



February 17, 2023

Joanna Troy

Director, Energy Policy and Planning at Commonwealth of Massachusetts

100 Cambridge St., 9th Floor,

Boston, MA 02114

**RE: COMMENTS OF CENTER FOR RESOURCE SOLUTIONS (CRS) ON THE MASSACHUSETTS  
DEPARTMENT OF ENERGY RESOURCES (DOER) FORWARD CLEAN ENERGY MARKET (FCEM)  
DESIGN PROPOSAL**

Dear Joanna Troy:

CRS appreciates this opportunity to provide feedback on the FCEM Design Proposal ("Proposal"). Our comments are primarily focused on Section 2 of the Proposal, "Product Definition." CRS has been deeply involved in renewable energy and greenhouse gas (GHG) accounting across the U.S. and we are concerned that future market design frameworks and elements could disrupt existing renewable energy markets and limit their growth. We understand that the Proposal is intended to secure clean energy supply. Our comments pertain to the overall viability and desirability of different certificates within the Proposal and their impacts on existing markets and programs.

**BACKGROUND ON CRS AND GREEN-E®**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS provides technical guidance to regulators, utilities, and others on renewable and clean energy policy and program design, accounting, tracking and verification, market and program interactions, and consumer protection. CRS also administers the Green-e® programs. For over 20 years, Green-e® has been the leading independent certification for voluntary renewable electricity products in North America. In 2021, Green-e® certified retail sales of over 110 million megawatt-hours (MWh), serving over 1.3 million retail purchasers of Green-e® certified renewable energy, including over 309,000 businesses and more than a million residential customers.<sup>1</sup> CRS recently launched the [Clean Energy Accounting Project](#) (CEAP), which develops standardized, stakeholder-reviewed clean energy and GHG emissions accounting guidance addressing outstanding questions in voluntary and regulatory markets.

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<sup>1</sup> See the 2022 (2021 Data) Green-e® Verification Report here for more information: <https://resource-solutions.org/g2022/>

### Concern with Creating Multiple Instruments

It is critical that markets for renewable energy be able to continue functioning under a new wholesale framework, which requires 1) maintaining verifiable and exclusive retail transactions and delivery of renewable energy, and 2) full aggregation of renewable generation attributes and exclusive retail delivery claims. The introduction of three new instruments (New England REC (NE-REC), New England Clean Energy Attribute Certificate (NE-CEAC), and New England Greenhouse Gas Marginal Abatement Certificate (NE-GHG))<sup>2</sup> raises concerns related to double counting of generation from renewable facilities and disaggregation of Renewable Energy Certificates (RECs), either of which could reduce overall regional demand for renewable energy. **We recommend preserving the aggregation of generation attributes in a single instrument, e.g., Generation Information System (GIS) certificates, to avoid double counting and protect the integrity of renewable energy markets.**

### Avoiding Double-Counting

New England needs a clear and consistent mechanism for exclusive retail delivery of renewable energy. RECs and other GIS certificates were created to prevent double counting of renewable energy consumption by, or delivery or sale to, multiple consumers, or more than once by a particular consumer. If there are multiple retail instruments, then double counting (delivery to multiple customers) must be avoided—e.g., a single instrument for a given unit of generation. It's important that there be no double counting within each certificate type (each certificate is retired only once), but also that there be no double counting of each unit (MWh) of generation (the aggregated group of energy attributes) since the same unit of generation and all attributes can only be delivered/used once by a single party.

Using the existing New England Power Pool Generation Information System (NEEPOL-GIS) for tracking multiple instruments may mitigate some risks of double counting, but the details of issuance, transfer, and retirement of the proposed instruments will be important to ensure that retail claims remain clear and consistent. Under the Proposal, “[t]he NE-REC, NE-CEAC, NE-GHG, and state-defined REC products are all MWh-based clean electricity attribute products and are therefore mutually exclusive (i.e., 1 MWh of generation can be retired in satisfaction of consumer demand or state mandates under only one of these mutually exclusive products).”<sup>3</sup> The Proposal should clarify what is meant by “mutually exclusive.” We understand this to mean that these instruments cannot be sold separately from one another for the same MWh of generation. **We recommend that different energy instruments issued for a single MWh not be able to be sold separately.**

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<sup>2</sup> New England Forward Clean Energy Market PROPOSED MARKET RULES, VERSION. (pg. 12-14). Available at: <https://www.mass.gov/doc/ma-doer-fcem-design-proposal/download>

<sup>3</sup> New England Forward Clean Energy Market PROPOSED MARKET RULES, VERSION. (pg. 12). Available at: <https://www.mass.gov/doc/ma-doer-fcem-design-proposal/download>

### Maintaining “Regulatory Surplus” for the Voluntary Market

Market design should avoid harm to voluntary renewable energy markets. It should maintain pathways to “regulatory surplus” for the voluntary market without significantly increasing the cost of voluntary renewable energy. Voluntary renewable energy—renewable generation purchased voluntarily by businesses and individuals to meet their own goals—has historically not been used to meet governmental targets, laws, or legal mandates. The voluntary market stands apart from and builds on compliance efforts. This separation enables the voluntary market to make an incremental difference often referred to as “regulatory surplus.” Where renewable energy sold into the voluntary market does not have an effect beyond compliance, particularly compliance related to GHG emissions, this changes the effectiveness of voluntary renewable energy as a climate change solution for participating companies and individuals. Under the Proposal, the attributes of generation, specifically the avoided emissions value, are disaggregated, i.e., split into multiple instruments. Disaggregating the attributes of generation makes it more difficult to verify that generation is surplus to regulation, as instruments representing different attributes of the same MWh could be used to evaluate compliance under different programs. **If it is unclear that voluntary renewable energy has an effect beyond compliance, voluntary demand for renewable energy may decline.**

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### NE-REC, NE-CEAC Concerns

The proposed NE-REC, NE-CEAC, and certificates disaggregate attributes in ways that threaten the integrity of voluntary and compliance markets. Under the proposed rules “NE-RECs and NE-CEACs will not be issued for energy injections during real-time pricing intervals when the resource node has a negative locational marginal price (LMP).”<sup>4</sup> Sixteen<sup>5</sup> U.S. states, multiple federal organizations, as well as the NEEPOL-GIS<sup>6</sup> recognize that RECs represent one MWh of generation and can be used to track and transact renewable electricity on the grid. This is regardless of LMP at the time of energy injection. Certificates used for retail transactions and delivery/use claims should be issued for every MWh of generation.

### NE-GHG Certificate Concerns

Several aspects of the NE-GHG certificate also pose risks to the integrity of renewable energy markets:

- Under the Proposal, NE-GHG certificates are not issued on a per MWh basis, but only issued when enough MWhs have been injected into the grid to cause a predetermined amount of

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<sup>4</sup>New England Forward Clean Energy Market PROPOSED MARKET RULES, VERSION. (pg. 12). Available at: <https://www.mass.gov/doc/ma-doer-fcem-design-proposal/download>

<sup>5</sup> See Jones, T. et al. (2015). The Legal Basis of Renewable Energy Certificates. Center for Resource Solutions. <https://resourcesolutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>

<sup>6</sup> NEPOOL-GIS: NEPOOL-GIS 2015, Appendix 1.1 p. 1 [http://www.nepoolgis.com/wpcontent/uploads/sites/3/2015/01/GIS-Operating-Rules-effective-1\\_1\\_15.doc](http://www.nepoolgis.com/wpcontent/uploads/sites/3/2015/01/GIS-Operating-Rules-effective-1_1_15.doc)

marginal avoided emission, called the “standard abatement rate.”<sup>7</sup> Not issuing certificates for each MWh of generation creates uncertainty surrounding which MWhs receive certificates which may confuse market participants and have a chilling effect on renewable energy purchasing.

- It is unclear what claim the NE-GHG certificate will convey or for what purpose it can be used. As described, it cannot be used to convey a clean energy supply claim. It should not be used to change the reported emissions attributes of generation. While certificates are commonly used to define the attributes of delivered/consumed electricity, there is no history of certificate use to *change* the attributes of reported generation, since that can be directly measured. This Proposal should make explicit that, as currently defined, this certificate does not represent clean energy supply and elaborate on the intended use of this certificate.
- Under the Proposal, the NE-GHG certificate disaggregates the avoided emissions value of instruments that are currently used to substantiate renewable energy delivery claims. This puts the NE-GHG certificate in conflict with existing REC and GIS certificate definitions. The states served by ISO New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)<sup>8</sup> all have REC and/or GIS certificate definitions which state that RECs represent one MWh of renewable generation. This definition de facto includes avoided GHG emissions, as avoided emissions are part of every unit of generation. The avoided emissions attribute of a certificate is especially important for states to achieve their respective GHG reduction goals with renewable energy programs. If multiple entities are making claims to the different attributes of the same unit of generation, it would unnecessarily complicate voluntary and compliance markets and slow GHG reduction efforts. The avoided emissions attribute of generation should not be split into a certificate that could be sold separately from other attributes of generation for the same MWh.
- There is further risk of the NE-GHG certificate being inappropriately used to convey an emissions reduction claim or conflated with carbon offsets. Since the NE-GHG certificate is an amount of avoided emissions awarded to non-emitting generators, storage, and demand response, it is not equivalent to reductions beyond a baseline scenario (which require proof by an additionality test)<sup>9</sup> and should not be used for net adjustments to reported emissions. The

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<sup>7</sup> New England Forward Clean Energy Market PROPOSED MARKET RULES, VERSION 1. (pg. 12). Available at: <https://www.mass.gov/doc/ma-doer-fcem-design-proposal/download>

<sup>8</sup> See Jones, T. et al. (2015). The Legal Basis of Renewable Energy Certificates. Center for Resource Solutions. <https://resourcesolutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

<sup>9</sup> Environmental Protection Agency, Green Power Markets. Market Instruments. Available at: <https://www.epa.gov/green-power-markets/market-instruments>

Proposal should clarify that this instrument is not an offset and should not be used for carbon reduction claims.

Recommendation

**To achieve the objectives of the Proposal and maintain clear and consistent retail delivery claims and avoid double counting, we recommend, as an alternative to the Proposal, that additional information be added to GIS certificates (such as avoided grid emissions or LMP at the time of injection) to incentivize and enable purchasing of attributes that align with buyer's preferences or new requirements.**

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Concerns with Clean Capacity Certificates (NE-CCCs)

Under the Proposal, NE-CCCs will “correspond to the unbundled attribute reflecting capacity delivered into the ISO-NE FCM and supplied by non-emitting resources. The new NE-CCC product will create an opportunity for states and consumers to dictate and certify that a particular share of their total resource adequacy requirements must be served by non-emitting clean electricity resources.”<sup>10</sup> It is important that this certificate not be conflated with RECs/GIS certificates used for renewable energy delivery claims. Based on REC definitions used throughout New England, referring to capacity as an “attribute” could cause confusion with energy attributes included in RECs.

Recommendation

**Add clarifying language that NE-CCCs are for use toward resource adequacy requirements and do not convey attributes of energy generation for retail delivery claims.**

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Please let me know if we can provide any further information.

Sincerely,

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Lucas Grimes  
Manager, Policy

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<sup>10</sup> New England Forward Clean Energy Market PROPOSED MARKET RULES, VERSION. (pg. 12). Available at: <https://www.mass.gov/doc/ma-doer-fcem-design-proposal/download>