#### 225 CMR 15.00 RENEWABLE ENERGY PORTFOLIO STANDARD – CLASS II

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## 15.01: Authority

225 CMR 15.00 is promulgated pursuant to M.G.L. c. 25A, § 11F.

# 15.02: Definitions

<u>Aggregation</u>. 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 15.05(4).

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 15.07. One unit of credit shall be equivalent to the RPS Class II Renewable Generation Attribute associated with one MWh of electrical energy output from an RPS Class II Renewable Generation Unit, excluding Waste Energy Generation Units, and one unit of credit shall be equivalent to the RPS Class II Waste Energy Generation Attribute associated with one MWh of electrical energy output from an RPS Class II Waste Energy Generation Unit.

<u>Alternative Compliance Payment (ACP)</u>. 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 II Renewable Generation Attributes or RPS Class II Waste Energy Generation Attributes required under 225 CMR 15.07.

<u>Biomass Fuel Certificate</u>. A certificate issued in accordance with rules established by the Department in the Biomass Eligibility and Certificate *Guideline* that

- (a) represents one ton, equal to 2000 pounds, of supply of Eligible Biomass Woody Fuel
- (b) specifies the source of the wood; and
- (c) 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.

<u>Biomass Input Heat Content</u>. 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 provided by the Department in the Overall Efficiency and Greenhouse Gas Analysis Guideline. The methodology includes 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.

<u>Blended Fuel</u>. A liquid or gaseous fuel that is blended from both Eligible RPS Class II Renewable Fuel(s) and ineligible fuel(s), a portion of whose electrical energy output may qualify as RPS Class II Renewable Generation under criteria set forth in 225 CMR 15.05(2).

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

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

<u>Co-Mingled Biomass Woody Fuel</u>. 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.

<u>Commercial Operation Date</u>. The date that a Generation Unit first produced electrical energy for sale within the ISO-NE Control Area or within an adjacent Control Area. In the case of a Generation Unit that is connected to the End-use Customer's side of the electric meter or produces Off-grid Generation, the date that such Generation Unit first produced electrical energy.

<u>Compliance Filing</u>. A document filed annually by a Retail Electricity Supplier with the Department documenting compliance with 225 CMR 15.07, 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.

<u>Compliance Year</u>. 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 15.07 and 15.08.

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

<u>Current Use Program</u>. 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.

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

<u>Department</u>. The Massachusetts Department of Energy Resources (DOER) established by M.G.L. c. 25A, § 1.

Distribution Company. A distribution company as defined in M.G.L. c. 164 § 1.

<u>Eligible Biomass Fuel</u>. Fuel sources 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; 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: <u>Construction and Demolition Waste</u> (C&D).

<u>Eligible Biomass Woody Fuel</u>. Woody fuels that are derived from the following sources, consistent with the requirements of 225 CMR 15.05(5):

# (a) 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.

# (b) 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 ten 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.
- (c) <u>Forest Salvage</u>: 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.

### (d) Non-Forest Derived Residues:

1. <u>Primary Forest Products Industry</u>: 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. <u>Secondary forest products industry</u>: 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. <u>Land Use Change Non-agricultural</u>: 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. <u>Land Use Change Agricultural</u>: Trees cut or otherwise removed in the process of converting forest land to agricultural usage, either for new or restored farm land.
- 5. <u>Yard Waste</u>: Leaves, grass clippings, prunings, and other natural organic matter discarded from yards and gardens.
- 6. <u>Wood Waste</u>: 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.
- (e) <u>Dedicated Energy Crops</u>. Wood 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.

<u>Eligible Forest Biomass Tonnage Report</u>. The report certified by a Professional Forester under the provisions of 225 CMR 15.05(5) 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% 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; 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.

<u>Eligible RPS Class II Renewable Fuel</u>. An Eligible Biomass Fuel, landfill methane gas, municipal solid waste, 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 or Class II Renewable Generation if the RPS Class I or Class II 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.

<u>Fire-adapted Forest Ecosystem</u>. Natural forest communities characterized by vegetation including, but not limited to, pitch pine and/or scrub oak occurring on droughty soils, and that

- (a) have evolved with fire as a natural process;
- (b) support and renew associated wildlife species and habitats; and
- (c) 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 Generation Unit's fuel type, emissions, vintage and RPS eligibility.

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

<u>Geothermal Energy</u>. 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.

<u>Guidelines</u>. A set of clarifications, interpretations, and procedures, including forms, developed by the Department to assist in compliance with the requirements of 225 CMR 15.00. 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 15.00.

<u>Hydroelectric Energy</u>. 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.

<u>Impacted Watershed</u>. 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 Generation Unit.

<u>ISO-NE</u>. 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.

<u>ISO-NE Settlement Market System</u>. 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.

<u>Lifecycle Greenhouse Gas Emissions</u>. 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, 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 and use of the finished fuel at the Generation Unit, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

<u>Low Impact Hydro Power Institute (LIHI)</u>. A non-profit 501(c)(3) organization, 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.

<u>Manufactured Biomass Fuel</u>. 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.

<u>Marine or Hydrokinetic Energy</u>. 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.

<u>MassDEP</u>. The Massachusetts Department of Environmental Protection established by M.G.L. c. 21A, § 7.

<u>Megawatt-hour (MWh)</u>. A unit of electrical energy or work equivalent to one million watts of power operating for one hour, or, for the purpose of thermal energy, a unit of energy equal to 3,412,000 British Thermal Units (Btu).

<u>Merchantable Bio-products</u>. 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.

<u>NEPOOL GIS</u>. 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.

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

<u>Operator</u>. Any person or entity who has charge or control of a Generation Unit subject to 225 CMR 15.00, including without limitation a duly authorized agent or lessee of the Owner, or a duly authorized independent contractor.

Overall Efficiency. For a Generation Unit using an Eligible Biomass Woody Fuel, the calculation shall be the sum of:

- (a) Renewable Generation not utilized behind-the-meter, plus
- (b) Renewable Energy utilized behind-the-meter divided by 0.92, or 92%, which is one minus the average distribution and transmission line losses of the electrical grid, which, for the purpose of this calculation, is 8%, plus
- (c) Useful Thermal Energy, plus
- (d) Merchantable Bio-Products;

and this summation shall be divided by the Biomass Input Heat Content.

Owner. Any person or entity who, alone or in conjunction with others, has legal ownership, a leasehold interest, or effective control over the real property or property interest upon which a Generation Unit is located, or the airspace above said real property, including without limitation a duly authorized agent of the Owner. For the purposes of 225 CMR 15.02, Owner does not mean a person or entity holding legal title or security interest solely for the purpose of providing financing.

<u>Percent Under-compliance</u>. The difference, if positive, between 50% and the reported lifecycle greenhouse gas emissions over 20 years as reported in a Biomass Unit Annual Compliance Report by an RPS Class II Renewable Generation Unit that utilizes Eligible Biomass Woody Fuel, as provided in 225 CMR 15.05(5)(d). The difference, if negative, shall not be considered under-compliance as related to 15.05(5)(d)3.

<u>Professional Forester</u>. A person 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.

<u>Relevant Hydroelectric Agency</u>. 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 Generation Unit's production of Renewable Generation.

<u>Renewable Generation Unit</u>. A Generation Unit that uses an Eligible RPS Class II 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 15.04(1)(a).

<u>Retail Electricity Product</u>. 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.

<u>Retail Electricity Supplier</u>. 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 15.00 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.

Renewable Generation. The electrical energy output of an RPS Class II Renewable Generation Unit, or that portion of the electrical energy output of an RPS Class II Generation Unit that qualifies under:

- (a) a Co-firing and Blended Fuel Waiver, pursuant to 225 CMR 15.05(2);
- (b) the Special Provisions for a Generation Unit Located in a Control Area Adjacent to the ISO-NE Control Area, pursuant to 225 CMR 15.05(3); or
- (c) any other applicable provision of 225 CMR 15.00.

RPS Class II Renewable Generation Attribute. The Generation Attribute of the electrical energy output of a specific RPS Class II Generation Unit that derives from the Generation Unit's production of RPS Class II Renewable Generation, excluding Attributes derived from the production of Waste Energy.

<u>RPS Class II Renewable Generation Unit</u>. A Generation Unit or Aggregation that has received an RPS Class II Statement of Qualification from the Department.

<u>RPS Class II Waste Energy Generation Attribute</u>. The Generation Attribute of the electrical energy output of a specific Waste Energy Generation Unit that derives from the Generation Unit's production of Waste Energy.

Statement of Qualification (SQ). A written document from the Department that qualifies a Generation Unit or Aggregation as an RPS Class II Qualified Generation Unit, or that qualifies a portion of the annual electrical energy output of a Generation Unit or Aggregation as RPS Class II 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.

<u>Valid Air Permit</u>. 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.

Waste Energy. Electrical energy generated from the combustion of municipal solid waste.

<u>Waste Energy Generation Unit</u>. A Generation Unit that utilizes conventional municipal solid waste plant technology in commercial use to generate Waste Energy.

# 15.03: Administration

225 CMR 15.00 shall be administered by the Department.

# 15.04: Applicability

225 CMR 15.00 applies to Retail Electricity Suppliers and to the Owners or Operators of RPS Class II Generation Units.

# 15.05: Eligibility Criteria for RPS Class II Generation Units

- (1) <u>Eligibility Criteria</u>. A Generation Unit may qualify as an RPS Class II Generation Unit subject to the limitations in 225 CMR 15.05.
  - (a) <u>Fuels, Energy Resources and Technologies</u>. The Generation Unit shall use one or more of the fuels, energy resources and/or technologies listed in 225 CMR 15.05(1)(a)1 through 10.
    - 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 II 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.
    - 6. <u>Hydroelectric</u>. A Generation Unit that uses Hydroelectric Energy may qualify as an RPS Class II Generation Unit, subject to the limitations in 225 CMR 15.05(1)(a)6.
      - a. The Generation Unit has a nameplate capacity up to 7.5 megawatts.
      - b. The Generation Unit does not involve any dam or water diversion structure constructed after December 31, 1997, or pumped storage of water.
      - c. The Generation Unit does not generate Marine or Hydrokinetic Energy.
      - d. The Generation 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 Generation Unit shall demonstrate compliance with such standards by submitting the documentation required in either 225 CMR 15.05(1)(a)6.d.i or ii.

- i. LIHI Certification of the Generation Unit; except that in either of the two circumstances provided in 225 CMR 15.05(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.
  - (i) 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 Generation Unit; or
  - (ii) If, between issuance of the LIHI certification and the Department's determination of the Generation 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 Generation 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 Generation 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 Statement of Qualification Application should be approved. The Department thereafter shall make finding of whether the Generation Unit meets appropriate environmental safeguards despite the lack of LIHI certification.
- e. The Owner or Operator of the Generation Unit must serve notice to all Relevant Hydroelectric Agencies of its application for LIHI certification. The Owner or Operator of the Generation Unit also must serve notice to all Relevant Hydroelectric Agencies and provide opportunity for comment within 30 days of such notice, with regard to its submission of a Statement of Qualification Application . Notice of such service must be provided to the Department.
- f. If LIHI fails to act to certify or deny certification within 180 days from the date of submission of the Generation 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 Generation Unit and any submissions to LIHI by Relevant Hydroelectric Agencies, and shall make a final determination as to whether the Generation Unit meets environmental standards specified in 225

CMR 15.05(1)(a)6.d.

- g. If LIHI is unable to review for certification a Generation 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 Generation Unit may petition the Department for certification using the LIHI standards by an independent third party acceptable to the Department.
- 7. <u>Waste to Energy</u>. A Generation Unit that uses Waste Energy may qualify as an RPS Class II Generation Unit subject to the following limitations:
  - a. Has received approval from the MassDEP of the Unit's participation in or operation of an authorized recycling program;
  - b. Maintains participation in or operation of such recycling program and confirms this maintenance by submitting an annual report to the Department and MassDEP of its compliance;
  - c. Complies with the applicable requirements of 310 CMR 7.08(2): *Municipal Waste Combustors*;
  - d. Complies with the applicable requirements of 310 CMR 19.000: *Solid Waste Management*.
- 8. Low-emission, biomass power conversion technologies using an Eligible Biomass Fuel. A Generation Unit may qualify as an RPS Class II Generation Unit, provided it uses an Eligible Biomass Fuel, subject to the limitations in 225 CMR 15.05(1)(a)8.
  - 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 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.
  - c. 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.
  - d. 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. The Unit shall provide a report of the anticipated fuel supply for that Compliance Year no later than January 1 of each year on an annual basis.
    - ii. A design and operational plan that demonstrates that the Unit will achieve an Overall Efficiency, as calculated in 225 CMR 15.05(5)(c)2. through 4., of at least 50% on a quarterly basis.
    - 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% reduction of greenhouse gas emissions 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.

- e. In the case of a Generation Unit that uses anaerobic digester gas or another biogas that is an Eligible Biomass Fuel, such gas may be either
- i. Conveyed directly to the Generation Unit without the use of facilities used as common carriers of natural gas, or
- ii. Transported to a Generation Unit within the ISO-NE Control Area or an adjacent Control Area via a common carrier of natural gas, in which instance the gas would be subject to the following provisions:
  - (i) the gas is produced entirely within the ISO-NE Control Area or an adjacent Control Area; and
  - (ii) documentation is provided, satisfactory to the Department, regarding the gas transportation and related contracts; and
  - (iii) demonstration is provided, satisfactory to the Department, that the gas can be physically delivered to the Generation Unit.
- 9. Marine or Hydrokinetic Energy.
- 10. Geothermal Energy.
- (b) <u>Commercial Operation Date</u>. The Commercial Operation Date shall be on or before December 31, 1997.
- (c) <u>Metering</u>. 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 following limitations:
  - 1. <u>Off-grid Generation</u>. If the Generation Unit produces Off-grid Generation, such Generation Unit must be located in Massachusetts.
  - 2. <u>Behind-the-meter Generation</u>. If the Generation Unit is wired to the electrical system on the End-use Customer's side of a retail electric meter, such Generation Unit must be located inside the ISO-NE Control Area and have a nameplate capacity of 25 megawatts or less.
- (2) <u>Co-Firing and Blended Fuel Waiver</u>. All or a portion of the electrical energy output of a Generation Unit that uses ineligible fuel in conjunction with an Eligible RPS Class II Renewable Fuel, whether by co-firing such fuels or by using a Blended Fuel, may qualify as RPS Class II Renewable Generation provided the Generation Unit meets the eligibility requirements of 225 CMR 15.05, subject to the limitations in 225 CMR 15.05(2).
  - (a) The portion of the total electrical energy output that qualifies as RPS Class II

Renewable Generation in a given time period shall be equal to the ratio of the net heat content of the Eligible RPS Class II 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 15.05(5)(a)(2)b.
- (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 15.05(1)(a)8.
- (d) 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 the Department and the MassDEP with assistance in this determination.
- (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.
- (f) The provisions of 225 CMR 15.05(2) 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 II Renewable Fuel.
- (3) 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 II Generation Unit located in a Control Area adjacent to the ISO-NE Control Area that qualifies as RPS Class II 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 following requirements:
  - (a) The Generation Unit Owner or Operator shall provide documentation, satisfactory to the Department, that the RPS Class II Renewable Generation Attributes or RPS Class II Waste Energy 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.
  - (b) 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 II Renewable Generation into the ISO-NE Control Area for the creation of RPS Class II 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.
  - (c) The quantity of electrical energy output from an RPS Class II Generation Unit outside the ISO-NE Control Area that can qualify as RPS Class II Renewable Generation at the NEPOOL GIS during each hour is limited to the lesser of the RPS Class II Renewable Generation actually produced by the Unit or the RPS Class II Renewable Generation actually scheduled and delivered into the ISO-NE Control Area.

- (4) <u>Special Provisions for Aggregations</u>. 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 15.05, may receive a single Statement of Qualification and be treated as a single RPS Class II Renewable Generation Unit under the following criteria and procedures:
  - (a) Each Generation Unit in such Aggregation must use the same fuel, energy resource and technology as all other Generation Units in the Aggregation.
  - (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 Generation 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 as part of an aggregated total for the Aggregation, 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.
- (5) <u>Special Provisions for Generation Units Using Eligible Biomass Woody Fuels, Co-Mingled Biomass Woody Fuels, or Manufactured Biomass Fuels.</u>
  - (a) <u>Eligible Biomass Woody Fuel or Manufactured Biomass Fuel Certification</u>, <u>Verification</u>, <u>and Enforcement</u>. 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 by the Owner or Operator in a Biomass Unit Annual Compliance Report provided in 225 CMR 15.05(5)(d). The documentation shall demonstrate that the Owner or Operator of the Generation Unit has obtained a quantity of Biomass Fuel Certificates representing an equal or greater quantity than the tonnage of Eligible Biomass Woody Fuel in the Report. 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 volume of Manufactured Biomass Fuel delivered to the unit.
    - 2. Biomass Fuel Certificates shall be originated, procured, and transacted in accordance with the Department's Biomass Eligibility and Certificate Guideline. Certificates shall be valid only in one of the following instances:
      - a. Biomass Fuel Certificates that accompany the shipment of Eligible Biomass Woody Fuel from its original source and:
        - i. is delivered directly to an RPS Class II Renewable Generation Unit; and
        - ii. 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. If the fuel is subsequently co-mingled by the retailer, the Certificate accompanying the co-mingled fuel must represent the original Eligible Biomass Woody Fuel tonnage delivered to the retailer. The newly Co-Mingled Biomass Woody Fuel must then be delivered by the same retailer directly to an RPS Class II 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: *Renewable Energy Portfolio Standard Class I*, 225 CMR 15.00, or 225 CMR 16.00: *Alternative Energy Portfolio Standard (APS)*.
- 3. For Forest Derived Residues and Forest Derived Thinnings the Biomass Fuel Certificate shall be issued consistent with the Eligible Forest Biomass Tonnage Report and signed by a Professional Forester.
- 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 15.00. 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 each of the following:

- a. A certification from a Professional Forester that the amount to be removed for Eligible Biomass Woody Fuel is no more than the allowable percent of the total weight of all forest products harvested from a given forest harvest site;
- b. A certification from a Professional Forester that the prescribed harvest meets the forest sustainability thresholds provided in the Department's Biomass Eligibility and Certificate *Guideline*;
- c. The total tons of *Eligible Biomass* Woody Fuel prescribed for harvesting under the category of Forest Derived Residues; and
- d. 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 Department's Biomass Eligibility and Certificate Guideline. The allowable percent removal limit shall be determined as prescribed in the Department's Biomass Eligibility and Certificate 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 the Non-Forest Derived Residue fuels, Forest Salvage, and Dedicated Energy Crops meet the criteria of an Eligible Biomass Woody Fuel as provided in the Department's Biomass

Eligibility and Certificate Guideline.

- (b) <u>Verification Provision</u>. The Department or independent third-parties contracted for by the Department, shall conduct document inspections, audits, or site visits under 225 CMR 15.11, as often as the Department determines is necessary to verify compliance with all relevant provisions of 225 CMR 15.00 pertaining to use of an Eligible Biomass Woody Fuel. Verification by the Department shall follow the recommendations of the Advisory Panel and Forest Impact Statement, as established in 225 CMR 14.05(8)(b)1.: *Advisory Panel* and 2.: *Forest Impact Assessment*.
- (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. The Generation Unit will be provided RPS Class II Renewable Generation Attributes as a function of its Overall Efficiency.
  - 1. Each quarter, the designated 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, of a Generation Unit, must report: Biomass Input Heat Content, Useful Thermal Energy, Merchantable Bio-Products, Renewable Generation, Renewable Generation utilized behind-the-meter, and the Overall Efficiency. 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. Each quarter, a Generation Unit shall be provided an amount of Renewable Energy Attributes on the NEPOOL GIS calculated as follows:
    - a. A Generation Unit achieving 60% or higher Overall Efficiency in a quarter will receive one RPS Class II Renewable Energy Attribute for each MWh of RPS Class II Renewable Energy Generation.
    - b. A Unit achieving greater than 50% and less than 60% Overall Efficiency in a quarter will receive one RPS Class II Renewable Energy Attribute for each MWh of RPS Class II Renewable Energy Generation times a pro-rated fraction calculated as follows: 0.5 + 5 x (Overall Efficiency 0.5), whereby the Overall Efficiency is expressed as a decimal (e.g. 51% is expressed as 0.51).
    - c. A Unit achieving 50% Overall Efficiency in a quarter will receive 1/2 RPS Class II Renewable Energy Attribute for each MWh of RPS Class II Renewable Energy Generation.
- (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 31st of each year a Biomass Unit Annual Compliance Report and be subject to the following:
  - Within the Biomass Unit Annual Compliance Report, in a format set forth in the Department's 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 five 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 Department's 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 Generation Unit's performance with respect to the lifecycle greenhouse emissions requirements in 225 CMR 15.05(1)(a)8.d.iii, including the actual percent lifecycle greenhouse gas emissions reduction over 20 years, as determined in the Department's Overall Efficiency and Greenhouse Gas Analysis 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 15.05(5)(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 15.06(7). The Generation Unit's probationary status shall be rescinded and the Generation Unit's Statement of Qualification shall no longer be subject to revocation if either:
    - i. For any three Compliance Years of the probationary period the Biomass Unit Annual Compliance Report demonstrates that the Generation Unit is complying with the lifecycle greenhouse gas emissions requirements; or
    - ii. 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 Generation Unit reports under compliance with the lifecycle greenhouse emissions requirements, the Generation 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 RPS Class II Renewable Energy Attribute settled for RPS Class II compliance in Massachusetts that was generated by the Generation 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:

- (i) 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
- (ii) 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 15.06(7), 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 Generation Unit's Statement of Qualification will be revoked, as provided under 225 CMR 15.06(7).
  - i. For the first year in a Generation Unit's probationary status, the Generation Unit shall provide to the Department by April 1st, 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 Generation Unit shall provide to the Department by April 1st, 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 Generation Unit shall provide to the Department by April 1st, 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 Generation Unit shall provide to the Department by April 1st, 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 Generation Unit shall provide to the Department by April 1st, 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.

### 15.06: Statement of Qualification Process for RPS Class II Renewable Generation Units

(1) <u>Statement of Qualification Application (SQA)</u>. An SQA shall be submitted to the Department by the Owner or Operator of the Generation Unit or Aggregation. 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 SQA is administratively complete or if additional information is required pursuant to 225 CMR 15.06(1).
- (b) The Department may, in its sole discretion, provide an opportunity for public comment on any SQA.

### (3) <u>Issuance or Non-Issuance of an SQ.</u>

- (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 II Renewable Generation pursuant to 225 CMR 15.05, the Department will provide the Owner or Operator of such Generation Unit or Aggregation with an SQ.
- (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 15.00.
- (c) If the Generation Unit or Aggregation does not meet the requirements for eligibility as an RPS Class II Renewable Generation Unit, the Department shall provide written notice to the Owner or Operator, including the Department's reasons for such finding.
- (4) <u>RPS Effective Date</u>. The RPS Effective Date shall be the earliest date on which electrical energy output of an RPS Class II Renewable Generation Unit or Waste Energy Generation Unit can result in the creation of RPS Class II GIS Certificates, with the following limitations:
  - (a) In the case of a Biomass Generation Unit, the RPS Effective Date shall not be earlier than the date on which the Department determines that the Biomass Generation Unit has commenced compliance with the low-emission conditions in its SQ;
  - (b) In the case of a Hydroelectric Energy Generation Unit, the RPS Effective Date shall not be earlier than the date on which the Department determined that the Generation Unit has commenced compliance with the environmental conditions in its SQ;
  - (c) In the case of a Waste Energy Generation Unit, the RPS Effective Date shall not be earlier than the date on which the Department determines that the Waste Energy Generation Unit has commenced compliance with the recycling program conditions in its SQ.

In no instance shall the RPS Effective Date occur before January 1, 2009.

(5) <u>Notification Requirements for Change in Eligibility Status</u>. The Owner or Operator of an RPS Class II Renewable Generation Unit or Waste Energy Generation Unit shall notify the Department of any changes in the technology, operation, emissions, fuel sources, energy resources, or other characteristics of the Generation Unit that may affect the eligibility of the

Generation Unit as an RPS Class II Renewable Generation Unit or Waste Energy 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 II Renewable Generation Unit or Waste Energy Generation Unit and describe the changes in sufficient detail to enable the Department to determine if a change in eligibility is warranted.

- (6) <u>Notification Requirements for Change in Ownership, Generation Capacity, or Contact Information</u>. The Owner or Operator of an RPS Class II Renewable Generation Unit or Waste Energy Generation Unit shall notify the Department of any changes in the ownership, operating entity, generation capacity, NEPOOL GIS account, independent verification system for the Generation 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) <u>Suspension or Revocation of Statement of Qualification</u>. The Department may suspend or revoke a Statement of Qualification if the Owner or Operator of an RPS Class II Renewable Generation Unit or Waste Energy Generation Unit fails to comply with 225 CMR 15.00 or if a Generation Unit does not operate during a consecutive 12-month period.

# 15.07: Renewable Energy Portfolio Standard – Class II

- (1) <u>RPS Class II Renewable Generation Minimum Standard</u>. The total annual sales of each Retail Electricity Product sold to Massachusetts End-use Customers by a Retail Electricity Supplier, under contracts executed or extended on or after January 1, 2009, shall include a minimum percentage of electrical energy sales with RPS Class II Renewable Generation Attributes. The RPS Class II Renewable Generation Minimum Standard shall be calculated as follows:
  - (a) The following table reflects the RPS Class II Renewable Generation Minimum Standards in effect from 2009 through 2021:

Compliance Year	RPS Class II Renewable
	Generation Minimum Standard
2009	3.60%
2010	3.60%
2011	3.60%
2012	3.60%
2013	1.50%
2014	1.75%
2015	2.00%
2016	2.5319%
2017	2.5909%
2018	2.6155%
2019	2.6883%
2020	3.2056%
2021	3.5634%

- (b) For each Compliance Year after 2021, the Department shall announce the RPS Class II Renewable Generation Minimum Standard no later than August 31st two years prior to the Compliance Year. The RPS Class II Renewable Generation Minimum Standard shall be determined by the following formula:
- The RPS Class II Renewable Generation Minimum Standard for each Compliance Year (CY) shall be equal to the RPS Class II Renewable Generation Minimum Standard for the prior Compliance Year (CY-1), plus the number of RPS Class II Renewable Generation Attributes settled for compliance in Compliance Year three years prior (CY-3), divided by the total MWh of electrical energy sales by Retail Electricity Suppliers to End-use Customers in Compliance Year three years prior (CY-3), minus the number of RPS Class II Renewable Generation Attributes settled for compliance in Compliance Year four years prior (CY-4) divided by the total MWh of electrical energy sales by Retail Electricity Suppliers to End-use Customers in Compliance Year four years prior (CY-4). For the purpose of these calculations, the total MWh of electrical energy sales by Retail Electricity Suppliers to End-use Customers shall be determined in the manner specified in 225 CMR 15.09(2)(a), and Attributes settled for compliance in a given Compliance Year shall be represented by the total of all RPS Class II qualified GIS Certificates that are determined by the Department to qualify for RPS Class II Renewable Energy compliance in the Compliance Year in which the energy that they signify was generated.
- (c) Notwithstanding the calculation in 225 CMR 15.07(1)(b), the RPS Class II Renewable Generation Minimum Standard shall not exceed 3.6% of the Total Electrical Energy Sales to End-use Customers, as provided in 225 CMR 15.09(2)(a).
- (2) RPS Class II Waste Energy Minimum Standard. The total annual sales of each Retail Electricity Product sold to Massachusetts End-use Customers by a Retail Electricity Supplier, under contracts executed or extended on or after January 1, 2009, shall include a minimum percentage of electrical energy sales with RPS Class II Waste Energy Generation Attributes. The RPS Class II Waste Energy Minimum Standard shall be equal to 3.5% of electrical energy sales in the Compliance Years 2009 through 2020. In Compliance Years 2021 through 2025, the RPS Class II Waste Energy Minimum Standard shall be equal to 3.7% of electrical energy sales. In 2026 and all subsequent Compliance Years, the RPS Class II Waste Energy Minimum Standard shall be equal to 3.5% of electrical energy sales. Beginning in 2025 and every five years thereafter, the Department shall conduct a review of the RPS Class II Waste Energy Minimum Standard and consult with MassDEP on the standard to ensure consistency with the solid waste master plan. Following stakeholder comment and input on the review of the RPS Class II Waste Energy Minimum Standard, the Department may modify the Minimum Standard for the following five years.

# 15.08: Compliance Procedures for Retail Electricity Suppliers.

(1) <u>Standard Compliance</u>. Each Retail Electricity Supplier shall be deemed to be in compliance with 225 CMR 15.00 if the information provided in the Compliance Filing submitted pursuant to 225 CMR 15.09 is true and accurate and demonstrates compliance with 225 CMR 15.07. A Retail Electricity Supplier shall demonstrate to the satisfaction of the Department that RPS Class II Renewable Generation Attributes and RPS Class II Waste Energy 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) <u>Banked Compliance</u>. A Retail Electricity Supplier may use RPS Class II Renewable Generation Attributes and RPS Class II Waste Energy Generation Attributes produced in one Compliance Year for compliance over the course of the following two subsequent Compliance Years, subject to the limitations in 225 CMR 15.08(2) and provided that the Retail Electricity Supplier is in compliance with 225 CMR 15.00 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 II Renewable Generation Attributes and RPS Class II Waste Energy 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 15.00;
  - (b) do not exceed 30% of the RPS Class II Renewable Generation Attributes and 30% of the RPS Class II Waste Energy Generation Attributes needed by the Retail Electricity Supplier for compliance with the RPS Class II Renewable Generation Minimum Standard, and RPS Class II Waste Energy Minimum Standard in the year they were generated, subject to 225 CMR 15.09(2)(d) and subject to the following limitations:
    - 1. In Compliance Years 2014 and 2015 no excess RPS Class II Waste Energy Generation Attributes shall be available as Banked Compliance, and
    - 2. Commencing with Compliance Year 2016, bankable excess RPS Class II Waste Energy Generation Attributes shall not exceed 5% of the RPS Class II Waste Energy Generation Attributes needed by the Retail Electricity Supplier for compliance with the RPS Class II Waste Energy Minimum Standard in the year they were generated.
  - (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) <u>Alternative Compliance for RPS Class II Renewable Generation Minimum Standard</u>. A Retail Electricity Supplier may discharge its obligations under 225 CMR 15.07(1), in whole or in part, for any Compliance Year by making an ACP to the MassCEC. Such funds shall be held in an account separate from other accounts of the MassCEC.
  - (a) <u>Procedures</u>. 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 15.07(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 II Renewable Generation Minimum Standard shall be \$25 per MWh for Compliance Year 2009. 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. The ACP Rate for the RPS Class II Renewable Generation Minimum Standard shall not exceed \$35 per MWh for any given Compliance Year.

- 3. The Retail Electricity Supplier shall include with its Annual Compliance Filing copies of any ACP receipt(s) for ACPs made to the MassCEC during the Compliance Year.
- (b) <u>Use of Funds</u>. The Department shall oversee the use of ACP funds by the MassCEC.
- (4) <u>Alternative Compliance for RPS Class II Waste Energy Minimum Standard</u>. A Retail Electricity Supplier may discharge its obligations under 225 CMR 15.07(2), in whole or in part, for any Compliance Year by making an ACP to the MassCEC. Such funds shall be held in an account separate from other accounts of the MassCEC.
  - (a) <u>Procedures</u>. A Retail Electricity Supplier shall receive Alternative Compliance Credits from the Department, subject to the following:
    - 1. The quantity of Alternative Compliance Credits, specified in MWhs, that can be applied to its obligations under 225 CMR 15.07(2) 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 II Waste Energy Minimum Standard shall be \$10 per MWh for Compliance Year 2009. For each subsequent Compliance Year, the Department shall publish the ACP Rate by January 31st 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. In Compliance Year 2021 through 2025, the ACP Rate for the RPS Class II Waste Energy Minimum Standard shall be equal to the ACP Rate for the RPS Class II Renewable Energy Minimum Standard set pursuant to 225 CMR 15.08(3)(a)2, but shall be \$11.50 per MWh beginning in 2026.
    - 3. The Retail Electricity Supplier shall include with its Annual Compliance Filing copies of any ACP receipt(s) for ACPs made to the MassCEC during the Compliance Year.
  - (b) Use of Funds. The Department shall oversee the use of ACP funds by the MassCEC.
- (5) Beginning in 2025 and every five years thereafter, the Department shall conduct a review of the ACP Rate and consult with DEP on the ACP Rate for the RPS Class II Waste Energy Minimum Standard to ensure consistency with the solid waste master plan. Following stakeholder comment and input on the review of the ACP Rate, the Department may modify the rate for the following five years.

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

- (1) <u>Date of Annual Compliance Filing</u>. 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) <u>Contents of Annual Compliance Filing</u>. For each Retail Electricity Product, the Filing shall document compliance with the provisions of 225 CMR 15.07 and 15.08 to the satisfaction of the Department and shall include, but not be limited to, the following:
  - (a) <u>Total Electrical Energy Sales to End-use Customers</u>. 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 Retail Electricity Supplier correctly allocated or should have allocated to all of the Retail Electricity 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, as specified in the Department's Guideline on the Determination of Sales to End-use Customer.
- (b) <u>Electrical Energy Sales to End-use Customers by Product</u>. 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 Retail Electricity Supplier correctly allocated or should have allocated to each of the Retail Electricity 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, as specified in the Department's Guideline on the Determination of Sales to End-Use Customer. The Department shall keep product information confidential to the extent permitted by law.
- (c) <u>Attributes Allocated from the Compliance Year</u>. Documentation of the total MWhs of each Retail Electricity Product allocated to End-use Customers that were derived from both RPS Class II Renewable Generation and RPS Class II Waste Energy 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, shall be 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 both RPS Class II Renewable Generation and RPS Class II Waste Energy 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 both RPS Class II Renewable Generation and RPS Class II Waste Energy generation during the Compliance Year.
- (d) Attributes Allocated from Banked Compliance. Allocation by Retail Electricity Product of any quantity of Attributes banked from one or both of the two previous years pursuant to 225 CMR 15.08(2) that are used to demonstrate compliance in the current Compliance Year, except that banked RPS Class II Waste Energy Generation Attributes cannot be used for compliance with the RPS Class II Renewable Generation Minimum Standard and banked RPS Class II Renewable Generation Attributes cannot be used for compliance with the RPS Class II Waste Energy Generation Minimum Standard.
- (e) <u>Alternative Compliance Credits</u>. Allocation by Retail Electricity Product of any Alternative Compliance Credits claimed pursuant to 225 CMR 15.08(3), along with a copy of any ACP receipt(s).
- (f) <u>Attributes Banked for Future Compliance</u>. Identification of any quantity of RPS Class II Renewable Generation Attributes and of any RPS Class II Waste Energy Generation Attributes that the Retail Electricity Supplier anticipates claiming for purposes of Banked Compliance in subsequent years under the Banked Compliance provisions of 225 CMR 15.08(2), except that RPS Class II Waste Energy Generation Attributes that are in excess of the quantity of such Attributes needed for the RPS Class II Waste Energy Minimum in Compliance Years 2014 and 2015 cannot be used for Banked Compliance.
- (g) Exempt Contracts under the RPS Class II Renewable Generation Minimum Standard and the RPS Class II Waste Energy Minimum Standard. Identification of any contract for

a specific term of years that was executed before January 1, 2009, and its terms including but not limited to, the execution and expiration dates of the contract and the annual volume of electrical energy supplied.

### 15.10: Reporting Requirements

- (1) <u>Certification</u>. Any person required by 225 CMR 15.00 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) <u>Annual Renewable Energy Resource Report</u>. The Department shall produce an annual report that summarizes information submitted to the Department by Retail Electricity Suppliers in the Annual Compliance Filing submitted to the Department pursuant to 225 CMR 15.09(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, the Solar Carve-out Minimum Standard, and Solar Carve-out II Minimum Standard, both separately and combined; and
  - (b) the extent to which the Retail Electric Suppliers used Standard Compliance, Banked Compliance, and Alternative Compliance in meeting the Minimum Standards.

# 15.11: Inspection

- (1) <u>Document Inspection</u>. The Department may audit the accuracy of all information submitted pursuant to 225 CMR 15.00. The Department may request and obtain from any Owner or Operator of an RPS Class II Renewable Generation Unit, Waste Energy Generation Unit, and any Retail Electricity Supplier information that the Department determines necessary to monitor compliance with and enforcement of 225 CMR 15.00.
- (2) <u>Audit and Site Inspection</u>. Upon reasonable notice to a Retail Electricity Supplier, Waste Energy Generation Unit Owner or Operator, or RPS Class II Renewable Generation Unit Owner or Operator, the Department may conduct audits, which may include inspection and copying of records and/or site visits to an RPS Class II Renewable Generation Unit, Waste Energy 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 15.00.

### 15.12: Non-compliance

Any Retail Electricity Supplier or Owner or Operator of an RPS Class II Renewable Generation Unit that fails to comply with the requirements of 225 CMR 15.00 shall be subject to the following provisions:

- (1) <u>Notice of Non-compliance</u>. A failure to comply with the requirements of 225 CMR 15.00 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 or Operator of an RPS Class II Renewable Generation Unit that fails to comply with the requirements of 225 CMR 15.00. The Notice of Non-compliance shall describe the Requirement(s) with which the Retail Electricity Supplier, Owner, or Operator failed to comply and the time period of such non-compliance.
- (2) <u>Publication of Notice of Non-compliance</u>. 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 or Operator returns to compliance as determined by the Department.
- (3) <u>Planning Requirement</u>. A Retail Electricity Supplier that fails to meet the requirements of 225 CMR 15.07 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) <u>Suspension or Revocation of License</u>. 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 15.00 may be subject to the Massachusetts Department of Public Utilities Licensure Action under 220 CMR 11.07(4)(c)1.
- (5) <u>Collection of Financial Security</u>. In the event that a Retail Electricity Supplier fails to discharge its annual obligations by September 1 of a compliance year under 225 CMR 15.07, by the means described in 225 CMR 15.08(1) through (4), the Department will notify the Retail Electricity Supplier that it must provide the Department with a payment using the financial security of which it provided pursuant to 225 CMR 14.08(4), unless a Retail Electricity Supplier has an approved alternative payment plan to discharge its annual obligations in full that has been approved by the Department prior to September 1<sup>st</sup>. The payment shall, within 30-days of notification by the Department, be deposited into the Alternative Compliance Payment fund established in 225 CMR 14.08(3) pursuant to the provisions of 225 CMR 14.12(5).
- (6) <u>Partial Compliance</u>. In the event that the collection of financial security under 225 CMR 14.12(5) results in the collection of an amount of Alternative Compliance Payments that is insufficient to discharge a Retail Electricity Supplier's full annual obligations under 225 CMR 15.07, the Retail Electricity Supplier will remain in a state of non-compliance, and the Department will take the necessary actions to document and enforce this non-compliance, pursuant to 225 CMR 15.12(1) through (4).
- (7) The Department reserves all rights to take any and all appropriate actions to ensure the collection of all Alternative Compliance Payments owed to ensure annual compliance obligations are fully discharged by a Retail Electricity Supplier, including, but not limited to, filing a petition with the Department of Public Utilities requesting an investigation into a supplier that is deemed to be in non-compliance by the Department.

# 15.13: Severability

If any provision of 225 CMR 15.00 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 15.00: M.G.L. c. 25A, § 11F.