STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 03-E-0188 - Proceeding on Motion of the Commission
Regarding a Retail Renewable Portfolio Standard

REPLY BRIEF ON EXCEPTIONS TO THE RECOMMENDED DECISION OF THE RENEWABLE ENERGY TECHNOLOGY AND ENVIROMENT COALITION[1]

Submitted on Behalf of RETEC by:

Katherine Kennedy, Esq.
Nathanael Greene
Natural Resources Defense Council, Inc.
40 W. 20th St.
New York, New York 10011
(212) 727-4463

Douglas Ward, Esq./Valerie Strauss
American Wind Energy Association
c/o Young, Sommer...LLC
5 Palisades Drive
Albany, NY 12205
518-438-9907, Ext.253

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New York, New York and Albany, New York

[1] RETEC members include: American Lung Association of New York State; American Wind Energy Association; Citizen's Advisory Panel; Community Energy; Fuel Cell Energy, Inc., Hudson River Sloop Clearwater; Natural Resources Defense Council; New York Lawyers for the Public Interest; New York League of Conservation Voters; New York Public Interest Research Group; New York Renewable Energy Coalition; New York Solar Energy Industries Association; Pace Energy Project; Plug Power; PowerLight; Public Utility Law Project; Riverkeeper; Scenic Hudson; Sierra Club Atlantic Chapter; Solar Energy Industries Association; Sustainable Energy Developments, Inc.; and Union of Concerned Scientists.

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I. INTRODUCTION

On June 3, 2004, Administrative Law Judge ("ALJ") Stein issued a recommended decision ("RD") in Case 03-E-0188: Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard. Parties to the case filed briefs on exceptions to the RD on June 23, 2004. In keeping with the New York State Public Service Commission's ("Commission") June 3, 2004 Notice of Schedule for Filing Exceptions, the Renewable Energy Technology and Environment Coalition (RETEC) hereby files this reply brief opposing certain parties' exceptions to the RD.

[2] Positions taken by RETEC members in this proceeding are reached as a result of consensus and RETEC members reserve the right to take different positions on the individual matters discussed on a stand-alone basis or in other policy arenas but support RETEC documents as a whole on a consensus basis.

II. SUMMARY OF REPLY TO EXCEPTIONS

RETEC respectfully submits that the Briefs on Exceptions[3] filed by the Joint Utilities ("JU"), Multiple Intervenors ("MI"), the New York Independent System Operator ("NYISO") and the Independent Power Producers of New York ("IPPNY"), among others, lack merit for the reasons discussed more fully below. RETEC does not reject all of these parties' briefs in their entirety, but they contain significant erroneous information and misleading recommendations. Specifically, RETEC believes that:

- Full implementation of the RPS must begin immediately to stimulate development of desirable energy resources and allow the State to reap the multiple benefits that such resources provide. Postponement or a pilot program will not achieve the desired objectives.

- A 2008 review would cast doubt on the Commission's commitment to the RPS, encourage continued stalling and obstructionist tactics by those opposed to the RPS, and yield little hard data on which to judge the success of the program. A review should take place no earlier than 2010.

- The baseline must be fixed, except for revisions made because of significant changes in the amount of existing renewable resources, and green marketing must not be included. To do otherwise would result in confusion, inhibit investment and complicate procurement.

- Individual procurement by LSEs is the preferable implementation model for an RPS, although RETEC will support hybrid procurement as long as the details are sufficient to promote project financing. The arguments made against LSE procurement responsibility and for totally centralized, State procurement are incorrect and unsubstantiated.

- An alternative compliance mechanism is not only justified but is a fundamental component of an RPS.

- Disqualifying otherwise eligible projects from the RPS because they may be recipients of other financial incentives is neither practical nor fair. RETEC has previously proposed, and argues here as well, that all otherwise eligible technologies commencing operation after January 2000 by eligible for the RPS.

[3] All references to submissions by active parties (i.e. JU, NI, IPPNY, etc.) refer to those parties' Briefs on Exceptions unless otherwise indicated.

- The Commission should adopt the Biomass Working Group's recommendations, which set the proper initial requirements on eligible biomass, particularly with regard to air emissions standards.

- RETEC supports the Recommended Decision to exclude municipal solid waste (MSW) fueled power plants (i.e., mass burn trash burners) and disputes the arguments offered in the IWSA Brief on Exceptions opposing this decision.

- The record clearly supports the establishment of the SBC-Like Tier, which can be easily administered. MI mistakenly describes the SBC-like tier as too costly by overstating the cost by approximately 100% and ignoring the fact that SBC-like tier payments are capital payments not energy-based payments.

- Strict delivery of energy with imports is unreasonable and unnecessary as it imposes hurdles on the utilization of renewable energy that would otherwise provide environmental and reliability benefits to New York. As RETEC has previously argued, reciprocity is a much more efficient, flexible and pragmatic approach.

- The RD is an excellent and well-reasoned determination of facts upon which the Commission can base its implementation plans. Parties to this proceeding have had ample opportunity to comment; additional and never-ending studies upon which all parties would never agree will serve no purpose other than obstruction of state policy.

- Staff used the correct procedure to calculate costs, and MI's arguments to the contrary must be dismissed as incorrect.

- Neither NYPA nor flex-rate customers should be exempt from the RPS. All New Yorkers will benefit from the increased use of renewable energy, and therefore all New Yorkers should participate in the RPS.

- A cost-of-service approach to procurement as recommended by MI is an unworkable and unacceptable burden on the Commission and DPS staff and the opposite of a competitive market.

- Reliability issues are unfairly being used as proxy for economic impact on existing generators.

- The Commission need not wait for studies being conducted by NYSERDA and the NYISO before implementing the RPS. Rather, they should be taken under review as called for in the RD. There is no logical, legal or just reason to treat the interconnection of renewables any different than any other energy resource nor put off the beneficial effects of the RPS while awaiting studies aimed at enhancing the State's existing reliability protocols.

III. ARGUMENT

A. TIMELINE AND TARGETS

1. Full RPS Implementation Must Begin Now

MI asserts that the start date for the RPS should be 2009. MI at 5 and 27-28. As RETEC and others have repeatedly noted in comments, the RPS is meant to stimulate development of desirable energy resources and allow the State to reap the multiple benefits that such resources provide. Postponing implementation prevents realization of those benefits, drives investment dollars and businesses to other States, and prevents the downward pressure on costs induced by increased investment in these technologies. While MI asserts the cost of renewables will be dramatically less in 2009, it is highly unlikely such reductions in costs will be realized without State-encouraged investment in the interim.

In addition, MI asserts that by 2009 the wind projects currently proposed but not built in New York will be operating even in the absence of an RPS. MI at 28. However, these wind projects were put in the pipeline by innovative risk takers in anticipation of an RPS. It is entirely unclear how many, if any, will come to fruition absent an RPS. MI also fails to recognize that these very projects are likely to be some of the least cost renewable resources eligible under the RPS.

The JU argue for a pilot program conducted via central procurement. JU at 51. They incorrectly see a pilot program as being easier to implement and capable of producing results useful for predicting the outcome of a broader RPS. They are incorrect on both counts. First, any central procurement will require a careful delineation of the details for contracting; therefore, a pilot program requires the same level of specificity as a full program without which careful investors will not underwrite projects. Second, without assurances of an on-

going program, renewable energy project developers will not invest in New York, making any initial results spurious as indicators of future success.

2. A Commission Review Should Be No Earlier Than 2010

RETEC objected to the recommendation that the first Commission review take place in 2008 in its Brief on Exceptions, and it opposes the support of this review date expressed by MI, JU and IPPNY. To have such a review potentially just two years after the start of the RPS would cast doubt on the Commission's commitment to the RPS, and encourage continued stalling and obstructionist tactics by opponents to the RPS. Moreover, a review in the infancy of the program would yield little hard data on which to judge the success of the program. RETEC believes those supporting a 2008 review do not have the success of the RPS foremost in mind. RETEC recommends that such a review occur no earlier than 2010. Should a hybrid model be chosen for procurement, this time frame will also allow the Commission to consider phasing out central procurement in favor of full individual procurement as a robust renewables market develops. A firm commitment to the RPS targets over the long term is essential to instill confidence in building a robust market for renewable energy.

3. The Baseline Should Be a Fixed Number and Should Not Include Green Marketing

MI argues that the baseline should be revised to reflect a recent Federal Energy Regulatory Commission ("FERC") decision on NYPA's out-of-state sales and that the baseline be revisited during a 2008 Commission review. MI at 32-33. The baseline is admittedly not a firm number given the fluctuations in hydropower project output. It was also based on compromise positions of the active parties. However, the baseline must be fixed in time, except for revisions made because of order of magnitude changes in the amount of

existing renewable resources. To do otherwise would result in confusion, inhibit investment and complicate procurement.

RETEC and others also have argued that the Green Market demand should be removed from the baseline, not increased as MI asserts. MI at 33. The inclusion of Green Market demand in the baseline creates confusion and undermines consumer confidence in the Green Market. The Green Market by definition captures the desire of some individuals or businesses to provide support for more renewable resources than would otherwise be provided. The inclusion of Green Market demand within the baseline, thereby lowering the RPS requirement, sends the wrong message to these consumers and jeopardizes the economic viability of Green Marketing in New York. Were MI's suggestion to go forward, Green Market consumers would no longer be creating an absolute increase in demand for renewable energy but rather merely shouldering costs that would otherwise be shared by all.

The Commission should use a revised baseline, which excludes green marketing, and establish firm annual targets expressed as a percentage of load in order to reach the goal of having 25% of the State's electricity be generated by renewable energy in 2013.

B. PROCUREMENT STRUCTURE

1. Individual Procurement By LSEs Is Preferable

RETEC has consistently maintained that individual procurement by LSEs is the preferable implementation model for an RPS. These truly market-based requirements have a proven track record, and have gained the support of a number of active parties. See Brief on Exceptions of RETEC at 23-26; Constellation New Energy at 7-11, and IPPNY's Reply Comments of October 31, 2003. RETEC has suggested in previous comments that, if the Commission feels it is in the State's interests, hybrid procurement is a "second-best alternative" as long as the implementing details are correct and sufficient to allow for market

development. RETEC has also suggested that during a review of the program, the Commission should consider a transition to individual procurement.

However, the arguments made by the JU against individual procurement and for completely centralized procurement are incorrect and unsubstantiated. Completely centralized procurement will not produce a true market for renewable energy. The basis of an RPS is the creation of a market for Renewable Energy Credits, which represent the public benefits of renewable energy, and only individual procurement can create a true market for these RECs. Beyond this, renewable energy generators such as wind power require a contract for their energy output in order to obtain financing. RETEC believes that ultimately those responsible for purchases of wholesale power to meet customer needs should also be responsible for the purchase of wholesale *renewable* power to meet those needs. One of the benefits of an RPS is that LSEs gain familiarity and comfort with renewable energy; this aids the development and support of a viable market well into the future.

The JU except to the Recommended Decision's endorsement of the Staff "hybrid" model for procurement of renewable energy. JU at 7-13. Their exception is grounded on their view that the Central Procurement model, in which a State procuring body has sole responsibility for entering into contractual arrangements with renewable energy developers, is the superior RPS structural choice from the perspectives of equity and efficiency. RETEC disagrees.

The chief advantage cited by the JU for completely Centralized Procurement is the ability of the state agency to flexibly solicit for blocks of renewable energy resources, giving "coherent consideration to geographical distribution of renewables, any appropriate encouragement of specific technology types and to other factors related to State policy that

would not be relevant to, or available for consideration in, procurement by an LSE having a basic desire to seek 'least cost" alternatives.". According to the Joint Utilities, the Central Procurement Model also avoids a number of practical implementation issues revolving around the LSE's renewable energy purchasing practices in the context of a shifting customer base. JU at 9-10. The Joint Utilities also opine that the Central Procurement Model is most compatible with the development of retail competition.

RETEC believes the JU position is inconsistent. It is precisely the individual model that is most compatible with competitive markets because it is in fact a market-based procurement policy- procurement of least-cost resources by multiple buyers (i.e. LSEs). The issue of shifting customer base (to the extent there is much shifting of the customer base) can easily be addressed by a liquid REC market with banking and borrowing and an appropriate period for "true-up" of LSE responsibilities. In other words, LSEs can reconcile changes in their RPS requirement due to changes in customer base by purchasing or selling RECs.

Individual Procurement is the most flexible and market-based approach to implementation of an RPS. It allows responsible entities options for compliance. Under Individual Procurement, LSEs as well as large industrial consumers could enter into bilateral contracts for renewable energy, which can provide a stable fuel price as a hedge against the uncertainty of volatile fossil fuel prices.

Within a hybrid procurement approach as suggested by the RD, some LSEs may well chose to participate in the central procurement system based on a business judgment that this approach will yield least cost resources, minimize administrative burdens, or reduce regulatory risk. Other LSEs may opt to go outside the central procurer because of a perceived or real competitive advantage in securing renewable energy, a desire to innovate, or for other

reasons. RETEC believes the Commission should encourage rather than constrain the innovations a true individual procurement market can provide. The hybrid model recommended in the RD, with the exceptions noted by RETEC, will provide the flexibility for individual procurement to develop, while also providing a substantial role for a centralized system in the early years of the RPS. RETEC is pleased that NYSERDA has stated its willingness to be the central procurement agency if necessary, as it clearly has the requisite experience to ably fill this role.

2. JU Misinterprets the Suggested Contract Method

Contrary to the JU's assertion, the RD does not *require* LSEs to enter into Contracts for Differences ("CFDs") when contracting under individual procurement. . JU at 14. Under the RD's proposal, LSEs would be free to contract as they choose, whether under short or long-term contracts or CFDs, and whether for energy and attributes or attributes alone.[4] The RD states that LSEs should be given cost recovery for entering into prudent and competitively obtained long term contracts such as CFDs. LSEs would, however, have to decide in advance whether or not to satisfy the RPS through individual procurement or central procurement or a combination of the two.

A Central Procurement Agency would use a CFD approach. The CFD approach is necessary because the Central Procurement agency will not contract for energy, and investors will not finance projects based only on attribute purchases alone. (If they would, the price of the attributes likely would be substantially higher than under a bundled contract or a CFD.)

The JU discussion of CFDs mistakenly assumes that renewable generators will behave differently when under a CFD than when not under such a contract. JU at 15-16. The JU posit

[4] If the RPS was implemented via Individual Procurement alone, rather than a hybrid of some sort, RETEC has argued that LSEs would need to sign long-term contracts, without which project financing would be impossible.

that CFDs remove any incentive to respond to price as reflected in changes in LBMP. It is not, however a CFD that causes a renewable generator to be a price-taker in the wholesale market; rather it is the nature of intermittent renewable generation. Wind energy projects, for example, cannot be sited purely on the basis of LBMP and they do not cycle in response to constantly changing LBMP price signals as fossil fuel units do.

3. An Alternative Compliance Mechanism is Appropriate and Essential

The JU and MI argue that an alternative compliance mechanism ("ACM") is unjustified and penalizes customers. JU at 17; MI at 31. An alternative compliance mechanism is not only justified but is a fundamental component of an RPS. Alternative compliance options can be used for two purposes. They can serve as a cost cap for when renewable generation is not available in sufficient quantity at given prices, as well as a penalty for not procuring renewable generation.

The use of an ACM does not penalize customers. An RPS provides multiple benefits to New Yorkers (i.e. "customers"). The use of an ACM as either a penalty or a price cap ensures that New Yorkers get the benefits they deserve from the renewable energy development an RPS fosters. It serves as an inducement for LSEs to contract for renewable energy and satisfy their obligations, and provides funding for renewable energy purchases when LSEs do not fulfill their obligations (RETEC has argued that any funds collected must be used for direct development of renewable energy.)

The amount recommended in the RD, 150% of the REC price, is appropriate but a fixed price (for example, $50/mwh) also has merit. RETEC believes the ACM should be used primarily as a price cap. In other words, if no renewable generation is available at a given price, the LSE may pay the ACM instead of showing ownership and retirement of RECs. However, any fixed-price ACM must be set high enough to encourage compliance through

long-term contracting. The ACM should be adjusted upward if it appears that LSEs are using the mechanism to simply avoid signing renewable energy contracts.

C. ELIGIBILITY

1. Participation in Other Government Programs Must Not Preclude RPS Eligibility

RETEC has explained in its Brief on Exceptions that the Commission must clarify the RD's language on eligibility with respect to existing projects. The position of both RETEC and Staff to include existing wind projects as eligible is appropriate; RETEC has argued that the eligibility date for renewable resources under the RPS be January of 2000. The RD's rationale for the inclusion of existing small hydropower projects applies equally to existing wind projects, which were developed by innovative risk takers who should not now be penalized for their efforts. RETEC also believes that the Commission should clarify the term "developed after" in this recommendation by substituting the words "begun operations after" in order to more precisely define this start date (a position supported as well by NRG at 3).

The JU appears to misinterpret the lack of clarity in the RD when it erroneously states that SBC-program funded projects are included in the baseline and not eligible for the RPS. JU at 47. The Commission must clarify that all projects involving eligible technologies that begin operation after January 2003 are eligible for the RPS. (With the addition of existing wind projects as also eligible.) In many instances, if not most, the SBC funding provided to a renewable technology is only a fraction of that needed for development. The use of SBC-funds therefore will only reduce the amount needed to be obtained from the RPS program and will result in a lower cost renewable supply.

In addition, the Joint Utilities argue that any resource already receiving a state or federal subsidy should be ineligible for the RPS. JU at 50. To the extent that the JU is arguing

that any facility receiving the federal PTC should not be eligible for the RPS, this is patently absurd. This would do nothing more than increase the cost of the program, or doom it to automatic failure. Either wind projects would have to forego the PTC and recover more of their costs through the NY RPS (an unlikely scenario), or non-wind energy resources (many of which are more expensive than wind) would be used for the RPS. The arguments made by JU and MI also fail to acknowledge that conventional generating sources have enjoyed and continue to enjoy large embedded subsidies.[5] It is unlikely that any nuclear plants would operate in the U.S. were it not for federal liability coverage under the Price-Anderson Act, and in New York, a large number of independent power plants obtained taxpayer-subsidized financing through Industrial Development Agencies. Many of MI's member companies enjoy the benefits of subsidized economic development rates. The "level playing field" touted by the Joint Utilities simply does not exist in the energy market. Disqualifying otherwise eligible projects from the RPS because they may be recipients of other financial incentives is neither practical nor fair.

2. Proposals to Expand Eligible Biomass Beyond the Working Group's Recommendation Should Be Rejected

RETEC respectfully reiterates its call for the Commission to adopt the Biomass Working Group's recommendations. These recommendations set the proper initial requirements on eligible biomass and identify the need for developing a mechanism for evaluating alternative resources. The Commission should reject the call by a number of parties to expand the definition of eligible resources and instead initiate the process for

[5] See the following resources: http://www.repp.org/repp_pubs/articles/resRpt11/preleasesubsidies.pdf, http://www.taxpayer.net/TCS/fuelsubfact.htm, http://www.greenscissors.org/publications/gs2004.pdf, http://www.foe.org/camps/eco/payingforpollution/percentage.html, http://www.stanford.edu/group/efmh/jacobson/energy.pdf, http://www.externe.info/externpr.pdf

developing standards and monitoring requirements for an on-going evaluation of potential alternative fuels.

As addressed in RETEC's brief on exceptions, there were a number of key recommendations made by the Biomass Working Group that were ignored or misinterpreted in the RD. The RD fails to address potential air pollution from biomass facilities, adopts an overly broad definition of waste materials that can be used, fails to identify testing and monitoring standards needed to protect the public health and ensure that only clean biomass is used in meeting the RPS, and finally fails to require a growing fraction of biomass co-firing come from energy crops.

A number of parties (e.g. Taylor Recycling, Changing World Technology ("CWT"), and KeySpan) specifically call for a broader definition of biomass. KeySpan, for instance, calls for the inclusion of tires and automobile fluff, neither of which are renewable in any sense of the word. These resources should be rejected even if they can be turned into energy without serious risk to public health. These materials are primarily derived from petroleum products; any eligibility requirement that included them would therefore essentially be claiming that fossil fuels are renewable.

We would further note that it is simply too late in this proceeding to propose a new technology for eligibility, as CWT and KeySpan have done. CWT did not propose its process for eligibility until the Brief on Exceptions phase, having elected not to participate in this process at any other time since its inception in early 2003. The alleged benefits of its process were not examined by the Working Groups, subject to examination in the lengthy and repeated exchange of comments, nor examined in the DGEIS or the cost studies. On this basis alone, CWT's request for eligibility should be denied.

Taylor Recycling claims that RETEC's members reject the inclusion of biomass recovered from mixed waste "in the total absence of experience or data." Taylor Recycling at 1. However there is ample data to prove that producing energy from mixed and contaminated waste streams produce significant quantities of highly toxic air pollution (See Appendix D of RETEC's September 2003 Comments and the affidavits By Dr. Allen Hershkowitz and Sam Swanson submitted as part of the same comments), and comparatively little to support the notion that unspecified and uncited "advanced non-combustion processes" will somehow solve this problem.

RETEC supports the recommendation made by the Biomass Working Group that a testing and monitoring process be developed to evaluate alternative biomass fuels and ensure that power facilities are receiving a homogeneous stream of biomass and that the facilities are not producing toxic air pollutant or exacerbating regional air quality problems. As Taylor Recycling notes, the working group recommended that the DEC's DAR-3 testing protocol be used as a framework for an approach for the RPS. These testing and monitoring protocols should be developed expeditiously, but need not be in place when the RPS starts.

A number of parties call for specific clarifications and expansions of the definition of acceptable forms of co-firing. KeySpan for instance calls for a clarification on the language governing the vintage of projects that are eligible, particularly with regard to landfill gas. KeySpan points out that gas collection systems are likely to have been in place prior to the development of a landfill gas-to-energy project. KeySpan also calls for landfill gas to be eligible for co-firing and points out that if it is, the facility at which cofiring occurs will likely have been in place prior to development. As noted above, RETEC agrees that the date governing eligible vintage should be an "in-service" date.

Other parties also take exception to limiting co-firing to coal combustion. See Empire State Forest Products Association, Changing World Technologies, and KeySpan. RETEC believes that the restrictions on air pollution and the requirement that a growing percentage of biomass be used for co-firing (except for landfill gas co-firing) are more important criteria than which fossil fuel biomass is co-fired. Co-firing provides an important intermediate step in the development of dedicated biomass facilities powered by dedicated energy crops. Only this combination will allow for the full benefits of bioenergy to be realized. Co-firing eliminates the need to develop capital for dedicated biomass facilities, but unless a growing percentage of dedicated energy crops are required, then co-firing provides little in the way of long-term benefits.

Therefore, RETEC agrees that co-firing need not be limited to biomass with coal combustion as long as the air pollution and dedicated energy crop requirements recommended by the Biomass Working Group and RETEC are adopted. Co-firing landfill gas with a variety of fossil fuels is the most promising alternative, but co-firing clean unadulterated biomass with other fossil fuels should also be considered.

3. The RD Correctly Excluded Municipal Solid Waste From the RPS

RETEC supports the Recommended Decision to exclude municipal solid waste (MSW) fueled power plants (i.e., mass burn trash burners). RETEC disputes the arguments offered in the IWSA Brief on Exception opposing this decision.

The IWSA challenges the conclusions of the Recommend Decision, and the draft Environmental Impact Statement, both of which find that MSW burners should be excluded from the list of RPS eligible sources for environmental reasons. The facts presented in this case clearly show that increasing MSW fueled power plants will result in reduced air quality, increasing NOx and mercury emissions in New York. NOx and mercury emissions are

among the most serious potential air pollution threats to the health of New Yorkers produced by electricity generation, and the reduction of their emissions is a key goal of this policy.

In support of its argument, the IWSA offers a table (IWSA at page 2) comparing MSW fueled plants with a generic wood waste plant and a generic landfill gas plant. However, this table ignores the criteria established by the Biomass Working Group. The Working Groups' plan would ensure that only clean wood waste, landfill gas and other biomass fueled plants would qualify. For example, the Biomass Working Group identified maximum NOx emission rates significantly lower than the NOx emission rates for any of the three IWSA plants. The working group also addressed the need to exclude contaminated wastes from the fuel stream. The table does not offer a useful comparison of many of the important emission rates.

In its brief on exceptions, IWSA reiterates misleading claims about the mercury emissions from incinerators verses landfills. IWSA at page 2-3 and Attachment 5 to IWSA's October 31, 2003 filing. IWSA claims that a ton of waste disposed of in a landfill will produce more mercury air pollution than the equivalent ton disposed of in a waste-to-energy incinerator. Unfortunately the calculations on which this claim is based are simply wrong. The misuse of a conversion factor in the IWSA equations results in an almost 30-fold overestimate of the mercury emissions from landfills by more than 30 times.[6]

The IWSA compounds this error by assuming no energy production from landfill gas - meaning that only coal fired electricity will be displaced by electricity generated at

[6] In Attachment 5 to IWSA's October 2003 comments—the only apparent support for its claim—IWSA uses a landfill gas formation rate of 6418 cubic feet of landfill gas per ton of MSW processed at a landfill. This number is the total amount of landfill gas produced over the entire lifetime of the garbage buried in the landfill. Unfortunately, IWSA uses it as if this amount was produced each year, further assuming that the garbage will continue to produce this level for 30 years and that additional garbage producing at the same rate will be added each year. The result is an overestimation of the mercury emissions from landfill by more than 30 fold..

incinerators. The simple fact of the matter is that incinerators have unacceptably high mercury emissions and should not be included in the RPS.

Similarly IWSA observes, "Furthermore, waste-to-energy as an alternative to land disposal and power generation from coal prevents the release of nearly 24,000 tons of nitrogen oxides and 2.6 million tons of volatile organic compounds." This comparison does little to inform the decisions to be made. Within the context of meeting the RPS targets, our choice is between clean renewable energy and waste to energy. New York only gets about 18% of its electricity from coal; waste to energy would therefore displaces a much more diverse, and generally much cleaner, mix than the pure coal scenario in their comments.

4. A SBC-like Tier is Consistent with State Policy and the Goals of the RPS

Contrary to the Briefs on Exceptions of Multiple Intervenors, the Joint Utilities, Constellation NewEnergy, and the Small Hydro Group, RETEC believes the record decisively and abundantly supports the establishment of the SBC-Like Tier. The second public policy objective adopted by the New York State Energy Planning Board in its most recent State Energy Plan is as follows:

> Stimulating sustainable economic growth, technological innovation, and job growth in the State's energy and transportation sectors, through competitive market development and government support.
> New York State Energy Plan, page S-2, June 2002.

Creation of an SBC-like tier fits squarely within this policy objective and is consistent with the economic development mission of NYSERDA and the Commission.

As noted throughout the proceedings, beginning with the instituting order, the New York Renewables Portfolio Standard seeks to promote a constellation of public benefits – economic development, improved reliability and peaking capacity, improved public health and environmental quality, improved environmental justice, etc. The intent of the RPS, as

articulated in the title of the standard, is to develop a diverse portfolio of renewable resources. This portfolio should achieve a variety of public benefits at a reasonable cost. In this context, the SBC-like tier is critical to the credibility and relevance of the policy, and we applaud Judge Stein's efforts to balance the competing interests in this case.

MI questions whether an SBC-like tier will have a stimulating effect on the emerging technologies in the tier. It is ironic that MI questions the efficacy of economic development programs, considering how strenuously MI defends the existing economic development contracts enjoyed by its members. It is axiomatic that increasing the revenues of an emerging industry will stimulate the development of that industry's products. States with significant long-term commitment to integrating the full spectrum of clean energy technologies can reap the economic and societal benefits of high-value, high-tech and high growth clean energy industries. The adoption of a forward-looking RPS, including an SBC-like tier, will greatly accelerate investment in New York by renewable energy companies.

5. Parties Overstate the Costs of the SBC-like Tier

MI and the Joint Utilities mistakenly describe the SBC-like tier as too costly. MI overstates the cost of an SBC-like tier by approximately 100% by neglecting to "back out" the generation provided by SBC-like tier technologies from the expected generation provided by other renewable resources. As RETEC and others have shown in briefs on exceptions, the real cost of the SBC-like tier is not the gross cost estimated in Appendix B of the RD, but rather the net life-cycle cost ($71,101,187) estimated on page 31 of the accompanying worksheet entitled "RD case results 6-3-04." Because the SBC-like tier backs out the most expensive energy from the main tier, and because it is paid in the form of capital buy-downs, the net life-cycle cost of approximately $71 million is far more relevant than the gross cost of approximately $149 million.

MI's statement that the SBC-like tier would cost $543 per megawatthour, is misleading. MI arrived at this figure by dividing the capital payments from 2006 – 2013 by the megawatt-hours generated by these resources over the same period, *ignoring these system's decades of expected subsequent operation beyond 2013.* In making this calculation, MI ignores that SBC-like tier payments are capital payments not energy-based payments. In their brief, MI simultaneously demands that cost estimates extend beyond 2013, while ignoring all the benefits that would accrue post-2013 and apparently claiming that already installed SBC-like tier technologies would generate no MWh from 2013 onwards. This despite the fact that the excellent cost/benefit ratio obtained from long-term output from upfront incentives was singled out for specific discussion in the staff's cost studies.

Finally, any consideration of the cost of an SBC-like tier should recognize the benefits of distributed generation ("DG") that are not presently accounted for by the regulatory system. These include reduced line losses, reduced transmission and distribution investment, and security and reliability benefits.

The methodological inconsistencies are sufficiently serious and pervasive that RETEC urges the Commission to dismiss MI's cost and output statements for the SBC-Like Tier. The record already contains superior information that provides an adequate basis for decision.

6. An SBC-Like Tier Would Be Easily Administered

The RD advocates an SBC-like tier supported by capital-payments only rather than the use of RECs, as RETEC has argued would be preferred and easily administered. Some parties (Constellation NewEnergy at 15) have claimed that the inclusion of small or behind the meter resources will introduce excessive difficulties into the verification and administration of the standard. However, NYSERDA's respected and well-developed technology deployment program already administers similar programs.

The administrative simplicity of the SBC-like tier extends, as well, to the generation and use of renewable energy credits in this market. RETEC has demonstrated that existing inverter output measurement, remote output measurement over the Internet or telephone networks, and the aggregation and sale of renewable energy credits are standard business activities in which "behind the meter" renewable industries can and do participate in already.

Concordant with this argument, we would note the July 1, 2004 launch of the New Jersey Solar Renewable Energy Credit trading program at http://www.njcep.com/srec/. This functioning website allows the trading, aggregation, and submission of solar renewable energy credits in fulfillment of that neighbor state's RPS. Absent some unforeseen significant difference between New York and New Jersey in the operation of their markets, this objection of administrative complexity must be dismissed.

D. DELIVERY REQUIREMENT FOR IMPORTS

1. Strict Delivery of Energy for Imports is Unreasonable and Unnecessary

Ridgewood Power, LLC and EMI both take exception to the RD's support for a "relaxed" deliverability requirement whereby "[i]mports of all types of otherwise eligible resources should be eligible for renewable energy credits or certificates as long as an associated amount of energy is delivered to the New York Control Area in the same calendar month." RD at 84-5; Summary of Options and Recommendations at 13. Ridgewood argues that relaxed deliverability "provides an opportunity for gaming" by pairing remotely generated RECs with a non-associated amount of non-renewable energy sold into New York State. Ridgewood at 8. EMI labels this approach a "regulatory fiction," arguing that a relaxed deliverability mechanism sanctions the crediting of renewable energy neither generated in nor sold into New York State. EMI at 3. But the physical reality of electricity makes it impossible to know if the energy delivered is in fact from the renewable generator. RECs are used

precisely to ensure that actual renewable generation occurred; there is no need to go beyond that to require strict delivery of energy, which creates unnecessary economic burdens on market participants. While RETEC concurs with Ridgewood and EMI's underlying concern that New Yorkers be the primary beneficiaries of a New York RPS program, we have fully argued in our Initial Comments of Sept. 26, 2003 and our Brief on Exceptions of June 23, 2004, such an outcome does not require the strict deliverability approach recommended by these parties.

Indeed, strict deliverability may impose hurdles on the utilization of renewable energy that would otherwise provide environmental and reliability benefits to New York. As noted in a recent report jointly funded by the US Department of Energy and NYSERDA, "the requirement to schedule cross-border energy transactions to precisely reflect the generator's production profile may add transactional costs and operational burdens on transacting parties." *See,* Grace, Robert R. and R. Wiser, Transacting Generation Attributes Across Market Boundaries – Compatible Information Systems and the Treatment of Imports and Exports, November, 2002. Moreover, strict deliverability undermines the flexibility and liquidity introduced through the unbundling of renewable energy from attributes.

As RETEC has previously argued, reciprocity is a much more efficient, flexible and pragmatic approach to securing for New York the benefits of an RPS envisioned by the Commission. Reciprocity has the added advantage of leveraging equal and open market access for New York renewable generators in neighboring states – an outcome that is furthered neither by the relaxed deliverability approach recommended by the RD; nor by the strict deliverability approach sought by Ridgewood and EMI.

E. COSTS AND BENEFITS

1. The Commission and DPS Staff Have Fulfilled Their Responsibility Completely and Commendably.

JU once again raises their "cost study" as juxtaposition to the work of the DPS staff. RETEC has previously submitted a detailed criticism of the JU cost study. See RETEC comments of September 26, 2003. The approach taken by DPS staff reflects reality much better than that of the JU.

Contrary to the JU's assertions, parties to this proceeding have already had ample opportunity to comment on the cost studies and to question the experts involved at on-the-record technical hearings. While the JU assert that the Commission has not fulfilled its responsibilities under SEQRA (JU at 30), the Commission has in fact fulfilled any responsibility to review the cost impacts associated with an RPS. RETEC has discussed in detail how the Commission has fulfilled its legal obligations in this proceeding in its previous filings. See RETEC Reply Comments of October 31, 2003 and RETEC Comments on DGEIS of May 14, 2004.

The JU argue that the RD forecloses the Commission from considering the alternatives offered by active parties. JU at 38. The activities of the active parties and the Administrative Law Judge were designed precisely to narrow the material that the Commission itself must review. The resulting RD is an excellent presentation of the arguments put forth, and a well-reasoned determination of facts upon which the Commission can base its policy statement and implementation plans.

In contrast, the plan of action seemingly preferred by JU is nothing more than an endless series of studies designed to prevent implementation of a meaningful and successful RPS. JU at 38-39.

The JU argue that accurate cost and reliability studies can only be undertaken after the specific RPS parameters of the Commission's policy statement are known. However, following this logic, then after additional studies the JU could simply argue that the parameters must be changed again necessitating another round of cost studies on the revised parameters, *ad infinitum*. RETEC posits that RPS implementation must begin as soon as possible, with a first compliance year of 2005 or 2006. Additional and never-ending studies upon which all parties would never agree will serve no purpose other than obstruction of state policy goals.

2. MI Misunderstands the Principles of Economic Forecasting

MI argues that the Cost Study underestimates true costs because it uses 2003 dollars throughout. MI at 9. MI argues that current dollars should have been used instead to take inflation into account. MI either misunderstands or misrepresents the fundamental economic principle of inflation and has ignored fundamental principles of economic forecasting – namely, the use of constant dollars and a real discount rate. Inflation simply shows the relative spending power of a dollar - including it would simply present a misleading sense of costs going up when in fact their value in comparison to the rest of the economy would be remaining constant. If inflation were in fact included, the discount rates would need to be adjusted to include it as well, which would result in all net present value figures being exactly the same. Staff used the correct procedure to calculate costs, and MI's arguments on this point must be dismissed as incorrect.

3. Neither NYPA Nor Flex-Rate Customers Should Be Exempt From the RPS

All New Yorkers will benefit from the increased use of renewable energy. Therefore, all New Yorkers should participate in the program. RETEC disagrees with the RD

recommendation that NYPA customers and municipal utilities be exempt and it also disagrees with MI that the RD's recommendations be extended to all categories of NYPA industrial power and flex-rate customers. MI at 33-42.

The emphasis of the RPS is to support *incremental* renewable energy development in New York State. As a public authority, NYPA is uniquely situated to leverage its buying power to support renewable energy development in the state. Beyond this, any premium that economic development customers might be asked to pay by virtue of the RPS program should be put in some perspective. MI is in fact arguing against a "subsidy" to renewable generators by arguing for an additional "subsidy" to businesses that use low-cost existing generation resources. These economic development customers have for many years been the beneficiaries of low-cost power at subsidized rates well below the otherwise applicable utility tariff. These historical benefits should not now be used to justify exemption from support of additional renewable energy. The renewable energy industry has a great deal of economic development potential and jobs to offer New York. A firm commitment to an immediate, workable and universally applicable RPS will bring jobs and economic growth to New York, as RETEC has demonstrated quantitatively in previous comments.

MI also argues that industrial customers should not bear a "disproportionate" share of the RPS costs, using the DPS cost study percentage rate impacts as their example of such potential disproportionate costs. However, the percentages are different simply because the rate structures for industry are different than for residential customers. By this logic, the industrial rates for electricity are themselves unfair. This postulate fails to withstand logical analysis.

4. A Cost of Service Approach is Untenable and Incompatible With the Marketplace

MI's vision for an RPS is one that cannot be practicably put into effect and must be rejected. . MI advocates an RPS where premiums are paid on a cost-of-service basis as determined by the Commission. MI at 3 and 17. This is not only an unworkable and unacceptable burden on the Commission and DPS staff, but it is the opposite of a competitive market, which MI asserts it favors.

A market-based RPS, with multiple buyers and sellers of renewable energy, will produce renewable generation at least cost. Under a cost-of-service approach, a review of payments needed for each generator may be needed annually as costs change over time. Not only would this be unduly burdensome, but it would effectively prevent financing of projects.

As noted earlier in its own comments, MI's member companies receive economic development benefits from the State. However, these companies do not subject their books to annual review by the State to ensure all benefits are absolutely necessary for the companies to remain in business, based on that particular business's economic viability, nor do they allow the State to decide what a fair profit is. We believe MI would not support such an intrusion into the marketplace where it affected its members; it should not expect other business sectors to do so.

5. Volumetric Recovery of Costs is the Most Sensible

MI argues for the costs of the program to be recovered through demand charges and not volumetric charges. MI at 42-44. Recovering costs volumetrically is the most sensible approach. The RPS targets are set based on energy use and the renewable attributes that will be used to show compliance (i.e. tracked and retired by a certificates tracking system) are tied to energy production. In any case, RETEC assumes it is the premium only that is being discussed and not the entire cost of the renewable energy supply. RETEC believes recovery of

costs for renewable energy should be determined in the same manner as recovery of costs from non-renewable resources. MI's position would simply serve to shift costs from high volume customers onto other customer classes.

F. RELIABILITY

1. Reliability is Unfairly Being Used as Proxy for Economic Impact on Existing Generators

Existing generators and others express concern about what they label "reliability" issues and challenge the idea of a government program to support particular technologies due to possible "unintended, adverse economic consequences" on existing generators. IPPNY at 5; NYISO at 5.

However, existing generation resources have themselves benefited substantially from government programs over the years. See footnote 5 above. It could be argued, conversely, that renewable generators have suffered so-called "unintended, adverse economic consequences" by the very fact that existing fossil fuel generators avoid paying for the societal externalities they cause. The NYISO's mission is "to administer an open, competitive and nondiscriminatory wholesale market for electricity" (NYISO Overview, NYISO web site). Adapting to allow for incorporation of generation resources that are disadvantaged by an existing market favorable to externality-intensive generators should be seen as part of this mission. The NYISO has a responsibility to ensure that New York's electric system serves the resources that New York's citizens prefer, rather than dismissing this important State policy initiative as a pure "subsidy" as the NYISO does repeatedly in its exceptions.

System operators ably and consistently respond to fluctuations in load; they are simply less familiar with managing fluctuations in generation. Increased experience with wind energy, information from other systems with large amounts of renewable generation, and

technological improvements, including forecasting, will help offset system operator concerns about integrating wind resources during the gradual ramp-up envisioned under the RPS.

Improved forecasting of wind energy availability is becoming more widespread and sophisticated every year, and other technologies are progressing similarly. Especially in light of the substantial reliability benefits previously elucidated by RETEC and others, there is no reason to delay immediate implementation of the RPS.

2. RPS Implementation Should Proceed; Additional NYISO Recommendations May Be Considered During Commission Review or As Needed

The decision to implement an RPS and provide the benefits amply documented in the record of this proceeding is correctly the domain of the State as represented by the Public Service Commission. The NYISO's role is to facilitate wholesale electric market transactions and to ensure reliability while doing so. Nothing in this record has indicated it will be unable to fulfill this function. The NYISO argues that the Commission should not implement an RPS until after the NYISO's independent market advisor has completed a study and the Commission has incorporated the study's recommendations into its decision. NYISO at 4-5. RETEC respectfully disagrees.

The Commission need not wait for the study nor necessarily adopt its recommendations on procurement. Rather, they should be taken under review as called for in the RD. The study is not a formal part of this proceeding. Active parties have had absolutely no input to its design and have not been provided with an opportunity to comment on it. Of course, the Commission will consider any available input offered by the NYISO when taking action on the RPS, and as all parties agree, changes to implementing procedures may be made during Commission review, based on accumulated information and experience. This

experience will include the results of any ongoing study. We see no reason whatsoever to delay immediate implementation.

3. The RPS Can and Will be Implemented Consistent with Reliability Needs.

Reliability of the State's electric grid must, of course, be always maintained. The NYISO in its comments and in the Phase 1 Report on Wind Integration has clearly stated that it will ensure reliability is maintained. A reliable grid is a given, and should not be the "paramount" policy consideration in this proceeding as the JU would prefer. JU at 20. That changes to existing rules and standards may be required over time while preserving reliability does not change the working policy objectives of an RPS, which are correctly focused on the rationale for State support of renewable energy use.

RETEC has commented previously on how the addition of renewable energy resources can reduce the price of natural gas. See RETEC Comments on the Cost Study Report II, March 2004. This also can have an important impact on reliability. As renewables replace natural gas used for electricity production, more natural gas is available at lower cost for other purposes such as home heating in the winter, which is precisely what was found in a recent DOE study of the recent winter gas crisis in New England.

There is no reason to prevent interconnection of renewable resources to meet a beneficial State policy while awaiting study results as active parties such as IPPNY and the NYISO suggest. IPPNY at 3-6; NYISO at 4. There are existing protocols to protect reliability which must be followed by every new generation resource seeking to interconnect to the State's electric grid. Further, the NYISO (and FERC) periodically reexamine and upgrade the protocols used to maximize reliability of the system. There is no reason to wait for the results of the Phase 2 report of the wind integration study before commencing the RPS. The existing

provisions will most certainly ensure reliability in the preliminary years and any changes to these procedures can then be implemented. In the absence of an RPS, wind energy generators would still be following these procedures on a facility-by-facility basis in order to interconnect, *regardless* of how many megawatts of wind energy they represented in total (and the 500 MW "limit" referred to by IPPNY is not a limit on the amount of wind generation allowed in NY). There is no logical, legal or just reason to treat renewables any differently than any other energy resource nor put off the beneficial effects of the RPS while awaiting studies aimed at enhancing the State's existing reliability protocols.

IV. CONCLUSION

To conclude, RETEC respectfully requests that the Commission adopt the RD, clarified in accordance with the exceptions and reply on exceptions submitted by RETEC, as expeditiously as possible. All New Yorkers will benefit from the State's leadership on renewable energy and the rapid and effective implementation of the RPS.

Respectfully Submitted on Behalf of RETEC by:

Katherine Kennedy, Esq.
Nathanael Greene
Natural Resources Defense Council, Inc.
40 W. 20th St.
New York, New York 10011
(212) 727-4463

Douglas Ward, Esq./Valerie Strauss
American Wind Energy Association
c/o Young, Sommer...LLC
5 Palisades Drive
Albany, NY 12205
518-438-9907, Ext.253

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New York, New York and Albany, New York