

## Section

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14.01: Authority

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

14.02: Definitions

Advancement of Biomass Conversion Generation Unit. A Generation Unit that utilizes an Eligible Biomass Woody Fuel determined by the Department to significantly advance biomass energy conversion by either 1) utilizing a new energy conversion technology or 2) processing the woody biomass fuel in a new manner, but in no instance shall the Unit use a single cycle steam turbine generator. The Unit shall be amongst the first installed Generation Units, and demonstrate advancement in the commercial applicability, including advancements in the control and reduction of emissions other than greenhouse gas emissions, of biomass energy.

Aggregation. A group of one or more Generation Units that receives a single Statement of Qualification from the Department under criteria and procedures set forth in 225 CMR 14.05(6).

Alternative Compliance Credit. A credit obtained by a Retail Electricity Supplier upon making an Alternative Compliance Payment. Such credit is used to document compliance with 225 CMR 14.07. One unit of credit shall be equivalent to the RPS Class I Renewable Generation Attribute associated with one MWh of electrical energy output from a RPS Class I Renewable Generation Unit, or one unit of credit shall be equivalent to the Solar Carve-Out Renewable Generation Attribute associated with one MWh of electrical energy output from a Solar Carve-Out Renewable Generation Unit.

Alternative Compliance Payment (ACP). A payment of a certain dollar amount per MWh, resulting in the issuance of Alternative Compliance Credits, which a Retail Electricity Supplier may submit to the Department in lieu of providing RPS Class I Renewable Generation Attributes or Solar Carve-Out Renewable Generation Attributes required under 225 CMR 14.07.

Authorized Agent. A person or entity that serves under an agreement entered into by each of the Owners or Operators of Generation Units within an Aggregation for all dealings with the Department and with the NEPOOL GIS.

Biomass Fuel Certificate. A certificate issued in accordance with rules established by the Department in the Biomass Eligibility and Certificate Guideline that (1) represents one ton, equal to 2000 pounds, of supply of Eligible Biomass Woody Fuel, (2) specifies the source of the wood and, (3) specifies the woods eligibility as Forest Derived Residues, Forest Derived Thinnings, Forest Salvage, Non-Forest Derived Residues, or Dedicated Energy Crops. For Forest Derived Residues and Forest Derived Thinnings, the Certificate shall reference the relevant Eligible Forest Biomass Tonnage Report, and include any additional information deemed necessary by the Department.

Biomass Input Heat Content. The thermal energy content, measured in MWh, of biomass fuel as it is input into a Generation Unit over a period of time. For the purpose of wood chips, the value will be determined using a methodology to be provided by the Department in the Overall Efficiency and Greenhouse Gas Analysis Guideline. The methodology will include a weighted average of all the metered weight of utilized biomass fuel types (as differentiated by typical moisture content), and an assigned heat content from referenced literature to each biomass type. For processed biomass fuels, the thermal energy content shall be documented to the satisfaction of the Department by an independent testing laboratory.

Blended Fuel. A liquid or gaseous fuel that is blended from both Eligible RPS Class I Renewable Fuel(s) and ineligible fuel(s), a portion of whose electrical energy output may qualify as RPS Class I Renewable Generation under criteria set forth in 225 CMR 14.05(3).

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

Certificates Obligation. A term defined in the NEPOOL GIS Operating Rules at Rule 4.1(b), or any successor rule.

Co-Mingled Biomass Woody Fuel. Any woody biomass fuel, that is clean and devoid of non-woody biomass, paints, stains or other contaminants, and fossil fuel derived materials, and which is physically co-mingled or mixed with Eligible Biomass Woody Fuel.

Commercial Operation Date. The date that a Generation Unit first produces electrical energy for sale within the ISO-NE Control Area or within an adjacent Control Area. In the case of a Generation Unit that has been moved from a location within the ISO-NE Control Area or within an adjacent Control Area to another location in one of those Control Areas, the date that such Generation Unit first produced electrical energy for sale at its earliest location in those Control Areas. In the case of a Generation Unit that is connected to the End-use Customer's side of the electric meter, the date on which the local distribution company grants approval for the Generation Unit to interconnect with the grid. In the case of a Generation Unit that produces Off-grid Generation, the date that such Generation Unit first produces electrical energy. In the case of a Generation Unit that meets the eligibility requirements of 225 CMR 14.05 and co-fires an Eligible RPS Class I Renewable Fuel, the date when the Generation Unit first co-fires such Eligible RPS Class I Renewable Fuel.

Compliance Filing. A document filed annually by a Retail Electricity Supplier with the Department documenting compliance with 225 CMR 14.07, consistent with the format set forth in the Guidelines and submitted no later than the first day of July, or the first Business Day thereafter, of the subsequent Compliance Year.

Compliance Year (CY). 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.

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.

Current Use Program. A state administered program that permits a property owner to have a parcel of land taxed at a rate based on the current use of the land including but not limited to open space, active forestry, or agriculture as opposed to the fair market or development value of the property.

Department. The Massachusetts Department of Energy Resources (DOER), established by M.G.L. c. 25A.

DCR. The Massachusetts Department of Conservation and Recreation (DCR) established by M.G.L. c. 21 § 1.

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 unsorted solid wastes~~ consisting of Eligible Biomass Woody Fuel, Co-Mingled Biomass Woody Fuel, Manufactured Biomass Fuel; by-products or waste from animals or agricultural crops; food or vegetative material; ~~energy crops~~; algae; organic refuse -derived fuel; anaerobic digester gas and other biogases that are derived from such resources; and neat Eligible Liquid Biofuel that is derived from such fuel sources-; but shall not include Construction and Demolition Waste as defined in 310 CMR 19.006.

Eligible Biomass Woody Fuel. Woody fuels that are derived from the following sources, consistent with the requirements of 225 CMR 14.05(8):

Forest Derived Residues:

1. Tops, crooks and other portions of trees produced as a byproduct during the normal course of harvesting material, such as timber, pulpwood or cordwood.
2. Other woody vegetation that interferes with regeneration or the natural growth of the forest, limited to locally invasive native species and non-native invasive woody vegetation.

Forest Derived Thinnings:

1. Unacceptable growing stock which is defined as trees considered structurally weak or have low vigor and do not have the potential to eventually yield a 12 foot sawlog or survive for at least the next 10 years.
2. Trees removed during thinning operations, the purpose of which is to reduce stand density and enhance diameter growth and volume of the residual stand.

#### Forest Salvage:

Damaged, dying or dead trees removed due to injurious agents, such as wind or ice storms or the spread of invasive epidemic forest pathogens, insects and diseases or other epidemic biological risks to the forest, but not removed due to competition. Such eligible trees may be removed without limitation for biomass fuel, only if a major threat to forest health or risk to private or public resources, and if the USDA Animal Health and Plant Inspection Service (APHIS), the USDA Forest Service, or appropriate federal or state governmental agency has issued a declaration, rule, or order declaring a major threat to forest health or risk to private or public resources. Forest Salvage also includes trees removed to reduce fire hazard within Fire-adapted Forest Ecosystems, as certified by a letter to the Department from the state agency responsible for forestry in consultation with the appropriate environmental state agencies.

#### Non-Forest Derived Residues:

1. Primary forest products industry: Lumber mill residues or lumber processing residues consisting of the slabs, shavings, trimmings, sawdust, bark, end pieces of wood, and log cores that result from the various processing operations occurring in sawmills, pulp mills, and veneer and plywood plants.
2. Secondary forest products industry: Wood waste produced as a byproduct of the production of finished wood products, including but not limited to clean residues from woodworking shops, furniture factories, and truss and pallet manufacturing.
3. Land use change – non-agricultural: Trees cut or otherwise removed in the process of converting forest land to non-forest and non-agricultural uses provided that such development has already received all applicable state and local permits for the development.
4. Land use change – agricultural: Trees cut or otherwise removed in the process of converting forest land to agricultural usage, either for new or restored farm land.
5. Yard waste: Leaves, grass clippings, prunings, and other natural organic matter discarded from yards and gardens.
6. Wood waste: Non-treated pallets; pruned branches, stumps, and whole trees removed during the normal course of maintenance of public or private roads, highways, driveways, utility lines, rights of way, and parks.

Dedicated Energy Crops. Wood purposefully grown for the purpose of producing fuel, provided that such wood was not grown on land that sequestered significant amounts of carbon, such as a forest, and provided that such land does not have the economic potential to support production of any other agricultural crop grown for human consumption as food.

Eligible Forest Biomass Tonnage Report. The report certified by a professional forester under the provisions of 225 CMR 14.05(8) that details the amounts of Forest Derived Thinnings and Forest Derived Residues that may be removed from a harvest site to be

Eligible Biomass Woody Fuel. In the case of a Forest Derived Residue, the Report further details whether such Forest Derived Residue is derived from harvest by-products or invasive species, as defined in the subcategories of Forest Derived Residue.

Eligible Liquid Biofuel. A liquid fuel that is derived from Eligible Biomass Fuel, but is not Eligible Biomass Woody Fuel or Co-Mingled Biomass Woody Fuel, and that yields at least a 50 per cent reduction in Lifecycle Greenhouse Gas Emissions relative to average lifecycle greenhouse gas emissions for petroleum distillate fuel sold in 2005, as determined by the Department in consultation with the MassDEP and the Executive Office ~~of Energy and Environmental Affairs~~; or that is derived from waste feedstocks consisting of previously used or discarded solid, liquid or contained gaseous material resulting from industrial, commercial or household food service activities that would otherwise be stored, treated, transferred or disposed. Waste feedstock shall include, but not be limited to, waste vegetable oils, waste animal fats, substances derived from wastewater and the treatment of wastewater, or grease trap waste. Waste feedstock shall not include petroleum-based waste or waste that otherwise meets the definition of hazardous waste, unless otherwise determined by the MassDEP.

Eligible RPS Class I Renewable Fuel. An Eligible Biomass Fuel, landfill methane gas, hydrogen derived from such fuels or hydrogen derived from water using the electrical output of a Renewable Generation Unit, but not hydrogen derived using RPS Class I Renewable Generation if the RPS Class I Renewable Generation Attributes of such Generation are sold, retired, claimed, used or represented as part of electrical energy output or sales, or used to satisfy regulatory obligations in any jurisdictions, and not hydrogen derived directly or indirectly from ineligible fuels.

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 owner's other generating stations, shall not be considered an End-use Customer.

Executive Office. The Executive Office of Energy and Environmental Affairs established by M.G.L. c. 6A § 2.

Fire-adapted Forest Ecosystem: Natural forest communities characterized by vegetation including, but not limited to, pitch pine and/or scrub oak occurring on droughty soils, and that 1) have evolved with fire as a natural process, 2) support and renew associated wildlife species and habitats, and 3) are identified on the most recently updated U.S. Department of Interior, Geological Survey national LANDFIRE map.

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.

Geothermal Energy. Heat energy stored in the Earth's crust that can be accessed for electric power generation.

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

Guidelines. A set of clarifications, interpretations, and procedures, including forms, developed by the Department to assist in compliance with the requirements of 225 CMR 14.00. The Department may issue new or revised Guidelines from time to time. Each Guideline shall be 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 Vintage Generation Unit that meets the requirements of 225 CMR 14.05(1)(a), stated in 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.

Hydroelectric Energy. Electrical energy from a Generation Unit that uses flowing freshwater 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”).

Impacted Watershed. All water bodies or areas of land hydrologically connected to a hydroelectric facility, whether located upstream or downstream, which may experience any alteration of their physical, biological, or ecological characteristics as a result of the operation or increased capacity expansion of a hydroelectric Generation Unit.

ISO-NE. ISO New England Inc., the independent system operator for New England, 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, the FERC’s corresponding regulations, and any successor FERC orders and regulations.

ISO-NE Settlement Market System. The ISO-NE’s electronic database system into which all real-time load and generation data are entered and from which such data are provided to the NEPOOL GIS.

Lifecycle Greenhouse Gas Emissions. The aggregate quantity of greenhouse gas emissions, including direct emissions and significant indirect emissions such as significant emissions from land use changes, [and temporal changes in forest carbon sequestration and emissions resulting from biomass harvests, regrowth, and avoided decomposition](#) as determined by the Department in consultation with the MassDEP and the Executive Office of Energy and Environmental Affairs, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

Low Impact Hydropower Institute (LIHI). A non-profit 501(c)(3) organization located in Portland, Maine, whose stated purpose is to reduce the impacts of hydropower generation through the certification of hydropower projects that have avoided or reduced their environmental impacts pursuant to the Low Impact Hydropower Institute’s criteria.

Manufactured Biomass Fuel. [A biomass fuel that is prepared, other than by means of fuel drying, through a fuel processing facility that is separate from a Generation Unit and that utilizes Eligible Biomass Woody Fuel for production. Examples include, but are not limited](#)



to, the mechanical production of wood pellets or bio-dust, and the refinement of bio-oil through pyrolysis.

Marine or Hydrokinetic Energy. Electrical energy derived from waves, tides and currents in oceans, estuaries and tidal areas; free-flowing water in rivers, lakes, streams, and human-made channels, provided that such water is not diverted, impounded, or dammed; or differentials in ocean temperature, called ocean thermal energy conversion.

Massachusetts Clean Energy Technology Center (MassCEC). The center established in M.G.L. c. 23J, § 2.

~~MassDEP. The Massachusetts Department of Environmental Protection, established by M.G.L. c. 21A, § 7.~~

Massachusetts Renewable Energy Trust. The Trust under M.G.L. c. 23J, § 9, which administers renewable energy programs for the Commonwealth.

~~MassDEP. The Massachusetts Department of Environmental Protection established by M.G.L. c. 21A, § 7.~~

Megawatt-hour (MWh). A unit of electrical energy or work equivalent to one million watts of power operating for one hour.

Merchantable Bio-Products. Products that are refined from a biomass fuel by a bio-refinery project in which the Generation Unit is integral. Products include but are not limited to merchantable chemicals such as additives, lubricants, or specialty chemicals, and other products which can be permanently sequestered for carbon reductions.

NEPOOL GIS. The NEPOOL 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 the ISO-NE Control Area.

Non-intermittent Generation Unit. A Generation Unit having a capacity factor of 50 per cent or greater, as determined by the Department.

NERC Tag. A document that identifies an electrical energy interchange transaction and its associated participants, assigned in accordance with rules set forth by the North American Electric Reliability Corporation, a non-profit corporation granted by the Federal Energy Regulatory Commission (FERC) the legal authority to enforce mandatory reliability standards for the U.S. bulk power system, subject to FERC oversight.

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

Operator. Any person or entity that has charge or control of a Generation Unit subject to 225 CMR 14.00, including without limitation a duly authorized agent or lessee of the Owner,

or a duly authorized independent contractor.

Owner. Any person or entity that, 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, including without limitation a duly authorized agent of the Owner. For the purposes of 225 CMR 14.02, Owner does not mean a person or entity holding legal title or security interest solely for the purpose of providing financing.

Percent Under-Compliance. [The difference, if positive, between 50 percent and the reported lifecycle greenhouse gas emissions over 20 years as reported in a Biomass Unit Annual Compliance Report by an RPS Class I Renewable Generation Unit that utilizes Eligible Biomass Woody Fuel, as provided in 225 CMR 14.05\(8\)\(d\).](#)

Power Conversion Technology. The design, process, and equipment by which an energy resource is converted into useful energy, as specified in Guidelines.

Relevant Hydroelectric Agency. A federal, state or provincial agency with oversight over fish and wildlife, water quality, river flows, fish passage and protection, mitigation and enhancement opportunities, related to a hydroelectric facility located in the Impacted Watershed or that impacts downstream or upstream passage of fish and wildlife.

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 an Eligible RPS Class I Renewable Fuel, Hydroelectric Energy, waste-to-energy that is a component of conventional municipal solid waste plant technology in commercial use, or any of the fuels, energy resources or technologies set forth in 225 CMR 14.05(1)(a).

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.

RPS Class I Renewable Generation. The electrical energy output excluding any electrical energy utilized for parasitic load of a RPS Class I Renewable Generation Unit, or that portion of the electrical energy output excluding any electrical energy utilized for parasitic load of an RPS Class I Renewable Generation Unit that qualifies under (1) the Special Provisions for Incremental Generating Capacity, pursuant to 225 CMR 14.05(2) issued on or after January 1, 2009; (2) a Vintage Waiver, pursuant to 225 CMR 14.05(2) issued before January 1, 2009;



(3) a Co-firing and Blended Fuel Waiver, pursuant to 225 CMR 14.05(3); (4) the Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area, pursuant to 225 CMR 14.05(5); or (5) any other applicable provision of 225 CMR 14.00.

RPS Class I Renewable Generation Attribute (Attribute). The Generation Attribute of the electrical energy output of a specific RPS Class I Renewable Generation Unit that derives from the Unit's production of RPS Class I Renewable Generation.

RPS Class I Renewable Generation Unit. A Generation Unit or Aggregation that has received a Statement of Qualification from the Department, including a Generation Unit or Aggregation termed a New Renewable Generation Unit in a Statement of Qualification issued by the Department pursuant to 225 CMR 14.00 before January 1, 2009, but does not include Solar Carve-Out Renewable Generation Units.

Solar Carve-Out Renewable Generation. The electrical output of a Solar Carve-Out Renewable Generation Unit that qualifies for the Massachusetts Solar Carve-Out excluding any electrical energy utilized for parasitic load.

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

Solar Carve-Out Renewable Generation Unit. A Generation Unit or Aggregation that has received a Statement of Qualification from the Department that specifies its qualification for participation in the Solar Carve-Out under 225 CMR 14.05(4).

Statement of Qualification. A written document from the Department that qualifies a Generation Unit or Aggregation as an RPS Class I Qualified Generation Unit or a Solar Carve-Out Renewable Generation Unit, or that qualifies a portion of the annual electrical energy output of a Generation Unit or Aggregation as RPS Class I Renewable Generation.

Useful Thermal Energy. [Energy \(a\) in the form of direct heat, steam, hot water, or other thermal form that is used in production and beneficial measures for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements and \(b\) for which fuel or electricity would otherwise be consumed. Thermal energy used for the purpose of drying or refining biomass fuel shall not be considered Useful Thermal Energy.](#)

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.* 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), that has a Commercial Operation Date of December 31, 1997, or earlier, and for which the Department issued a Statement of Qualification under the Vintage Waiver provision in 225 CMR 14.05(2) before January 1, 2009.

Vintage Generation. The electrical energy output of a Vintage Generation Unit during the

period of the Unit's Historical Generation Rate.

#### 14.03: Administration

225 CMR 14.00 shall be administered by the Department.

#### 14.04: Applicability

225 CMR 14.00 applies to Retail Electricity Suppliers and to the Owners or Operators of RPS Class I Renewable Generation Units and Solar Carve-Out Renewable Generation Units.

#### 14.05: Eligibility Criteria for RPS Class I and Solar Carve-Out Renewable Generation Units

(1) Eligibility Criteria. A Generation Unit may qualify as an RPS Class I Renewable Generation Unit or a Solar Carve-Out Renewable Generation Unit subject to the limitations in 225 CMR 14.05.

(a) Fuels, Energy Resources and Technologies. The Generation Unit shall use one or more of the fuels, energy resources and/or technologies listed in 225 CMR 14.05(1)(a)1 through 9.

1. Solar photovoltaic or solar thermal electric energy.
2. Wind energy.
3. Ocean thermal, wave or tidal energy.
4. Fuel cells using an Eligible RPS Class I Renewable Fuel.
5. Landfill methane 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, except that such landfill methane gas may be collected from a landfill entirely within the ISO-NE Control Area or an adjacent Control Area and transported to a Generation Unit within one of those Control Areas via a common carrier of natural gas, subject to documentation satisfactory to the Department of the gas transportation and related contracts.
6. Hydroelectric. An Generation Unit that uses Hydroelectric Energy may qualify as an RPS Class I Generation Unit, subject to the limitations in 225 CMR 14.05(1)(a)6.
  - a. The Unit has a nameplate capacity up to 25 megawatts, or increased capacity installed or efficiency improvements implemented after December 31, 1997, the aggregate of which increased capacity or efficiency improvements does not exceed 25 megawatts.
  - b. The Unit does not involve any dam or water diversion structure constructed after December 31, 1997, or pumped storage of water.
  - c. The Unit does not generate Marine or Hydrokinetic Energy.

d. The Unit meets appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed, as determined by the Department in consultation with Relevant Hydroelectric Agencies. The Unit shall demonstrate compliance with such standards by submitting the documentation required in either 225 CMR 14.05(1)(a)6.d.i or ii.

i. LIHI Certification of the Unit; except that in either of the two circumstances provided in 225 CMR 14.05(1)(a)6.d.i, the Department may request further information from the applicant and the Relevant Hydroelectric Agencies as part of its review of the applicant's Statement of Qualification Application. The Department shall notify the applicant of any such input from a Relevant Hydroelectric Agency not later than 30 days after receiving such input and shall provide the applicant an opportunity to respond to the Department not later than 30 days after the applicant's receipt of such notice from the Department.

A. If a Relevant Hydroelectric Agency identified an environmental concern and a proposed remedy to LIHI during the LIHI certification process, and such concern was not addressed in the LIHI certification to the satisfaction of the Agency, and the Agency consulted with the Owner or Operator of the Unit; or

B. If, between issuance of the LIHI certification and the Department's determination of the Unit's eligibility, a Relevant Hydroelectric Agency submits to the Department evidence of a significant environmental problem not previously known by such Agency, after consulting with the Owner or Operator of the Unit.

ii. A denial of certification from LIHI specifying the reasons the certification was denied and the applicant's proposed rationale for why the project should nevertheless receive a Statement of Qualification. In this instance, the Department shall notify and seek input from the Relevant Hydroelectric Agencies, which shall have 30 days from the date of their receipt of such notification to provide feedback to the Department. The Owner or Operator of the Unit shall be notified of any such input and shall have 30 days from receipt of such notice to respond to the satisfaction of the Department as to why its Application should be approved. The Department thereafter shall make finding of whether the Unit meets appropriate environmental safeguards despite the lack of LIHI certification.

e. The Owner or Operator of the Unit must serve notice to all Relevant Hydroelectric Agencies of its application for LIHI certification and its submission of a Statement of Qualification Application and must provide notice of such service to the Department.

f. If LIHI fails to act to certify or deny certification within 180 days from the date of submission of the Unit's application to LIHI, the Owner or Operator shall

file notice of such event with the Department. The Department shall review the federal, state or provincial permits for the Unit and any submissions to LIHI by Relevant Hydroelectric Agencies, and shall make a final determination as to whether the Unit meets environmental standards specified in 225 CMR 14.05(1)(a)6.d.

g. If LIHI is unable to review for certification a Unit that is located in a Control Area adjacent to the ISO-NE Control Area and outside the United States of America, the Owner or Operator of such Unit may petition the Department for certification using the LIHI standards by an independent third party acceptable to the Department.

7. Low-emission, advanced biomass Power Conversion Technologies using an Eligible Biomass Fuel. A Generation Unit may qualify as an RPS Class I Renewable Generation Unit, provided it uses an Eligible Biomass Fuel, subject to the limitations in 225 CMR 14.05(1)(a)7.

a. The Department shall set forth in Guidelines low-emission eligibility criteria which will become effective on their date of issuance. Any emission eligibility criteria in subsequently revised Guidelines shall become effective 24 months from their date of issuance.

b. A Generation Unit with a Commercial Operation Date after December 31, 1997, that is required to obtain an air permit in its jurisdiction, must possess a Valid Air Permit and must demonstrate to the satisfaction of the Department 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 Department receives the Unit's Statement of Qualification Application.

c. A Generation Unit with a Vintage Waiver that is required to obtain an air permit in its jurisdiction must possess a Valid Air Permit and must demonstrate to the satisfaction of the Department 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 Department receives the Unit's Statement of Qualification Application.

d. A Generation Unit that is not required to obtain an air permit in its jurisdiction must demonstrate to the satisfaction of the Department that its emissions are consistent with criteria set forth in the Guidelines that are applicable for the date on which the Department receives the Unit's Statement of Qualification Application.

e. In the case of a Generation Unit for whose size, type, or fuel the Guidelines do not provide applicable emission limits, the Department will determine appropriate limits in consultation with the MassDEP.

[f. A Generation Unit, that uses an Eligible Biomass Woody Fuel, Co-Mingled Biomass Woody Fuel, or a Manufactured Biomass Fuel, must provide to the Department as part of their Statement of Qualification Application the following items.](#)

- i. A fuel supply plan indicating the anticipated fuel types, sources, and amounts. Not later than January 1, the Unit shall provide on an annual basis a report of the anticipated fuel supply for that Compliance Year.
- ii. A design and operational plan that demonstrates that the Unit will achieve an Overall Efficiency, as calculated in 225 CMR 14.05(8)(c)(2)-(4), of at least 50 per cent on a quarterly basis, or 40 percent on a quarterly basis for Advancement of Biomass Conversion Generation Units.
- iii. An analysis of net Lifecycle Greenhouse Gas Emissions, that demonstrates, to the satisfaction of the Department, that such emissions, over a 20 year life cycle, yield at least a 50 per cent reduction of greenhouse gas emissions per unit of useful energy relative to the Lifecycle Greenhouse Gas Emissions from the aggregate use of the operation of a new combined cycle natural gas electric generating facility using the most efficient commercially available technology as of the date of the Statement of Qualification Application for the portion of electricity delivered by the Generation Unit and, if applicable, the operation of the fossil fuel fired thermal energy unit being displaced, or in the case of new Useful Thermal Energy, a gas-fired thermal energy unit using the most efficient commercially available technology as of the date of Statement of Qualification Application for the portion of the Useful Thermal Energy delivered by the Generation Unit. The Department shall provide in the Overall Efficiency and Greenhouse Gas Analysis Guideline as part of the Statement of Qualification Application a standard analytical methodology to meet this requirement, including a full accounting of greenhouse gas emissions associated with any fuel processing.

8. Marine or Hydrokinetic Energy.

9. Geothermal Energy.

(b) Commercial Operation Date. The Commercial Operation Date shall be after December 31, 1997, unless the Generation Unit received a Statement of Qualification with a Vintage Waiver prior to January 1, 2009. In the case of a Solar Carve-Out Renewable Generation Unit, the Commercial Operation Date shall be after December 31, 2007.

(c) Metering. The electrical energy output from a Generation Unit shall be verified by the ISO-NE or by an independent verification system or person participating in the NEPOOL GIS accounting system as an independent Third Party Meter Reader, as defined in Rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule, and approved by the Department.

(d) Location. The Generation Unit location is subject to the limitations in 225 CMR 14.05(1)(d).

1. Off-grid Generation. If the Generation Unit produces Off-grid Generation, such Unit must be located in Massachusetts.

2. Behind-the-meter Generation. If the Generation Unit is wired to the electrical system on the End-use Customer's side of a retail electric meter, such Unit must be located within the ISO-NE Control Area.

(e) Capacity Obligation. The Generation Unit's generating capacity is subject to the obligations in CMR 14.05(1)(e).

1. The amount of the generation capacity of the Generation Unit whose electrical energy output is claimed as RPS Class I Renewable Generation or Solar Carve-Out Renewable Generation shall not be committed to any Control Area other than the ISO-NE Control Area unless such Generation Unit has entered into a Capacity Obligation in another Control Area before the start of the first available compliance year for the ISO-NE Forward Capacity Market, in which case this subsection shall apply upon the expiration of that Capacity Obligation. However, if the Generation Unit executed a contract for the sale of RPS Class I Renewable Generation Attributes or RPS Class I Renewable Generation, or both, before January 1, 2009, for a term of at least 2 years, the contract price of which relied on the receipt of capacity payments from a control area adjacent to the ISO-NE control area, and the Generation Unit can demonstrate such reliance to the satisfaction of the Department, this requirement shall not take effect for that Generation Unit until the expiration of that contract.

2. The Generation Unit Owner or Operator of a Non-intermittent Generation Unit shall commit to the ISO-NE Control Area the amount of the capacity of that Unit claimed as RPS Class I Renewable Generation or Solar Carve-Out Renewable Generation by submitting by the applicable deadline a show of intent for the ISO-NE Forward Capacity Auction that is the earliest available for the Unit after the Owner or Operator has submitted a Statement of Qualification Application unless the Owner or Operator can provide to the Department documentation of its prior commitment to the ISO-NE Control Area of such capacity. The Owner or Operator of any Unit that cannot demonstrate such prior commitment must also clear the Forward Capacity Auction for which it has qualified, even if it must participate as a price taker. The requirements of this paragraph do not apply to Generation Units for which ~~DOER~~the Department has received an administratively complete Statement of Qualification Application prior to July 2, 2008.

3. An RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit that was deemed unqualified by the ISO-NE for participation in the ISO-NE Forward Capacity Market for technical reasons may commit capacity to another control area and may receive GIS Certificates for the energy sold into the ISO-NE Control Area, subject to a determination by the Department.

4. An RPS Class I Renewable Generation Unit or a Solar Carve-Out Renewable Generation Unit that has registered with the relevant distribution company as a net metering facility pursuant to 220 CMR 18.00, shall be exempt from the capacity obligation under 225 CMR 14.05(1)(e) while the facility is net metering.

(2) Special Provisions for Incremental Generation. An increase in electrical energy output of a Generation Unit with a Commercial Operation Date on or before December 31, 1997, may qualify as RPS Class I Renewable Generation, subject to the limitations in CMR 14.05(2).



(a) The Generation Unit must meet the eligibility requirements of 225 CMR 14.05 with the exception of 225 CMR 14.05(1)(b).

(b) The portion of the total electrical energy output of the Generation Unit that qualifies as RPS Class I Renewable Generation in a given calendar year shall be the portion attributable to incremental new generating capacity or efficiency improvements installed or implemented after December 31, 1997, using equipment that was not utilized in any Renewable Generation Unit within the ISO-NE Control Area or within Control Areas adjacent thereto on or before December 31, 1997.

(c) The portion of the electrical energy output of a Generation Unit that does not qualify as RPS Class I Renewable Generation under the provisions of this subsection or under a Statement of Qualification granted to a Vintage Generation Unit prior to January 1, 2009, may qualify as RPS Class II Renewable Generation if it applies for and meets the eligibility standards of the RPS Class II Regulations set forth in 225 CMR 15.00.

(d) The portion of electrical energy output of a Generation Unit that replaces the output of an RPS Class I Renewable Generation Unit qualified under 225 CMR 14.05(1)(a)(5) at the same location, or proximate thereto, and utilizes the fuel resource of that location, shall not be qualified as Incremental Generation, unless a Unit meets the requirements of 225 CMR 14.05(7)(d).

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

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

~~(b)~~ If using a Co-Mingled Biomass Woody Fuel, such fuel shall be considered an ineligible fuel unless such fuel is accompanied by Biomass Fuel Certificates as provided in 225 CMR 14.05(8)(a)2b.

(c) If using a Blended Fuel of which the eligible portion is an Eligible Biomass Fuel or if co-firing an ineligible fuel with an Eligible Biomass Fuel, the entire Generation Unit must meet the requirements of an advanced biomass Power Conversion Technology as set forth in 225 CMR 14.05(1)(a)7.

(ed) If using an Eligible Biomass Fuel, the Generation Unit must demonstrate to the satisfaction of the Department that the emission rates for the entire Generation Unit are consistent with rates prescribed by the MassDEP for comparably fueled Generation Units in the Commonwealth. The Department may require the Generation Unit Owner or Operator to retain at its own expense a third-party consultant deemed satisfactory to the Department, to provide ~~DOER~~the Department and the MassDEP with assistance in this determination.

(~~d~~e) The Generation Unit must provide with its Statement of Qualification Application a fuel supply plan that specifies each and every fuel that it intends to use, in what relative proportions either in co-firing or in a Blended Fuel, and with what individual input heat values. Such plan shall include the procedures by which the Unit will document to the satisfaction of the Department its compliance with the plan.

(~~e~~f) The provisions of 225 CMR 14.05(3) 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 RPS Class I Renewable Fuel.

(4) Special Provisions for a Solar Carve-Out Generation Unit.

(a) The Solar Carve-Out Renewable Generation Unit must be used on-site, located in the Commonwealth of Massachusetts, and be interconnected with the electric grid. On-site use includes any new or existing load located at the site of the Unit including any parasitic load that may result from the installation of the Unit, and that is wired to receive a portion of the electrical energy output from the Unit before the balance of such output passes through the Unit's metered interconnection onto the electric grid. The maximum capacity of a Unit shall be 6 MW, as measured on a nameplate capacity basis in direct current and shall be determined based on the total capacity located on a single parcel of land. For any parcel of land for which a Solar Carve-Out Generation Unit has submitted a Statement of Qualification Application, if its current boundaries are the result of a subdivision recorded after January 1, 2010, the Owner or Operator shall make a demonstration to the Department that the subdivision was not for the purpose of eligibility in the Solar Carve-Out Program. If the Department is not satisfied by such showing, the 6 MW limit shall apply to the metes and bounds of the parcel as recorded prior to the subdivision. Any subsequent additional solar photovoltaic Units that would result in excess of 6 MW of capacity installed on the same parcel of land and meeting all other requirements under 225 CMR 14.00 may qualify only for RPS Class I Renewable Generation Attributes.

(b) If the construction and installation of a Unit was funded through a program administered prior to January 1, 2010, by the Massachusetts Renewable Energy Trust, or if the Unit was funded substantially from American Recovery and Reinvestment Act, P.L. 111-5 (ARRA) for the installation of that Unit, the Unit shall not be eligible to participate in the Solar Carve-Out. Substantial shall mean for this purpose more than 67 per cent of total installed cost. Notwithstanding this subsection, if the substantial funding that a Unit receives is from a payment in lieu of tax credit under section 1603 of ARRA, the Unit shall be eligible for Solar Carve-Out Renewable Generation Attributes.

(c) Owners or Operators of Units under this subsection are eligible to participate in the Solar Credit Clearinghouse Auction for the Opt-In Term specified in the Statement of Qualification of the Unit. The Department or its agent shall maintain an account, known as Solar Credit Clearinghouse Auction Account on the NEPOOL GIS into which eligible Owners or Operators may deposit Solar Carve-Out Renewable Generation Attributes. The Solar Credit Clearinghouse Auction Account shall be available for deposit of Attributes only from May 16 to June 15, inclusive.

(d) An Owner or Operator that opts to deposit Solar Carve-Out Renewable Attributes into the Solar Credit Clearinghouse Auction Account shall be assessed, at the completion

of the auction, a usage fee of 5 per cent of the auction price for each such Attribute deposited into Solar Credit Clearinghouse Auction Account. This usage fee shall be deposited into the Alternative Compliance Payment fund under 225 CMR 14.08(3).

(e) Those Attributes deposited into Solar Credit Clearinghouse Auction Account shall then be retired and reissued by NEPOOL GIS as Re-minted Auction Account Attributes. These Attributes shall be eligible in either of the two subsequent Compliance Years from the year in which they were generated to meet obligations under the Massachusetts Solar Carve-Out Minimum Standard. The Department or its agent shall conduct an auction for those Attributes. Any entity wishing to purchase Re-minted Auction Account Attributes may participate and enter a bid. Each bid shall be for the number of Re-minted Auction Account Attributes that the bidder wishes to purchase at a fixed price of \$300 per Re-minted Auction Account Attribute.

(f) The Solar Credit Clearinghouse Auction shall be held not later than July 31. If the Auction clears, meaning that the total number of Re-minted Auction Account Attributes bid for in the auction was equal to or more than the number of Solar Carve-Out Renewable Attributes deposited, then the total amount of deposited Attributes will be distributed to the bidders in a pro-rated manner such that each bidder receives the same percentage of their bid volume. If the auction does not clear, meaning that the total number of Re-minted Auction Account Attributes bid for in the auction was less than the number of Solar Carve-Out Renewable Attributes deposited, the Department or its agent shall void the auction.

(g) If the auction under 225 CMR 14.05(4)(f) does not clear, the Department shall conduct a new auction within 3 Business Days, in which any Attributes purchased shall be eligible in any of the three subsequent Compliance Years from the year in which they were generated to meet obligations under the Massachusetts Solar Carve-Out Minimum Standard. If the auction does not clear, the Department or its agent shall void the auction.

(h) If the auction under 225 CMR 14.05(4)(g) does not clear, the Department or its agent shall conduct another auction within 3 Business Days, at which point the Attributes shall be eligible in any of the three subsequent Compliance Years from the year in which they were generated to meet obligations under the Massachusetts Solar Carve-Out Minimum Standard. Prior to this Auction, the Department shall also re-calculate the Massachusetts Solar Carve-Out Minimum Standard under 225 CMR 14.07(2)(h).

(i) If the auction under 225 CMR 14.05(4)(h) does not clear, the Re-minted Auction Account Attributes deposited in the Solar Credit Clearinghouse Auction Account shall be allocated to the bidders in a pro-rated manner so that an equal percentage of Re-Minted Auction Account Attributes are allocated from each Generation Unit that deposited Solar Carve-Out Renewable Attributes. The remaining Re-minted Auction Account Attributes shall be returned to the Owner or Operator of the Generation Unit who made the deposit. These Attributes shall be eligible in any of the three subsequent Compliance Years from the year in which they were generated to meet obligations under the Massachusetts Solar Carve-Out Minimum Standard, and may be sold by the Owner or Operator of the Generation Unit.

(j) When 400 MW of Solar Carve-Out Renewable Generation Units have been installed, the Department shall announce that this threshold has been reached and shall not accept

any new Statement of Qualification Applications for the Solar Carve-Out Program under 225 CMR 14.05(4). Such Units are still eligible to apply as RPS Class I Renewable Generation Units.

(5) Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area. The portion of the total electrical energy output of an RPS Class I Renewable Generation Unit located in a Control Area adjacent to the ISO-NE Control Area that qualifies as RPS Class I Renewable Generation shall meet the requirements in Rule 2.7(c) and all other relevant sections of the NEPOOL GIS Operating Rules or any successor rule, and the requirements in 225 CMR 14.05(5).

(a) The Generation Unit Owner or Operator shall provide documentation, satisfactory to the Department, of a contract or other legally enforceable obligation(s) ("Legal Obligation") that is executed between the Generation Unit Owner or Operator 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. Such documentation shall include provisions for obtaining associated transmission rights for delivery of the Unit's electrical energy from the Unit to the ISO-NE Control Area. The Generation Unit Owner or Operator shall pay for evaluation and verification of the provisions of such documentation by an independent party that is engaged or approved by the Department.

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

1. the electrical energy delivered pursuant to the Legal Obligation was settled in the ISO-NE Settlement Market System;
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 originating Control Area employs a Generation Information System that is comparable to the NEPOOL GIS, information from that system may be used to support such documentation;
3. the electrical energy delivered under the Legal Obligation received a NERC Tag confirming transmission from the adjacent Control Area to the ISO-NE Control Area; and
4. the RPS Class I Renewable Generation Attributes have not otherwise been, nor will be, sold, retired, claimed, used or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Massachusetts.

(c) The Generation Unit Owner or Operator must provide an attestation in a form to be provided by the Department that it will not itself or through any affiliate or other contracted party, engage in the process of importing RPS Class I Renewable Generation into the ISO-NE Control Area for the creation of RPS Class I Renewable GIS Certificates, and then exporting that energy or a similar quantity of other energy out of the ISO-NE Control Area during the same hour.

(d) The quantity of electrical energy output from an RPS Class I Renewable Generation Unit outside the ISO-NE Control Area that can qualify as RPS Class I Renewable

Generation at the NEPOOL GIS during each hour is limited to the lesser of the RPS Class I Renewable Generation actually produced by the Unit or the RPS Class I Renewable Generation actually scheduled and delivered into the ISO-NE Control Area.

(6) Special Provisions for Aggregations. An Aggregation of Generation Units that are located behind the customer meter or that are Off-grid Generation Units, each of which could independently meet the relevant requirements of 225 CMR 14.05, may receive a single Statement of Qualification and be treated as a single RPS Class I or Solar Carve-Out Renewable Generation Unit under the criteria and procedures in 225 CMR 14.05(6).

(a) Each Generation Unit in such Aggregation must be located within the same state and use the same fuel, energy resource and technology as all other Units in the Aggregation. In the instance of an Aggregation that includes a Solar Carve-Out Renewable Generation Unit, the Aggregation shall only include Units that are eligible for the Solar Carve-Out under 225 CMR 14.05(4).

(b) Each of the Owners or Operators of Generation Units within the Aggregation must enter into an agreement with a person or entity that serves as the Authorized Agent for the Aggregation in all dealings with the Department and with the NEPOOL GIS, and such agreement must include procedures by which the electrical energy output of each Unit shall be monitored and reported to the NEPOOL GIS.

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

(d) The electrical energy output of each of the Generation Units in the Aggregation must be individually monitored and recorded, and it must be reported to the NEPOOL GIS, by an independent Third Party Meter Reader as defined in Rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule, and approved by the Department.

(7) Special Provisions for Relocated, Repowered, and Replacement Generation Units. The Department may provide a Statement of Qualification to a Generation Unit that meets one of the following categories and criteria, as well as all other relevant provisions of 225 CMR 14.05:

(a) Relocated Generation Unit. A Generation Unit whose Power Conversion Technology was used on or before December 31, 1997, to generate electrical energy outside of both the ISO-NE Control Area and Control Areas adjacent thereto, and that is relocated into one of said Control Areas after December 31, 1997, provided that any components of the Power Conversion Technology that were not used outside of said Control Areas were first used in a Generation Unit after December 31, 1997.

(b) Repowered Generation Unit. A Generation Unit that did not utilize an Eligible RPS Class I Renewable Fuel at any time on or before December 31, 1997.

(c) Replacement Generation Unit. A Generation Unit that replaces a mothballed or decommissioned Generation Unit that had operated on the same site on or before December 31, 1997, subject to the following limitations:

1. The entire Power Conversion Technology of the existing Unit is replaced with equipment manufactured after December 31, 1997; and
2. The existing Unit has not been in commercial operation for at least five years prior to submission of the Statement of Qualification Application.

(d) Replacement Generation Unit for Vintage Generation Unit Destroyed or Subject of Government Taking. All of the electrical output of a Generation Unit that replaces the output of an RPS Class I Vintage Generation Unit originally qualified as New Renewable Generation under 225 CMR 14.05(1)(a)(5) at the same location, or proximate thereto, and utilizes the fuel resource of that location, may qualify as RPS Class I Renewable Generation without a Historical Generation Rate if the Owner or Operator can demonstrate to the satisfaction of the Department that the Unit has been rendered functionally or financially inoperable by (A) an act of God, (B) an act of war, (C) an act of terrorism or (D) an act of eminent domain.

(8) Special Provisions for Generation Units Using Eligible Biomass Woody Fuels, Co-Mingled Biomass Woody Fuels, or Manufactured Biomass Fuels.

(a) Eligible Biomass Woody Fuel or Manufactured Biomass Fuel Certification, Verification, and Enforcement. An Owner, Operator, or Authorized Agent of a Generation Unit that uses an Eligible Biomass Woody Fuel or a Manufactured Biomass Fuel must meet the following provisions.

1. Over each Compliance Year, the tonnage of all Eligible Biomass Woody Fuel input to the Generation Unit shall be documented, in a Biomass Unit Annual Compliance Report provided in 225 CMR 14.05(8)(d), by ownership by the Owner or Operator of the Generation Unit of Biomass Fuel Certificates equal to the tonnage input. For Manufactured Biomass Fuel, the Biomass Fuel Certificates shall be for the required tonnage of Eligible Biomass Woody Fuel necessary for the production of the delivered volume of Manufactured Biomass Fuel.
2. Biomass Fuel Certificates shall be originated, procured, and transacted in accordance with the Biomass Eligibility and Certificate Guideline and shall be limited to the follow Certificates:
  - a. Biomass Fuel Certificates that accompany the shipment of Eligible Biomass Woody Fuel from its original source and which is delivered directly to a RPS Class I Renewable Generation Unit, and which has not been modified or mixed with other fuels or materials.
  - b. Biomass Fuel Certificates that accompany the shipment of Eligible Biomass Woody Fuel from its original source and which is delivered directly to a retailer of Eligible Biomass Woody Fuel, and whereby said Biomass Fuel Certificates subsequently accompanies a shipment of Co-Mingled Biomass Woody Fuel, of



an equal tonnage represented by said Biomass Fuel Certificates, which is delivered by the same retailer directly to a RPS Class I Renewable Generation Unit.

c. Biomass Fuel Certificates obtained by and transacted between the Owners, Operators, or Authorized Agents of Generation Units that have received Statements of Qualification from the Department under 225 CMR 14.00, 225 CMR 15.00, or 225 CMR 16.00.

3. For Forest Derived Residues and Forest Derived Thinnings the Biomass Fuel Certificate shall be issued consistent with the Eligible Forest Biomass Tonnage Report which shall include one of the following:

a. Citation of the DCR Cutting Plan under the Long Term Management option and prepared by a Massachusetts Licensed Forester, and shall include detail of the total allowable tonnage of forest derived Eligible Biomass Woody Fuel;

b. Citation to a cutting plan authorized under the host state forest agency which includes a determination, approved by the Department, that the material removed meets the definition of an Eligible Biomass Woody Fuel; or

c. Signature of a professional forester who is certified by the Society of American Foresters, licensed and/or certified by the host state of the harvest site, or certified by the Department where the Department has received documentation that the professional forester has proficiency and experience in forestry.

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4. The Eligible Forest Biomass Tonnage Report shall include certification by the professional forester of compliance with all eligibility requirements for Eligible Biomass Woody Fuels under 225 CMR 14.00. This may include evidence that the fuel has been received from land certified by the Forest Stewardship Council (FSC), Sustainable Forest Initiative (SFI), USDA Forest Service; Forest Stewardship Program, or the host state's Current Use Program.

5. For Forest Derived Residues and Forest Derived Thinnings, the Eligible Forest Biomass Tonnage Report shall also include a certification from the professional forester that no more than the allowable per cent of the total weight of all forest products harvested from a given forest harvest site is prescribed to be removed for utilization as an Eligible Biomass Woody Fuel. The professional forester shall also certify that the prescribed harvest meets the forest sustainability thresholds provided in the Biomass Eligibility and Certificate Guideline. The Eligible Forest Biomass Tonnage Report shall also include (1) the total tons of Eligible Biomass Woody Fuel prescribed for harvesting under the category of Forest Derived Residues, and (2) the total tons of Eligible Biomass Woody Fuel for harvesting under the category of Forest Derived Thinnings. The total weight of the forest products shall be calculated utilizing weight standards

by species provided in the Biomass Eligibility and Certificate Guideline. The allowable percent removal limit shall be determined as prescribed in the Guideline to protect soil nutrient retention in varying soil conditions.

6. For Non-Forest Derived Residue fuels, Forest Salvage, and Dedicated Energy Crops, the Biomass Fuel Certificate shall be completed by the fuel supplier and certified by the Owner, Operator, or Authorized Agent duly verifying the fuel supplier, tonnage, source, and that said material feedstock meets the criteria of an Eligible Biomass Woody Fuel as provided in the Biomass Eligibility and Certificate Guideline.

(b) Verification Provision. The Department or independent third-parties contracted for by the Department, shall conduct document inspections, audits, or site visits under 225 CMR 14.11, as often as the Department determines is necessary to verify compliance with all relevant provisions of 225 CMR 14.00 pertaining to use of an Eligible Biomass Woody Fuel.

1. Advisory Panel. The Department shall appoint a panel of 9 members representing the Executive Office, the Department, DCR, MassDEP, an environmental advocacy group, a licensed Massachusetts forester, a conservation biologist, the Owner of a biomass Generation Unit, and a member of the public. The Panel shall monitor the ongoing verification processes and shall meet not less than 2 times per year and provide the Department, from each meeting, its findings and recommendations, including its level of confidence in the verification and enforcement provisions, regarding 1) the tracking and enforcement of Eligible Biomass Woody Fuel and Co-Mingled Biomass Woody Fuel and 2) the tracking of Biomass Fuel Certificates and their impact on the biomass fuel market and greenhouse gas accounting. The Panel shall also review the costs of verification and make recommendations to the Department on any measures that may be required to offset this cost.
2. Forest Impact Assessment. Every 5 years, beginning in 2015, the Department, in coordination with DCR, will conduct an assessment of the impacts on Massachusetts and regional forests resulting from biomass fuel removals. The 5-year assessment shall also consider information on the Eligible Woody Biomass Fuel utilized by qualified Generation Units and the extent to which such fuels come from the categories of Non-Forest Derived Residues, Forest Derived Residues, Forest Derived Thinnings, Forest Salvage, and Dedicated Energy Crops. The Department shall use this information to evaluate the appropriateness and accuracy of greenhouse gas accounting from Generation Units utilizing Eligible Woody Biomass Fuel as provided in the Lifecycle Greenhouse Gas Analysis required under 225 CMR 14.05(1)(a)7(f)iii, and as implemented in the Overall Efficiency and Greenhouse Gas Analysis Guideline. Findings from the assessment shall be reported to the Executive Office and made available to the public no later than June 1 of each assessment year. If the Department concludes the findings would likely result in significant impacts on long term forest sustainability or accurate greenhouse gas accounting, the Department shall consult with the Executive Office,

MassDEP, and DCR on any changes that may be required by the Department, MassDEP or DCR to maintain long term forest sustainability and climate change mitigation.

(c) A Generation Unit that uses Eligible Biomass Woody Fuel, Co-Mingled Biomass Woody Fuel, or Manufactured Biomass Fuel must report to the Department the following information on a quarterly basis, and will be provided RPS Class I Renewable Generation Attributes as a function of its Overall Efficiency as calculated in 225 CMR 14.05(8)(c)(2)-(3).

1. Each quarter, the designated independent Third-Party Meter Reader of a Generation Unit, approved by the Department, must report the following information to the Department; Biomass Input Heat Content, Useful Thermal Energy, Merchantable Bio-Products, Renewable Generation, Renewable Generation utilized behind-the-meter, and the Overall Efficiency as calculated in 225 CMR 14.05(8)(c)(2)-(3). For all reported data and prior to the calculation of Overall Efficiency, all energy units must be expressed in MWh. For Useful Thermal Energy and Biomass Input Heat Content the conversion of energy units shall consider that each 3412 thousand BTUs is equivalent to one MWh. For Merchantable Bio-Products the product shall be prescribed an energy content based on its enthalpy of reaction, as determined by a standard independent laboratory analysis, and those units of energy appropriately converted to MWhs.
2. The Overall Efficiency of the Generation Unit each quarter shall be calculated as: the sum of 1) Renewable Generation not utilized behind-the-meter, 2) Renewable Energy utilized behind-the-meter divided by one minus the average distribution and transmission line losses of the electrical grid for which for this purpose shall be 8%, 3) Useful Thermal Energy, and 4) Merchantable Bio-Products; divided by Biomass Input Heat Content.
3. A Generation Unit shall be provided on the NEPOOL GIS each quarter an amount of Renewable Energy Attributes calculated as follows:
  - a. A Generation Unit achieving 60% or higher Overall Efficiency in a quarter will receive one RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation.
  - b. A Unit achieving 50% Overall Efficiency in a quarter will receive one-half RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation.
  - c. A Unit achieving greater than 50% and less than 60% Overall Efficiency in a quarter will receive one RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation times a pro-rated fraction calculated as follows:  $0.5 + 5 \times (\text{Overall Efficiency} - 0.5)$ , whereby the Overall Efficiency is expressed as a decimal (e.g. 50% is expressed as 0.5).

4. Notwithstanding the calculation in 225 CMR 14.05(8)(c)(3), an Advancement of Biomass Conversion Generation Unit shall be provided on the NEPOOL GIS each quarter an amount of Renewable Energy Attributes calculated as follows:

- a. A Generation Unit achieving 60% or higher Overall Efficiency in a quarter will receive one RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation.
- b. A Unit achieving 40% Overall Efficiency in a quarter will receive one-half RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation.
- c. A Unit achieving greater than 40% and less than 60% Overall Efficiency in a quarter will receive one RPS Class I Renewable Energy Attribute for each MWh of RPS Class I Renewable Energy Generation times a pro-rating fraction calculated as follows:  $0.5 + 2.5 \times (\text{Overall Efficiency} - 0.4)$ , whereby the Overall Efficiency is expressed as a decimal (e.g. 50% is expressed as 0.5).

(d) Annual Compliance of Generation Units using Eligible Biomass Woody Fuel, Co-Mingled Biomass Woody Fuel, or Manufactured Biomass Fuel. An Owner, Operator, or Authorized Agent of a Generation Unit using Eligible Biomass Woody Fuel, Co-Mingled Biomass Woody Fuel, or Manufactured Biomass Fuel shall provide to the Department by January 31 of each year a Biomass Unit Annual Compliance Report and be subject to the following:

1. Within the Biomass Unit Annual Compliance Report, in a format set forth in the Overall Efficiency and Greenhouse Gas Analysis Guideline, the Owner, Operator, or Authorized Agent shall identify the Owner's ownership of Biomass Fuel Certificates denoting the fuel consumption for the Compliance Year by the Generation Unit by tons of fuel, categorized as Forest Derived Residues, Forest Derived Thinnings, Non-Forest Derived Residues, Forest Salvage, and Dedicated Energy Crops. The Owner, Operator, or Authorized Agent shall retain copies of all Biomass Fuel Certificates for 5 years. The Report must explain any variances with the proposed Fuel Supply Plan filed with the Department for that Compliance Year.
2. The Biomass Unit Annual Compliance Report must include a greenhouse gas analysis for the Compliance Year. The analysis shall be prepared in accordance with the Overall Efficiency and Greenhouse Gas Analysis Guideline and the fuel use as represented by the Biomass Fuel Certificates owned for the Compliance Year. This Report must also document the Unit's performance with respect to the lifecycle greenhouse emissions requirements in 225 CMR 14.05(1)(a)(7)(iii), including the actual percent lifecycle greenhouse gas emissions reduction over 20 years, as determined in the Guideline. The Report shall document any under-compliance and the Percent Under-Compliance with the lifecycle greenhouse gas emission reduction requirement.
3. For Generation Units that report a Percent Under-Compliance in 225 CMR

14.05(8)(d)(2), the following provisions shall apply.

- a. The Generation Unit shall be placed in a probationary status and the Department shall notify the Owner that its Statement of Qualification shall be revoked at the end of five Compliance Years following the Compliance Year for which the Percent Under-Compliance was reported, as provided under 225 CMR 14.06(9). The Unit's probationary status shall be rescinded and the Unit's Statement of Qualification shall no longer be subject to revocation if either 1) for any three Compliance Years of the probationary period the Biomass Unit Annual Compliance Report demonstrates that the Unit is complying with the lifecycle greenhouse gas emissions requirements, or 2) the Generation Unit's accumulated Percent Under-Compliance is offset by any net over-compliance with the lifecycle greenhouse gas emissions requirement as demonstrated in the Unit's Annual Compliance Reports during the probationary period.
- b. For any Compliance Year for which a Unit reports under compliance with the lifecycle greenhouse emissions requirements, the Unit shall demonstrate compliance through the Under-Compliance Mechanism as follows:
  - i. The Generation Unit shall demonstrate compliance by making an Under-Compliance Payment to the MassCEC. Such payment shall be equal to the product of the Generation Unit's Percent Under-Compliance for the relevant year times \$0.50 for each Renewable Energy Certificate settled for RPS Class I compliance in Massachusetts that was generated by the Unit in the relevant Compliance Year. The Generation Unit shall provide to the Department copies of any receipt(s) for Under-Compliance Payment made to the MassCEC for the Compliance Year.
  - ii. All Under-Compliance Payments received by the MassCEC shall be held in an account separate from other accounts of the MassCEC. The use of all Under-Compliance Payments shall be overseen by the Department. The use of the funds shall be limited to the provision of financial support for either 1) investments across the supply chain for Forest Derived Residues, such as but not limited to, investments in residue biomass harvest equipment, investment in residue fuel handling and trucking, and incremental investments needed by Generation Units to handle and utilize residue biomass material, or 2) activities that increase carbon sequestration through the growth of biomass, for example the planting of trees.
  - iii. The Generation Unit shall have up to one calendar year, after the filing of its Biomass Unit Annual Compliance Report, to make its total Under-Compliance Payment. If the Generation Unit fails to make full payment in this time, its Statement of Qualification shall be revoked, in accordance with 225 CMR 14.06(9), after the end of that calendar year.

- c. A Generation Unit that is subject to a probationary status shall meet the following requirements to demonstrate its ability to operate within compliance. If, in any Compliance Year, the following requirements are not followed, the Unit's Statement of Qualification will be revoked, as provided under 225 CMR 14.06(9).
- i. For the first year in a Generation Unit's probationary status, the Unit shall provide to the Department by April 1, a revised Fuel Supply Plan demonstrating corrective action from previous year's procurement practices that will provide for the necessary annual supply of Non-Forest Residues and Forest Derived Residues.
  - ii. For the second year in a Generation Unit's probationary status, the Unit shall provide to the Department by April 1, a revised Fuel Supply Plan that demonstrates that at least 25% of the necessary annual supply of Non-Forest Residues and Forest Derived Residues are procured under a contract with a fuel supplier.
  - iii. For the third year in a Generation Unit's probationary status, the Unit shall provide to the Department by April 1, a revised Fuel Supply Plan that demonstrates that at least 50% of the necessary annual supply of Non-Forest Residues and Forest Derived Residues are procured under a contract with a fuel supplier.
  - iv. For the fourth year in a Generation Unit's probationary status, the Unit shall provide to the Department by April 1, a revised Fuel Supply Plan that demonstrates that at least 75% of the necessary annual supply of Non-Forest Residues and Forest Derived Residues are procured under a contract with a fuel supplier.
  - v. For the fifth year in a Generation Unit's probationary status, the Unit shall provide to the Department by April 1, a revised Fuel Supply Plan that demonstrates that 100% of the necessary annual supply of Non-Forest Residues and Forest Derived Residues are procured under a contract with a fuel supplier.

(e) The Treatment of Previously Qualified Biomass Generation Units. Notwithstanding any other provision of 225 CMR 14.00 Generation Units utilizing a woody biomass fuel that had received a Statement of Qualification (SQ) prior to December 3, 2009 shall be subject to the following provisions:

- 1. The Department shall continue with the existing terms of all SQs, subject to 225 CMR 14.12, for all such qualified Generation Units through Compliance Year 2012.
- 2. If a Generation Unit which utilizes an Eligible Biomass Woody Fuel demonstrates to the satisfaction of the Department compliance with the fuel plan requirement found in 225 CMR 14.05(1)(a)(7)(f)(i) and the requirements in 225 CMR 14.05(8)(a), then the Department shall continue such Unit's existing SQ



through Compliance Year 2014.

3. Beginning in Compliance Year 2016 a previously qualified Generation Unit utilizing an Eligible Biomass Woody Fuel shall meet all requirements of 225 CMR 14.00. If a Unit cannot demonstrate compliance with 225 CMR 14.00 the Department shall rescind the Unit's SQ effective commencing in Compliance Year 2016.

#### 14.06: Qualification Process for RPS Class I and Solar Carve-Out Renewable Generation Units

(1) Statement of Qualification Application. A Statement of Qualification Application shall be submitted to the Department by the Owner or Operator of the Generation Unit or by the Authorized Agent for an Aggregation, as provided in 225 CMR 14.05(6)(b). The applicant must use the most current forms and associated instructions provided by the Department, and must include all information, documentation, and assurances required by such forms and instructions.

(2) Review Procedures.

(a) The Department will notify the applicant when the Statement of Qualification Application is administratively complete or if additional information is required pursuant to 225 CMR 14.06(1).

(b) The Department may, in its sole discretion, provide an opportunity for public comment on any Statement of Qualification Application.

(c) Not later than 10 days after receiving an administratively complete Statement of Qualification Application for an Advancement of Biomass Conversion Generation Unit, the Department shall notice such application and provide an opportunity for public comment before the Department issues a Statement of Qualification.

(3) Issuance or Non-Issuance of a Statement of Qualification.

(a) If the Department 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 RPS Class I Renewable Generation or aas Solar Carve-Out Renewable Generation pursuant to 225 CMR 14.05, the Department will provide the Owner or Operator of such Unit or the Authorized Agent for such Aggregation with a Statement of Qualification.

(b) The Statement of Qualification shall include any applicable restrictions and conditions that the Department deems necessary to ensure compliance by a particular Generation Unit or Aggregation with the provisions of 225 CMR 14.00. For any individual Solar Carve-Out Renewable Generation Unit, greater than 1 MW, a Statement of Qualification shall not be granted unless all applicable state and local permits have been obtained.

(c) If the Generation Unit or Aggregation does not meet the requirements for eligibility as an RPS Class I Renewable Generation Unit or a Solar Carve-Out Renewable Generation Unit, the Department shall provide written notice to the Owner or Operator or

to the Authorized Agent for an Aggregation, including the Department's reasons for such finding.

(d) A Solar Carve-Out Renewable Generation Unit shall receive a Statement of Qualification that states that the Unit is eligible for the Massachusetts Solar Carve-Out and that specifies a term of calendar quarters, referred to as the Opt-In Term, during which period the Unit is eligible to participate in the Solar Credit Clearinghouse Auction. The Opt-In Term shall be set at the time that the Unit receives its Statement of Qualification, and the Opt-In Term shall commence with the earlier of either the first day of the calendar quarter during which occurs the RPS Effective Date, as such date is provided in 225 CMR 14.06(4), or the first day of the subsequent calendar quarter from the date of the Statement of Qualification.

(e) The length of the Opt-In Term shall be forty quarters in Compliance Year 2010. This Term shall be reduced by four quarters for each full 10 per cent of the compliance obligation that is deposited into the Solar Credit Clearinghouse Auction Account and shall be increased by four quarters for each full 10 per cent of the compliance obligation that is met with ACP Payments. However, in no instance shall this reduction or increase be greater than eight quarters for one Compliance Year, nor shall the Opt-In Term exceed forty quarters. For Compliance Years 2010-2016, inclusive, the Opt-in Term shall not be less than twenty quarters. For Compliance Year 2017 and later, the Department shall determine whether to set a minimum number of quarters for the Opt-in Term for the Compliance Year. The Department shall announce annually on July 20, or the first Business Day thereafter, the length of the Opt-in Term, which shall apply to all Generation Units that receive Statements of Qualification as of that date and until a different Opt-In Term is announced.

(4) RPS Effective Date. The RPS Effective Date shall be the earliest date on or after the Commercial Operation Date on which electrical energy output of an RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit can result in the creation of RPS Class I or Solar Carve-Out Renewable Generation Attributes, except that, in the case of a Biomass Unit, the RPS Effective Date shall not be earlier than the date on which the Department determines that the Unit has commenced compliance with the low-emission conditions in its Statement of Qualification, and in the case of a Hydroelectric Unit, the RPS Effective Date shall not be earlier than the date on which the Department determined that the Unit has commenced compliance with the environmental conditions in its Statement of Qualification.

(5) Notification Requirements for Change in Eligibility Status. The Owner or Operator of an RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit shall notify the Department of any changes in the technology, operation, emissions, fuel sources, energy resources, capacity commitment, or other characteristics of the Generation Unit that may affect the eligibility of the Unit as an RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit. The Owner or Operator shall submit the notification to the Department no later than five 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 RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit and describe the changes in sufficient detail to enable the Department to determine if a change in eligibility is warranted.

(6) Notification Requirements for Change in Ownership, Generation Capacity, or Contact Information. The Owner or Operator of an RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit shall notify the Department of any changes in the ownership, operating entity, generation capacity, NEPOOL GIS account, independent verification system for the Unit's or Aggregation's electrical energy output, or contact information for the Generation Unit or Aggregation. The Owner or Operator shall submit the notification to the Department no later than five days following the end of the month during which such changes were implemented.

(7) Time Limit for Project Implementation. Any Statement of Qualification issued on or after the effective date of this section shall expire 48 months after the issuance date of the Statement of Qualification (the Expiration Date) unless the Commercial Operation Date of the Generation Unit or Aggregation is on or before the Expiration Date. The Department may, at its discretion, grant an extension of the Expiration Date of the Statement of Qualification upon petition by the Owner or Operator of the Generation Unit or Aggregation. If the Owner or Operator of such Unit or Aggregation desires an extension, such Owner or Operator must submit a new Statement of Qualification Application, and the decision of the Department on such new application may be made in accordance with the regulations and criteria that are applicable on the date that the Department receives that application.

(8) Expiration of Advisory Rulings. An advisory ruling issued by the Department for any proposed Generation Unit for which an administratively complete Statement of Qualification Application has not been submitted as of the effective date of this subsection, shall be deemed to have expired on that date.

(9) Suspension or Revocation of Statement of Qualification. The Department may suspend or revoke a Statement of Qualification if the Owner or Operator of an RPS Class I Renewable Generation Unit or Solar Carve-Out Renewable Generation Unit or Authorized Agent of an Aggregation fails to comply with 225 CMR 14.00.

#### 14.07: Renewable Energy Portfolio Standard – Class I

(1) RPS Class I 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, as specified in the table in 14.07, of electrical energy sales with RPS Class I Renewable Generation Attributes and Solar Carve-Out Renewable Generation Attributes.

#### **MASSACHUSETTS RENEWABLE ENERGY PORTFOLIO STANDARD – CLASS I MINIMUM PERCENTAGES OF ANNUAL ELECTRICAL ENERGY SALES WITH RPS CLASS I RENEWABLE GENERATION ATTRIBUTES**

Compliance Year	Cumulative Minimum Percentage, Including Solar Carve-Out Renewable Generation
2003	1.0

2004	1.5
2005	2.0
2006	2.5
2007	3.0
2008	3.5
2009	4.0
2010	5.0
2011	6.0
2012	7.0
2013	8.0
2014	9.0
2015	10.0
2016	11.0
2017	12.0
2018	13.0
2019	14.0
2020	15.0

(2) Solar Carve-Out Minimum Standard.

(a) 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 Solar Carve-Out Renewable Generation Attributes. This percentage shall be a portion of the Supplier's obligation under 225 CMR 14.07(1) and not an additional obligation of the Supplier. For each Compliance Year, the Solar Carve-Out Minimum Standard shall be calculated as the total Solar Carve-Out compliance obligation (in MWh) as determined in 225 CMR 14.07(2)(b) through 225 CMR 14.07(2)(h), divided by the total MWh of electrical energy sales by Retail Electricity Suppliers to End-use Customers in the Compliance Year 2 years prior, as such sales are defined in 225 CMR 14.09(2)(a). This resulting percentage, or Solar Carve-Out Minimum Standard, shall be announced by the Department not later than August 30 of the preceding Compliance Year.

(b) For Compliance Year 2010, the total compliance obligation shall be established to be 34,164 MWh, calculated as 30 MW multiplied by 365 days in the year multiplied by 24 hours in the day multiplied by 0.13 (or 13%) capacity factor.

(c) For Compliance Year 2011, the total compliance obligation shall be established to be 78,577 MWh, calculated as 69 MW multiplied by 365 days in the year multiplied by 24 hours in the day multiplied by 0.13 (or 13%) capacity factor.

(d) For each subsequent Compliance Year (CY), the total compliance obligation shall be equal to the total compliance obligation from the previous Compliance Year (CY-1), plus the difference between the Solar Carve-Out Renewable Generation Attributes projected to be generated for the previous Compliance Year and the Solar Carve-Out Renewable Generation Attributes actually generated for the Compliance Year two years prior (CY-2) which is multiplied by 1.3, minus the quantity of Solar Carve-Out Alternative Compliance Credits used for the Compliance Year two years prior plus the number of Solar Carve-Out Renewable Generation Attributes from the Compliance Year two years prior banked as provided under 225 CMR 14.08(2), plus the number of Solar

Carve-Out Renewable Generation Attributes from the Compliance Year two years prior deposited into the Solar Credit Clearinghouse Auction Account.

$$\text{Total Compliance Obligation}_{\text{CY}} = \text{Total Compliance Obligation}_{\text{CY-1}} + [\text{Total SRECs Generated (projected)}_{\text{CY-1}} - \text{SRECs Generated (actual)}_{\text{CY-2}}] \times 1.3 - \text{ACP Volume}_{\text{CY-2}} + \text{Banked Volume}_{\text{CY-2}} + \text{Auction Volume}_{\text{CY-2}}$$

For the purpose of the calculation in 225 CMR 14.07(2)(d), the Solar Carve-Out Renewable Generation Attributes actually generated for the Compliance Year two years prior (CY-2) shall be determined as the Attributes minted by the NEPOOL GIS in the Compliance Year two years prior (CY-2). The total Solar Carve-Out Renewable Generation Attributes projected to be generated for the previous Compliance Year (CY-1) shall be calculated by the Department as the sum of Attributes reported to the Department by the independent Third Party Meter Reader during the first two quarters of the previous Compliance Year (CY-1), and the projection by the Department of Attributes to be generated during the final two quarters of the previous Compliance Year prior (CY-1) by considering information including, but not limited to, the Commercial Operation Dates of Units that have received or have pending Statement of Qualifications. The Department shall provide documentation of its projection with its announcement of the new compliance obligation.

(e) In the calculation in 225 CMR 14.07(2)(d), in the year when the term calculated as the total compliance obligation for the previous Compliance Year (CY-1) plus the difference between the total Solar Carve-Out Renewable Generation Attributes generated for the previous Compliance Year (CY-1) and the total Solar Carve-Out Renewable Generation Attributes generated for the Compliance Year two years prior (CY-2) multiplied by 1.3, exceeds 455,520 MWh (calculated as the annual generation of 400 MW operating at a 13% capacity factor), then this term shall be replaced by the quantity 455,520 MWh, and the remainder of the equation shall remain the same in calculating the total compliance obligation for that year.

(f) In no instance prior to the total compliance obligation reaching 455,520 MWh shall the Solar Carve-Out Minimum Standard be a percentage less than that of the previous Compliance Year (CY-1). If the calculations in 225 CMR 14.07(2)(d) result in such a situation, the Solar Carve-Out Minimum Standard shall be equal to the percentage from the previous Compliance Year (CY-1).

(g) Notwithstanding 225 CMR 14.07(2)(d), for all Compliance Years subsequent to reaching a compliance obligation equal to or greater than 455,520 MWh, then the total compliance obligation shall be set equal to either (1) the total Solar Carve-Out Renewable Generation Attributes projected to be generated for the previous Compliance Year (CY-1), or (2) the total Solar Carve-Out Renewable Generation Attributes projected to be generated for the previous Compliance Year (CY-1) minus the quantity of Solar Carve-Out Alternative Compliance Credits used for the Compliance Year two years prior (CY-2) plus the number of Solar Carve-Out Renewable Generation Attributes from the Compliance Year two years prior (CY-2) deposited into the Solar Credit Clearinghouse Auction Account, whichever is greater.

(h) In the instance the Solar Credit Clearinghouse Auction under 225 CMR 14.05(4)(g)

does not clear, prior to conducting an auction under 225 CMR 14.05(4)(h), the Department shall recalculate the Solar Carve-Out Minimum Standard for the Compliance Year two years following the Compliance Year in which the Solar Carve-Out Renewable Generation Attributes deposited into the Solar Credit Clearinghouse Auction Account were generated by adding to the previously calculated total compliance obligation under 225 CMR 14.07(2)(d) through (g) the number of Solar Carve-Out Renewable Generation Attributes deposited into the Solar Credit Clearinghouse Auction Account such that the number of Attributes deposited is counted twice.

(i) In the Compliance Year in which the Department stops qualifying Units for the Solar Carve-Out Program under 225 CMR 14.05(4)(j), the Department shall announce the final Compliance Year of the Solar Carve-Out program. This final Compliance Year shall be calculated as the then current Compliance Year, plus the longest remaining Opt-In Term (expressed as calendar quarters divided by four and rounded up to a whole year) for any qualified Solar Carve-Out Renewable Generation Unit. In the event that a Solar Credit Clearinghouse Auction is held and creates Re-minted Auction Account Attributes that can be used for Compliance Years after the calculated final Compliance Year, the Department shall extend the final Compliance Year by the number of years sufficient to accommodate the Compliance Years during which the Re-minted Auction Account Attributes can be used for Solar Carve-Out compliance.

(j) For the year after the final Compliance Year, the Department shall set the Solar Carve-Out Minimum Standard to zero. From this time forward, Solar Carve-Out Renewable Energy Generation Attributes shall cease to exist, and all generation from qualified Solar Carve-Out Renewable Generation Units shall produce RPS Class I Renewable Energy Attributes.

(3) Post-2020 Standards. After 2020, the RPS Class I Minimum Standard shall increase by 1% per Compliance Year unless modified by law.

#### 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 shall demonstrate to the satisfaction of the Department that RPS Class I Renewable Generation Attributes or Solar Carve-Out Renewable Generation Attributes used for compliance have not otherwise been, nor will be, sold, retired, claimed, used 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 RPS Class I Renewable Generation Attributes or Solar Carve-Out Renewable Generation Attributes produced in one Compliance Year for compliance in either or both of the two subsequent Compliance Years, subject to the limitations in 225 CMR 14.08(2) 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 Department that such Attributes:



(a) were in excess of the RPS Class I Renewable Generation Attributes or Solar Carve-Out 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 30% of the RPS Class I Renewable Generation Attributes or do not exceed 10% of the Solar Carve-Out Renewable Generation Attributes needed by the Retail Electricity Supplier for compliance with the RPS Class I Minimum Standard or the Solar Carve-Out Renewable Minimum Standard, respectively, in the year they were generated, subject to 225 CMR 14.09(2)(d);

(c) were produced during the Compliance Year in which they are claimed as excess by the generation of electrical energy sold to End-use Customers in the ISO-NE Control Area, by the generation of electrical energy on End-use Customers' sides of retail meters in the ISO-NE Control Area, or by the generation of electrical energy from Off-grid Generation Units in Massachusetts; 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.

(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 MassCEC. Such funds shall be held in an account separate from other accounts of the MassCEC.

(a) RPS Class I Procedures. A Retail Electricity Supplier shall receive Alternative Compliance Credits from the Department, subject to the following:

1. The quantity of Credits, specified in MWhs, that can be applied to its obligations under 225 CMR 14.07(1) 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 for the RPS Class I Minimum Standard shall be \$50 per MWh for Compliance Year 2003. For each subsequent Compliance Year, the Department 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 to the MassCEC for the Compliance Year.

(b) Solar Carve-Out Renewable Generation Procedures. A Retail Electricity Supplier shall receive Solar Carve-Out Alternative Compliance Credits from the Department, subject to the following:

1. The quantity of Credits, specified in MWhs, that can be applied to its obligations under 225 CMR 14.07(2) shall be determined by calculating the ratio of the total of Solar Carve-Out ACPs paid for the Compliance Year to the Solar Carve-Out ACP

Rate for that Compliance Year.

2. The ACP Rate for the Solar Carve-Out Minimum Standard shall be \$600 per MWh. The Department may reduce the Rate, but not by more than 10% in a Compliance Year. The Department shall publish any new ACP Rate by January 31 of the Compliance Year with an explanation of the change.

3. The ACP Rate for that portion of a Retail Electricity Supplier's Solar Renewable Energy Credit obligations that were contractually committed or renewed prior to January 1, 2010, shall be equal to the RPS Class I ACP Rate as calculated for the applicable Compliance Year under 225 CMR 14.08(3)(a)(2). This provision does not apply to obligations that were contractually committed or renewed on or after January 1, 2010.

4. The Retail Electricity Supplier shall include with its Annual Compliance Filing copies of any ACP receipt(s) for Solar Carve-Out ACPs made to the MassCEC for the Compliance Year.

(c) Use of Funds. The Department shall oversee the use of ACP funds by the MassCEC, so as to further the commercial development of RPS Class I Renewable Generation Units and Solar Carve-Out Renewable Generation Units.

#### 14.09: Annual Compliance Filings for Retail Electricity Suppliers

(1) Date of Annual Compliance Filing. For each Compliance Year, the Retail Electricity Supplier annually shall file an annual Compliance Filing with the Department no later than the first day of July, or the first Business Day thereafter, 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 Department 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 allocated by the Retail Electricity Supplier to End-use Customers in the Compliance Year. Such allocation is defined as the total quantity of the Supplier's Certificates Obligation that the Supplier correctly allocated or should have allocated to all of the Supplier's Massachusetts retail subaccounts in the NEPOOL GIS, in compliance with all relevant provisions of Part 4 of the NEPOOL GIS Operating Rules, or any successor rules.

(b) Electrical Energy Sales to End-use Customers by Product. Documentation of the total MWhs of each Retail Electricity Product allocated to End-use Customers in the Compliance Year, verified by an independent third party satisfactory to the Department, consistent with the Guidelines. Such allocation is defined as the quantity of the Supplier's Certificates Obligation that the Supplier correctly allocated or should have allocated to each of the Supplier's Massachusetts retail subaccounts at the NEPOOL GIS, in compliance with all relevant provisions of Part 4 of the NEPOOL GIS Operating Rules, or any successor rules. The Department shall keep product information confidential to the extent permitted by law.

(c) Attributes Allocated from the Compliance Year. Documentation of the total MWhs

of each Retail Electricity Product allocated to End-use Customers that were derived from RPS Class I Renewable Generation and Solar Carve-Out Renewable Generation during the Compliance Year, and which may include electrical energy generated on End-use Customers' sides of retail meters in the ISO-NE Control Area or by Off-grid Generation Units in Massachusetts in the Compliance Year, as follows:

1. For electrical energy transactions included in the ISO-NE Settlement Market System, the Compliance Filings shall include documentation from the NEPOOL GIS administrator of the Retail Electricity Supplier's ownership of GIS Certificates representing RPS Class I Renewable Generation and Solar Carve-Out Renewable Generation during the Compliance Year.
  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, the Compliance Filings shall include documentation from the NEPOOL GIS of the Retail Electricity Supplier's ownership of GIS Certificates representing RPS Class I Renewable Generation and Solar Carve-Out Renewable Generation during the Compliance Year.
- (d) Attributes Allocated from Banked Compliance. Allocation by Retail Electricity Product of any quantity of RPS Class I Renewable Generation Attributes banked from one or both of the two previous years pursuant to 225 CMR 14.08(2) that are used to demonstrate compliance with the RPS Class I Minimum Standard in the current Compliance Year, and allocation by Retail Electricity Product of any quantity of Solar Carve-Out Renewable Generation Attributes banked from one or both of the two previous years pursuant to 225 CMR 14.08(2) that are used to demonstrate compliance with the Solar Carve-Out Minimum Standard or the RPS Class I Minimum Standard in the current Compliance Year;
- (e) Alternative Compliance Credits. Allocation by Retail Electricity Product of any Alternative Compliance Credits claimed pursuant to 225 CMR 14.08(3)(a), along with a copy of any Alternative Compliance Payment receipt(s), and allocation by Retail Electricity Product of any Solar Carve-Out Alternative Compliance Credits claimed pursuant to 225 CMR 14.08(3)(b), along with a copy of any Solar Carve-Out Alternative Compliance Payment receipt(s); and
- (f) Attributes Banked for Future Compliance. Identification of any quantity of Attributes from RPS Class I Renewable Generation or Solar Carve-Out Renewable Generation, 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).
- (g) Contracts Subject to Lower ACP Rate under 225 CMR 14.08(3)(b)(3). Identification of any contract for a specific term of years that was executed before January 1, 2010, and its terms, including but not limited to, the execution and expiration dates of the contract and the annual volume of electrical energy supplied. Contracts eligible for the Lower ACP Rate shall include only those contracts that were executed by a retail End-use Customer.

#### 14.10: Reporting Requirements

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

- (a) the person's name, title and business address;
- (b) the person's authority to certify and submit the documentation to the Department; 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."

(2) Annual Renewable Energy Resource Report. The Department shall produce and make available to the public an annual report that summarizes information submitted to the Department by Retail Electric Suppliers in the Annual Compliance Filings submitted to the Department pursuant to 225 CMR 14.09(2). Such report shall include non-confidential data that provides the following:

- (a) the extent to which the Retail Electric Suppliers complied with the RPS Class I Minimum Standard and the Solar Carve-Out Minimum Standard, both separately and combined;
- (b) the extent to which the Retail Electric Suppliers used Standard Compliance, Banked Compliance, and Alternative Compliance in meeting the Minimum Standards; and
- (c) the names, locations, and types of RPS Class I Renewable Energy Generation Units and Solar Carve-Out Renewable Energy Units from which the Retail Electric Suppliers, as an aggregate, obtained the Renewable Energy Attributes used in meeting the Minimum Standards.

(3) Identification of Renewable Generation Units, RPS Class I Generation Units and Solar Carve-Out Renewable Generation Units. The Department shall inform the NEPOOL GIS administrator which Generation Units should be designated as Renewable Generation Units, RPS Class I Generation Units and Solar Carve-Out Renewable Generation Units pursuant to 225 CMR 14.00.

#### 14.11: Inspection

(1) Document Inspection. The Department may audit the accuracy of all information submitted pursuant to 225 CMR 14.00. The Department may request and obtain from any Owner, Operator or Authorized Agent of an RPS Class I Renewable Generation Unit or a Solar Carve-Out Renewable Generation Unit, including Aggregations, and from any Retail Electricity Supplier information that the Department determines necessary to monitor

compliance with and enforcement of 225 CMR 14.00.

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

#### 14.12: Non-compliance

Any Retail Electricity Supplier or Owner, Operator or Authorized Agent of a RPS Class I Renewable Generation Unit, Solar Renewable Generation Unit or Aggregation that fails to comply with the requirements of 225 CMR 14.00 shall be subject to the following provisions:

(1) Notice of Non-compliance. A failure to comply with the requirements of 225 CMR 14.00 shall be determined by the Department. A written Notice of Non-compliance shall be prepared and delivered by the Department to any Retail Electricity Supplier or Owner, Operator or Authorized Agent of an RPS Class I Renewable Generation Unit or Solar Renewable Generation Unit or Aggregation 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.

(2) Publication of Notice of Non-compliance. A Notice of Non-compliance may be published on the Department's website and in any other media deemed appropriate by the Department. Such publication may remain posted until the Retail Electricity Supplier or Owner, Operator or Authorized Agent returns to compliance as determined by the Department.

(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 Department 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 or such date as the Department may specify.

(4) Suspension or Revocation of License. The Department shall refer its findings of non-compliance to the Massachusetts Department of Public Utilities. A Retail Electricity Supplier that fails to comply with 225 CMR 14.00 may be subject to the Massachusetts Department of Public Utilities Licensure Action 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.

## REGULATORY AUTHORITY

225 CMR 14.00: M.G.L. c. 25A, § 11F.