

## ATTACHMENT A

### RFP 3257- Provisional Certification and Application Form

*This application must be **completed, signed, and submitted** through the SeamlessDocs web application. Please review Exhibit A Eligibility and Certification Guidance (pages A-1 through A-15, attached) for requirements prior to completing this form. Applicants are responsible for promptly notifying NYSERDA of any changes to the information contained within this application. Terms used in this form are defined in the Definitions section of the RFP 3257. The Primary Contact in Section A of the application will receive all RFP 3257 correspondence.*

#### A. General Information

Legal Name of Bidder:

##### Primary Contact Address:

Address Line 1: \_\_\_\_\_

Address Line 2: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

##### Bidder Address:

Address Line 1: \_\_\_\_\_

Address Line 2: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

##### Primary Contact:

Prefix: \_\_\_\_\_ Title: \_\_\_\_\_

First Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Last Name: \_\_\_\_\_ Email Address: \_\_\_\_\_

#### B. Bid Facility Information

Name of Bid Facility:

Bid Facility Address:

Address Line 1: \_\_\_\_\_

Legal Name of Primary Bid Facility Owner:

Address Line 2: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Bid Facility County:

Brief Description of Bid Facility (if co-firing include all fuels (eligible and ineligible) to be used):

In-Service Date: (Actual or Anticipated)

Local Utility:

Grid System Facility ID Number: (if Applicable)

Grid System Queue Number: (if Facility is not yet Operational)

Market Pricing Zone of Delivery to NYISO:

Nameplate Capacity (MW):

Capacity Factor (%):

Expected Average Annual Production (MWh):

Expected Annual Eligible Production (MWh):

Expected Annual Bid Quantity (MWh): (Non-Binding)

**C. Renewable Energy Category (Required for all applicants)**

Select Applicable technology:

- |                             |             |
|-----------------------------|-------------|
| Solar                       | Hydro       |
| Wind                        | Ocean/Tidal |
| Biomass (See Parts G and H) | Fuel Cell   |

**D. Generation Type (Required for all applicants)**

Select Generation Type (Ref. Pg. A-2):

New Generation

*\* Incremental Facilities have additional requirements. Please see Exhibit A: Eligibility and Certification Guidance*

Incremental Generation *(If Checked Complete Part F (Non Fuel-based), or Part G (Fuel-based only))*

**E. Behind-the-Meter Generation or Grid Connected (Required for all applicants)**

Select Power Utilization (Ref. Pg. A-3):

Behind-the-Meter

**If Behind-the-Meter** Choose:

Net-Metering

Grid Connected  
(ALL power delivered to the grid)

Remote Net-Metering  
(See NYS Public Authorities Law §66-j)

**F. Incremental Non Fuel-Based Generation Details (Per Part D)**

Percent of Expected Average Annual Production Attributable to Upgrade/Repowering (%): (as stated in Engineer's Report)

**G. Incremental Fuel-based Generation or Capacity (Per Parts C and D)**

Provide Project **Baseline** Generation or Capacity:

Provide Project **Total Renewable** Generation or Capacity:

Generation Basis (MWh/yr): \_\_\_\_\_

Generation Basis (MWh/yr): \_\_\_\_\_

or

or

Capacity Basis (MW): \_\_\_\_\_

Capacity Basis (MW): \_\_\_\_\_

**H. Biomass Project Details (Per Part C)**

**Conversion Technology** (Ref. Pg. A-4):

List of Eligible Biomass Feedstocks (Ref. Pg. A-6 through A-10):

*Review applicable requirements for all feedstocks planned for use in the proposed projects in Exhibit A.*

Direct Combustion

Gasification

Decomposition

Anaerobic Digestion

Liquification, Esterification,  
Fermentation, or Pyrolysis

**Unadulterated Feedstocks**

**Feedstocks for Decomposition**

Ag. Crop/Orchard Residues

Landfill Gas Produced On-Site

Harvested Wood, Silvicultural

Landfill Gas Transported to

Clean Wood Residues

Site via Pipeline

Untreated RDF

Untreated Source-Separated Wood

Clean MRF Fuels

**Fuel Usage** (Ref. Pg. A-5):

All Unadulterated or  
Converted Adulterated  
Feedstocks

**Adulterated Feedstocks** (Eligible if  
converted to biogas or liquid biofuel)

Or

Agricultural & Food Processing Residue & Animal Byproducts

Cofiring

Animal Manure (Anaerobic Digestion Only)

Treated Source-Separated Biomass

Mixed Urban Wood Residues

**I. Checklist**

The following are completed and will be provided as uploaded attachments:

If Applicable, demonstration of fuel availability (RFP Section VIII. Eligibility C. Provisional Certification)

If Applicable, Engineering report or Eligible Baseline Calculation form (Exhibit A pgs. A-11 through A-15)

Proof of Bid Deposit

<b>Facility Nameplate Capacity:</b>	<b>Bid Deposit Required:</b>
Less than 5.00 MW:	\$5,000
5.00 – 19.99 MW:	\$20,000
20.00 – 49.99 MW:	\$50,000
50.00 MW or more:	\$100,000

*If necessary, additional documentation supporting the Provisional Certification and Application may be uploaded or attached.*

**J. Bidder Must Answer the Following Questions**

Have you been indicted/convicted for a felony within the past 5 years? (if yes, attach explanation)	Yes	No
Are you a Minority or Women-Owned Business Enterprise?	Yes	No
Does your proposal contain Minority or Women-Owned Business enterprises as subcontractors?	Yes	No
Has the Bid Facility been the basis or subject of any award of funding through NYSERDA as described in the RFP? (If yes, attach a description of such assistance or support.)	Yes	No
Do you wish to have information submitted in your Provisional Certification and Application package (including data on this form) treated as proprietary or confidential trade secret information?	Yes	No

**K. Disclosure of Prior Findings of Non-Responsibility**

Has any Governmental Entity made a finding of non-responsibility regarding the Individual or Entity seeking to enter the Procurement Contract in the last four years?	Yes	No
Was the basis for the finding of non-responsibility due to a violation of §139-j of the State Finance Law?	Yes	No
Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity?	Yes	No

If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility on Page 4.

**K. Disclosure of Prior Findings of Non-Responsibility (continued)**

If you answered yes to any of the questions in Section K from page 3, please provide details regarding the finding of non-responsibility.

Government Agency or Authority: \_\_\_\_\_

Date of Finding of Non-responsibility: \_\_\_\_\_

Basis of Finding of Non-responsibility: (Add additional pages as necessary)

Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named Individual or Entity due to the intentional provision of false or incomplete information? Yes      No

If you answered yes, please provide details below.

Government Agency or Authority: \_\_\_\_\_

Date of Termination or Withholding of Contract: \_\_\_\_\_

Basis of Termination or Withholding: (Add/upload additional pages as necessary)

**L. Signature**

I, the undersigned certify that I am an Officer or otherwise authorized representative of the above-noted Bidder, and that all statements herein are true and accurate.

I understand that NYSERDA and the PSC reserve the right to request additional information to confirm or clarify the information reported in this Application and to demonstrate the eligibility of this Bid Facility under the New York RPS, and I agree to provide any such information promptly. I also understand that NYSERDA and the PSC, or their authorized agents, may audit any applicant to verify the accuracy of any information included as part of this Application. I further understand that NYSERDA must be notified promptly of any material change in the information provided in this Application. I understand that final verification of this information and Operational Certification by the PSC will be required before the first payment under any contract awarded with NYSERDA can be made. I understand that failure to provide information as requested by NYSERDA, to allow an audit, or to accurately complete this Application may disqualify this Facility from consideration under any RPS competitive procurement and/or may result in contract termination by NYSERDA.

I certify that the above information, and all information submitted in connection with State Finance Law §139-j and §139-k, is complete, true, and accurate, that I have read and reviewed the Standard Terms and Conditions set forth in the attached Sample Agreement and that I accept all terms unless otherwise noted herein, and that the application requirements noted in Section I have been completed and are enclosed. I affirm that I understand and will comply with NYSERDA's procedures under §139-j(3) and §139-j(6)(b) of the State Finance Law. I understand that this application may be disqualified if the requirements are not met. I, the undersigned, am authorized to commit my organization to this proposal.

I hereby certify that the information provided in this Application is true and correct to the best of my knowledge.

Authorized Representative Name: \_\_\_\_\_

Title: \_\_\_\_\_ Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Signed: \_\_\_\_\_

# Exhibit A

## Eligibility and Certification Guidance

### Purpose:

This appendix presents the applicable provisions of the PSC Orders and NYSERDA guidance on RPS eligibility and certification in summary form. In the downloadable PDF version links to all of the governing documents are provided.

### Key Links:

PSC Proceedings: [Case Number 03 E 0188](#) or visit <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=03-e-0188>

NYSERDA RPS Website: [NYSERDA RPS](#) or visit <http://www.nyserda.ny.gov/About/Renewable-Portfolio-Standard>

Advisory Opinion: [NYSERDA Advisory Opinion](#) or visit <http://www.nyserda.ny.gov/All-Programs/Programs/Main-Tier/Advisory-Opinion>

If you are unsure about the eligibility of your project, you may seek an advisory option.

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## A. New vs. Incremental Generation

### 1. NEW GENERATION - ALL RENEWABLE ENERGY CATEGORIES

(Additional Requirements Apply to Hydro See Page A-12)

The generating facility qualifies as a new renewable generation facility if it meets either of the following conditions:

- a) The facility was not in commercial operation prior to January 1, 2003.
- b) The facility was in commercial operation before January 1, 2003, but had never used eligible renewable resources before that date.

### 2. INCREMENTAL - ALL RENEWABLE ENERGY CATEGORIES

(Additional Requirements Apply to Biomass, Hydro, Wind, and Solar incremental Projects, See Pages A-11, A-13, A-14, and A-15, respectively.)

Energy generated at a facility that was in commercial operation and using eligible renewable resources before January 1, 2003 can qualify as incremental renewable generation if it meets the following conditions.

The incremental output associated with an upgrade/re-powering of an existing renewable energy facility must meet certain requirements prior to RPS bidding. The Applicant must demonstrate: (a) that the equipment upgrades/re-powering will be significant and not be the result of normal capital and/or operations and maintenance activities; and (b) that the baseline and incremental generation for an average year can be determined using data monitored on site.

The Applicant must have an independent professional engineer prepare a report that documents the specific upgrades/re-powering activities associated with investments that have or will be made to the referenced facility and documents the incremental electrical output expected in an average year due specifically to the proposed upgrades/re-powering investments.

#### RPS Document References and Links:

The Applicant may use the reference below to obtain additional information.

Order Regarding Retail Renewable Portfolio Standard, State of New York Public Service Commission, Case 03-E-0188, September 24, 2004. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d>

## B. Behind-the-Meter Generation vs. Grid Connected

**1. Behind-the-Meter:** The project will use some or all generated power Behind-the-Meter

< or >

**2. Grid Connected:** The project will deliver all generated power to the grid

### **Additional Behind-the-Meter Generation Requirements:**

Defined as: Generation facility where the energy is generated on the premises of the customer and is supplied directly to the customer and consumed on the customer's premises without ever passing through utility/municipal utility company/public authority transmission or distribution system.

These requirements are also applicable for new power projects where a portion of the energy is to be supplied to the customer behind the meter and the remainder will be delivered to the grid.

### **RPS Project Specific Requirements:**

The following is a set of standards with which all proposed new generation facilities eligible under the RPS must comply if planning to produce energy for Behind-The-Meter usage. This category of RPS eligible projects is restricted to facilities which own power generation equipment designed and operated for the purpose of self-generation, i.e. offsetting on-site electrical loads, and not primarily as a grid-feeding entity.

1. Behind-The-Meter generation projects shall be RPS eligible only where the energy from such projects will be delivered to a customer in New York State whose electricity was obtained through the NYISO/utility system as of January 20, 2011; excluding customers in the territory of the Long Island Power Authority (LIPA).
2. Applicants shall provide an additional revenue-grade electrical generation meter on the site of the proposed generation facility as a means to monitor the energy produced and consumed by the generator and its end-user.
3. The electrical generation meter must be read and recorded periodically by NYSERDA or an independent third-party.

### **RPS Document References and Links:**

The applicant may use the reference below to obtain additional information.

1. Order Allowing Main Tier "Behind The Meter" Contracts And Wholesale Delivery To Utility/Municipal Utility/Public Authority Entities, Applicable To Future Solicitations Only, State of New York Public Service Commission, Case 03-E-0188, pp. 7-11, November 24, 2010. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b4FDEEDDA-27A3-4BA5-9632-4EB8189B9E50%7d>

## C. Biomass Conversion Technology

### 1. Direct Combustion

Solid-fueled power boilers for electricity generation (includes combined heat and power technologies)

### 2. Thermal or Hydrothermal Gasification

Clean syngas produced for use in reciprocating engines, gas turbines, fuel cells, etc. (includes combined heat and power technologies)

### 3. Decomposition

Landfill organics converted to methane produced through natural decomposition for use in internal combustion engine gensets, fuel cells (or other fueled gensets)

### 4. Anaerobic Digestion

High-moisture organic wastes converted to methane in a digester for use in internal combustion engine gensets, fuel cells (or other fueled gensets)

### 5. Liquefaction, Esterification, Fermentation, or Pyrolysis

Clean liquid fuel produced for use in reciprocating engines, fuel cells, gas turbines, etc. (includes combined heat and power technologies)

## D. Biomass Fuel Usage

### 1. Project-Specific Requirement for Biomass Cofiring Project:

Generation facilities using eligible biomass fuels with ineligible fuels (i.e., fossil and ineligible biomass fuels) are subject to power production measurement and accounting rules which are designed to ensure that only the RPS Attributes associated with the eligible renewable portion of power generation at the facility are purchased under the RPS Program.

Reliable and accurate measurement methodologies must be employed to track RPS Attribute production at the power plant. The methodologies are based on the following:

- a) An accurate measurement and accounting of the RPS program eligible fuel source's heat input to the conversion device in accordance with the RPS Biomass Power Guide; and
- b) An apportionment of total electricity generation based on the fraction of the total conversion device heat input provided by the RPS program eligible fuel source.

### 2. Project-Specific Requirements for Gaseous Biomass Fuel Cofiring Summary:

A renewable generating facility using renewable pipeline gas (RPG) must satisfy the following criteria:

- a) Common carrier RPG resources will be considered eligible only if sourced and used in the same state to generate power delivered to New York;
- b) Sufficient metering is in place at the landfill gas (LFG) collection/processing facility to allow accurate accounting of LFG collected, upgraded and injected as RPG into the common carrier;
- c) The generator must keep and provide sufficient records on physical delivery from common carrier, gas consumption, and gas quality to pro rate the facilities monthly electrical generation based on the ratio of the total RPG contract gas energy and the total gas energy used; and
- d) To be RPS eligible, contracts for RPG transported over common carrier must be new contracts. The buyer must notify the gas producer as part of the new RPG contract or modification that the gas contract is being purchased for conversion to RPS eligible power and is subject to the accounting rules of the RPS program. The RPG producer must certify that the gas delivered under contract is produced from new resources, i.e. new or expanded RPG production systems.

### RPS Document References and Links:

The Applicant may use the references below to obtain detailed information directly from the RPS documents.

1. New York State Renewable Portfolio Standard: RPS Biomass Power Guide, Antares Group, Inc., Revised July 2014. ([Biomass Power Guide Download Link](#)) or visit <http://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-and-Environmental-Markets/RPS/RPS-Documents/NYS-RPS-biomass-guidebook.pdf>
2. Order Authorizing Additional Main Tier Solicitations and Directing Program Modifications, State of New York Public Service Commission, Case 03-E-0188, pp. 20-22, January 26, 2006. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BA64A5FC7-24BF-4FDE-82BC-1793630E5D82%7D>

## E. Biomass Feedstock Definitions

The following is a complete list of RPS eligible biomass feedstocks with definitions. The unadulterated biomass is RPS eligible using all acceptable conversion technologies. Adulterated biomass is only RPS eligible if, prior to combustion, the generating facility converts it to a biogas or liquid biofuel using an acceptable biomass feedstock conversion technology. The Applicant is only required to meet the RPS Requirements of the feedstocks (listed in Section H of the Provisional Certification Application Form) that are used in the proposed project.

### **1. UNADULTERATED FEEDSTOCKS**

#### **a) Agricultural Crop/Orchard Residues**

Defined as: Stalks and stover from harvesting and tree prunings from orchards.

**Project Specific Requirements:** None.

#### **b) Harvested Wood and Silvicultural Wood**

Harvested wood and silvicultural wood are both unadulterated biomass fuel resources, defined as follows:

Harvested Wood: Wood harvested during commercial harvesting.

Silvicultural Waste Wood: Wood harvested during timber stand improvement and other forest management activities conducted to improve the health and productivity of the forest.

**Project Specific Requirements:** Renewable generating facilities that generate electricity using one or more of these fuel resources must prepare, monitor and maintain the Forest Management Plan and the Harvest Plan required for participation in the RPS.

##### **Forest Management Plan (FMP)**

The renewable generating facility must have a professional forester prepare a current FMP that includes standards and guidelines for sustainable forest management and requires adherence to management practices that conserve biological diversity, productive forest capacity and promotes forest ecosystem health. A fuel supplier of a biomass facility must be in compliance with the biomass facility's FMP.

##### **Harvest Plan**

Each fuel supplier must prepare a harvest plan that includes landowner objectives; a map of the area to be harvested; skid road layout; locations of all streams, wetlands and water bodies; forest type designation, anticipated volume of wood to be harvested; silvicultural techniques and best management practices to be implemented; and provisions for the monitoring of harvest operations by a professional forester. Periodic inspections of harvesting operations by state authorities or approved nongovernmental forest certification bodies are performed to ensure that harvest operations conform to the standards.

#### **c) Clean Wood Residues**

Defined as: mill residue wood, pallet wood, site conversion wood (land clearing), or sustainable yield wood (energy crops)

**Project Specific Requirements:** None.

#### **d) Untreated Refuse Derived Fuel (RDF)**

Defined as: Pellets or briquettes made by the densification of the source-separated, combustible, untreated and unadulterated wood portion of MSW or C&D debris.

**Project Specific Requirements:** Renewable generating facilities certified for this application, in full or in part, use source- separated wood waste residues (including Refuse Derived Fuel (RDF), Urban Wood Waste and Related

Waste fuels). The unadulterated biomass portion of the source-separated material will qualify for RPS support without further requirements. These fuels must meet the following EPA definition for source-separation:

"Source-Separation is defined as segregating various wastes at the point of generation (e.g., separation of paper, metal and glass from other wastes to make recycling simpler and more efficient)."

#### **e. Untreated Source-Separated Wood**

Defined as: The source-separated, combustible untreated wood portion of MSW or C&D residues.

**Project Specific Requirements:** Renewable generating facilities certified for this application, in full or in part, use source-separated wood waste residues (including Refuse Derived Fuel (RDF), Urban Wood Waste and Related Waste fuels). The untreated, unadulterated biomass portion of the source-separated material will qualify for RPS support without further requirements. These fuels must meet the following EPA definition for source separation:

"Source Separation is defined as segregating various wastes at the point of generation (e.g., separation of paper, metal and glass from other wastes to make recycling simpler and more efficient)."

#### **f. Clean Materials Recycling Facility (MRF) Fuels - Separated Clean Construction and Demolition (C&D) Debris**

Defined as: The clean biomass separated from the mixed waste stream of C&D debris at a permitted MRF or C&D processing facility. These C&D residues may not include non-recyclable wood (e.g. plywood and particle board), paper, paperboard boxes, textiles, food, leather, yard waste and leaves.

**Project Specific Requirements:** Generators may only procure clean MRF fuels from suppliers that are permitted for handling C&D wastes by a State or Canadian Province. Permitted suppliers must be audited and approved by NYSERDA. The specific requirements summarized herein are listed in the Feedstock References and Links Document 4 (2010), page A-10.

#### **Fuel Quality Assurance/Quality Control (QA/QC) Safeguards**

Eligible generators participating in the RPS program must formulate and implement a Fuel QA/QC plan specifically addressing Clean MRF Fuels. The plan will cover:

1. The Procurement Plan for the Clean MRF Fuels including supply contract provisions to implement the safeguards as they apply to the suppliers and provisions for allowing for NYSERDA auditing for RPS participation.
2. Procedures for recording, monitoring and sampling of all deliveries and excluding fuel deliveries that fail to meet the quality standards
3. Procedures and schedule for testing the samples in accordance with the fuel quality specification for Clean MRF Fuels (Contained in Feedstock References and Links Document 5, (2009), page A-8) and contracts with independent third party labs that will conduct the testing for the chemical composition of the fuel with respect to the specification

#### **Required Record Keeping**

Applicants should plan to maintain records required by the safeguards. Records for all deliveries of Clean MRF Fuels must be kept along with monthly test reports of fuel quality with respect to the fuel quality standard for Clean MRF Fuels (See Feedstock References and Links Document 5, page A-8). Test reports must be submitted to NYSERDA.

## **2. ADULTERATED FEEDSTOCKS**

### **a) Agricultural & Food Processing Residue and Animal Byproducts**

Defined as: Leather, offal, and food processing residue byproducts.

**Project Specific Requirements (Not Applicable for Anaerobic Digestion Projects):** This restriction applies to a renewable generating facility using adulterated agricultural residue fuels from agricultural by-products such as leather and offal and food processing residues. These biomass feedstocks are only eligible for the RPS Program if the facility meets the following criteria:

1. The renewable generation facility must first use a primary feedstock conversion technology that converts biomass to a liquid or gaseous fuel before being fired in a boiler unit.
2. Show proof of comparative emission test results. In other words, the facility must demonstrate that using the primary feedstock conversion technology power is generated from biogas or liquid biofuel derived from adulterated sources with emissions less than or equal to that of biogas or liquid biofuel using unadulterated sources as feedstock. The generating facility develops an emissions test plan in accordance with the PSC Order to verify emissions comparability.

#### **b) Animal Manure Utilized for Anaerobic Digestion Projects**

**Project Specific Requirements:** Renewable generating facilities using these biomass fuels must meet the following RPS requirements:

**SPDES-Permitted Facilities:** A renewable generating facility using this application is a Concentrated Animal Feeding Operation (CAFO) and is required to have a State Pollutant Discharge Elimination System (SPDES) permit by New York State Department of Environmental Conservation and is currently operating in compliance with its SPDES permit. The facility will have a current Agricultural Waste Management Plan (AWMP) developed by a duly qualified Agricultural Environmental Management (AEM) Planner.

**Facilities Not Required to Have a SPDES Permit:** A renewable generating facility certified for this application is a Concentrated Animal Feeding Operation (CAFO), but is not required to have a State Pollutant Discharge Elimination System (SPDES) permit by New York State Department of Environmental Conservation. The facility is or will be operating in compliance with the best management practices for a facility of its size set forth in the Principles and Water Quality Protection Standards specified in the Agricultural Environmental Management (AEM) Framework & Resource Guide developed by the NYS Department of Agriculture and Markets and the NYS Soil and Water Conservation Committee.

#### **c) Treated Source-Separated Urban Biomass or Treated RDF**

Defined as: Treated urban biomass is adulterated biomass from the following list: non- recyclable wood (e.g. plywood and particle board), paper, paperboard boxes, textiles, food, leather, yard waste and leaves. Treated RDF is the pellets or briquettes made by densification of the combustible, treated or adulterated wood portion of MSW or C&D debris.

**Project Specific Requirements:** Renewable generating facilities using these biomass fuels must meet the following RPS requirements:

1. Adhere to the following EPA definition for source separation: "Source Separation is defined as segregating various wastes at the point of generation (e.g., separation of paper, metal and glass from other wastes to make recycling simpler and more efficient)."
2. The renewable generation facility must use a primary feedstock conversion technology that converts biomass first to a liquid or gaseous fuel before being fired in a boiler.
3. Show proof of comparative emission test results. In other words, the facility must demonstrate that power is generated from biogas or liquid biofuel derived from adulterated sources with emissions less than or equal to that of biogas or liquid biofuel derived only from unadulterated sources as feedstock. The generating facility must develop an emissions test plan in accordance with the PSC Order to verify emissions comparability.

**d) Mixed Urban Wood Residues (formerly listed as Non-Source Separated Wood)<sup>1</sup>**

Defined as: The mixed and non-recyclable (treated wood such as plywood and particle board) wood portion of MSW and C&D residues as distinguished from the clean wood materials separated at either the source or MRF and listed as RPS unadulterated biomass.

**Project Specific Requirements:** Renewable generating facilities using these biomass fuels must meet the following RPS requirements:

1. The renewable generation facility must use a primary feedstock conversion technology that converts biomass first to a liquid or gaseous fuel before being fired in a boiler.
2. Show proof of comparative emission test results. In other words, the facility must demonstrate that power is generated from biogas or liquid biofuel derived from adulterated sources with emissions less than or equal to that of biogas or liquid biofuel derived only from unadulterated sources as feedstock. The generating facility must develop an emissions test plan in accordance with the PSC Order to verify emissions comparability.
3. If the biomass fuel residues are non-source-separated, the facility must demonstrate that these resources come from NYSDEC- permitted solid waste facilities. In other words, the facility must demonstrate that the non-source-separated wood residue portion comes from NYSDEC-permitted solid waste facilities that pay for NYSDEC provided monitors to ensure that their biomass processing is consistently within their facility permits and conditions. In other jurisdictions the facility must demonstrate that equivalent safeguards are provided.

**2. FEEDSTOCKS FOR DECOMPOSITION**

**a) Landfill Gas Produced On-Site**

Defined as: Landfill organics converted to methane produced through natural decomposition for use on-site in internal combustion engine gensets, fuel cells (or other fueled gensets).

**Project Specific Requirements:** There are no RPS Project-Specific Technology Requirements that apply to landfill gas generators that only use biogas produced and consumed on-site for grid delivered power generation. However, participation in the RPS requires additional monitoring and reporting activities that are delineated in the contract. For detailed information on operating requirements, the Applicant should refer to the RPS Biomass Power Guide prepared by NYSERDA.

**b) Landfill Gas Transported to Site via Pipeline (Renewable Pipeline Gas)**

Defined as: Landfill organics converted to methane produced through natural decomposition for use off-site by a process of upgrading the gas to pipeline quality and delivering it into the natural gas pipeline infrastructure.

**Project Specific Requirements:** See Page A-5.

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<sup>1</sup> This feedstock category and definition replaces the feedstock category named “non-source separated wood” formerly listed in this Application for previous Solicitations. The more recent PSC order issued on November 22, 2010 carved out of the original category a subset of feedstocks described in this application as “Clean Materials Recovery Facility (MRF) Fuels” which is now listed in the Unadulterated Feedstocks section of the application.

## Feedstock References and Links:

The Applicant may use the references below to obtain detailed information directly from the RPS documents.

- 1 New York State Renewable Portfolio Standard: Biomass Power Guide, Antares Group Inc., Revised July 2014. ([Biomass Guide Download Link](#)) or visit <http://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-and-Environmental-Markets/RPS/RPS-Documents/NYS-RPS-biomass-guidebook.pdf>
- 2 Order Approving Implementation Plan, Adopting Clarifications and Modifying Environmental Disclosure Program , State of New York Public Service Commission, Case 03-E-0188, pp. 53-56, April 14, 2005. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b601B2105-AD06-4FB0-8A7B-C4CFAF43BE9A%7d>
- 3 Order Authorizing Additional Main Tier Solicitations and Directing Program Modifications, State of New York Public Service Commission, Case 03-E-0188, p. 20-28 and Appendix B, January 26, 2006. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BA64A5FC7-24BF-4FDE-82BC-1793630E5D82%7D>
- 4 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. Niagara Generation, LLC, Retail Renewable Portfolio Standard, Order Approving Petition with Modifications, State of New York Public Service Commission, Case 09-E-0843, November 22, 2010, p 16-17. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bEE9ADBC5-8FEA-428B-8BD5-CA6324C147FA%7d>
- 5 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 Program, November 6, 2009, Attachment B. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={95E9D8BA-2032-474B-A5DA-E5D24EF1EE03}> and Order Approving Petition with Modifications, State of New York Public Service Commission, Case 09-E-0843, November 22, 2010. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={B9AC4EB3-2D9D-4A67-9A99-A8D6C4CA3FA0}>.

## F. Biomass Incremental Generation or Capacity Requirement

An existing biomass electric generating facility seeking RPS Program eligibility for increased energy/capacity derived from eligible biomass fuels must first determine its baseline eligible generation/capacity. The generating facility will use one of two methods for calculating the new renewable generation.

- Option 1: Incremental Generation above the Average Baseline - average of two highest years of five-year period prior to January 1, 2003 (applicable to all types of projects)
- Option 2: Incremental Capacity above Baseline (applies only to projects making substantial investments to achieve increased renewable capacity)

**For Provisional Certification, the Applicant must attach a report delineating the method and data used in the baseline calculation.** This report and supporting data must be audited by an independent Certified Public Accountant (CPA) or professional engineer, with the auditor's letter of review included with the report. For more information about requirements for the calculation methodology, the Applicant may refer to the RPS Biomass Power Guide. For Option 1, the forms for reporting the data and calculation of baseline generation are available on NYSERDA's RFP website ([Calculation Attachment Link](#)) or visit <http://www.nyserra.ny.gov/All-Programs/Programs/Main-Tier/Main-Tier-Solicitations>.

### **RPS Document Reference Links:**

The Applicant may use the references below to obtain detailed information directly from the RPS documents.

1. New York State Renewable Portfolio Standard: Biomass Power Guide, Antares Group Inc., Revised July 2014. ([Biomass Guide Download Link](#)) or visit <http://www.nyserra.ny.gov/-/media/Files/EDPPP/Energy-and-Environmental-Markets/RPS/RPS-Documents/NYS-RPS-biomass-guidebook.pdf>
2. Order Authorizing Additional Main Tier Solicitations and Directing Program Modifications, State of New York Public Service Commission, Case 03-E-0188, pp. 22-24, January 26, 2006. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BA64A5FC7-24BF-4FDE-82BC-1793630E5D82%7D>

## G. Hydro New Generation Requirement

### **Requirement Summary**

The production associated with a new hydroelectric facility must meet certain requirements. The Bid Facility must meet the following criteria: (a) run-of-river operation, (b) 30 megawatts or less nameplate capacity, and (c) no constructed new storage impoundments.

**For Provisional Certification, the Applicant must attach a report, prepared by an independent professional engineer, verifying that the design meets the eligibility criteria (above).**

### **RPS Document Reference Link:**

The Applicant may use the reference below to obtain additional information.

Order Regarding Retail Renewable Portfolio Standard, State of New York Public Service Commission, Case 03-E-0188, pp 32-35 and Appendix B, September 24, 2004. ([Download Link](http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d>

## H. Hydro Incremental Generation Capacity Requirement

### **Requirement Summary**

The incremental production associated with an upgrade/re-powering of an existing hydroelectric facility must meet certain requirements prior to RPS bidding.

The Applicant must demonstrate: (a) that the equipment upgrades/re-powering will be significant and not be the result of normal capital and/or operations and maintenance activities; and (b) that no new storage impoundments have been installed for the hydroelectric generating facility.

**For Provisional Certification, the Applicant must attach a report , prepared by an independent professional engineer, that documents the specific upgrades/re-powering activities and associated investments that have been or will be made to the referenced facility.** The report must document:

1. Historical baseline of average annual production (not less than ten years) with the corresponding water flows as measured by USGS gauges or best available data sources;
2. The post-upgrade/repowering expected average annual production; and
3. The incremental production, expressed as a percentage, of the expected average annual production due specifically to the completed or proposed upgrades/re-powering investments.

### **Suggested Engineering Approach**

The suggested approach for calculating the baseline, the post-upgrade/repowering expected average annual production, and the percentage of such production attributable to the upgrade/repowering would entail the development of a mathematical model to simulate monthly and annual energy production. Applicants can propose an alternative approach to these calculations provided the approach can predict the incremental production with comparable accuracy.

The model would incorporate available stream flow data (USGS gauges or best available data sources), reservoir management requirements (determined by FERC license conditions), and the performance characteristics of the generating equipment (based on the manufacturer's guarantees or field testing) as parameters. The simulation model should be based on water-balance continuity (all inflows match outflows). Simulation results should be calibrated to actual electrical output over the historical periods that contain the most detailed and complete records (at least monthly flow data, with complete information on water utilization). Overall plant efficiency may be adjusted as needed to adjust simulated production to match actual production. Pre and post-upgrade simulations should be used to determine the percentage of electrical output attributable to the upgrade in an average year, where an average year means average annual flow conditions over the most recent representative historical period of not less than ten years.

In constructing the simulation model, any information on historical water utilization (i.e., minimum flow restrictions, bypass flows, and spillage) should be taken into account and the model should assume the operation of the facility conforms to the guide curves as laid out in the FERC license granted for such facility. Any FERC license constraints that will, in the future, change current reservoir management practices should be accounted for in the post-upgrade simulation. Once under contract with NYSERDA, the seller will be required, on a semiannual basis, to compare the actual water flows and power production with simulated production post upgrade/repowering for the same period to determine the degree of accuracy of the projected incremental power production.

### **RPS Document References and Links:**

The Applicant may use the reference below to obtain additional information.

Order Regarding Retail Renewable Portfolio Standard, State of New York Public Service Commission, Case 03-E-0188, pp 32-35 and Appendix B, September 24, 2004. ([Download Link](http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d>

## I. Wind Incremental Generation Capacity Requirement

### **Requirement Summary**

The incremental production associated with an upgrade/re-powering of an existing wind facility must meet certain requirements prior to RPS bidding.

The Applicant must demonstrate that the equipment upgrades/re-powering will be significant and not be the result of normal capital and/or operations and maintenance activities.

**For Provisional Certification, the Applicant must attach a report**, prepared by an independent professional engineer or meteorologist, that documents the specific upgrades/re-powering activities and associated investments that have been or will be made to the referenced facility. The report must document:

1. The historical baseline of average annual production (not less than three years) with the corresponding meter data or best available data sources;
2. The post-upgrade/repowering expected average annual production;
3. The incremental production, expressed as a percentage, of the expected average annual production due specifically to the completed or proposed upgrades/investments;
4. If available, a "Wind Report" describing the electric energy producing potential of the project, which assesses the wind resource potential at the site and describes the incremental upgrade as proposed. "Wind Report" means the unabridged and unredacted final report concerning the electric energy producing potential of the Site prepared by an independent meteorologist and which is used by Seller to obtain both: (a) Project financing or funding for the Generating Facility; and (b) The final design and binding price quote from the Wind Turbine manufacturer.

### **RPS Document Reference Link:**

The Applicant may use the reference below to obtain additional information.

Order Regarding Retail Renewable Portfolio Standard, State of New York Public Service Commission, Case 03-E-0188, September 24, 2004. ([Download Link](http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d>

## J. Solar Incremental Generation Capacity Requirement

### **Requirement Summary**

The incremental production associated with an upgrade/re-powering of an existing solar facility must meet certain requirements prior to RPS bidding.

The Applicant must demonstrate that the equipment upgrades/re-powering will be significant and not be the result of normal capital and/or operations and maintenance activities.

**For Provisional Certification, the Applicant must attach a report**, prepared by an independent professional engineer, that documents the specific upgrades/re-powering activities and associated investments that have been or will be made to the referenced facility. The report must document:

1. The historical baseline of average annual production (not less than three years) with the corresponding meter data or best available data sources;
2. The post-upgrade/repowering expected average annual production;
3. The incremental production, expressed as a percentage, of the expected average annual production due specifically to the completed or proposed upgrades/investments.
4. If available, a "Solar Resource Evaluation Report" describing the electric energy producing potential of the project, which assesses the solar resource potential at the site and describes the incremental upgrade as proposed.

### **RPS Document Reference Link:**

The Applicant may use the reference below to obtain additional information.

Order Regarding Retail Renewable Portfolio Standard, State of New York Public Service Commission, Case 03-E-0188, September 24, 2004. ([Download Link](#)) or visit <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB1830060-A43F-426D-8948-F60E6B754734%7d>