

**COMMONWEALTH OF MASSACHUSETTS
OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION
DIVISION OF ENERGY RESOURCES**

**Background Document
On Proposed Revisions to the
Regulations for the Massachusetts
RENEWABLE ENERGY PORTFOLIO STANDARD
225 CMR 14.00**

June 2, 2006

A. INTRODUCTION

The Massachusetts Division of Energy Resources (“DOER”) seeks public comment on an amended regulation 225 CMR 14.00, the Massachusetts Renewable Energy Portfolio Standard. The “Notice of Public Hearing on Proposed Regulations” was submitted to the Secretary of the Commonwealth on June 2, 2006, for publication in the *Massachusetts Register* on June 16, 2006. In addition, the Notice was sent to three newspapers of general circulation on June 2, 2006, for publication no later than June 7, 2006.

The Massachusetts Renewable Energy Portfolio Standard (“RPS”) was enacted on November 25, 1997 as G.L. c. 25A, sec. 11F. As directed by the statute, the Division of Energy Resources (DOER) promulgated the RPS regulations in April, 2002 as 225 CMR 14.00. The purpose of the RPS regulation is to promote the development of electric power generation that uses renewable energy resources. The statute and regulation provide that retail electricity suppliers selling electricity in Massachusetts are required to include a prescribed, annually-increasing percentage of supply from qualified renewable generators.

During the four years of administration of the RPS program, both DOER (as the regulator) and renewable energy industry participants (as the regulated) have identified certain provisions of the regulations that require clarification or modification in order best to accomplish the intent of the enabling statute. To a considerable extent, these clarifications concern the manner in which DOER will qualify biomass energy units under the statutory criteria of “low emissions” and “advanced power conversion technology.”

DOER has undertaken a detailed review of the regulations and consulted with numerous stakeholders since July 2005 to develop a comprehensive amended RPS regulation. We believe this amended regulation addresses the numerous issues that DOER and the stakeholders identified in the review process as requiring attention.

B. POLICY OBJECTIVES

The RPS is expected to stimulate development of new electric generating units that use renewable fuels and technologies, and thereby accomplish the following policy objectives:

- Increase the share of our electricity generated by new renewable resources;
- Decrease atmospheric pollution from the New England fleet of power plants that serve Massachusetts consumers;
- Diversify the fuels used to generate power that serves Massachusetts consumers;
- Decrease our reliance on fossil fuels imported from other regions; and
- Moderate price volatility caused by reliance on imported fossil fuels.

The proposed revisions are intended to ensure that the RPS will better accomplish the above policy objectives by clarifying and improving the criteria by which power plants are qualified for RPS, by committing DOER to a date by which the continuation of RPS minimum percentages for the period beyond 2014 will be decided, and by clarifying how retail electricity suppliers must ascertain and document their compliance with RPS.

C. SUMMARY OF THE PROPOSED REVISIONS

The proposed revisions to the RPS regulation include the following significant changes:¹

1. Clarifies the following issues regarding the biomass Generation Units:
 - a. Defines “low-emission, advanced biomass power conversion technologies,” with reference to the concurrently-issued *Guideline on the RPS Eligibility of Biomass Generation Units*, which DOER also offers for public comment. Eligibility criteria are detailed in the Guidelines. At 14.05 (1) (a) 6.
 - b. Provides that the *Guideline* may be updated periodically, but any revised eligibility criteria would take effect 24 months following publication of a revised *Guideline*. At 14.05 (1) (a) 6.a.
 - c. Requires that a biomass Unit² with a Commercial Operation Date prior to 1998, whether retrooled or not, can qualify only under a Vintage Waiver and must meet the criteria applicable to new plants at the time the Unit’s Statement of Qualification application is filed with DOER. At 14.05 (1) (a) 6.b & 6.d, and at 14.05 (2) (d) 4.
 - d. Clarifies the inclusion of construction and demolition (C&D) wood as an Eligible Biomass Fuel. At 14.02.
2. Distinguishes between a New Renewable Generation Unit and the newly-introduced term, “RPS Qualified Generation Unit.” At 14.02.

¹ References are to relevant sections of 225 CMR 14.00, and capitalized terms are defined in the RPS Regulation at 14.02 or are introduced in other sections of the Regulation.

² “Unit” in this summary refers to a Generation Unit as that is defined in the RPS Regulation at 14.02.

3. Addresses several “vintage” issues (applicable to Generation Units that operated prior to 1998) at 14.05 (2) (c), specifically:
 - a. Allows pre-1998 generation equipment moved into the ISO-NE Control Area or into an adjacent Control Area that did not previously operate in either area, to be eligible to qualify as a New Renewable Generation Unit.
 - b. Clarifies that a pre-1998 Unit that did not previously utilize Eligible New Renewable Fuel(s) is eligible to qualify as a New Renewable Generation Unit.
 - c. Allows a Unit installed at a site where a Renewable Generation Unit had operated prior to 1998 to become an RPS Qualified Generation Unit without a Vintage Waiver – except in the case of a landfill gas Unit located at the site of a pre-1998 landfill gas Unit. Also at 14.05 (1) (d) 4 and 14.05 (2) (b).
 - d. See item 1.c, above.
4. Clarifies the definition of Commercial Operation Date and the newly introduced RPS Effective Date, when an RPS Qualified Generation Unit may begin earning MA RPS-qualified renewable energy Certificates (so-called “RECs”) at the NEPOOL GIS. At 14.02 and 14.06 (4).
5. Expands New Renewable Generation to include output onto the ISO New England grid of electricity from distributed generation Units outside of Massachusetts, subject to certain metering requirements. At 14.05 (1) (d) 1.
6. Introduces the new term “Composite Fuel” and provides for its partial eligibility in a revised “Co-Firing and Composite Fuel Waiver.” 14.02 and 14.05 (3).
7. Clarifies that, for power imported into the ISO-NE Control Area from an RPS Qualified Generation Unit in an adjacent Control Area and claimed for RECs, production of the imported power be documented for each hour of the month, not averaged over the whole month. At 14.05 (5).
8. Codifies that an Aggregation of small Units (typically photovoltaic systems) can apply for and collectively receive a single Statement of Qualification and be treated as a single RPS Qualified Generation Unit (a procedure already in practice). At 14.05 (6).
9. Codifies the acceptability of an “authorized agent” to act on behalf of Generation Unit(s) Owners or Operators. At 14.05(6) (b), 14.06 (1), and elsewhere.
10. Eliminates the Advisory Ruling provision, currently at 14.06 (5), and provides in the new *Guideline on the RPS Eligibility of Biomass Generation Units* explicit and detailed criteria and procedures for qualifying biomass units.
11. Introduces a new Notification requirement regarding changes in a Unit’s ownership, generation capacity, or contact information. At 14.06 (6).
12. Introduces a provision for a new Statement of Qualification to terminate 48 months from the date of issuance unless the Unit commences commercial operation within that period. At 14.06 (7).

13. Provides for existing Advisory Rulings to expire six months after the effective date of the Regulatory revisions. At 14.06 (8).
14. Commits DOER to provide, when it issues its decision at the end of 2007 regarding 2010-2014 RPS annual percentage increases, a date for a second such RPS extension decision. At 14.07 (2).
15. Designates the Massachusetts Technology Park Corporation as a recipient of Alternative Compliance Payments, but provides that DOER may designate another entity. At 14.08 (3)
16. Clarifies and codifies that the load obligation upon which the Retail Electric Suppliers must comply with the RPS minimum standard is to be based on the available NEPOOL GIS data representing retail load served, inclusive of distribution line losses. At 14.09 (2) (a) and (b).
17. Adds a Severability provision. At 14.13.

The above list is not exhaustive and is limited to identifying substantive changes. In addition, DOER's proposed revisions include some minor procedural or definitional clarifications, technical updates, corrections, and cross referential changes.

**COMMONWEALTH OF MASSACHUSETTS
OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION
DIVISION OF ENERGY RESOURCES**

NOTICE OF PUBLIC HEARING ON PROPOSED REGULATIONS

Notice is hereby given pursuant to Massachusetts General Laws (M.G.L.) c. 30A, §2, that the Office of Consumer Affairs and Business Regulation, Division of Energy Resources (DOER) will hold a public hearing to receive oral and written testimony on proposed *revisions* to its regulations entitled:

Renewable Energy Portfolio Standard (225 CMR 14.00)

The revisions to the regulations are proposed pursuant to the authority granted by M.G.L. c. 25A, §§6 and 11F. The regulations implement the statutory mandate in M.G.L. c. 25A, §11F that requires all retail electricity suppliers selling electricity to end-use customers in the Commonwealth to obtain specific minimum percentages of their electricity supply from new renewable energy generation sources according to a prescribed schedule.

DOER will also accept testimony on a draft *Guideline on the RPS Eligibility of Biomass Generation Units*, according to the schedule below.

Interested persons may appear at a PUBLIC HEARING to be held in Boston, Massachusetts, on June 28, 2006, from 10:00 a.m. to 1:00 p.m., at 100 Cambridge Street (Saltonstall Building), 2nd floor, Conference Room B. Attendees must show photo identification at the 2nd floor security counter, receive a visitor's pass, and pass through a metal detection security gateway.

The deadline for *INITIAL WRITTEN COMMENTS* is 5 p.m. on July 6, 2006. The deadline for *FINAL WRITTEN COMMENTS* is 5 p.m. on July 18, 2006. Written comments must be submitted to DOER in both electronic and hard-copy versions. Hard-copy versions must be submitted to Robert Sydney, General Counsel, Division of Energy Resources, 100 Cambridge Street, Suite 1020, Boston, Massachusetts 02114. Electronic versions must be e-mailed to doer.rps@state.ma.us. Those who speak at the public hearing are urged also to provide written copies or summaries of their statements at the hearing.

The proposed revisions to the RPS regulations, the draft *Guideline on the RPS Eligibility of Biomass Generation Units*, the *Background Document on Proposed Revisions to the Regulations for the Massachusetts Renewable Energy Portfolio Standard*, and directions to the public hearing site can be downloaded from the DOER web site at www.mass.gov/doer/rps. Anyone with questions about the public regulatory process should contact Howard Bernstein at 617-727-4732, extension 40155.

Date: June 2, 2006

Robert J. Sydney
General Counsel

**Commonwealth of Massachusetts
Office of Consumer Affairs & Business Regulation
DIVISION OF ENERGY RESOURCES**

**RENEWABLE ENERGY PORTFOLIO STANDARD
GUIDELINE
ON THE
RPS ELIGIBILITY OF BIOMASS GENERATION UNITS**

**June 2, 2006
(Draft for Public Review)**

Pursuant to the Renewable Energy Portfolio Standard Regulations at 225 CMR 14.00

This Guideline¹ describes the eligibility criteria and procedures by which the Division of Energy Resources (“DOER” or “the Division”) shall determine whether an existing or proposed, biomass-fueled, Generation Unit uses “low-emission, advanced biomass power conversion technologies,” as mandated by the RPS statute² and provided in the RPS Regulations at 225 CMR 14.05(1)(a)6.³ The Guideline is divided into two sections, the first pertaining to the eligibility criteria for “low-emissions” and the second to the eligibility criteria for “advanced biomass power conversion technologies.”

This Guideline shall become effective immediately upon the date of its issuance and shall continue in force until the date on which it is superseded by a revised version. The Guideline shall apply to Statement of Qualification Applications that are received and deemed administratively complete by DOER on or after the effective date of the Guideline and before a subsequent revision takes effect.

DOER expects that future revisions will be necessitated by improvements in biomass energy and air pollution technologies over time. That is the reason for DOER’s establishment of the specific RPS eligibility criteria for biomass-fueled Generation Units by means of Guidelines rather than in the RPS Regulations themselves. Any revision of this Guideline that modifies eligibility threshold values or criteria (as detailed below) shall become effective on the twenty-four month anniversary of the issuance date of such revision, as provided at 225 CMR 14.05(1)(a)6.a. Each such revision of this Guideline shall apply to Statement of Qualification Applications received and deemed administratively complete by DOER on or after the effective date of such revision and before a subsequent revision takes effect. Revisions that do *not* establish eligibility threshold values or criteria shall become effective upon their dates of issuance or on such dates as are specified in the revisions themselves.

¹ This Guideline, along with guidelines on other topics that DOER may issue from time to time, collectively constitute the *Massachusetts RPS Guidelines*, as the term “Guidelines” is defined in the RPS Regulations at 225 CMR 14.02.

² The RPS statute at M.G.L. Ch. 25A, Section 11F, is available at <http://www.mass.gov/legis/laws/mgl/25a-11f.htm>.

³ The RPS Regulations are available at <http://www.mass.gov/doer/rps/225cmr.pdf>.

Background

In order for a biomass-fueled Generation Unit to qualify as a New Renewable Generation Unit under the RPS Regulations, it must meet the Eligibility Criteria at 225 CMR 14.05(1). Among those criteria are the fuel and technology criteria at 14.05(1)(a)6, which requires that such a Unit use “Low-emission, advanced biomass power conversion technologies using an Eligible Biomass Fuel. . . . subject to the limitations set forth herein.” That language is based on identical language in the RPS statute⁴ The Guideline expands upon the language of the Regulations, to provide the details by which DOER will evaluate Statement of Qualification Applications for biomass-fueled Units to qualify as New Renewable Generation Units under the RPS Regulations. As such, the criteria and procedures described herein are intended to replace the need for Advisory Rulings, for which the Proposed RPS Regulations also issued today no longer provide.

The Advisory Ruling provision proposed to be removed from the regulations (now at 225 CMR 14.06(5)) has provided a method for an applicant to receive a determination from DOER of whether or not its Generation Unit would likely receive approval as a New Renewable Generation Unit prior to submitting an application for a Statement of Qualification. Its purpose was to provide assurance to owners of Generation Units early in the development of a project, at a level sufficient to obtain financing. The Advisory Ruling was primarily used for biomass Generation Units due to, in part, the lack of specific guidance available from DOER on what constituted low-emissions and advanced biomass power conversion technologies. In practice, the Advisory Rulings evolved into being viewed by recipients and others as *de facto* DOER approvals, in that it was assumed that a Statement of Qualification subsequently would be granted automatically if a plant’s final description matched that in the Advisory Ruling. Hence, biomass plant developers came to depend on Advisory Rulings as a critical prerequisite for obtaining financial support. This was the case even when a proposed project was substantially the same as a project for which a previous Advisory Ruling has been issued. Thus, the process of a developer requesting an Advisory Ruling, and DOER responding to the request, has become an additional step, with its attendant cost and burden for both parties.

Almost four years have elapsed since the RPS Regulations went into effect in April 2002. During that time, DOER issued a number of Statements of Qualification and Advisory Rulings for biomass Generation Units. In addition, DOER and the Massachusetts Department of Environmental Protection (“MassDEP”) conducted a public Inquiry on biomass technologies during the summer of 2005.⁵ Based on the experience and knowledge acquired thereby, DOER now issues this Guideline to provide sufficient clarity and predictability to biomass Unit developers and eliminate the need for case-by-case Advisory Rulings.

⁴ M.G.L. Ch. 25A, Section 11F(b)(viii). See footnote 2 for on-line availability.

⁵ This Guideline follows up DOER’s *Notice of Inquiry Regarding Some Proposed Revisions of the Regulations Pertaining to the Definition of “Low-Emission, Advanced Biomass Power Conversion Technologies”* (“NOI”) and the comments received from stakeholders in response to the NOI. The NOI, comments, and other related documentation are available at http://www.mass.gov/doer/rps/notice_of_inquiry.htm and will not be reiterated here.

Section One

RPS Low-Emission Criteria

To qualify as a New Renewable Generation Unit under the RPS Regulations, a biomass Generation Unit must be deemed by DOER to be one that uses a “low-emissions” technology; that is, a technology that results in the Unit being characterized as having low emissions of pollutants. The statute does not specify which pollutants must be minimized or what level of emissions should be considered as “low,” thereby leaving to DOER the responsibility of doing so, in the public interest and pursuant to the intent of the legislature. Since the outset of the program, DOER has worked in close consultation and cooperation with MassDEP, the Commonwealth’s lead agency in such matters. This Guideline now defines what constitutes “low emissions,” solely for the purpose of RPS qualification. In addition to meeting the emission levels required by this Guideline, the RPS Regulations continue to require that the Generation Unit must be in receipt of a Valid Air Permit from the applicable agency of the jurisdiction in which the Unit is located.⁶

This Guideline provides details on the methodology and specifications by which a Generation Unit will be judged to meet the low emissions criteria, and also describes the requirements for monitoring, reporting, and enforcement of emissions standards after a Unit has been deemed RPS-qualified.

However, it is important to note that *this Guideline provides low emissions specifications only for Units that use wood-fired and other solid-fueled steam boilers*. The current version of the Guideline, in addition to providing the solid-fueled boiler specifications, describes the procedures through which DOER, in consultation with MassDEP, will determine the low-emission criteria for projects that propose to use *other* fuels or power conversion technologies.

Given the range of eligible biomass fuels and power conversion technologies, the Guideline is unable to provide “low emissions” specifications for all Units that potentially may seek RPS qualification. In the meantime, DOER, with MassDEP, will review on a case-by-case basis all proposed projects *not* of the type covered in this Guideline. As a consequence of such reviews, DOER, with MassDEP, may develop specifications to cover other types of fuels and technologies. DOER will issue those specifications in subsequent revisions of this Guideline.

RPS Emission Limits for Wood-Fired and Other Solid-Fueled Steam Boilers⁷

For the sole purpose of qualifying for the MA RPS, a biomass Generation Unit using a wood-fired steam boiler or other solid fueled steam boiler must not exceed monthly average emission limits for nitrogen oxides (NOx) and particulate matter (PM) that are specified in Table

⁶ See the definition of Valid Air Permit in the RPS Regulations at 225 CMR 14.02. Note, that if such a permit is not required in that jurisdiction or for a Unit of that size or type, then the Regulations at 225 CMR 14.05(1)(a)6.e provide that the Unit’s emission rates simply must be consistent with criteria set forth in this Guideline, a matter discussed below.

⁷ It must be noted that biomass-fired boilers may make incidental use of fossil fuels for the purpose of plant start-up. Any non-incidental use of ineligible fuels would require a Co-Firing and Composite Fuel Waiver, as provided in the Regulations at 225 CMR 14.05(3).

One for Units of three nameplate capacity ranges.⁸ It should be noted that these limits may be different, both in magnitude and in averaging period, from the limits specified in the Unit’s Valid Air Permit, and that they must be separately reported to DOER on a quarterly basis.⁹

Table One
RPS Monthly Average Emission Limits
for Wood-Fired and Other Solid-Fueled Steam Boilers

Nameplate Capacity	NO _x	PM	Monitoring/Testing
< 1 MW	0.30 lbs /MMBtu	0.012 lbs /MMBtu	Portable monitor for NO _x , O ₂ , & CO. ¹⁰ Initial stack test for PM, ¹¹ NO _x , ¹² & CO, ¹³ and retest every five years.
1-10 MW	0.10 lbs /MMBtu	0.012 lbs /MMBtu	Portable monitor for NO _x , O ₂ , & CO. ¹⁴ Initial stack test for PM, NO _x , & CO, and retest every three years
> 10 MW	0.065 lbs /MMBtu	0.012 lbs /MMBtu	CEMS for NO _x & CO. ¹⁵ Annual stack test for PM. CO CEMS as surrogate for PM monthly average.

In the case of a Generation Unit that has multiple boilers, the size ranges and emission limits of Table One apply to a shared smokestack. For example, if a Unit has two boiler/turbine sets of 8 MW each and they share one smokestack, the size range will be “>10 MW.” If a Unit has multiple stacks, each serving one or a discrete number of boilers, then the size range and emission limit would apply to each stack separately. It is important to note that, in the case of a Unit with multiple stacks, the weighted average NO_x and weighted average PM

⁸ DOER has determined in consultation with the DEP that these two pollutants are the two most critical ones for wood-fired boilers. Emissions of other criteria pollutants are adequately addressed in state air permits.

⁹ The monitoring and reporting of these emissions, as well as their relation to the RPS qualification of GIS certificates are described in the section titled “Emissions Monitoring, Reporting, and Enforcement,” below.

¹⁰ Concentrations of CO, O₂, and NO_x shall be measured daily with a portable monitor that satisfies 40 CFR 60, Appendix B PS-2. The monitor shall be calibrated before use and the sample shall be taken from a location that satisfies the requirements of 40 CFR 60 Appendix A Methods 1 and 2. At least one sample shall be taken each day the boiler operates. Operation and maintenance of the monitor shall be according to the manufacturer’s recommendations. CO is a surrogate limit for complying with the PM emissions limit. If the monthly average CO concentration exceeds 200 ppm @ 3% O₂, the boiler will be considered to be in non-compliance with the PM emission limit. Portable monitors will be operated and maintained according to the manufacturers recommendations.

¹¹ Testing for PM shall be conducted in accordance with 40 CFR 60, Appendix A, Test Method 5.

¹² Testing for NO_x shall be conducted in accordance with 40 CFR 60, Appendix A, Test Method 7E.

¹³ Testing for CO shall be conducted in accordance with 40 CFR 60, Appendix A, Test Method 10.

¹⁴ Specifications are the same as in footnote 10.

¹⁵ The Continuous Emissions Monitoring System (CEMS) for NO_x shall satisfy either 1) 40 CFR 60, Appendix B PS-2 with the QA/QC requirements of 40 CFR 60 Appendix F or 2) 40 CFR 75, except that missing data routines and bias adjustment factors do not need to be applied. The CEMS shall be operated at all times the boiler is operating except periods of CEMS calibration checks, zero span adjustment, and preventive maintenance. Notwithstanding such exceptions, in all cases the CEMS must obtain valid data for a minimum of 90% of the hours per month during which the emission unit is operating.

emissions from all of the stacks in the Unit must be in compliance with the RPS emission limits in order for the electricity output in a given month to qualify as New Renewable Generation and earn MA RPS qualified GIS certificates.¹⁶ However, if a multiple stack Unit has a separate generator account at the NEPOOL GIS for each stack, then the Unit can be subdivided for the purposes of RPS low-emission compliance and GIS certificate qualification.

In the case of a Generation Unit that uses any solid Eligible Biomass Fuel(s) in conjunction with any ineligible fuel(s), whether by co-firing such fuels or by using a Composite Fuel, these size ranges and emission limits apply to the entire Unit, per the Co-Firing and Composite Fuel Waiver provisions at 225 CMR 14.05(3)(b).

Over time, the emissions limits of Table One will be lowered if it is determined that more stringent limits are commercially available and economically feasible. Any changes in these limits will be announced by DOER through a revised Guideline. To accommodate the timing of the power plant development process, such changes in emissions limits will become effective twenty-four months after they are issued. The limits will apply to all units for which an administratively complete Statement of Qualification Application is received on or after that effective date and until a subsequent revision takes effect.

Review for Other Fuels and Other Types of Biomass Units

In the case of any proposed biomass Generation Unit that does *not* use a steam boiler fueled by wood or other solid fuel, DOER will consult with MassDEP by means of an interagency team to determine appropriate emission limits. Examples of such Units include but are not limited to the following:

- Boilers or engines fueled by biodiesel or bio-oil.
- Equipment fueled by biogas that is not the product of anaerobic digestion.¹⁷
- Bioreactors.

The interagency team will consist of DOER's RPS staff and one or more members of MassDEP's Biomass Review Team (BRT). The BRT will meet with project developers to provide them with guidance on applicable emission limits for RPS qualification for non-solid fueled Units or for Units that do not use steam boilers. In the case of projects located within Massachusetts, the BRT will also provide guidance to applicants on MassDEP air quality permitting requirements. The BRT will provide the following types of services:

- For in-state projects, provide an expedited process for determination of Best Available Control Technology (BACT) and other aspects of MassDEP permitting;
- Review any project if additional guidance is needed regarding the application of already established RPS emission limits;

¹⁶ The method for weighting will be specified in a Unit's Statement of Qualification.

¹⁷ The use of anaerobic digester gas are treated in the RPS Regulations, at 225 CMR 14.02 and 14.05(1)(a)5, in the same manner as the use of landfill methane, rather than the use of biomass fuel.

- Review all projects for whose fuel or technology type the RPS Guidelines do not yet specify emission limits and recommend to DOER limits appropriate for the project.

As a follow-up of the third type of service, the BRT will recommend to DOER appropriate emission limits for fuels and technology types not already covered in the RPS Guidelines. The BRT will also periodically review existing RPS emission limits and recommend to DOER reductions in these emission limits as technology improves. DOER may revise the Guideline as appropriate to incorporate such recommendations.

State Air Permitting of Biomass Generation Units

In order to qualify as a New Renewable Generation Unit, a biomass-fueled Unit must receive a Valid Air Permit from the applicable environmental agency of the jurisdiction in which the Unit is or will be located.¹⁸ The RPS Regulations at 225 CMR 14.02 define Valid Air Permit as follows:

Valid Air Permit. Within the United States, a current and effective authorization, license, certificate, or like approval to construct and/or operate a source of air pollution, issued or required by the regulatory agency designated in the applicable State Implementation Plan to issue permits under the Clean Air Act, 42 U.S.C. §§ 7401, et seq., as amended. In jurisdictions outside of the United States, it shall be a document demonstrating an equivalent authorization.

The pollutants covered and the emission standards in such permits may differ from the RPS emission limits. The MA RPS low-emission criteria pertain only to the RPS qualification of the Unit and of the conditions governing the RPS qualification of its electricity output. They in no way replace the air emission obligations required by the regulatory agency that has jurisdiction where an RPS-qualified Unit is located.

For Generation Units located in Massachusetts, MassDEP has established a set of emissions limits that it suggests as the starting point for BACT for wood-fired boilers within given size ranges. MassDEP will post those limits as guidance at its own website and may revise or supplement them from time to time.¹⁹ MassDEP will determine the effective dates of any changes that it makes in its BACT guidelines and procedures.

For Generation Units *not* located in Massachusetts, applicants must provide proof of receipt of a Valid Air Permit from the applicable regulatory agency. If such Valid Air Permit has not yet been obtained by the applicant and provided to DOER by the time the Statement of Qualification Application review has been successfully completed, DOER may, in its sole discretion, issue a Statement of Qualification in which providing DOER with a copy of its Valid Air Permit is a condition of the RPS qualification.

¹⁸ The exception is noted in footnote 6.

¹⁹ The DEP website is at <http://www.mass.gov/dep/>.

Emissions Monitoring, Reporting, and Enforcement²⁰

For any solid biomass-fueled Generation Unit with a smokestack serving one or more steam boilers and generation equipment whose total nameplate capacities are equal to or greater than 10 MW, NO_x emissions shall be monitored with a Continuous Emissions Monitoring System (CEMS) that satisfies either 40 CFR 60 Appendix B PS-2 (with the QA/QC requirements of 40 CFR 60 Appendix F) or 40 CFR 75, except that missing data routines and bias adjustment factors do not need to be applied. The NO_x CEMS shall be operated at all times that the boiler is operating except during periods of CEMS calibration checks, zero span adjustment, and preventive maintenance. Notwithstanding such exceptions, in all cases the CEMS must provide valid data for a minimum of 90% of the hours per month during which the Unit is operating. A CO CEMS also shall be used, and average monthly CO concentration will provide a surrogate limit for PM. If the combined monthly average CO concentration from all of the stacks in the Unit exceeds 200 ppm @ 3% O₂, the Unit shall be considered to be in non-compliance with the PM emission limit. In addition, an annual stack test shall be required for PM.

For any solid biomass-fueled Generation Unit with a smokestack serving one or more steam boilers and generation equipment whose total nameplate capacities are below 10 MW, concentrations of NO_x, CO, and O₂ shall be measured daily with a portable monitor. The portable monitor shall satisfy 40 CFR 60, Appendix B PS-2. The monitor shall be calibrated before use, and the sample shall be taken from a location that satisfies the requirements of 40 CFR 60 Appendix A Methods 1 and 2. At least one sample shall be taken each day the boiler operates. Operation and maintenance of the monitor shall be according to the manufacturer's recommendations. The monthly average CO concentration will provide a surrogate limit for complying with the PM emissions limit. If the combined monthly average CO concentration from all of the stacks in the Unit exceeds 200 ppm @ 3% O₂, the Unit shall be considered to be in non-compliance with the PM emission limit.

For a Unit below one MW nameplate capacity, an initial stack test shall be performed for PM, NO_x, and CO, with a retest every five years. For a Unit with a nameplate capacity of one through 10 MW, an initial stack test shall be performed for PM, NO_x, and CO, with a retest every three years.

For any biomass Unit that does not use a solid-fueled steam boiler, NO_x and PM emission limits, monitoring, and reporting shall be established by DOER/DEP interagency team and specified in the Unit's Statements of Qualification.

The Owner, Operator or authorized agent of a biomass Generation Unit shall submit to DOER, with a copy to MassDEP (*and* to its own regulatory agency, if not located in Massachusetts), the following reports and other documentation per the timetable noted or immediately upon their availability:

- MA RPS Quarterly Low-Emission Report scheduled as specified in Table Two. Each such report shall include a cover letter that states what is attached, summarizes the emission and compliance information derived from the Unit's CEMS and/or portable monitors (including the monthly average for each stack and the average for all stacks),

²⁰ To the extent deemed necessary, additional protocols and procedures beyond those described in this section will be included in a Unit's Statement of Qualification and may be incorporated in subsequent revision of this Guideline.

and the certification required in the RPS Regulations at 225 CMR 14.10 (1). The certification shall be stated to cover both the information in the cover letter and in the electronic documentation. The date and *summary* result of the most recent, RPS-required stack test shall be included with each quarterly report. The cover letter shall be sent to DOER and MassDEP, and documentation for the information summarized in the cover letter shall be provided *only* on a compact disk sent to DOER and MassDEP, except for stack test data, which shall be provided as described below.

- Whenever a new, RPS-required stack test occurs and is reported to the Unit’s own regulatory agency, a copy to DOER and MassDEP of a *summary* of the results. In the case of a stack test conducted to satisfy only the requirements of MA RPS and not those of the Unit’s own regulatory agency, the entire report specified in the Unit’s Statement of Qualification must be sent to DOER and MassDEP on a compact disk along with a summary. A summary of that report shall be sent as hard copy to both DOER and MassDEP and must include the certification required in the RPS Regulations at 225 CMR 14.10 (1). The certification shall be stated to cover both the information in the cover letter and in the electronic documentation. The date and results of each such stack test (but not documentation previously submitted) also shall be included in each MA RPS Quarterly Low-Emission Report until superseded by the results of a later stack test.
- Notification to DOER of any enforcement action by the applicable environmental agency, as required in the RPS Regulations at 225 CMR 14.06 (5), since such action may affect the RPS qualification of the Unit.

Table Two
Schedule for MA RPS Quarterly Low-Emission Reports

Quarter	Months Reported	Report Due to DOER
1	Jan, Feb, Mar	April 30
2	Apr, May, Jun	July 30
3	Jul, Aug, Sep	October 31
4	Oct, Nov, Dec	January 31

For any calendar month during which the reported monthly average emissions level for NOx or PM exceeds its RPS emissions limit²¹ or is found to be in non-compliance with any provisions of its Statement of Qualification, the Unit’s Owner, Operator, or authorized agent will be in non-compliance with the requirements of 225 CMR 14.00 and shall be subject to the provisions of 225 CMR 14.12. In addition, DOER will take appropriate action through the NEPOOL GIS to assure that the electricity output of the Generation Unit will not have MA RPS New Renewable Generation Attributes and, thereby, will not receive MA RPS-qualified GIS Certificates.

²¹ In the case of PM, this would apply in the case of an exceedance of the surrogate CO limit.

For any calendar month during which a required, periodic PM stack test of the Unit reveals exceedance of the RPS PM emission limit, the Unit's Owner, Operator, or authorized agent will be in non-compliance with the requirements of 225 CMR 14.00 and shall be subject to the provisions of 225 CMR 14.12. In addition, DOER will take appropriate action through the NEPOOL GIS to assure that the electricity output of the Generation Unit will not have MA RPS New Renewable Generation Attributes and, thereby, will not receive MA RPS-qualified GIS Certificates. RPS qualification of the output from the Unit will resume as of the first complete month after a subsequent stack test demonstrates RPS compliance.²²

In order to return to RPS compliance, the Unit's Owner, Operator or authorized agent must demonstrate to the satisfaction of DOER that the emission limits are again being met. In the case of a Unit that has been in non-compliance for a period of three months, such demonstration must include a report in which an Authorized Representative of the Owner, Operator or authorized agent describes and certifies the reasons for the exceedance and of actions taken to restore the Unit's operation to compliance with the low-emission conditions of its Statement of Qualification, including or followed by documentation satisfactory to DOER of such restored compliance. Documentation must include a quarterly MA RPS Low-Emission Report and/or PM stack test results.

It is important to note that, if a Generation Unit has more than one smokestack, and the emissions from each are controlled, monitored and reported separately, but the Unit has a single generator account with the NEPOOL GIS, the weighted average NOx and the weighted average PM emissions²³ from all of the stacks in the Unit combined must be in compliance with the RPS emission limits in order for the electricity output in a given month to qualify as New Renewable Generation and earn MA RPS qualified GIS certificates.²⁴

Possession of a Valid Air Permit is a threshold eligibility criterion for RPS qualification (except when such permit is not required by the applicable agency). DOER recognizes that minor or short term violations of applicable permit conditions and environmental regulations may occur from time to time, and such violations will not necessarily affect continued qualification of a Unit as an RPS Qualified Generation Unit. However, DOER, in consultation with MassDEP, may review reports of enforcement actions by applicable environmental agencies, and DOER may find a Unit's Owner, Operator or authorized agent in non-compliance with the requirements of 225 CMR 14.00. In case of such a finding, they shall be subject to the provisions of 225 CMR 14.12. Suspension or revocation of a Unit's Valid Air Permit will result in DOER's suspension of the Unit's qualification or other action that DOER deems appropriate under the provisions of 225 CMR 14.12.

²² DOER understands that, in limited circumstances, the GIS Administrator could encode GIS certificates as RPS-qualified as of the day following a successful PM stack test, as requested by DOER. However, such immediate qualification is subject to the ability of the GIS and of the GIS Administrator. Otherwise, RPS qualification would resume as of the month following the successful stack test. The above notwithstanding, in the case of an unsuccessful stack test and a subsequent successful stack test both in the same month, RPS qualification will resume as of the following month unless the Owner, Operator or authorized agent or Operator of the Unit can demonstrate to the satisfaction of DOER that the first test was an anomaly.

²³ The method for weighting will be specified in a Unit's Statement of Qualification..

²⁴ As noted earlier, if a multiple stack Unit has a separate generator account at the NEPOOL GIS for each stack, then the Unit can be subdivided for the purposes of RPS low-emission compliance and GIS certificate qualification.

Low Emission Criteria for Units That Do *Not* Require Valid Air Permits²⁵

If a biomass-fueled Generation Unit located outside Massachusetts does not require a preconstruction air permit, and if the fuel, technology type, and size of the Unit are such that the Unit would, if located in Massachusetts, require an air plan approval or some other form of Valid Air Permit, then the following criteria shall apply *solely* for MA RPS qualification:

- If the Unit uses a wood-fired or other solid-fueled steam boiler, then the emission limits of Table One, above, will apply, along with the monitoring, reporting, and enforcement conditions described above.
- If the Unit is of a type, fuel, and size that it would, if located in Massachusetts be governed by MassDEP's Engine and Combustion Turbine regulations at 310 CMR 7.00 et seq. and 310 CMR 70.00, then the fuel and emission limit provisions of those regulations would apply.
- All other Units that are of a fuel and size that would necessitate, if located in Massachusetts, a Valid Air Permit, but that would neither use a solid biomass-fired steam boiler nor be governed by MassDEP's Engine and Combustion Turbine regulations, shall be evaluated as to air emissions by the BRT procedure described above.

If a biomass-fueled Generation Unit does not require an air permit because its size is *below the threshold* for regulations that would otherwise apply in either its own jurisdiction or in Massachusetts, then DOER will undertake a case-by-case review, as follows. DOER will determine if the Unit meets the Advanced Biomass Power Generation Technology criteria through the process described in Section Two of this Guideline. If the Unit does meet those criteria, DOER may consult with MassDEP to determine whether the Unit would raise any air quality concerns for MassDEP. After such consultation, DOER may decide that the Unit qualifies as meeting the low-emissions standard either with or without any emission limitation conditions being included in its Statement of Qualification.²⁶

Low Emissions and New Unit Start-Up²⁷

When a new biomass Generation Unit begins to generate electricity using Eligible Biomass Fuel(s), its output will qualify as New Renewable Generation only *after* it demonstrates to the satisfaction of DOER, in consultation with MassDEP, that the Unit is meeting the low-emission conditions in its Statement of Qualification.²⁸ DOER will deem those limits to have been met when all of the following conditions have been met:

²⁵ See 225 CMR 14.05(1)(a)6.e.

²⁶ DOER may issue further guidance pertaining to small Units in subsequent revisions of the Guideline.

²⁷ This section pertains to all Units with steam boilers. In the case of all other types of Units, the provisions pertaining to low emissions and new Unit start-up will be specified in the Unit's Statement of Qualification.

²⁸ In the case of a new Unit designed to burn either an ineligible fuel *or* an Eligible Biomass Fuel, and where sole use of an Eligible Biomass Fuel follows the end of start-up and testing of the Unit with the ineligible fuel, then the averaging of monthly emissions and the compliance with any other RPS emissions requirements will commence when the use of the ineligible fuel ends and sole use of the Eligible Biomass Fuel begins.

1. If a CEMS is required for the Unit, the NO_x CEMS has been certified in the manner specified either in its pre-construction air permit, other Valid Air Permit, or its Statement of Qualification.
2. If, for the month in which a required CEMS or PMS has been duly certified or required portable monitor use has commenced, the NO_x emissions averaged over the remainder of that calendar month do not exceed the NO_x limit, beginning the day after the CEMS has been duly certified or portable monitor use has commenced.
3. If the most recent stack test, if required, demonstrates compliance with the PM limit.

When DOER is satisfied that all three of those conditions have been met, DOER will designate as the RPS Effective Date the later of (a) the day after the successful stack test, or (b) the day after CEMS certification, or (c) the day after commencement of portable monitor use. GIS Certificates created for electricity output as of the Unit's RPS Effective Date will be encoded as MA RPS-qualified New Renewable Generation and will continue to be encoded as such so long as the Unit's emission limits and other conditions of the Unit's Statement of Qualification continue to be met.²⁹

DOER may, at its discretion and in consultation with MassDEP, provide for and include in a Unit's Statement of Qualification a limited optimization period. During an optimization period, the electricity output from a Unit would qualify as New Renewable Generation if it meets a specified, less stringent limit for one or both of the two pollutants. In the case of a Unit with an optimization period, the RPS Effective Date for the optimization period would commence as described in the previous paragraph and would continue until *either* of the following two conditions is reached:

1. The optimization period reaches the time limit provided in the Statement of Qualification, after which the output will not be qualified as New Renewable Generation until compliance with the final limits specified in its Statement of Qualification is demonstrated in the manner described in the previous paragraph.
2. The emissions of the two pollutants are in compliance with final limits provided in the Statement of Qualification. DOER will deem those limits to have been met when the NO_x emissions averaged over one complete calendar month do not exceed the NO_x limit, and the most recent certified stack test demonstrates compliance with the PM limit.

In the case of a Generation Unit that does not require CEMS or portable monitoring of NO_x or stack testing of PM, the qualification and initial encoding of GIS Certificates as New Renewable Generation shall be done as specified in the Unit's Statement of Qualification.

²⁹ Such encoding of GIS certificates shall be done by a procedure to be agreed upon between the GIS Administrator and DOER and shall be communicated to Unit Owner, Operator or authorized agent as appropriate.

Section Two

Advanced Biomass Power Generation Technology Criteria

This section of the Guideline describes the method and specifies information required for an applicant to receive a DOER determination that its biomass Generation Unit uses an advanced biomass power conversion technology under 225 CMR 15.01(1)(a)6.b. One purpose is to provide sufficient advance guidance to potential developers of biomass Generation Units. Another purpose is to assist the Owner, Operator or authorized agent of such a Unit in preparing an application for a Statement of Qualification with sufficient thoroughness that DOER can expeditiously determine if the technology of the Generation Unit qualifies as advanced biomass power conversion technology. In any case, DOER reserves the right to request additional information in support of an application if such information is needed for such determination.

Henceforth, in lieu of the previously available Advisory Ruling process, an applicant shall participate in the pre-application review process described below. This process, combined with the specific guidance for an advanced biomass power conversion technology determination provided herein, is intended to provide a good indication to an applicant in advance of submitting an application for a Statement of Qualification of the likelihood that its Generation Unit would receive a positive determination by DOER on its RPS qualification.

Pre-Application Review Process

A potential applicant should contact DOER early in the development process of its biomass Generation Unit to review the proposed design and expected performance outcomes with the agency. DOER will review this information with applicants through meetings in advance of the applicant's formal application for a Statement of Qualification. Through this information exchange, the applicant will receive a preliminary indication of the likelihood their project, as described, will meet the requirements for receiving a Statement of Qualification certifying its RPS eligibility. The process is expected to provide the applicant with necessary guidance for further development of its biomass Generation Unit and submission of a complete application. Nevertheless, any indication of potential RPS eligibility provided by DOER during this pre-application review process will not be considered as binding the agency's ultimate decision on a Statement of Qualification, and no project will be deemed RPS-eligible until issuance of a Statement of Qualifications by DOER to that effect.

There is no prescribed number of meetings that DOER anticipates for this process. However, the applicant should expect, at minimum, an initial meeting to introduce the project, followed by another meeting that provides further details of the project. Although an applicant is not required to follow this pre-application process, it can be expected that if it does, it is likely to increase the chances that it will submit a more complete application and receive a more timely review and decision by DOER.

Evaluation Criteria for Making an Advanced Technology Determination

This section defines the eligibility criteria for “advanced biomass power conversion technologies” by which DOER will determine whether a particular Generation Unit qualifies. DOER will evaluate a combination of qualitative and quantitative information regarding specific biomass plant attributes that an applicant shall provide. The required information is detailed in the section following this one. DOER will evaluate that information in light of the technologies available in the marketplace and of the state of the market with regard to the usage of such technologies.

The *Primary Eligibility Criteria* are the most important criteria that DOER will consider in its determination of whether a Unit uses an “advanced biomass power conversion technology.” DOER will first consider the efficiency by which fuel is converted to usable energy, expressed as “net heat rate” (defined below). *It is important to note that the net heat rate figures are targets toward which to strive, **not** threshold values that must be met.*

To the extent that DOER finds that a proposed Unit’s projected net heat rate does not closely approach the applicable efficiency figure, DOER will give weight to the other Primary Eligibility Criterion, namely the design of the fuel conversion process. This means that *if*, in order to meet particular needs of the project, including but not limited to those related to fuel supply or space availability, the developer has selected an appropriate state-of-the-art system design or design feature that does not approach the appropriate efficiency target, DOER may determine that, on balance, the Unit is utilizing an advanced power conversion technology. Note that new technologies or technologies that are still in the demonstration phase of development will receive special consideration under this criterion.

If DOER determines that the two Primary Eligibility Criteria, taken together, are not clearly sufficient to enable DOER to determine whether or not a proposed Unit is utilizing an advanced power conversion technology, then DOER will consider one or both of the *Secondary Eligibility Criteria* in order to make a final determination.

Primary Eligibility Criteria

A. Efficiency of Fuel Conversion to Usable Energy

An eligible Generation Unit shall achieve high efficiency in the process of converting fuel to electricity, as determined by comparing the proposed Unit’s net heat rate with the best commercially achievable net heat rate for the fuel conversion process proposed.³⁰ If the Unit proposes to use solid biomass fuel with stoker or fluidized bed combustion technology, DOER will use the target values in Table Three below to evaluate the plant’s net heat rate at a standard fuel moisture specification of 45%. For other fuel conversion technologies, DOER will consider how closely the net heat rate approaches that which DOER ascertains (if possible) to be optimal for the chosen fuel stream and technology type.

³⁰ In the case of a combined heat-and-power plant, usable heat shall be included in the determination of efficiency, and due consideration will be given to the unique challenges posed by non-combustion and bio-reactor technologies.

Table Three
Target Net Heat Rates (in Btu/kWh) for
Wood and Other Solid Fuel-Fired Steam Boilers³¹

Capacity per Turbine	Stoker	Fluidized Bed
Equal to or greater than 1 MW and less than 10 MW	15,500	16,500
Equal to or greater than 10 MW and less than 25 MW	14,000	15,000
Equal to or greater than 25 MW	12,500	13,500

B. Design of Fuel Conversion Process

An eligible Generation Unit shall utilize state-of-the-art design for converting biomass fuel to electrical energy.

Secondary Eligibility Criteria

C. Fuel Handling and Conditioning

A Generation Unit not clearly eligible under the Primary Eligibility Criteria alone may, nonetheless, be deemed eligible by demonstrating technology for fuel handling and conditioning that is not commercially practiced in the United States at the time of application.

D. New Market Applications

A Generation Unit not clearly eligible under the Primary Eligibility Criteria alone may, nonetheless, be deemed eligible if the particular use of the Unit for energy production from biomass is not a common one in the Northeast and whose expanded usage will lead to technology improvements that will enable future such units to qualify under the Primary Eligibility Criteria.

Information Required for Making an Advanced Technology Determination³²

In providing information to DOER, the applicant must explain how and to what extent its Generation Unit will meet or address each of the criteria for being judged to be eligible with the

³¹ Information from *Lessons Learned from Existing Biomass Power Plants* (a February 2000 report to the National Renewable Energy Laboratory, available on line at <http://www.nrel.gov/docs/fy00osti/26946.pdf>) was used in developing these net heat rate targets.

³² DOER may incorporate the information specified below into a prescribed format for filing a Statement of Qualification Application.

advanced biomass power conversion technologies requirement. Although this section of the Guideline specifies the information an applicant must or may provide for DOER to conduct its review, an applicant should not limit itself to the information prescribed herein and is, indeed, encouraged to submit any additional information that it believes could assist DOER in its evaluation and determination. DOER will evaluate the information provided in light of the technologies available in the marketplace and of the state of the market with regard to the usage of such technologies.

Primary Eligibility Criteria

A. Efficiency of Fuel Conversion to Usable Energy

Applicant shall provide the following:

1. ***For all types of plants, as applicable:***
 - a. A description of the type of equipment to be used to transform the energy content of the Eligible Biomass Fuel into electrical energy and, if relevant, useful thermal energy and useful products.
 - b. The Eligible Biomass Fuel(s) to be used and its Higher Heating Value (HHV), as used.
 - c. In the case of a Unit that will co-fire an ineligible fuel with an Eligible Biomass Fuel (or will use Composite Fuels), a description of the fuels (including the constituents of Composite Fuels), and their relative proportions of the fuels (or of the constituents) by both weight and HHV. Also describe the method by which the quantities and relative heating values will be assured, monitored, and documented to DOER.
 - d. The expected net heat rate of the Generation Unit. “Net heat rate” is defined here as the ratio of the fuel energy input to the net electrical output of the generation unit (Btu/kW-hr).
 - e. Justification that this is the best net heat rate achievable, including any contributing factors that raise this net heat rate above what might otherwise be achieved.
 - f. Any economic considerations in making design and operational decisions that adversely impact the Generation Unit’s net heat rate.
 - g. Any processes that plant personnel will evaluate after operation begins to improve net heat rate.
2. ***For plants using wood or other solid-fuel fired, stoker or fluidized bed, steam boilers:***
 - a. Specify what the resulting plant heat rate would be using the standard fuel moisture specification of 45%. DOER will use the target values in Table Three to evaluate the plant’s net heat rate.

- b. Provide detailed justification for not meeting these target values (for example, whether the combustion technology has a higher than normal parasitic load).
- c. Specify the fuel design-basis moisture content. Explain why the fuel is expected to be at this moisture content, if and how the moisture content will be monitored/controlled to meet this specification, and the resulting expected heat rate.

Table Three
Target Net Heat Rates (in Btu/kWh) for
Wood and Other Solid Fuel-Fired Steam Boilers³³

Capacity per Turbine	Stoker	Fluidized Bed
Equal to or greater than 1 MW and less than 10 MW	15,500	16,500
Equal to or greater than 10 MW and less than 25 MW	14,000	15,000
Equal to or greater than 25 MW	12,500	13,500

- 3. ***For combined heat and power plants:***
 - a. Specify the thermal load, and provide a projected annual load duration curve.
 - b. Describe the usefulness and intended uses of the thermal output, including information demonstrating the commitment of the thermal host.
 - c. Specify the ***overall*** plant efficiency, which DOER will use for evaluation of efficiency in the case of CHP plants, as well as the individual efficiencies for the electrical and thermal outputs.
- 4. ***For bio-reactors and plants using other emerging technologies:***
 - a. Specify and describe the technology to be used.
 - b. Specify the overall plant efficiency, as well as the individual efficiencies for energy generation and for production of other product(s).
 - c. Describe the products to be produced from the biomass refining or other processes and their intended use, including, if available and appropriate, contract arrangements.
 - d. Specify the projected annual volume of product production from refining or other processes.
- 5. ***For plants using small engine generators or combustion turbines:***

³³ Information from *Lessons Learned from Existing Biomass Power Plants* (a February 2000 report to the National Renewable Energy Laboratory, available on line at <http://www.nrel.gov/docs/fy00osti/26946.pdf>) was used in developing these net heat rate targets.

- a. Specify the type and size of equipment to be used, and whether it is, or would be if located in Massachusetts, regulated by MassDEP under its Engine and Combustion Turbine regulations at 310 CMR 7.00 et seq. and 310 CMR 70.00
 - b. Provide data, technical literature, or Internet hyperlinks to literature to enable DOER to compare the efficiency and other performance information of the proposed Unit with other units of the same type.
6. ***For plants using liquid bio-fueled steam boilers:***
- Provide data, technical literature, or Internet hyperlinks to literature to enable DOER to compare the efficiency and other performance information of the proposed Unit with other units of the same type.

B. Design of Fuel Conversion Process

Applicant shall include the following:

1. **For combustion-based conversion processes, specify the following:**
 - a. The method for feeding fuel to the combustion process.
 - b. The method for supplying and controlling combustion air.
 - c. A description of the actual combustion process (e.g., fuel is burned in suspension, on grates, etc.) and the degree and control of gasification of the fuel prior to combustion.
 - d. The process for collecting and discharging ash.
 - e. Factors considered in selecting this design. This should include, but not be limited to, any considerations regarding economics, fuel(s) to be used, emissions control, Generation Unit's planned use (e.g., peaking, backup, etc), type of location, space availability, etc.
 - f. Identify and provide a description of patents, if any, that would document that the project would utilize state-of-the-art design.
2. **For bioreactors and other non-combustion processes, specify the following:**
 - a. The method for introducing the fuel to the process.
 - b. How the fuel conversion process takes place, including the introduction of any catalyst(s) to the process.
 - c. The process for collecting and discharging any waste products from the conversion process.
 - d. Factors considered in selecting this design. This should include, but not be limited to, any considerations regarding economics, fuel(s) to be used and the Generation Unit's planned use.
 - e. Identify and provide a description of patents, if any, that would document that the project would utilize state-of-the-art design.

Secondary Eligibility Criteria

C. Fuel Handling and Conditioning

Applicant may describe and justify any of the following, as appropriate, but only if the proposed design features are beyond what is commercially practiced in the United States:

1. The process for verifying that the fuel meets the specifications provided to the suppliers.
2. The processes and equipment used for sorting the fuel at the site of the Unit, if necessary.
3. The process for storing the fuel, and how long it is expected to be in storage. Include any measures taken to maintain safety and quality during fuel handling and storage.
4. Any processes for preparing the fuel for combustion or other energy conversion processes and for moving the fuel to the equipment where it will be converted to usable energy.
5. For manufactured fuels, such as wood pellet, biodiesel, and bio-oil, describe the technology and process of fuel manufacturing, highlighting advances in this fuel processing technology and justification for using such fuel.

D. New Market Applications

Applicant may choose to provide, to the extent deemed appropriate, any or all of the following information:

1. Identification of other locations where the proposed biomass technology is currently in use at the proposed scale, both in the Northeast and elsewhere.
2. Identification of the energy resources and/or technology being supplanted by this project.
3. A discussion of the extent to which this technology should be replicable in other locations or applications.
4. A description of how this energy resource and technology were chosen for this application.
5. Any other information that may be useful to DOER in determining that implementation of this project, as described, would represent a new market application.

225 CMR 14.00 - RENEWABLE ENERGY PORTFOLIO STANDARD

Section

- 14.01: Authority
- 14.02: Definitions
- 14.03: Administration
- 14.04: Applicability
- 14.05: Eligibility Criteria for New Renewable Generation Units
- 14.06: Qualification Process for New Renewable Generation Units
- 14.07: Renewable Energy Portfolio Standard
- 14.08: Compliance Procedures for Retail Electricity Suppliers
- 14.09: Annual Compliance Filings for Retail Electricity Suppliers
- 14.10: Reporting Requirements
- 14.11: Inspection
- 14.12: Non-Compliance
- 14.13: Severability

14.01: Authority.

225 CMR 14.00 is promulgated pursuant to M.G.L. c.25A, § 11F.

14.02: Definitions.

Aggregation. A group of one or more Off-Grid Generation Units or behind the meter Generation Units that receives a single Statement of Qualification from the Division under criteria and procedures set forth at 225 CMR 14.05 (6).

Deleted: Business Day. A business day shall mean Monday through Friday, exclusive of state and federal legal holiday

Commercial Operation Date. The date that a Generation Unit first coordinates, schedules and produces power for sale, within the ISO-NE Control Area or within an adjacent Control area, having fulfilled ISO-NE metering requirements and been considered an active market participant by ISO-NE, which requires valid market database registration and activation, or, for a Generation Unit in an adjacent Control Area, has met equivalent requirements. In the case of a Generation Unit that has been moved from another location within the ISO-NE Control Area or within an adjacent Control Area, the date that such Generation Unit first produced electrical energy for sale at its original location. In the case of a Generation Unit that is connected to the End-Use Customer's side of the electric meter or produces Off-Grid Generation, the date that such Generation Unit first produces electrical energy.

Deleted: electrical energy

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Compliance Filing. A document filed annually by a Retail Electricity Supplier with the Division documenting compliance with 225 CMR 14.00, consistent with the format set forth in the Guidelines and submitted no later than the first day of July of the subsequent Compliance Year.

Compliance Year. A calendar year beginning January 1 and ending December 31, for which a Retail Electricity Supplier must demonstrate that it has met the requirements of 225 CMR 14.07 and 14.08.

Composite Fuel. A fuel that is fabricated or blended from both Eligible New Renewable Fuel(s) and ineligible fuel(s).

Control Area. A geographic region in which a common generation control system is used to maintain scheduled interchange of electrical energy within and without the region.

Division. The Massachusetts Division of Energy Resources, established by M.G.L. c. 25A.

Eligible Biomass Fuel. Fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash and other clean wood that are not mixed with other solid wastes; agricultural waste, animal waste, food material, and vegetative material as those terms are defined, or may subsequently be defined, by the Massachusetts Department of Environmental Protection; energy crops; biogas; organic refuse-derived fuel; construction and demolition (C&D) wood; or neat biodiesel and other neat liquid fuels that are derived from such fuel sources.

Deleted: at 310 CMR 16.02

Deleted: that is collected

Deleted: managed separately from municipal solid waste

Eligible New Renewable Fuel. An Eligible Biomass Fuel, landfill or anaerobic digester methane gas, or hydrogen derived from such fuels or from water using the electrical output of a Renewable Generation Unit, but not hydrogen derived using New Renewable Generation and not hydrogen derived directly or indirectly from ineligible fuels.

Deleted: hydrogen derived

End-Use Customer. A person or entity in Massachusetts that purchases electrical energy at retail from a Retail Electricity Supplier, except that a Generation Unit, taking station service at wholesale from ISO-NE or self-supplying from its other generating stations, shall not be considered an End-use Customer.

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External

Deleted: Contract. An External Transaction Unit Contract for Energy 1 or Energy 2 as defined in the New England Power Pool Market Rules and Procedures Section 12.2.1 (a), or any successor rule.

Generation Attribute. A non-price characteristic of the electrical energy output of a Generation Unit including, but not limited to, the Unit's fuel type, emissions, vintage and RPS eligibility.

Generation Unit. A facility that converts a fuel or an energy resource into electrical energy.

GIS Certificate. An electronic record produced by the NEPOOL GIS that identifies relevant Generation Attributes of each MWh accounted for in the NEPOOL GIS.

Guidelines. A set of clarifications, interpretations, and procedures, including forms, as developed by the Division to assist in compliance with the requirements of 225 CMR 14.00. The Division may issue revised Guidelines from time to time. Each Guideline is effective on its date of issuance or on such date as is specified therein, except as otherwise provided in 225 CMR 14.00.

Historical Generation Rate. The average annual electrical production from a Generation Unit that meets the requirements of 225 CMR 14.05 (1) (a), stated in megawatt-hours (MWhs), for the three calendar years 1995 through 1997, or for the first 36 months after the Commercial Operation Date if that date is after January 1, 1995.

Deleted: December 31, 1994

ISO-NE. ISO New England Inc., the regional transmission organization for most of New England, which is authorized by the Federal Energy Regulatory Commission (FERC) to exercise for the New England Control Area the functions required pursuant to the FERC's Order No. 2000 and the FERC's corresponding regulations.

Deleted: The Independent System Operator for

Deleted: , which is responsible for the dispatch of Generation Units and the management of transmission of electrical energy at wholesale for the New England Power Pool

NEPOOL GIS. The Generation Information System, which includes a generation information database and certificate system, operated by the New England Power Pool (NEPOOL), its designee or successor entity, that accounts for Generation Attributes of electrical energy consumed within imported into, or exported from NEPOOL.

Deleted: ISO-NE Market Settlement System.

Deleted: ISO-NE's market financial settlement system. ¶
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Naturally Flowing Water and Hydroelectric Unit. A Generation Unit that uses flowing water as the primary energy resource, with or without a dam structure or other means of regulating water flow, and that is not located at a facility that uses mechanical or electrical energy to pump water into a storage facility (i.e., a so-called "pumped-storage facility").¶

¶
NE-GIS. The New England

New Renewable Generation. The electrical energy output of a New Renewable Generation Unit or that portion of the electrical energy output of a Generation Unit that qualifies under a Vintage Waiver, pursuant to 225 CMR 14.05 (2), or under a Co-firing and Composite Fuel Waiver, pursuant to 225 CMR 14.05 (3).

Deleted: New England

New Renewable Generation Attribute. The Generation Attribute of the electrical energy output of a specific Generation Unit that derives from the Unit's production of New Renewable Generation.

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NE-GIS Certificate. A document produced by the NE-GIS that identifies the relevant Generation Attributes of each MWh accounted for in the NE-GIS.

New Renewable Generation Unit. A Generation Unit or Aggregation that has received a Statement of Qualification from the Division and that has a Commercial Operation date after December 31, 1997.

Deleted: with Ineligible Fuels

Off-Grid Generation. The electrical energy produced by a Generation Unit that is not connected to a utility transmission or distribution system.

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North American Electric Reliability Council Tag. An identification of an electrical energy interchange transaction assigned in accordance with rules set forth by the North American Electric Reliability Council

Operator. Any person or entity who has charge or control of a Generation Unit subject to 225 CMR 14.00, including without limitation an agent or lessee of the Owner, or an independent contractor.

Owner. Any person or entity who, alone or in conjunction with others, has legal ownership, a leasehold interest, or effective control over the real property or

property interest upon which a Generation Unit is located, or the airspace above said real property. For the purposes of this definition, "Owner" does not mean a person or entity holding legal title or security interest solely for the purpose of providing financing.

Renewable Generation. The electrical energy output of a Renewable Generation Unit.

Renewable Generation Attribute. The Generation Attribute of the electrical energy output of a specific Generation Unit that derives from the Unit's production of Renewable Generation.

Renewable Generation Unit. A Generation Unit that uses any of the fuels, energy resources or technologies set forth in 225 CMR 14.05 (1) (a); that uses flowing water as the primary energy resource, with or without a dam structure or other means of regulating water flow, and that is not located at a facility that uses mechanical or electrical energy to pump water into a storage facility (i.e., a so-called "pumped-storage facility"); or that uses waste-to-energy that is a component of conventional municipal solid waste plant technology in commercial use.

Deleted:), Naturally Flowing Water and Hydroelectric,

Retail Electricity Product. An electrical energy offering that is distinguished by its Generation Attributes and that is offered for sale by a Retail Electricity Supplier to End-Use Customers.

Retail Electricity Supplier. A person or entity that sells electrical energy to End-Use Customers in Massachusetts, including but not limited to electric utility distribution companies supplying basic service or any successor service to End-Use Customers. A Municipal Lighting Plant shall be considered a Retail Electricity Supplier; however, it shall be exempt from the obligations of a Retail Electricity Supplier under 225 CMR 14.00 so long as and insofar as it is exempt from the requirements to allow competitive choice of generation supply pursuant to M.G.L. c. 164 § 47A.

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RPS Qualified Generation Unit. A Generation Unit or Aggregation that has received a Statement of Qualification from the Division.

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Statement of Qualification. A written document from the Division that qualifies a Generation Unit or Aggregation as a New Renewable Generation Unit, or that qualifies a portion of the annual electrical energy output of a Generation Unit or Aggregation as New Renewable Generation.

Deleted: any subsequently enacted system. ¶
¶

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Valid Air Permit. Within the United States, a current and effective authorization, license, certificate, or like approval to construct and/or operate a source of air pollution, issued or required by the regulatory agency designated in the applicable State Implementation Plan to issue permits under the Clean Air Act, 42 U.S.C. §§

7401, et seq., as amended. In jurisdictions outside of the United States, it shall be a document demonstrating an equivalent authorization.

Vintage Generation Unit. A Generation Unit that meets the requirements of 225 CMR 14.05 (1) and that has a Commercial Operation Date of December 31, 1997, or earlier.

Deleted: (a)

Vintage Generation. The electrical energy output of a Vintage Generation Unit during the period of the Unit's Historical Generation Rate.

Deleted: calendar years 1995 through 1997

14.03: Administration.

225 CMR 14.00 shall be administered by the Division.

14.04: Applicability.

225 CMR 14.00 applies to Retail Electricity Suppliers and to the Owners, Operators or authorized agents of New Renewable Generation Units.

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14.05: Eligibility Criteria for New Renewable Generation Units.

(1) Eligibility Criteria. A Generation Unit may qualify as a New Renewable Generation Unit subject to the limitations set forth herein.

(a) Fuels, Energy Resources and Technologies. The Generation Unit shall use one or more of the fuels, energy resources and/or technologies listed below.

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1. Solar photovoltaic or solar thermal electric energy.

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2. Wind energy.

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3. Ocean thermal, wave or tidal energy.

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4. Fuel cells using an Eligible New Renewable Fuel.

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5. Landfill methane gas or anaerobic digester gas, provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas.

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Deleted: Pile burn, stoker combustion or similar technologies shall not constitute an advanced biomass conversion technology.

6. Low-emission, advanced biomass power conversion technologies using an Eligible Biomass Fuel. A Generation Unit may qualify as an RPS Qualified Generation Unit, provided it uses an Eligible Biomass Fuel, subject to the limitations set forth herein.

Deleted: A Generation Unit with a Commercial Operation Date after December 31, 1997, that requires an air permit, must possess a Valid Air Permit issued after December 31, 1997, and demonstrate to the satisfaction of the Division that its emission rates are consistent with emission rates for comparable biomass units as prescribed by the Massachusetts Department of Environmental Protection.

a. The Division shall set forth in Guidelines low-emission eligibility criteria and eligibility criteria for

advanced biomass power conversion technologies; such criteria are effective on the issuance date of such Guidelines. The Division may issue revised Guidelines from time to time; any eligibility criteria in the revised Guidelines shall be effective twenty-four months from their date of issuance.

b. A Generation Unit shall be found to utilize an advanced biomass power generation technology if the Division determines that the Generation Unit as designed, constructed, or retrofitted meets the eligibility criteria set forth in the Guidelines that are applicable for the date on which the Division receives the Unit's Statement of Qualification application.

Deleted: A Generation Unit with a Vintage Waiver that requires an air permit must possess a Valid Air Permit and demonstrate to the satisfaction of the Division that its emission rates are consistent with emission rates for comparable biomass units as prescribed by the Massachusetts Department of Environmental Protection during the period January 1, 1990, through December 31, 1997.

c. A Generation Unit with a Commercial Operation Date after December 31, 1997, that requires an air permit, must possess a Valid Air Permit, and must demonstrate to the satisfaction of the Division that the emission rates of the Unit do not exceed limits set forth in the Guidelines that are applicable for the date on which the Division receives the Unit's Statement of Qualification application.

Deleted: A Generation Unit that does not require an air permit must demonstrate to the satisfaction of the Division that its emission rates are consistent with emission rates for comparable biomass units in a manner described in the Guidelines.

d. A Generation Unit with a Vintage Waiver that requires an air permit must possess a Valid Air Permit and demonstrate to the satisfaction of the Division that the emission rates of the Unit do not exceed limits set forth in the Guidelines that are applicable for the date on which the Division receives the Unit's Statement of Qualification application.

e. A Generation Unit that does not require an air permit must demonstrate to the satisfaction of the Division that its emissions are consistent with criteria set forth in the Guidelines that are applicable for the date on which the Division receives the Unit's Statement of Qualification application.

f. In the case of a Generation Unit for whose size, type, or fuel the Guidelines do not set forth applicable emission limits, the Division will determine appropriate limits in consultation with the Massachusetts Department of Environmental Protection.

(b) Commercial Operation Date. The Commercial Operation Date shall be after December 31, 1997, unless the Generation Unit receives a Vintage Waiver pursuant to 225 CMR 14.05 (2).

(c) Metering. The electrical energy output from a Generation Unit shall be verifiable by ISO-NE unless the Generation Unit is an RPS Qualified Generation Unit pursuant to the Special Provisions for a Small Generation Unit set forth in 225 CMR 14.05 (4).

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(d) Location. The Generation Unit location is subject to the limitations set forth herein.

1. Metering Distributed Generation. If the Generation Unit is wired both to the electrical system on the End-Use Customer's side of a retail electric meter and to the grid side of the meter, such Unit shall be metered in a manner satisfactory to the Division to verify the electrical output of the Unit to the grid. If the Generation Unit is located outside of Massachusetts, only that portion of the electrical energy delivered to the grid can be eligible as New Renewable Generation.

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Off-Grid

Deleted: produces Off-Grid Generation, such Unit must be located in Massachusetts.¶

¶ Behind the Meter Generation. If the Generation Unit

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¶ Vintage Generation. If the Generation Unit is located on or

Deleted: parcel of land, landfill or structure that was the site of Vintage Generation between

Deleted: years 1995 through 1997, such

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Deleted: Unit or a Generation Unit located at the site of Vintage Generation may qualify as a New Renewable Generation Unit subject to the limitations set forth herein.

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2. Behind the Meter Generation. If the Generation Unit is wired only to the electrical system on the End-Use Customer's side of a retail electric meter in such a manner that it displaces all or part of the metered consumption of the End-use Customer, it must be located in Massachusetts.

3. Off-Grid Generation. If the Generation Unit produces Off-Grid Generation, such Unit must be located in Massachusetts.

4. Vintage Landfill Generation. If the Generation Unit uses landfill methane gas and is located on a parcel of land or landfill that was the site of Vintage Generation from landfill methane gas at any time during calendar years 1995 through 1997, such Unit must receive a Vintage Waiver pursuant to 225 CMR 14.05 (2).

(2) Vintage Waiver. All or a portion of the electrical energy output of a Vintage Generation Unit, a Retrofitted Biomass Generation Unit, or a Landfill Generation Unit located at the site of Vintage Landfill Generation may qualify as New Renewable Generation provided the Generation Unit meets the eligibility requirements of 225 CMR 14.05, subject to the limitations set forth herein.

(a) Vintage Generation Units. The portion of the electrical energy output of a Vintage Generation Unit that qualifies as New Renewable Generation in any Compliance Year is that portion greater than the Unit's Historical Generation Rate.

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(b) Landfill Generation Units Located at the Site of Vintage Landfill Generation. The portion of the electrical energy output of a Generation Unit subject to 225 CMR 14.05 (1) (d) 4 that qualifies as New Renewable Generation in any Compliance Year is that portion greater than the aggregate Historical Generation Rate of the Vintage Landfill Generation

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(b)

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Unit(s) located on such parcel of land ~~or~~ landfill at any time during calendar years 1995 through 1997.

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(c) Non-Applicability of the Vintage Waiver Provisions. A Vintage Waiver is not required, and the Vintage Waiver provisions do not apply to Generation Units described in sub-sections 1, 2, and 3 below, subject to the limitations set forth in sub-section 4 below.

Deleted: Co-Firing With Ineligible Fuels Waiver. A Generation Unit that uses an ineligible fuel in conjunction with an Eligible New Renewable Fuel may qualify as a New Renewable Generation Unit

1. A Generation Unit that previously generated electricity outside of the ISO-NE Control Area and outside Control Areas adjacent to the ISO-NE Control Area, and that has been relocated into one of said Control Areas after December 31, 1997.

2. A Generation Unit that did not utilize an Eligible Renewable Fuel at any time prior to January 1, 1998.

3. A Generation Unit that replaces a Generation Unit that operated on the same site prior to January 1, 1998, except as provided at 225 CMR 14.05 (2) (b).

4. If a Generation Unit described in sub-section 1, 2, or 3 above utilizes an Eligible Biomass fuel, it must demonstrate to the satisfaction of the Division that its biomass power conversion technology and emission rates meet the criteria and limits set forth in the Guidelines that are applicable for the date on which the Division receives the Unit's Statement of Qualification application.

(3) Co-Firing and Composite Fuel Waiver. All or a portion of the electrical energy output of a Generation Unit that uses an ineligible fuel in conjunction with an Eligible New Renewable Fuel, whether by co-firing such fuels or by using a Composite Fuel, may qualify as New Renewable Generation provided the Generation Unit meets the eligibility requirements of 225 CMR 14.05, subject to the limitations set forth herein.

(a) The portion of the total electrical energy output that qualifies as New Renewable Generation in a given time period shall be equal to the ratio of the net heat content of the Eligible New Renewable Fuel consumed to the net heat content of all fuel consumed in that time period.

(b) If using an Eligible Biomass Fuel, the entire Generation Unit must meet the requirements of low-emission, advanced biomass power conversion technologies as set forth in 225 CMR 14.05 (1) (a) 6.

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(c) The provisions of this section shall not apply to the incidental use of ineligible fuels for the purpose of cold starting a Generation Unit that otherwise exclusively uses an Eligible New Renewable Fuel.

(4) Special Provisions for a Small Generation Unit. A Generation Unit whose metered data are not provided to the ISO-NE Settlement Market System or any subsequently enacted system may qualify as an RPS Qualified Generation Unit provided the Generation Unit meets the eligibility requirements of 225 CMR 14.05, subject to the limitations set forth herein.

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(a) The Generation Unit must be able to verify its electrical energy output in a manner satisfactory to the Division.

(b) The Generation Unit Owner, Operator or authorized agent must provide assurances satisfactory to the Division that the New Renewable Generation Attributes have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

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(5) Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area. A Generation Unit located in a Control Area adjacent to the ISO-NE Control Area may qualify as a New Renewable Generation Unit provided that the Generation Unit meets the eligibility requirements of 225 CMR 14.05. The portion of the total electrical energy output that qualifies as New Renewable Generation in a given time period shall meet requirements of Rule 2.7 of the NEPOOL GIS Operating Rules, or any successor rule, as well as the following:

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(a) A unit-specific bilateral contract that provides for an External Transaction, as defined in the ISO-NE Transmission, Markets & Services Tariff, Section III – Market Rule 1, or any successor tariff or rule shall be executed between the Generation Unit Owner, Operator, or authorized agent and an electrical energy purchaser located in the ISO-NE Control Area for delivery of the Unit's electrical energy to the ISO-NE Control Area. The unit-specific bilateral contract shall include associated transmission rights for delivery of the Unit's electrical energy over the ties from an adjacent Control Area to the ISO-NE Control Area.

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(b) The Generation Unit Owner, Operator, or authorized agent shall provide documentation, satisfactory to the Division, that:

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1. the electrical energy delivered pursuant to the unit-specific bilateral contract was settled in the ISO-NE Settlement Market System;

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2. the Generation Unit produced, during each hour of the applicable month, the amount of MWhs claimed, as verified by the NEPOOL GIS administrator; if the adjacent Control Area employs a Generation Information System that is comparable to the NE-GIS, such system may be used to support such documentation;

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3. the electrical energy delivered under the unit-specific bilateral contract received a North American Electric Reliability Council Tag (NERC Tag) confirming transmission from the adjacent Control Area to the ISO-NE Control Area; and

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4. the New Renewable Generation Attributes have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

(6) Special Provisions for Aggregations. An Aggregation of one or more Off-Grid Generation Units, or behind the meter Generation Units, each of which meets the requirements of 225 CMR 14.05, may receive a single Statement of Qualification and be treated as a single Qualified Renewable Generation Unit under criteria and procedures set forth in this section.

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14.06: Qualification Process for New Renewable Generation

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(1) Statement of Qualification. The Owner or Operator of a

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Deleted: New Renewable Generation Unit must submit an application on form(s) provided by the Division. If the Division finds that the Generation Unit meets the requirements for eligibility as a New Renewable Generation Unit pursuant to 225 CMR 14.05, the Division will provide the Owner or Operator of such Unit with a Statement of Qualification.

Deleted: (a) If the Generation Unit qualifies as a New Renewable Generation Unit pursuant to the Vintage Waiver, Co-firing with Ineligible Fuels Waiver, the Special Provisions for a Small Generation Unit, or the Special Provisions for a Generation Unit Located Outside the ISO-NE Control Area, the Statement of Qualification shall so indicate and shall include applicable restrictions. ¶
(b) If the Unit does not meet the requirements for eligibility as a New Renewable Generation Unit, the Division shall provide written notice to the Owner or Operator that the Generation Unit does not qualify as a New Renewable Generation Unit, including a statement of the reasons it does not qualify. ¶
(2)

(a) Each Generation Unit in such Aggregation must use the same fuel, energy resource and technology, as specified at 225 CMR 14.05 (1) (a).

(b) All of the Owners, Operators or authorized agents of Generation Units within the Aggregation must enter agreements with an entity that serves as the authorized agent for the Aggregation in all dealings with the Division and with the NEPOOL GIS, and such agreement must include procedures by which the electrical energy output of each Unit shall be reported to and can be verified by the authorized agent in a manner satisfactory to the Division.

(c) The authorized agent of the Aggregation must establish and maintain a GIS Generator's account at the NEPOOL GIS under the NEPOOL GIS Operating Rules, including all provisions for "Non-NEPOOL Generator Representatives," as that term is defined at Rule 2.1 of those Rules, or any successor rules.

(d) The authorized agent of the Aggregation must comply with all provisions of 225 CMR 14.00 that pertain to the Owner, Operator or authorized agent of a Generation Unit.

(e) The authorized agent of the Aggregation must provide assurances satisfactory to the Division that the New Renewable Generation Attributes associated with the electrical energy output of the Generation Units within the Aggregation have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

14.06: Qualification Process for New Renewable Generation.

(1) Application for a Statement of Qualification. Application for a Statement of Qualification shall be submitted to the Division using forms provided by the

Division. Such application may be submitted by the Owner, Operator or authorized agent of the Generation Unit or Aggregation.

(2) Statement of Qualification. If the Division finds that all or a portion of the electrical energy output of a Generation Unit or of an Aggregation meets the requirements for eligibility as New Renewable Generation pursuant to 225 CMR 14.05, the Division will provide the Owner, Operator, or authorized agent of such Unit or Aggregation with a Statement of Qualification.

(a) If all or a portion of the electrical energy output of a Generation Unit qualifies as New Renewable Generation pursuant to the Vintage Waiver, Co-firing and Composite Fuel Waiver, the Special Provisions for a Small Generation Unit, the Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area, or the Special Provisions for an Aggregation, the Statement of Qualification shall so indicate and shall include applicable restrictions.

(b) If the Generation Unit or Aggregation does not meet the requirements for eligibility as an RPS Qualified Generation Unit, the Division shall provide written notice to the Owner, Operator or authorized agent of such finding, including a statement of the reasons it does not qualify.

(3) Review Procedures.

(a) The Division will act on an administratively complete application submitted pursuant to 225 CMR 14.06 (1) within 90 days from the date such application is received by the Division.

(b) The Division shall provide an opportunity for public comment on such application for a Statement of Qualification if the Generation Unit or Aggregation would:

1. use an Eligible Biomass Fuel and is not required to have a Valid Air Permit;

2. co-fire an Eligible New Renewable Fuel in a Generation Unit in conjunction with ineligible fuels;

3. use a Composite Fuel;

4. use an Eligible New Renewable Fuel in a Generation Unit that originally used ineligible fuels; or

5. use an Eligible Biomass Fuel in conjunction with a Vintage Waiver.

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(c) The Division may provide an opportunity for public comment on any other application for a Statement of Qualification.

(4) RPS Effective Date. The date on which the electrical energy output of an RPS Qualified Generation Unit is first deemed by the Division to be qualified as New Renewable Generation shall be the Commercial Operation Date, except that, in the case of a biomass Unit, the RPS Effective Date shall be the later of the Commercial Operation Date or the date on which the Division determines that the Unit has commenced compliance with the low-emission conditions in its Statement of Qualification.

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(5) Notification Requirements for Change in Eligibility Status. The Owner, Operator, or authorized agent of an RPS Qualified Generation Unit shall notify the Division of any changes in the technology, operation, emissions, fuel sources, energy resources, or other characteristics of the Generation Unit that would affect the eligibility of the Unit as an RPS Qualified Generation Unit. The Owner, Operator, or authorized agent shall submit the notification to the Division no later than 5 days following the end of the month during which such changes were implemented. The notice shall state the date the changes were made to the Generation Unit and describe the changes in sufficient detail to enable the Division to determine if a change in eligibility is warranted.

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(6) Notification Requirements for Change in Ownership, Generation Capacity, or Contact Information. The Owner, Operator, or authorized agent of an RPS Qualified Generation Unit shall notify the Division of any changes in the ownership, generation capacity, or contact information of the Generation Unit. The Owner, Operator, or authorized agent shall submit the notification to the Division no later than five days following the end of the month during which such changes were implemented.

Deleted: (4) Suspension or Revocation of Statement of Qualification. The Division may suspend or revoke a Statement of Qualification if the Owner or Operator of a New Renewable Generation Unit fails to comply with 225 CMR 14.00. ¶

(5) Advisory Ruling. A Generation Unit Owner or Operator may request an advisory ruling from the Division to determine whether a Generation Unit would qualify as a New Renewable Generation Unit.

(7) Time Limit for Project Implementation. Any Statement of Qualification issued on or after the effective date of this section shall expire forty-eight months after the date of issue (the expiration date) unless the Commercial Operation Date of the Generation Unit or Aggregation is on or before the expiration date. The Division may, at its discretion, grant an extension of the expiration date of the Statement of Qualification upon petition by the Owner, Operator, or authorized agent of the Generation Unit or Aggregation. If a Statement of Qualification expires, the Owner, Operator or authorized agent must submit a new Statement of Qualification application, and the decision of the Division on such new application will be made in accordance with the regulations and criteria that are applicable on the date that the Division receives such new application.

(8) Time Limit for Statement of Qualification Applications for Generation Units with Existing Advisory Rulings. Any proposed Generation Unit that has received an Advisory Ruling from the Division prior to the effective date of this Section, 225 CMR 14.06 (8), must submit a completed Statement of Qualification

application no later than six months after the effective date of this Section, failing which its Advisory Ruling will expire.

(9) Suspension or Revocation of Statement of Qualification. The Division may suspend or revoke a Statement of Qualification if the Owner, Operator, or authorized agent of an RPS Qualified Generation Unit fails to comply with any provision of 225 CMR 14.00.

14.07: Renewable Energy Portfolio Standard.

(1) Minimum Standard. The total annual sales of each Retail Electricity Product sold to Massachusetts End-Use Customers by a Retail Electricity Supplier shall include a minimum percentage of electrical energy sales with New Renewable Generation Attributes, as follows:

Massachusetts Renewable Energy Portfolio Standard

MINIMUM PERCENTAGES OF ANNUAL ELECTRICAL ENERGY SALES WITH NEW RENEWABLE GENERATION ATTRIBUTES

Compliance Year	Cumulative Minimum Percentage
2003	1.0
2004	1.5
2005	2.0
2006	2.5
2007	3.0
2008	3.5
2009	4.0

(2) Post-2009 Standards. After 2009, the Minimum Standard shall increase by one percent per Compliance Year until the Division suspends the annual increase. At no time shall the Minimum Standard decrease below the percentage in effect at the time a suspension is implemented. Following a suspension, the Division, at its discretion, may reinstitute annual one percent increases. No later than December 31, 2007, the Division shall establish the annual one percent increase, if any, in the Minimum Standard for each Compliance Year from 2010 through 2014. No later than December 31, 2007, the Division shall set the date by which the subsequent such decision shall be issued.

14.08: Compliance Procedures for Retail Electricity Suppliers.

(1) Standard Compliance. Each Retail Electricity Supplier shall be deemed to be in compliance with 225 CMR 14.00 if the information provided in the Compliance Filing submitted pursuant to 225 CMR 14.09 is true and accurate and demonstrates compliance with 225 CMR 14.07. A Retail Electricity Supplier

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shall demonstrate to the satisfaction of the Division that New Renewable Generation Attributes used for compliance have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

(2) Banked Compliance. A Retail Electricity Supplier may use a quantity of New Renewable Generation Attributes produced in one Compliance Year for compliance in either or both of the two subsequent Compliance Years, subject to the limitations set forth herein and provided that the Retail Electricity Supplier is in compliance with 225 CMR 14.00 for all previous Compliance Years. In addition, the Retail Electricity Supplier shall demonstrate to the satisfaction of the Division that such Generation Attributes:

- (a) were in excess of the New Renewable Generation Attributes needed for compliance in the Compliance Year in which they were generated, and that such excess Attributes have not previously been used for compliance with 225 CMR 14.00;
- (b) do not exceed thirty percent of the Generation Attributes needed by the Retail Electricity Supplier for compliance in the year they were generated;
- (c) were produced by the generation of electrical energy sold to Massachusetts End-Use Customers during the Compliance Year in which they were generated; and
- (d) have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

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Deleted: New Renewable Generation Attributes produced during calendar year 2002 for compliance in Compliance Year 2003, subject to the limitations set forth herein.¶

¶ The Retail Electricity Supplier shall demonstrate to the satisfaction

Deleted: the Division that such Generation Attributes were produced by the generation of electrical energy sold to Massachusetts End-Use Customers during Calendar Year 2002.¶

¶ (b) The Retail Electricity Supplier must file an Early Compliance Filing pursuant to 225 CMR 14.09 (2).¶

(c) The Retail Electricity Supplier shall demonstrate to the satisfaction of the Division that such Generation Attributes have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts. ¶

(3) Banked Compliance. A Retail Electricity Supplier may use

(3) Alternative Compliance. A Retail Electricity Supplier may discharge its obligations under 225 CMR 14.07 (in whole or in part) for any Compliance Year by making an Alternative Compliance Payment (ACP) to the Massachusetts Technology Park Corporation, established by M.G.L. c. 40J, or other designee as determined by DOER.

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- (a) Procedures. A Retail Electricity Supplier shall receive Alternative Compliance Credits from the Division, subject to the following:
 - 1. The quantity of Credits, specified in MWhs, that can be applied to its obligations under 225 CMR 14.07 shall be determined by calculating the ratio of the total of ACPs paid for the Compliance Year to the ACP Rate for that Compliance Year.
 - 2. The ACP Rate shall be \$50 dollars per MWh for Compliance Year 2003. For each subsequent Compliance Year, the Division shall publish the ACP Rate by January 31 of the Compliance Year. The ACP Rate shall be equal to the previous

year's ACP Rate adjusted up or down according to the previous year's Consumer Price Index.

3. The Retail Electricity Supplier shall include with its Annual Compliance Filing copies of any ACP receipt(s) for ACPs made during the Compliance Year.

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(b) Use of Funds. The Division shall oversee the use of ACP funds so as to maximize the commercial development of New Renewable Generation Units.

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14.09: Annual Compliance Filings for Retail Electricity Suppliers.

(1) Date of Annual Compliance Filing. The Retail Electricity Supplier annually shall file a Compliance Filing with the Division no later than the first day of July of the subsequent Compliance Year.

(2) Contents of Annual Compliance Filing. For each Retail Electricity Product, the Filing shall document compliance with the provisions of 225 CMR 14.07 and 14.08 to the satisfaction of the Division and shall include, but not be limited to, the following:

(a) Total Electrical Energy Sales to End-Use Customers. Documentation of the total MWhs of electrical energy sold by the Retail Electricity Supplier to End-Use Customers in the Compliance Year. Such sales are defined herein as the total quantity of the Supplier's certificates obligation that the Supplier correctly allocated to all of the Supplier's Massachusetts retail subaccounts in the NEPOOL GIS, pursuant to Part 4 of the NEPOOL GIS Operating Rules, or any successor rules.

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(b) Electricity Sales to End-Use Customers by Product. Documentation of the total MWhs of each Retail Electricity Product sold to End-Use Customers in the Compliance Year, verified by an independent third party satisfactory to the Division, consistent with the Guidelines. Such sales are defined herein as the quantity of the Supplier's certificates obligation that the Supplier correctly allocated to each of the Supplier's Massachusetts retail subaccounts at the NEPOOL GIS, pursuant to Part 4 of the NEPOOL GIS Operating Rules, or any successor rules. The Division shall keep product information confidential to the extent permitted by law.

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(c) Attributes Allocated from the Compliance Year. Documentation of the total MWhs of each Retail Electricity Product sold to End-Use Customers that was New Renewable Generation produced by RPS Qualified Generation Units in the Compliance Year, as follows:

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1. For electrical energy transactions included in the ISO-NE Settlement Market System, the Compliance Filings shall include

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documentation from the NEPOOL GIS administrator of the Retail Electricity Supplier's ownership of GIS Certificates representing New Renewable Generation produced by RPS Qualified Generation Units during the Compliance Year.

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2. For electrical energy transactions not included in the ISO-NE Settlement Market System, but for which the Retail Electricity Supplier has secured GIS Certificates from the NEPOOL GIS administrator, the Compliance Filings shall include documentation from the NEPOOL GIS administrator of the Retail Electricity Supplier's ownership of GIS Certificates representing New Renewable Generation produced by RPS Qualified Generation Units during the Compliance Year.

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3. For electrical energy transactions not included in the ISO-NE Settlement Market System, and for which the Retail Electricity Supplier has not secured GIS Certificates from the NEPOOL GIS administrator, the Compliance Filing shall include documentation verified by an independent third party satisfactory to the Division, consistent with the Guidelines, including but not limited to the following:

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a. the identification of each RPS Qualified Generation Unit from which New Renewable Generation Attributes were claimed by the Retail Electricity Supplier for its compliance in the Compliance Year;

- Deleted: New Renewable

b. the quantity of New Renewable Generation produced by each such Unit for each applicable month of the Compliance Year; and

c. assurances satisfactory to the Division that the New Renewable Generation Attributes have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

(d) Attributes Allocated from Banked Compliance. Allocation by Retail Electricity Product of any quantity of Attributes banked from one or both of the two previous years pursuant to 225 CMR 14.08 (2) that are used to demonstrate compliance in the current Compliance Year;

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(f) Alternative Compliance Credits. Allocation by Retail Electricity Product of any Alternative Compliance Credits claimed pursuant to 225 CMR 14.08 (3), along with a copy of any Alternative Compliance Payment receipt(s);

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- (e) Attributes Allocated from Banked Compliance. Allocation by Retail Electricity Product of any Attributes banked from one or both of the two previous years pursuant to 225 CMR 14.08 (3)
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(g) Attributes Banked for Future Compliance. Calculation of the quantity of New Renewable Generation Attributes, if any, that the Retail Electricity Supplier anticipates claiming for purposes of Banked Compliance in subsequent years under the Banked Compliance provisions of 225 CMR 14.08 (2); and

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(h) Renewable Generation Attributes. Documentation from the NEPOOL GIS administrator of the total electrical energy sales to End-Use Customers in the Compliance Year associated with Renewable Generation Attributes.

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14.10: Reporting Requirements.

(1) Certification. Any person required by 225 CMR 14.00 to submit documentation to the Division shall provide:

- (a) name, title and business address;
- (b) the person's authority to certify and submit the documentation to the Division; and
- (c) the following certification: "I hereby certify, under the pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and imprisonment."

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(2) Early Compliance Filing. A Retail Electricity Supplier that anticipates claiming 2002 New Renewable Generation Attributes for purposes of compliance in 2003 under the Early Compliance provisions of 225 CMR 14.08 (2) shall submit to the Division an Early Compliance Filing no later than July 1, 2003. Such Attributes shall be reported in the Filing pursuant to the documentation requirements of 225 CMR 14.09 (1) (c). ¶

(2) Annual Renewable Energy Resource Report. The Division will produce an annual report that summarizes information submitted to the Division by Retail Electric Suppliers in the Annual Compliance Filing submitted to the Division pursuant to 225 CMR 14.09 (1) (a) and (h).

(3) Identification of Renewable Generation Units.

(a) The Division shall inform the NEPOOL GIS administrator which Generation Units should be designated as Renewable Generation Units pursuant to 225 CMR 14.00.

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(b) An Owner, Operator or authorized agent of a Generation Unit that does not participate in the NEPOOL GIS may petition the Division to have the Unit designated as a Renewable Generation Unit.

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14.11: Inspection.

(1) Document Inspection. The Division may audit the accuracy of all information submitted pursuant to 225 CMR 14.00. The Division may request

and obtain from any Owner, Operator or authorized agent of a Qualified Renewable Generation Unit and any Retail Electricity Supplier information that the Division determines necessary to monitor compliance with and enforcement of 225 CMR 14.00.

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(2) Audit and Site Inspection. Upon reasonable notice to a Retail Electricity Supplier or RPS Qualified Generation Unit Owner, Operator or authorized agent, the Division may conduct audits, which may include inspection and copying of records and/or site visits to an RPS Qualified Generation Unit or a Retail Electricity Supplier's facilities, including, but not limited to, all files and documents that the Division determines are related to compliance with 225 CMR 14.00.

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14.12: Non-Compliance.

Any Retail Electricity Supplier or Owner, Operator or authorized agent of an RPS Qualified Generation Unit that fails to comply with the requirements of 225 CMR 14.00 shall be subject to the following provisions:

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(1) Notice of Non-Compliance. A failure to comply with the requirements of 225 CMR 14.00 shall be determined by the Division. A written Notice of Non-Compliance shall be prepared and delivered by the Division to any Retail Electricity Supplier or Owner, Operator or authorized agent of an RPS Qualified Generation Unit that fails to comply with the requirements of 225 CMR 14.00. The Notice of Non-Compliance shall describe the Requirement(s) with which the Retail Electricity Supplier, Owner, Operator or authorized agent failed to comply and the time period of such non-compliance.

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(2) Publication of Notice of Non-Compliance. A Notice of Non-Compliance may be published on the Division web-site and in any other media deemed appropriate by the Division. Such publication may remain posted until the Retail Electricity Supplier or Owner, Operator or authorized agent returns to compliance as determined by the Division.

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(3) Planning Requirement. A Retail Electricity Supplier that fails to meet the requirements of 225 CMR 14.07 during a Compliance Year shall submit a plan for achieving compliance for the subsequent three years. The plan shall be filed with the Division no later than the first day of September of the Compliance Year subsequent to the Compliance Year for which the Retail Electricity Supplier was out of compliance.

(4) Suspension or Revocation of License. The Division shall refer its findings of non-compliance to the Department of Telecommunications and Energy. A Retail Electricity Supplier that fails to comply with 225 CMR 14.00 may be subject to the Department of Telecommunications and Energy Licensure Action(s) under 220 CMR 11.07 (4) (c) (1).

14.13: Severability.

If any provision of 225 CMR 14.00 is declared invalid, such invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.