accommodation be made for those generation facilities that have commercial obligations in a long term contract As the other RGGI states have shown, this can be done consistent with the goals and objectives of RGGI.

Connecticut Electric System

Section 51 of the Connecticut Electricity and Energy Efficiency Act (Public Act No. 07-242) requires that the electric distribution companies, in consultation with the Connecticut Energy Advisory Board, review the state's energy and capacity resource assessment and develop a comprehensive plan for the procurement of energy resources, … to meet the projected requirements of their customers **in a manner that minimizes the cost of such resources to customers over time.** (Emphasis added) The generation and sale of electricity by AES Thames under its long term contract with CL&P is fully consistent with the wording and intent of the Act.

Section 51 of PA 07-242, requires that electric distribution companies submit a comprehensive resource plan to the Connecticut Energy Advisory Board (CEAB). The report, "Integrated Resource Plan for Connecticut," January 1, 2008, was accordingly submitted by The Connecticut Light and Power Company (CL&P) and The United Illuminating Company (UI) and *The Brattle Group*, an independent economic consulting firm.

Key findings of the report include:

- Connecticut power prices will continue to be both high and possibly unstable. This is due primarily to the fact that electricity prices in New England will remain closely linked to natural gas prices.
- Using large amounts of natural gas for electricity generation may increase the potential of gas supply disruptions in the winter months when overall natural gas use peaks.

- Connecticut and other New England states have ambitious and escalating renewable energy procurement targets. However, the growing demand for renewable electric generation created by these targets may outpace the development of eligible supplies. Connecticut has relatively limited amounts of economically attractive renewable resource options, and New England states on the whole may not achieve their aggregate renewable targets over the next decade. There is a significant possibility that Connecticut's RPS requirements will not be met with renewable electric generation.

Report recommendations include (*italicized comments are AES's*):

- Explore other power procurement structures such as longer term power contracts on a cost-of-service basis with merchant and utility owners of existing and new generation.
  - *Allowing the State's sole existing contracted facility to experience negative financial consequences as a result of RGGI is in conflict with this recommendation and creates a risk as to the ability of attracting future long term power contracts. It is critical that Connecticut send a consistent market signal to other stakeholders that may engage in long term contracting. Failure to do so will result in an additional risk premium for those potential contracts and higher costs to Connecticut consumers.*
- Consider potential ways to mitigate the exposure of Connecticut consumers to the price and availability of natural gas.

AES Thames' believes the recommendations in the January 2008 CEAB report provide further support for a reasonable solution for the Long Term Contracted issue within the Connecticut RGGI regulation.

How Have Other States Within RGGI Handled Long Term Contracted Facilities?

Other states in the RGGI region (New York, Maryland, and New Jersey) have recognized the need to resolve the Long Term Contracted Facility issue and the following summarizes their solutions:

New York – Proposed Part 242 CO2 Budget Trading Program, Section 5.3(d) provides the details of New York's proposed "Long term contract set-aside allocation." The state has set aside 1,500,000 tons annually to the long term contract set-aside account from the State's CO2 Budget Trading Program annual base budget. Plants with long term contracts that meet several requirements, including demonstrating financial hardship as a consequence of RGGI, will be awarded allowances from this account.

Maryland – Maryland's draft rule handles plants with long term contracts in a manner similar to New York. Draft Subtitle 26.09 Maryland CO_2 Budget Trading Program, Chapter 02.05.C provides for the annual allocation of 1,698,191 tons to the long term

contract set-aside account from the State's CO2 Budget Trading Program annual base budget. Chapter 02.05.E specifies how the Long Term Contract Set-aside Account will be administered.

New Jersey – New Jersey has selected a different approach to address the issue and provides for price certainty for these facilities. Specifically, New Jersey Governor Corzine recently signed the RGGI auction legislation, A-4559/S-2976. The legislation was enacted as chapter 340 of the Laws of 2007 which provides for the direct sale of allowances to "dispatch agreement facilities" (i.e., long term contract plants) at the price of $2 per allowance for the life of their agreement or until the agreement is renegotiated, whichever occurs earlier. Such plants can buy allowances, equal to the average annual carbon dioxide emissions for the prior three-year period.

Based on the aforementioned, we propose two alternatives for consideration:

One alternative approach would be to build upon the authority provided by section 93(c) of Public Act 07-242, which provides that the Commissioner may establish regulations that include a set aside of allowances for combined heat and power. As explained above, as a cogeneration facility, the AES Thames plant is a combined heat and power plant. It is also, to our knowledge, the only facility subject to a long term contract that does not provide for any pass through of the cost of CO2 allowances. Therefore, section 22a-174-31(f) (3) of the final regulations could include a new category of Combined Heat and Power facilities called Generation Plants under Long Term Contract. That section should provide this category of facilities with an additional allowance set aside for those CHP Power Generation plants with long term PPAs entered into prior to a specified date, which could be, for example, April 2001, when New York Governor Pataki first proposed a RGGI program or December 20, 2005, the date that the RGGI MOU was signed. The set aside should include sufficient allowances to cover the CO2 emissions from the AES plant that are not covered by the currently proposed CHP set aside account.[1] This special category of allowance allocations would only remain in place until the pre-RGGI PPA expires.

The second alternative is specific draft language that will provide a solution that is consistent with other RGGI states that are dealing with the same issue. These provisions could be incorporated into the above special CHP allowance set aside suggested above:

Definitions: "Long Term Contract Set-aside Account" means a general account established by the Department from which allowances will be awarded to CO2 budget units with long term contracts after demonstration that purchasing allowances equal to the CO2 emissions will affect the financial viability of the plant.

Long Term Contract Set-aside Account. The Department will administer the Long Term Contract Set-aside Account as follows:

(1) Eligibility for a CO2 budget unit for allowances awarded by the Department from the Long Term Contract Set-aside Account shall be determined in accordance with the following criteria:

(a) That a long term contract for the electrical output of the budget unit has been in existence since January 1, 2001;

(b) That the applicant is unable to pass the cost of purchasing allowances on; and

(c) That purchasing allowances equal to the CO2 budget unit's CO2 emissions will affect the financial viability of the plant or direct or indirect corporate or individual owners of the plant. Such financial viability can be demonstrated by means of the following alternatives:

(i) the LTC applicant will suffer net losses as evidenced by the Net Income Statement line on the LTC applicant's audited financial statements in excess of the value of allowances sought, supported by projected costs and revenues for the allocation year for which the LTC application pertains; or

(ii) the value of the CO2 allowances sought which the LTC applicant will be unable to pass on to the LTC purchaser exceeds one (1) percent of the annual operating expenses of the CO2 budget unit for the

last full calendar year prior to the allocation year for which the LTC application pertains (excluding the cost of fuel, major maintenance, and depreciation)

(2) If allowances are awarded and in order to remain eligible for future allowances, the CO2 budget unit must attempt to renegotiate the contract to include the cost of purchasing CO2 allowances as soon as the opportunity to exercise any option in the existing contract occurs.

(3) The CO2 authorized account representative for the compliance account, herein referred to as the "LTC applicant," shall make all submissions to the Department required for the award of allowances.

(4) The LTC applicant may submit a written request to the Department for a specified number of CO2 allowances in the Long Term Contract Set-aside account as follows:

(a) To be considered for allowances for calendar year 2009, the request shall be submitted by October 1, 2008; and

(b) To be considered for allowances for calendar years after 2009, the request shall be submitted by the March 1 immediately preceding the allocation years for which it is being made, unless allocations were granted as part of a previous request.

(c) The LTC applicant may submit a request for an award of allowances for up to four years.

(5) The request shall include the following, with reasonable supporting documentation:

(a) A copy of the long term contract with a certification that the LTC applicant is unable to pass the cost of allowances on to the purchasing party;

(b) Net Income Statements, as prepared by an independent public accounting firm using generally accepted accounting principles, for the CO2 budget unit for the previous 5 year period; the information shared on

the Net Income Statement will be treated a confidential.

(c) Fuel data from the previous 5 year period, such as purchase costs;

(d) The calculation of emissions from the CO2 budget unit or units covered by the long term contract;

(e) A statement of costs to the CO2 budget unit or unit(s) associated with this subtitle, contrasted with all other costs associated with the operation of the CO2 budget unit(s);

(f) Other information as determined by the LTC applicant, such as a certification that purchasing allowances equal to emitted CO2 will affect the financial viability of the plant, or direct or indirect corporate or individual owners of the plant, including all supporting documentation; and

(g) Additional information requested by the Department that is necessary to make a decision on the request. All information submitted by the LTC applicant will be treated as confidential information and returned to the LTC applicant after the evaluation is completed.

(6) If more than one LTC applicant requests the award of CO2 allowances and the total number of CO2 allowances to be awarded would exceed the number of CO2 allowances in the Long Term Contract Set-aside account, the Department will revise the awards based on the proportion of each LTC applicant's unit's average heat input for base years 2003, 2004, and 2005 compared to the total average heat inputs for all units for the same base years.

(7) Within 45 days of receipt of the LTC applicant submission, the Department shall review for completeness and notify the LTC applicant if additional information is needed; and

(8) The Department shall notify the LTC applicant of approval or denial within 30 days of receiving all required information for the first submittal, and within 60 days of receiving all required information for all future submittals.

(9) An LTC applicant may receive CO2 allowance awards only for control periods starting on or after January 1, 2009.

(10) All allowances awarded by the Department under this section shall be maintained in the budget unit's compliance account and be used to demonstrate compliance.

(11) Allowances awarded by the Department under this section may not be resold.

(12) At the end of each control period, the Department will transfer any remaining CO2 allowances from the Long Term Contract Set-aside Account to the Connecticut Auction Account.

Credit should be provided for AES Thames' Offsets

Connecticut should work with other RGGI states to provide credit for the reductions that were achieved through the Guatemala carbon sequestration project. Section 22a-174-31a. Greenhouse Gas Emission Offset Projects should be modified accordingly for the reductions achieved by the AES Thames offset project.

Legal Considerations

<u>Connecticut Public Trust Action</u>

The proposed rule could result in unacceptable and unreasonable environmental degradation due to the magnitude of leakage. The RGGI modeling acknowledges that the program will lead to increased electricity imports generated by electric power plants in upwind, non-RGGI states. The upwind power plants that will increase generation as a result of RGGI, in order to provide electricity for sale in the RGGI region, have significantly higher emission rates for NOx, SO2, and mercury than power plants in Connecticut and the RGGI states. As a consequence of prevailing wind patterns, the increased emissions in upwind states will be transported into Connecticut potentially causing increased air pollution and pollutant deposition in Connecticut. Connecticut DEP must assess the potential for adverse environmental effects that will result from leakage and the RGGI program and to protect the Connecticut environment from such adverse effects. Because Connecticut DEP and the RGGI states have failed to assess the potential

impacts resulting from increased levels of NO_x, SO_2 mercury and CO_2 transported into the State due to the RGGI program, or take any meaningful action as part of the RGGI program to diminish or eliminate leakage, the RGGI program could potentially result in unreasonable levels of pollution. AES Thames respectfully submits that before finalizing the proposed rule, CT DEP should analyze the potential extent of adverse environmental effects from air pollutant transport caused by leakage and take reasonable action to mitigate increased air pollution from upwind power plants resulting from the RGGI program.

Summary

AES Thames is a clean, low cost plant, supporting fuel diversity in a region that relies too heavily on gas for power generation. Further, the facility offers a combined heat & power application to a cardboard recycling facility. The plant was one of the first facilities in the nation to voluntarily offset emissions through reforestation.

Maintenance of the AES Thames low cost power contract is consistent with the Connecticut Electricity and Energy Efficiency Act and its stated recommendations. Other states in the RGGI region with similar facilities have crafted a balanced solution. Existing Connecticut legislation allows for a similar treatment. We believe a resolution is good for many involved stakeholders including the Connecticut electric ratepayers, ISO-NE and the Connecticut electric system (by providing for reliability, including especially during critical winter system operations), our cogeneration partner at the site, and our community that depends on the viability of the facility.

Throughout the development of states' RGGI rules there has been significant emphasis placed on having as much consistency as possible between state programs. This fact is evidence in that three of the largest RGGI states have recognized that treatment of plants with long term contracts is an issue that warrants solution.

Connecticut, with only one contracted facility, has ignored this issue in its proposed rule. At the April 26, 2007 meeting in Hartford on development of the Connecticut RGGI rule there was discussion by the Department of Environmental Protection indicating recognition of the unique problem posed to contracted facilities by an allowances auction and the consideration of using a possible set-aside to address this issue. Yet the proposed rule does not address the issue. We respectfully request that the final Connecticut rule utilize the solutions developed in New York, Maryland, and New Jersey and provide

AES Thames comparable treatment through the expiration of its long term contract in 2015.

Thank you for the opportunity to provide these comments.