

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on November 18, 2010

COMMISSIONER PRESENT:

Garry A. Brown, Chairman
Patricia L. Acampora
Maureen F. Harris
Robert E. Curry, Jr.
James L. Larocca

CASE 09-E-0843 - In the Matter of the Petition of Niagara
Generation, LLC for Rulemaking Allowing Clean
Wood Separated from Construction and Demolition
Waste at Material Reclamation Facilities to be
Eligible for Use as Biomass Fuel in the
Renewable Portfolio Standard Program.

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

ORDER APPROVING PETITION WITH MODIFICATIONS

(Issued and Effective November 22, 2010)

BY THE COMMISSION:

INTRODUCTION

In this order, the Commission approves the November 6, 2009 petition of Niagara Generation, LLC (NiGen) with modifications and allows clean wood separated from construction and demolition debris at approved material reclamation facilities to be eligible for use as "biomass" fuel in the Renewable Portfolio Standard (RPS) program. The modifications include quality assurance plan, inspection, record retention, reporting, and third-party evaluation requirements to ensure that waste wood meets the appropriate standards desired for inclusion in the RPS program.

BACKGROUND

In an order issued September 24, 2004, the Renewable Portfolio Standard (RPS) program was adopted by the Commission.¹ In that order, the Commission approved the use of biomass-fueled generation facilities as an eligible RPS technology, noting that biomass is a sustainable feedstock that can assist New York in achieving the RPS targets. Among the eligible biomass feedstocks, "urban wood wastes" was included and defined as the source-separated, combustible untreated and uncontaminated (unadulterated) wood portion of municipal solid waste or construction and demolition debris. In the definition of "urban wood waste" the Commission distinguished the use of "adulterated" forms of biomass such as non-recyclable wood, paper, textiles, and yard waste, that would be eligible as a feedstock for biogas or liquid biofuels (not direct combustion) as long it could be demonstrated that the stack emission of such adulterated feedstock was less or equal to emission produced with unadulterated feedstock. In May 2006, a Biomass Guidebook was issued by NYSERDA, the RPS Program administrator, which further refined the eligibility of biomass feedstock.² As stated above, source-separated unadulterated wood waste from municipal solid waste or construction and demolition debris was qualified as an unadulterated resource and no special restrictions applied to that material as long as the unadulterated biomass had not been commingled with other wastes.

More stringent requirements were applied to biomass recovered from mixed waste streams. Feedstock which was not source separated was required to come from permitted solid waste

¹ Case 03-E-0188, Retail Renewable Portfolio Standard (RPS), Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004).

² Case 03-E-0188, supra, Renewable Portfolio Standard - Biomass Guidebook, (May 2006, Modified August 2009).

facilities in compliance with all New York State Department of Environmental Conservation (DEC) standards for operation (or an equivalent set of state standards for solid waste management). The feedstock must be subjected to a regular independent monitoring program that pays for DEC or approved third-party monitors to ensure that the biomass processing is consistently within facility permits and conditions. The conditions also limited commingled feedstock to be subjected to a conversion process (technologies that convert adulterated forms of biomass to a gaseous or liquid fuel - gasification, pyrolysis, and hydrolysis) prior to combustion. Further, they were subjected to the same requirements that apply to facilities using source-separated adulterated biomass and subject to comparative emissions testing.

On November 6, 2009, NiGen petitioned the Commission to expand the supply of clean wood from construction and demolition waste ("C&D waste") eligible for use in the RPS program. NiGen states that if the clean wood cannot be separated from other C&D waste at the construction or manufacturing site ("source separated"), it then will be sent to landfills along with the rest of the C&D waste from such sites. Ni-Gen suggests that the RPS program and its underlying public interest would be better served if the clean wood component of C&D waste was allowed to be separated from the rest of the C&D waste stream either at the construction site (source-separated) or at a solid waste material recovery facility ("MRF"). NiGen also asserts that the process technology and C&D waste sourcing practices now exist to permit such material to be separated at the MRF in such a way as to render a fuel that is as clean, if not cleaner, than source-separated biomass. According to NiGen, allowing clean wood recovered from MRFs to be an RPS-eligible biomass fuel, would substantially increase the production of

renewable energy, reduce the need for fossil fuels, and improve a biomass burning a facility's economic viability, while at the same time diminishing the volume of C&D wood sent to landfills.

Attached to NiGen's petition is a letter from the Natural Resources Defense Council (NRDC). NRDC's comments support NiGen's efforts to increase the amount of eligible biomass fuel by diverting clean wood from landfills. According to NRDC, much of the clean wood currently going through MRFs ends up in landfills, where its potential to be used productively is lost. NRDC agrees that new processes at MRFs can produce C&D feedstock wood just as clean as, or in some instances, cleaner than source-separated biomass. NRDC supports the NiGen proposal to reduce the waste stream and increase the eligible biomass feedstock, as long as any and all feedstock material meets appropriate standards.

NOTICE OF PROPOSED RULEMAKING

A Notice of Proposed Rulemaking concerning the RPS program proposals under consideration in this order was published in the State Register on December 23, 2009 [09-E-0843SP1]. The minimum period for the receipt of public comments pursuant to the State Administrative Procedure Act (SAPA) regarding the notice expired on February 8, 2010. The comments received in response to the notice that relate to the issues dealt with in this order have been considered. The actions taken in response to the comments are addressed below.

COMMENTS

NYSDEC submitted comments in response to the notice. DEC neither specifically supports nor opposes NiGen's petition, but requests that the Commission ensure that any changes to its biomass eligibility requirements is consistent with New York

solid waste management policy, greenhouse gas emission mitigation efforts, and DEC requirements. DEC finds petitioners use of the terms "material reclamation facility" and "solid waste material recovery facility" inconsistent with the DEC terms for solid waste management facilities that receive and sort C&D debris. The DEC regulations refer to these facilities as C&D Debris Processing Facilities.³ Clean wood, it states, could be recovered successfully from these facilities.

DEC also cites Environmental Conservation Law (ECL) § 27-0106, which outlines the State's solid waste management policy. According to the policy, it is a priority "to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled" ECL § 27-0106(1)(c). That statute prioritizes waste prevention, reuse, and recycling higher than both land-filling and combustion for energy recovery (ECL § 27-0106(1)(a)(b)), for both environmental impact and greenhouse gas management reasons. DEC is concerned that reuse and recycling of valuable C&D debris materials may be inhibited by permitting C&D debris processing facilities to divert the clean wood stream to biomass generating facilities. While potentially decreasing the landfilling of the untreated and uncontaminated wood portion of C&D debris, local end-use markets for C&D debris material could be discouraged from greater sorting and recovery.

NiGen responded to DEC's comments and generally agrees with DEC that any facility in New York State engaged in the separation of clean wood from C&D waste would be subject to the requirements of DEC's regulations governing C&D Debris Processing Facilities. However, since according to NiGen, generators should also be permitted to obtain eligible biomass

³ C&D debris processing facilities are subject to 6 NYCRR Part 360, Subpart 360-16.

fuel from MRFs located outside of New York, NiGen proposes that the Commission adopt its proposed protocol as part of its RPS program requirements and that the Commission direct the New York State Energy Research and Development Authority (NYSERDA) to incorporate that protocol into the RPS Biomass Guidebook.

NiGen also shares DEC's commitment to a comprehensive approach to recycling of waste materials, which includes reuse as well as combustion. Recycled wood materials (e.g., for paperboard or landscaping) are typically worth more than power plant fuel, even when such fuel is supported by renewable energy premiums. Moreover, to the extent that NiGen's proposal is successful in increasing the number or size of facilities designed to separate clean wood from C&D waste, the resulting increased availability of separated clean wood may well lead to the development of local markets for recycling and reuse of such wood in manners other than for energy conversion. According to NiGen, policies in other states and countries that have promoted the separation of clean wood from C&D waste have supported both biomass power and recycling. For example, the majority equity holders of NiGen, US Renewables Group, owns a biomass plant in California and is able to source clean C&D wood from a network of MRFs and earn renewable premiums from the energy conversion of such wood. A local paperboard manufacturer competes for clean C&D wood from the same network of MRFs.

RESOLUTION OF ISSUES

Biomass resources are expected to play an important role in the RPS program. However, the petition raises several issues that must be addressed prior to granting the relief proposed by the petitioner. These include:

1. Whether separation at a MRF will increase the viability of biomass facilitates participation in the RPS program;
2. Whether separation at MRFs will decrease the reuse and recycling of clean wood products for other than burning for energy production;
3. Since biomass is a fuel-based renewable energy source, whether separation at a MRF will improve or degrade biomass feedstock; and
4. Administrative issues concerning how changes to the program would be implemented, what additional costs would be created by the change, whether those costs are reasonable compared to the benefits generated, and how they would be recovered.

In order to explore these questions and fulfill our regulatory responsibilities, we have worked with Staff and NYSERDA to explore these issues in greater depth than that provided by the petitioner and the comments. In the process of gathering information, NYSERDA had a report prepared by its consultant, ANTARES Group Incorporated (ANTARES). That report has been filed in Case 03-E-0188 and is available to the public.⁴

In the report, ANTARES provided a summary of C&D recovery regulations for New York and the neighboring states with electric deliverability into the NYISO. The purpose included evaluation of existing regulations and how they could assist in ensuring that separation of clean wood from mixed waste streams is consistent, effective and verified. Great

⁴ ANTARES Group Incorporated, Clean Wood Separation from Mixed Construction and Demolition Debris at Material Recycling Facilities: Considerations for the New York RPS (June 28, 2010).

value was obtained from this exercise, as many of these issues have already been addressed elsewhere.

ANTARES provided an overview of potential separation technologies and identified issues/concerns with respect to culling the clean biomass fraction. This effort provided guidance to our specific added requirements, above those proposed by the petitioner, for separation of clean feedstock from C&D debris. Practical guidance on effective and economical implementation of the proposed Biomass Guidebook changes was provided, including valuable experience and information regarding:

- leveraging existing regulations in New York and the other relevant states;
- sorting, separation and handling procedures;
- testing, monitoring and verification procedures;
- establishing contamination thresholds, inspection requirements, fuel testing requirements for trace metals (ash elemental analysis); and
- in-state and out-of-state third party verification procedures ensuring compliance.

The report has been used in our evaluation of the issues raised by the NiGen petition.

Biomass Generation Viability Impacts

In its petition, NiGen asserts that allowing clean wood recovered from MRFs would substantially increase the production of renewable energy and improve biomass facilities' economic viability.⁵ As long as all new feedstock material meets

⁵ NiGen states that while its annual output has been 6.3 net-MW of biomass generation, it could increase that amount up to 30 net-MW if cost-effective RPS-eligible feedstock sources could be found.

appropriate standards, NRDC agrees that NiGen's proposal will increase the eligible biomass feedstock, presumably also agreeing that it will improve the economics of biomass generation. DEC for its part does not comment on the impact of the proposal on biomass contribution to RPS targets or biomass economics generally. Its concerns regarding the economics of the NiGen proposal tend to surround the potential affect on other uses of the clean wood coming from eligible C&D Debris Processing Facilities.

Discussion

We are aware of difficulties in acquiring sufficient eligible feedstock for biomass plants participating in the RPS Main Tier program and have continually recognized that facilities that have to procure fuel have had difficulties securing long-term supply contracts for their fuel, thereby making it difficult for them to commit to fixed-price long-term contracts for their attributes. For that reason, we have allowed contracts with fuel-based renewable energy generators to contain an escape clause every two and one-half years so that the generator may drop out of the program if unable to procure a continuous fuel supply at a price that supports its fixed-price long-term contract for renewable attributes. We did so in the anticipation that such contract provisions would provide greater certainty to fuel-based renewable energy generators. We have also addressed this situation by allowing fuel-based renewable generators, who have exercised the escape clause, to make a subsequent showing that their fixed-price long-term contract for renewable attributes combined with other proceeds produce insufficient revenues to secure a continuous fuel supply and make a reasonable profit. If such a demonstration is made, we will exercise our discretion to make a determination as to

whether to adjust the attribute contract price upwards for the next two and one half year period in lieu of termination.

We believe that granting the NiGen petition will have a positive effect on both meeting our RPS goal and on improving the economics of biomass generation. In accomplishing the latter, we recognize that this advances our overarching RPS policy objective to support creation of renewable industries that are self-supportive based on market demand and market forces.

New York's Solid Waste Management Policy

DEC cites Environmental Conservation Law (ECL) § 27-0106, outlining New York's solid waste management policy. That policy, for environmental reasons, prioritizes recovery of "energy from solid waste that cannot be economically and technically reused or recycled" below waste prevention, reuse, and recycling. DEC expresses concern that reuse and recycling of valuable C&D debris materials may be inhibited by allowing C&D debris processing facilities to supply feedstock to biomass generating facilities. While DEC agrees that landfilling of clean wood is less preferable than conversion to energy through combustion, local end-use markets for C&D debris material could be discouraged from greater sorting and recovery.

NiGen agrees with DEC's concerns regarding a comprehensive approach to recycling of waste materials. However, it argues that recycled wood materials (e.g. for paperboard or landscaping) are typically worth more than power plant fuel, even when augmented by REC payments. Further, NiGen argues that its proposal could increase the number or size of MRFs, the increased availability of separated clean wood could help develop local markets for recycling and reuse of reclaimed wood other than for energy conversion alone. NiGen cites policies in other states and countries that support reclamation

of clean wood from C&D debris for both biomass power and recycling. They specifically cite the majority equity holders of NiGen, US Renewables Group, who own a biomass plant in California where they are able to acquire clean C&D wood feedstock from a network of MRFs where a local paperboard manufacturer' competes for clean C&D wood from the same suppliers.

Discussion

We share DEC's and NiGen's concerns that clean wood recovered from C&D debris should be used appropriately and in concert with the priorities set for New York. While it seems appropriate to assure that all clean wood materials be recycled or reused that can be, assuring that such occurs can be difficult. It is important that such C&D debris does not enter into landfills and that it be reclaimed for reuse in some manner. If sufficient markets do not already exist to support full reuse and recycling of valuable C&D debris materials, it seems reasonable that increasing market demand for these products for energy generation could act to promote the increased development of C&D Debris Processing Facilities, and a resulting increase in uses of the clean wood produced in them. Assuming that the parties' apparent agreement that granting NiGen's proposal would likely reduce the amount of clean wood currently going into landfills, it seems reasonable to postulate that the proposal would likely not act too strongly to divert the clean wood waste stream away from competing reuse and recycling.

The ANTARES Report also addresses this point. It states that although, in allowing the use of facility-sorted C&D Debris, the RPS could be viewed as promoting the use of wood from the CDD waste stream for energy above recycling, a counter argument remains that the act of putting the material into the

CDD waste stream indicates that it has been deemed as "unrecyclable for its intended use" at the source and therefore it can be used for the production of energy.

Lacking any other incentive to prioritize the use of the clean C&D debris to non-combustion alternatives first, it seems reasonable to rely on the value of the feedstock product to individual applications at this time. However, if future studies indicate that reuse and recycling of valuable C&D debris materials is inhibited by permitting C&D debris processing facilities to divert the clean wood stream to biomass generating facilities, this issue will be revisited. It is valuable to note that the current policy of allowing only the source separation of these materials for RPS eligibility does not assure that the clean wood thus recovered is prioritized to non-combustion uses, such that a decision to allow facility-based separation would substantially alter the present balance between uses.

Biomass Feedstock Composition

NiGen claims that the technology currently available and used to sort C&D waste at MRFs produces a biomass fuel that is as clean, or cleaner, than source-separated biomass. NRDC agrees, stating that much of the clean wood currently going through MRFs ends up in landfills. This practice wastes the potential use of these materials for any purpose. NRDC further supports NiGen's claim that new processes at MRFs can produce C&D feedstock just as clean, or cleaner, than source-separated biomass. It should be noted that NRDC's support of similar proposals has previously been withheld due to lack of adequate safeguards.

While DEC disagrees with NiGen's use of the terms "material reclamation facility" and "solid waste material recovery facility" as inconsistent with DEC terms for facilities

that receive and sort C&D debris, if these facilities were defined as C&D Debris Processing Facilities subject to 6 NYCRR Part 360, Subpart 360-16, clean wood could be recovered successfully subject to DEC requirements.

NiGen agrees with DEC that New York facilities that separate clean wood from C&D waste should be thus defined and subject to the requirements of DEC's regulations governing those facilities. However, NiGen proposes that generators be permitted to obtain eligible biomass fuel from facilities outside of New York, which are not subject to the DEC's regulations. NiGen proposes that the Commission adopt NiGen's proposed protocol as part of its RPS program requirements to address wood feedstock from out of state and that it be incorporated into the RPS Biomass Guidebook.

Further the ANTARES Report indicated that C&D Debris Processing Facilities performed better at removing non-combustibles than the source separated facilities. The Report also states that these facilities performed equally as well as source separation in meeting fuel contamination levels.

Currently the Biomass Guidebook states the following regarding Biomass that is not source separated:

Biomass Recovered from Mixed Waste Streams: The most stringent requirements for eligibility apply to biomass recovered from mixed waste streams. These facilities must demonstrate that all feedstocks which are not source separated come from permitted solid waste facilities in compliance with all NYSDEC standards for operation (or an equivalent set of state standards for solid waste management). The facility must have a regular independent monitoring program that pays for NYSDEC (or approved third-party) monitors to ensure that its biomass processing is consistently within facility permits and conditions. In addition, these facilities are required to employ sorting techniques that recover the biomass fraction of mixed waste, and must use a feedstock conversion process prior to energy conversion.

Since NiGen proposes to use direct energy conversion, its proposal does not conform to current rules for commingled waste. Regarding direct energy conversion of commingled waste, the Biomass Guidebook states:

Source-Separated Urban Wood and Related Biomass Wastes: The source-separated, combustible untreated and uncontaminated wood portion of municipal solid waste or construction and demolition debris qualifies as an unadulterated resource and no special restrictions apply to these biomass fuels so long as the unadulterated biomass is not commingled with other wastes.

The concerns raised with separation of eligible feedstock recovered from commingled waste are expressed in terms of control over air pollution. Feedstock is determined eligible "if it can be demonstrated that the technology employed would produce power with emissions less than or equal to emissions produced while using only unadulterated feedstock." The minimum standards that must be met by feedstock combustion are the same as those listed in the Great Lakes States Air Permitting Agreement, which include:

- alkalated lead compounds
- benzo-a-pyrene
- hexachlorobenzene
- mercury
- 2,3,7,8-tetrachlorodibenzo-p-dioxin
- 2,3,7,8 -tetrachlorodibenzofuran
- total polychlorinated biphenyl

NiGen's proposed specifications are for the feedstock and not the generator emissions. NiGen's petition only addresses step one of the Biomass Guidebook Requirements for Facilities Using Adulterated Biomass, the Screening Analysis,

which prescreens the fuel prior to being combusted. It does not address steps two and three which are related to emissions. However, these standards were developed to address conversion of adulterated waste into an intermediate fuel prior to being combusted. It is not clear that such standards would be required to apply in this instance where the distinction is that the eligible fuel is being separated at a MRF rather than at the source. For source-separated clean wood, no such tests are required.

Further, the ANTARES Report indicates that wood separation techniques produce statistically similar quality material and that a more effective approach to ensure clean unadulterated fuel wood from C&D Debris is to define fuel quality standards. A fuel quality standard approach provides a base line for biomass fuel quality no matter the resource, allowing greater flexibility for the biomass facility in procuring qualifying fuel, mixing of biomass fuel from different sources, and easier regulation.

NiGen notes that its proposal for C&D debris feedstock was developed in conjunction with NRDC and is similar to a proposal adopted in Connecticut, also with the support of the NRDC. The proposed specifications contained in Attachment B of NiGen's petition are those developed with NRDC, laying out detailed tests and allowed tolerances for clean wood. As we noted above, the emission standards are not applied to similar feedstock with the distinction of having been separated at a central location. The difference is that source-separated feedstock is likely to have never been commingled with ineligible wastes, while separation at a MRF would require that ineligible waste be removed after the fact.

Discussion

In this instance, some additional safeguards are required. We see no reason to deny the petitioners' request that biomass generators be allowed to use feedstock provided by C&D Debris Processing Facilities, subject to DEC regulations. For C&D debris generated feedstock, the petition to allow separation at MRFs as well as at the source is granted as long as the MRF is a C&D Debris Processing Facilities subject to 6 NYCRR Part 360, Subpart 360-16 and thereby covered by DEC regulations.

The issue as to how to apply similar regulations to clean wood feedstock separated at facilities located out of state is a different matter. The issue raised is how to assure that such feedstock meets the goals of New York in recovery of useful materials from C&D debris and that such feedstock is as clean as that produced at a DEC-regulated C&D Debris Processing Facility. While it would be consistent to apply New York's priorities in reuse of C&D waste, there seems neither a practical way of enforcing such priorities, nor substantial value to New York ratepayers from doing so. Assuring that the feedstock procured from out of state is as clean as that provided by C&D Debris Processing Facilities subject to DEC regulation, on the other hand, seems both reasonable and necessary to protect New York's air quality.

We agree that NiGen's proposed tests are a good start for the purposes of evaluation of feedstock separated from commingled waste streams. However, we will add to that proposal the following requirements:

- NY RPS eligible generators shall maintain CDD processed wood supply contracts with facilities permitted by the state of their location to receive and process CDD wood;

- Eligible generators shall maintain records that include details about CDD wood use;
- Eligible generators may only accept CDD wood from sources have been audited and approved by NYSERDA;
- Eligible generators must examine incoming CDD wood to ensure that incoming fuel consistently meets or exceeds the Fuel Quality Standards for CDD prior to blending with other fuels;
- The facility shall provide a Quality Assurance/Quality Control Plan for assuring that CDD wood fuel used by the facility will remain consistent with the Standards for CDD Wood and Fuel Quality Standards for Blended Biomass Wood Fuel. The QA/QC plan shall be included in the Fuel Management Calibration Plan for the facility;
- Feedstock test reports must be submitted to NYSERDA on a monthly basis by third party independent contractors similar to the process for evaluating emissions from converted adulterated wood products;
- NYSERDA will monitor the generator tests and periodically conduct audits of these tests to verify the results; and
- NYSERDA will pay the generator for RPS attributes only after the test analyses have been submitted and verified.

If all of these checks and balances have been completed, the separation of eligible biomass feedstock at MRFs can be allowed.

Administrative Issues

While the above indicates that the petition could be granted without degrading biomass feedstock or running afoul of New York's waste management policies, and will likely assist in increasing Biomass plant viability, the practical issues surrounding a change in biomass feedstock rules of this nature need to be addressed. The issues include:

- how changes to the program would be implemented;
- what additional costs would be created by these changes;
- whether those costs are reasonable compared to the benefits generated; and
- how the costs would be recovered.

Discussion

It has been determined that the changes can be implemented by changes to the Biomass Guidebook. These changes can be made by Staff and NYSERDA as noted in our RPS Order dated January 26, 2006, in the footnote on page 20. Staff shall thus work with NYSERDA to assure the changes we adopt here are made to the Biomass Guidebook. We understand that NYSERDA has indicated that it is agreeable to these changes and has also agreed to take on the tasks involved to implement the changes to the RPS Program we are making here.

The estimated additional costs due the allowance of C&D Debris Processing Facilities, and similar facilities in other states, have been calculated by NYSERDA and Staff. These calculations are presented in the Appendix to this Order. The calculations show that the cost per biomass generating facility would be less than \$50,000 for one and less than \$90,000 for a biomass generating facility relying upon 10 sources for its sorted construction and demolition debris. Considering the size

of the contracts for biomass generators and the perceived value of the renewable energy generated by them, these amounts are well within the bounds of reasonable expense to increase the fuel source and supply for these generators. Any such costs incurred by NYSERDA will be recovered.

SEQRA FINDINGS

Pursuant to our responsibilities under the State Environmental Quality Review Act (SEQRA), in conjunction with this order we find that including clean wood separated from construction and demolition debris at approved material reclamation facilities procured and verified as described in the body of this order as an eligible feedstock in the Main Tier of the RPS program is within the overall action previously examined by us and will not result in any different environmental impact than that previously examined. In addition, the SEQRA findings of the September 24, 2004 Order are incorporated herein by reference and we certify that: (1) the requirements of SEQRA, as implemented by 6 NYCRR Part 617, have been met; and (2) consistent with social, economic, and other essential considerations, from among the reasonable alternatives available, the action being undertaken is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable.

CONCLUSION

The comments filed in this proceeding have been helpful in developing and prescribing a policy for using clean wood from C&D debris for renewable energy from biomass generators. As well, the ANTARES report and NYSERDA's assistance have contributed widely to the full discussion and understanding of the issues involved and the practicalities of

implementation. The suggestions made by DEC are useful in assuring that adoption of the basic request to allow facility-based separation of clean wood feedstock from C&D debris does not run afoul of New York environmental policy.

Therefore, we grant the relief sought by the petitioners, subject to the conditions discussed above. Biomass eligible feedstock from commingled C&D debris will in future include C&D debris that has been separated and verified in the manner proscribed above as well as the currently allowed source separation.

The Commission orders:

1. The Main Tier of the Renewable Portfolio Standard (RPS) program will include clean wood separated from construction and demolition debris at approved material reclamation facilities procured and verified as described in the body of this order as an eligible feedstock.

2. The New York State Energy Research and Development Agency (NYSERDA) will submit an updated RPS Biomass Guidebook, incorporating the changes described in the body of this order, to the Director of the Office of Energy Efficiency and Environment for review to ensure that it adequately reflects the requirements of this order before finalization.

3. The proceeding designated Case 09-E-0843 is closed. The proceeding designated Case 03-E-0188 is continued.

By the Commission,

JACLYN A. BRILLING
Secretary

NYSERDA/DPS ADMINISTRATIVE COST ESTIMATE FOR IMPLEMENTING CDD USE

One Time Program Costs		<i>Cost</i>
Task: Develop Prototype Plan for CDD Sources including Testing/Monitoring Protocols		
Estimate 2 to 3 man weeks of Consultant time @\$120/hr		\$14,400.00
Estimate 3 days NYSERDA Project Manager time		\$2,590.00
Estimate 2 Days DPS time		\$1,725.00
Estimate 8 hour legal review		\$920.00
Total		\$19,635.00
Task: Finalize Testing/Certification/Monitoring Protocols at Power Generators Site		
Estimate 2 weeks of Consultant time @ \$120/hr		\$9,600.00
Estimate 3 Days of NYSERDA Project Manager time		\$2,590.00
Estimate 1 Day DPS Program Manager time		\$870.00
Estimate 4 hours legal review		\$460.00
Total		\$13,520.00
Task: Update Biomass Guide Book		
Estimate 1 Day of Consultant time @ \$120/hr		\$960.00
Estimate 4 hours NYSERDA Project Manager time		\$460.00
Total		\$1,420.00
One Time Total Program Costs		\$34,575.00

One Time Program Costs - Per Bid Facility		<i>Per Facility</i>
Task: One time Costs per Generator (Incremental/Review/Negotiations to existing Certification)		
Consultant 4 hours @ \$120/hr = \$480		\$480.00
NYSERDA Project Manager 2 hours = \$230		\$230.00
Total		\$710.00
One Time Total Program Costs		\$710.00

Ongoing Program Costs - Per Bid Facility		<i>Per Facility</i>
Task: Annual Review and Audit (Incremental and assuming compliance)		
Consultant 4 hours @ \$120/hr = \$480		\$480.00
NYSERDA Program Manager 2 hours = \$230		\$230.00
Total		\$710.00
<i>Cost per year</i>		<i>\$710.00</i>
Cost per Facility for 10 year term		\$7,100.00

One Time Program Costs - Per Source		<i>Per Source</i>
Task: One time costs per Sources site (Review/Discuss/Negotiate QA/QC Protocol submitted)		
Consultant 24 hours @ \$120/hr = \$1920		\$1,920.00
NYSERDA Project Manager 16 hours = \$1840		\$1,840.00
DPS 4 hours = \$460		\$460.00
Travel, if required, = \$500		\$500.00
Cost per Facility/per source		\$4,720.00
Cost per Facility with 5 Sources		\$23,600.00
Cost per Facility with 10 Sources		\$47,200.00

Estimation of Costs Based on the number of Bid Facilities and Sources

<i>No. of Facilities</i>	1	5	10
1 Source	\$47,105.00	\$235,525.00	\$471,050.00
5 sources	\$65,985.00	\$329,925.00	\$659,850.00
10 sources	\$89,585.00	\$447,925.00	\$895,850.00