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May 27, 2021

By Email to Climate.strategies@mass.gov

RE: Comments to 2021 Program Review Stakeholder Discussion Document: 310 CMR 7.74 – Reducing CO2 Emissions from the Electricity Generation Units and 310 7.75: Clean Energy Standard

To Whom It May Concern:

Associated Industries of Massachusetts (AIM) is pleased to comment on the above stakeholder review. The stakeholder review (including a future opportunity for public comment) is required to be completed by December 31, 2021, for both regulations. Initial comments related to the scope of this review are due by May 31, 2021.

In addition, the review is necessary as the Governor recently signed *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy* ("Roadmap Bill") which mandates additional greenhouse gas reductions by 2030 beyond those identified in the interim Clean Energy and Climate Plan (CECP).

AIM is the largest general trade association in Massachusetts. AIM's mission is to promote the prosperity of the Commonwealth of Massachusetts by improving the economic climate, proactively advocating fair and equitable public policy, and providing relevant, reliable information and excellent services. All of AIM's members have an interest in this issue since it impacts the price of electricity and the flexibility to comply with clean energy and renewable energy standards.

Our comments will focus on 310 CMR 7.75: Clean Energy Standard.

One of the primary issues that needs to be addressed in this review is the fact that the Renewable Portfolio Standard (RPS) will overtake or nearly overtake the Clean Energy Standard (CES) during the term of the Section 83D hydroelectric procurement. Both the RPS level and the Section 83D procurement are mandated by the Legislature. Additionally, the RPS was increased in the recently signed Roadmap Bill, which makes these changes even more important. Should the RPS overtake or nearly overtake the CES, it will result in the Section 83D procurement being valued for energy only with no compliance advantage, and that will benefit other states at the expense of Massachusetts ratepayers.

It is also important to note that the RPS increases even after 2030, with no end date (not even at 100%) meaning that this issue will need to be addressed again later without permanent legislative

changes. Other programs also mandated by the legislature unrelated to clean energy also contribute to this imbalance.

AIM warned in earlier comments about the impending collision between the RPS and the CES and that is why we have consistently opposed any efforts to increase the RPS. Previously, we thought that this imbalance would occur around 2040. However, it is now apparent that such issues will need to be resolved before 2030.

TOPIC 1: STRINGENCY OF 310 CMR 7.74 AND 7.75

As stated above our comments will refer to 310 CMR 7.75.

Topic #1 asks for comments on the following changes.

- Increasing the stringency of the CES from 40% to 60% or more in 2030
- Increasing the CES-E from 20% of 2018 electricity sales to 25%

Unfortunately, the suggestions will not solve the long-term problem. The fundamental issue that needs to be resolved is the definition of a fully decarbonized electricity sector within the context of the ongoing need for natural gas and the other power supply mandates required by law.

Intuitively, decarbonization means an electricity sector with zero carbon emissions and under current law that would mean 100% of our power should come from RPS Class I, RPS Class II, CES, and CES-E eligible sources. However, the definition of "renewable power" does not include all these which surprises and confuses lots of people only focused on the RPS. Therefore, as some push for our electricity to come from "100% renewable sources" (including recently filed legislation) conflicting definitions already present a confusing barrier to fully transitioning to a zero-carbon future.

Additionally, under current law there are other commitments the legislature has made – RPS - Class II -WTE (Waste to Energy) and the Alternative Portfolio Standard (APS). While they are not necessarily zero-carbon sources, these sources were included in state law for diversity and economic reasons. Unless and until the applicable laws change and the public policy issues surrounding the reasons those were included in the first place are addressed, the obligation of these sources must be considered when defining the limits of a decarbonized electric grid and its impact on the increase in the RPS and CES. And the results of such an exercise has a large impact on whether Massachusetts can ever really be fully decarbonized.

Under this proposal, the following will be the status of the energy grid in Massachusetts in 2030 and 2040.

Legislative/Regulatory Mandated Obligations (approx. % of total load)			
Source Class	2020	2030 (proposed)	2040 (assumed)
Class I Renewables	16	40	50[(1)]
Clean Energy above Class I (i.e., large hydro or Class I)	4[(2)]	20	30[(3)]
CES-E	0	25	25
Class II Renewables	3.2	3.6	3.6
Class II WTE	3.5	3.7[(4)]	3.7[(4)]
APS	5	8.75	12.5
Total	31.7	101.05	124.8

[(1)] RPS increases 1% per year after 2030 forever
[(2)] CEC above Class I (4% in 2020) is being met with Class I resources since there are no CECs available, increasing costs
[(3)] Current CES schedule plus 20% (this proposal)
[(4)] Proposed under a different regulatory package

As you can see, with the changes proposed both here and in other regulatory packages, the amount of power accounted under various programs will exceed 100% of power load as early as 2030 – and this does not account for any natural gas needed. It is indisputable that natural gas will still be needed in 2030. The result is the same even if electricity use increases due to continued electrification.

While the 2040 totals are a bit more speculative, since they rely on continued operation of CES-E sources like nuclear, it will still likely be a problem due to continued need for gas prior to 2050. In fact, even if the CES remains at 20% above RPS (to account for the Section 83D hydroelectric power) and the CES-E remains at 20% the problem still occurs in 2030 and 2040. Whatever the settled number (and there may be additional iterations), the exercise is the same.

Since the 83D solicitation is for 20 years and the clock has not yet started, it is likely that without changes, the hydropower will become excess during the period of the contract and will not be needed for compliance purposes in Massachusetts.

This will raise costs as something will be displaced. If RPS Class I sources displace long-term hydropower PPAs, the clean energy credits (CECs) needed to comply with the CES above the RPS from the hydropower are no longer needed for compliance purposes and will have no value since no other state recognizes them (and in fact utilities cannot sell them during the life of the PPA anyway). The hydropower would essentially be valued for energy only and sold as a commodity into the New England electric grid like other energy sources, with the ratepayer obligated to pay the PPA price for its entire term.

Selling power into the wholesale market under these circumstances is risky and would make the ratepayers an unwilling partner in a power arbitrage arrangement dependent on the

wholesale price of energy during the PPA. If all the hydropower under the PPA were sold into the wholesale market even a loss of *1 penny per kWh* would result in a 100-million-dollar additional cost to ratepayers (prices from the last several years would indicate losses of about 5 cents per kWh).

Of course, this means that the ratepayer is buying more expensive RECs rather than the CECs they have already paid for to comply with the law, without getting any additional carbon reductions.

These changes will do nothing more than delay the inevitable clash between unnecessary focus on the RPS, the legitimacy of clean energy programs and the definition of a fully decarbonized electricity sector. It will not solve the real problem - a confusing and bureaucratic array of definitions, programs, renewable and clean energy classes, carve-outs and the like, each with its own rules, reporting mechanisms and ratepayer cost.

TOPIC 2: CLEAN ENERGY STANDARD TECHNICAL REVIEW

Topic #2 asks for comments on the following suggestions, among others.

- A comprehensive "global" CES as a substitute for, or complement the suite of RPS/APS/CES/CES-E policies

AIM has suggested for years that the time has come to stop this compartmentalizing. At this point it matters little if the source is "new," "existing," "clean," "zero-carbon," or "renewable" - all sources are needed to get to 100% zero-carbon and the notion that something must be a certain class or vintage to be good for Massachusetts is an outdated notion that is inconsistent with our long-term goals.

As such AIM supports the notion of a "global CES." It is time to rethink the whole notion of RECs and clean energy and use these notions to contain costs.

One of the prime reasons for all the compartmentalization was to incentivize the development of new resources. However, the relationship between incentives and the development of new resources is not clear. In fact, we believe that the incentives have absolutely no impact on the supply of clean energy and therefore the RECs are not helping in any way.

Most of the clean energy going forward will be offshore wind, as there is little likelihood of any large hydropower projects in addition to the current Section 83D procurement. Solar will remain relatively small. The other carve-outs – RPS Class II, RPS Class II-WTE, and the APS are cumulatively small, and generally stagnant over the next decade.

The procurement of additional offshore wind is not driven by incentives but rather by legislative requirements and there are many already in the pipeline. Project developers have publicly stated that the incentives (meaning state incentives such as RECs) have no role to play and would not

have changed the bidding process or price. As such, incentives such as RECs do not lower the cost of the procurement. The overall contract price is the same whether RECs are available or not and as REC values change, the energy component of the price increases or decreases. The consequence of whether the state incentives are available or not only matters where on a utility bill certain charges show up.

The issue addressed in this stakeholder review can be avoided, but it will take a complete rewrite of the RPS and clean energy regulations and laws. Either that or the establishment of some sort of regional clean energy market.

Obviously, this is a complicated undertaking. However, most of the clean and renewable power necessary to meet our goals has not been built yet, so one would start by dealing with the offshore wind procurements and the Section 83D hydropower, making these "new" sources equal. This means abolishing the RPS for offshore wind and making both the offshore wind and hydropower eligible for something like CECs. The cost of the contracts does not change.

The CES-E and the RPS Class II, which both deal with existing sources may be similar enough to be combined in some way. All that is left is the APS and solar, both of which could remain independent. Under this scenario, the four classes, properly enumerated would be much simpler and would account for the wide diversity of sources necessary to meet our goals.

As we stated, this is a complicated undertaking and requires a far more detailed analysis. Yet it is necessary. In the end, Massachusetts can only get to 100% clean energy. At that time, the job is done. There are perfectly good clean energy sources available - the Commonwealth needs to recognize them all for the cost-effective benefits they provide. Bringing all the existing clean energy sources under just a few umbrellas will allow Massachusetts to meet our clean energy goals efficiently and in a cost-effective way.

We suggest the establishment of a separate stakeholder process to review all these programs, their costs and benefits and whether they are achieving the long term goals of the Commonwealth at a sustainable cost to ratepayers.

Thank you for allowing us to make these comments and we look forward to working with your office in any way possible on this and other issues.

Should you have any questions please do not hesitate to contact me.

Sincerely yours,

Robert A. Rio, Esq.
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Comments of Brookfield Renewable:
Clean Energy Standard (CES) 2021 Program Review Stakeholder Discussion Document

Brookfield Renewable[1] appreciates the opportunity to submit comments in response to questions presented by the Massachusetts Department of Environmental Protection's (DEP) in its Clean Energy Standard (CES) 2021 Program Review Stakeholder Discussion Document. Brookfield Renewable appreciates the DEP's efforts to date in implementing the CES and CES-E as well as establishing an appropriate scope for the 2021 Program Review.

1. *Increase the stringency of the CES from 40% to 60% or more in 2030. For example, this could be addressed by increasing the standard by 5% or more each year from 2026 – 2030 (instead of the 2% each year increase in the current regulation). Waiting until 2025 before escalating the annual rate of increase would allow time for supply to become available before the changes take effect. In combination with the CES-E, these changes would place the Commonwealth on a path toward a fully decarbonized electricity sector by 2040.*

Brookfield Renewable supports an expansion of the CES that adequately accommodates 83D procurement and further aligns electricity sector mandates with the 2030 carbon reduction directives of the Legislature. While Brookfield Renewable supports at least a 60% CES by 2030, we recommend increasing the CES requirement beginning as early as 2022, thereby easing in the growth rate while also acknowledging the potential for 83D deliveries to begin as early as 2023. In addition, the annual requirements can be structured to ramp up more year over year in the second half of the decade, which aligns with the anticipated delivery of offshore wind associated with 83C procurement and the accelerated increase in the Class I RPS between 2025-2029, per Senate Bill 9, *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy*. This would reflect the following schedule:

[1] Brookfield Renewable U.S.is a leading owner, operator and developer of renewable power, delivering innovative renewable power solutions that accelerate the world towards a sustainable, low-carbon future. In Massachusetts, our renewable power fleet totals approximately 756 MW of nameplate generating capacity, consisting of 146 MW from distributed generation solar, 600 MW from pumped storage, and 10 MW from hydropower.

Current	Proposed
2022: 24%	2022: 27%
2023: 26%	2023: 30%
2024: 28%	2024: 33%
2025: 30%	2025: 37%
2026: 32%	2026: 41%
2027: 34%	2027: 45%
2028: 36%	2028: 50%
2029: 38%	2029: 55%
2030: 40%	2030: 60%

2. *Increase the CES-E from 20% of 2018 electricity sales to 25%. An increase from 20% to 25% could "lock in" a modestly larger contribution from pre-2010 clean generators. Making this change by 2026 would help ensure that new clean generators added quickly between 2026 and 2030 replace emitting generators, not existing clean generators.*

Brookfield Renewable supports an expansion of the CES-E and we agree with the DEP's rationale that a near-term expansion can ensure that incremental renewable energy deliveries are not having the counterproductive impact of displacing existing clean generators. However, Brookfield Renewable urges the DEP to consider whether more cost-effective eligibility frameworks can be deployed for the delivery of renewable energy attributes from existing renewable energy. For example, a significant portion of New England's legacy renewable generation, including existing Maine-located hydropower, is currently restricted from program participation, largely due to the current greenhouse gas accounting methodology and restrictions related to prior clean energy program participation. Brookfield Renewable encourages DEP to revisit this approach and the related prohibitions and to establish a larger, more competitive, program that includes broader eligibility of non-emitting attributes from NEPOOL-located renewable generation. Brookfield Renewable also recommends that the DEP explore the benefits of a requirement larger than 25%.

3. *A comprehensive "global" CES has been posited by some stakeholders as a substitute for, or complement to, the suite of RPS/APS/CES/CES-E policies that currently exist in Massachusetts and New England. How, exactly, would such a policy be structured? For example, how would costs be minimized in a single policy given the need to support*

technologies with widely differing costs (i.e., new rooftop solar vs. pre-2010 hydropower facilities)?

Brookfield Renewable generally agrees with a standardized and competitive market and compensation structure to ensure delivery of non-emitting attributes, including a price on carbon embedded in wholesale electricity market pricing. However, in the absence of robust carbon pricing policy, and in recognition of the ongoing regional discussions regarding ISO-NE market enhancements as well as the various technology-specific requirements included in current Massachusetts clean energy policies, Brookfield Renewable recommends that the DEP retain the bifurcated RPS/CES/CES-E structure. The DEP should instead seek to expand and improve upon the established CES-E structure, as previously discussed.

4. *Are changes needed to the alternative compliance payment (ACP) rates? For example, the rates could be specified in regulation as $35/MWh for the CES and $10/MWh for the CES-E (similar to current levels), instead of as a % of the RPS Class I ACP rate.*

On May 26, 2021, the DOER proposed final amendments to the RPS Class I Regulation that would require further reductions to RPS Class I ACP rates. Given these changes, as well as the potential for future ACP changes, Brookfield Renewable recommends that the DEP instead establish program ACP's that include fixed dollar amounts. Because the CES and RPS Class I programs are closely intertwined, Brookfield Renewable recommends a CES ACP of $40/MWh to align with the proposed RPS Class I ACP for years 2023 and beyond. Separately, the ACP for the CES-E could be set at $20/MWh to adequately encourage compliance purchases under an expanded program while also establishing a reasonable price ceiling.

5. *Should there be limits on allowance banking? Limiting allowance banking could increase liquidity, at least in the near term, because facilities would likely attempt to sell allowances that could not be banked.*

Brookfield Renewable recommends a banking limit equal to, or less than, the current 30% threshold in order to retain sufficient liquidity and price signals in the market.

6. *Should some allowances be offered for sale at auction well in advance of each compliance year? For example, vintage 2023 allowances could be sold over eight quarterly auctions beginning in December 2021. Making vintage 2023 allowances available earlier would facilitate future price discovery and could increase liquidity because there would be less need for facilities to obtain and bank excess vintage 2022 allowances to hedge against 2023 compliance obligations.*

Brookfield Renewable supports the sale of allowances at auction in advance of each compliance year as a means of improving price discovery and increasing liquidity.

7. *MLPs are required to report greenhouse gas emissions under 310 CMR 7.75. Under the new climate, each MLP is required to establish a greenhouse gas emissions standard (GGES). Are any clarifications necessary in relation to the GHG reporting requirements under 310 CMR 7.75? For example, is there a need to clarify that the prohibition on reporting non-emitting generation for which others own the emissions attributes will continue to apply regardless of how MLPs structure their GGES programs?*

Brookfield Renewable strongly encourages maintaining prohibitions on the reporting of non-emitting generation in instances where the non-emitting attributes have been sold to another entity. The avoidance of double-counting is a necessary component for the integrity of clean energy program and should be upheld regardless of how a MLP structures its GGES program.

Respectfully,

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May 28, 2021

CALPINE CORPORATION

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Submitted via email to climate.strategies@state.ma.us

May 28, 2021

Re: 310 CMR 7.74: Reducing CO_2 Emissions from Electricity Generating Units

Calpine Corporation ("Calpine") offers the following brief comments on the Massachusetts Department of Environmental Protection's ("MassDEP") 2021 Program Review Stakeholder Discussion Document regarding 310 CMR 7.74.

1. Thus far the program is operating in a manner consistent with our initial expectations regarding allowance prices and market liquidity. We think the program is operating as efficiently as possible for a single state trading market with a limited number of compliance entities.
2. MassDEP should expect that carbon emissions from in-state electric generating facilities will continue to decline over time as the various state-mandated, large-scale renewable projects and other non-emitting sources enter the market and displace generation from fossil-fired units. Calpine therefore believes that there is no need to modify the stringency of 310 CMR 7.74; any changes are unlikely to have any real world impact on Massachusetts power plant emissions.
3. Calpine encourages MassDEP to recognize the important findings of the recently-issued Massachusetts 2050 Decarbonization Roadmap, i.e., that compliance with the Commonwealth's goals and mandates will require economy-wide electrification and a substantial increase in installed generating capacity. The Roadmap also acknowledges that fossil units will continue to be needed for reliability even as they run less and less over time. State programs that may diminish the economic viability of reliability units could lead to unintended and uneconomic outcomes.

Thank you, in advance, for your consideration of our comments.

John Flumerfelt

CommonWealth
Resource Management Corporation

June 7, 2021

Massachusetts Department of Environmental Protection
Response to 2021 Program Review Stakeholder Discussion Document
regarding the Clean Energy Standards at 310 CMR 7.75

To the MassDEP:

CommonWealth Resource Management Corporation (CRMC) is pleased to provide these comments to the Massachusetts Department of Environmental Protection (MassDEP) as part of the 2021 program review of the Clean Energy Standard (CES) as defined in the MassDEP regulations at 310 CMR 7.75. CRMC is a stakeholder in our capacity as owner/operator of a facility that generates electricity from landfill gas and from biogas derived from digestion of organic wastes (the Facility). Our Facility, located in Dartmouth, Massachusetts, produces Massachusetts Class I renewable energy certificates (RECs) that would qualify as Clean Energy Credits (CECs).

Under existing regulations, the value of the CECs is capped by an alternative compliance payment (the CEC ACP) that is tied to 50 percent of the alternative compliance payment for MA Class I RECs (the REC ACP). The Massachusetts Division of Energy Resources (DOER) recently amended its regulations to reduce the REC ACP to $40 per MWh by 2023. Without further amendment, one consequence would be to reduce the CEC ACP to $20 per MWh by 2023.

If the CEC ACP remains tied to 50 percent of the REC ACP, CRMC is concerned that REC and CEC prices will both fall below $20 per MWh in 2023 and beyond. Such low prices, combined with low wholesale electricity prices, would threaten the economic viability of our Facility and undercut other MassDEP objectives for supporting facilities such as ours that destroy methane from landfills, offset generation of electricity from fossil sources and provide an alternative to landfills for management of organic wastes. Moreover, if the CEC ACP is too low, obligated retail suppliers lack incentive to purchase CECs rather than just paying the CEC ACP.

We therefore request that MassDEP respond to support these facilities through the following measures:

1. Raise the CEC ACP. CRMC requests that MassDEP raise the CEC ACP to be no lower than, and preferably greater than, 100 percent of the REC ACP.

2. Limit CECs to projects based in Massachusetts. The CES is a Massachusetts regulatory program for Massachusetts facilities and should incorporate preference for support of Massachusetts facilities. Otherwise, payments collected from Massachusetts ratepayers would be sent out of the state. Optimally, RECs would not count toward the CES obligation unless generated by a facility located in Massachusetts, thus giving such facilities an advantage over out-of-state facilities that qualify for MA Class I RECs. Alternatively, the MassDEP could retain requirements eliminated by the DOER related to capacity and electricity sales commitments and reporting requirements from Generators that are

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outside ISO-NE Control Area but selling into ISO-NE Control Area (Generator Importers), which include an increasing number of New York based legacy renewable projects that no longer qualify for New York renewable energy incentives. Generator Importers are a major contributor to oversupply of MA Class 1 RECs and are providing significant downward pressure on prices of MA Class I RECs, and, indirectly, on CECs. Restrictions on such facilities would diminish their adverse impact on the CES Program.

3. Comprehensive "global" CES. If the MassDEP were to move toward a comprehensive "global" CES to support technologies with widely differing costs, CRMC requests the MassDEP consider establishing fixed CECs prices by technology that are tied to the current market rates of wholesale power prices and escalate with time for inflation. This could establish floors to support projects otherwise forced to rely on volatile unstable REC and CEC markets for viability. For instance, the MassDEP might establish a fixed price for CECs from landfill gas-to-energy facilities based on revenue from electricity sales and CECs equivalent to a real value of $75 per MWh from both sources as a means of supporting the viability of such projects.

Thank you in advance for this opportunity to comment.

Sincerely,

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Principal, CRMC, Sole member, CommonWealth New Bedford Energy, LLC

Thomas W. Yeransian,
Principal, CRMC, Sole member, CommonWealth New Bedford Energy, LLC

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May 27, 2021

Via Electronic Mail

Commissioner Martin Suuberg
Massachusetts Department of Environmental Protection
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Subject: Comments on the Scope of the 310 CMR 7.74: Reducing CO_2 Emissions from Electricity Generating Units and 310 CMR 7.75: Clean Energy Standard Program Review

Dear Commissioner Suuberg:

Conservation Law Foundation ("CLF") appreciates the opportunity to comment on the scope of the Massachusetts Department of Environmental Protection's ("MassDEP") review of 310 CMR 7.74 and 310 CMR 7.75 as described in the 2021 Program Review Stakeholder Discussion Document. The comments below (1) respond to the four "Topics" on which MassDEP has requested stakeholder input and (2) propose additional amendments that MassDEP should consider in its program review.

CLF is a non-profit, member-supported environmental advocacy organization working in Massachusetts and across New England to protect our environment for the benefit of all people, to build healthy communities, and to sustain a vibrant economy. CLF is working throughout New England to advance policies and decision-making that reduce greenhouse gas ("GHG") emissions and incentivize clean energy sources.

I. MassDEP should expand the scope of its review of the Clean Energy Standard

In its Stakeholder Discussion Document, MassDEP has raised several important options for modifying the Clean Energy Standard ("CES"). MassDEP should further expand the scope of its program review to consider additional changes to improve the CES program and put the electricity generation sector on a path to achieve the decarbonization goals that will be required under the recent "Roadmap Law" (Senate Bill 9 - An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy).

First, MassDEP should consider avenues to reduce or eliminate combustion technologies, including woody biomass, from the CES market. It is far beyond time for Massachusetts to stop

attempting to engineer economic development for the woody biomass industry at the cost of the health of the people who live near inefficient and highly polluting woody biomass combustion facilities.[1] Biomass facilities, even when they are ostensibly low emitting, still release some level of harmful pollutants.[2] Such facilities pose risks to the health of nearby communities, and overburdened environmental justice populations are particularly vulnerable to any further decrease in air quality. Moreover, removing these technologies from the CES, along with other attribute markets, will be essential for the Commonwealth to meet its environmental and climate justice goals, as well as the net zero by 2050 requirement set out in Roadmap Law.

Second, MassDEP should amend the CES to account for the GHG emissions associated with other technologies incentivized or compensated under the CES, including hydropower. The CES regulations should require reporting of the GHG emissions from the electricity production by electricity retailers of hydroelectric or importers or producers, and the reported emissions should be included in the annual GHG inventory.

Third, electricity attribute programs, including the CES, can help reduce the overall peak installed capacity of our electric generation system. MassDEP should consider amendments to the CES that would encourage utilities to plan for peak demand reduction. Specifically, MassDEP should integrate into the Clean Energy Standard a requirement for each electric distribution company to file with MassDEP a plan to reduce peak demand by 50 percent by 2025 and to file with the Department of Public Utilities ("DPU") a plan to pay for combined strategies such as energy storage systems, time-of-use rates, energy efficiency services. This innovation would help fill a gap between the Mass Save program (which encourages overall demand reduction) and the Clean Peak Standard (which attempts to encourage use of lower-emitting sources to meet peak demand).

II. MassDEP should Increase the Stringency of the Clean Energy Standard

In Topic #1, MassDEP has requested stakeholder feedback with respect to whether it should increase the stringency of the CES from 40% to 60% or more in 2030. Given the value of the CES as a means for the Commonwealth to capture the clean or renewable energy attributes of electricity purchased by Massachusetts electric customers through procurements or the wholesale market rather than driving the development of new generation, the level of the CES should be calibrated when necessary to ensure that the Commonwealth is capturing all of the GHG emissions accounting value that its public policy-based electricity procurements are creating. In anticipation of an increase in eligible sources in the coming years that Massachusetts electric customers have already paid for, MassDEP should recalibrate and raise the CES so that costs and

[1] For detailed discussion of the unsuitability of woody biomass for clean electricity technology incentives, see CLF, et al., Joint Environmental Comments on Proposed Changes to the Biomass Regulations in the Renewable Energy Portfolio Standard (July 26, 2019).

[2] For instance, the air permit for Palmer Renewable Energy LLC's proposed biomass facility in East Springfield, Massachusetts would have allowed it to emit 34.55 tons of particulate matter and 13.2 tons of hazardous air pollutants annually, which includes heavy metals and carcinogens like formaldehyde and benzene. *See* MassDEP Conditional Air Permit for PRE Proposed Biomass-Fired Power Plant at 1000 Page Boulevard in Springfield, MA 15 (June 30, 2011), http://www.pfpi.net/wp-content/uploads/2019/05/Palmer-Renewable-Energy_Non-Major-Conditional-Plan-Approval_06_30_11-FINAL.pdf.

revenues in the CES and Renewable Portfolio Standard ("RPS") energy certificate markets align. If the stringency of the CES is not increased, the Commonwealth risks losing the benefits of the money that it has already put towards these sources in the event another state purchases the credits that these new sources will create. Accordingly, MassDEP should implement this change, but the regulations should also ensure that recalibration will occur when it is necessary to ensure the CES is capturing the value of emissions reductions.

Topic #1 also requests feedback on the stringency of 310 CMR 7.74. An emissions cap that is regularly being met from the inception of the program should indicate to regulators that the cap needs to be lowered. 310 CMR 7.74 should be updated to ensure that electric sector emissions ramp down as quickly as possible to enable electrification to drive emissions reductions in other sectors.

III. MassDEP Should Prioritize Meeting Emissions Reduction Goals for 2050 Over Minimizing Costs

The CES Technical Review described in Topic #2 is heavily focused on minimizing costs. MassDEP's focus should instead start with reviewing how the CES and the rest of the suite of standards listed (RPS, APS, and CES-E) will allow the electric generation sector to reduce its share of emissions necessary for Massachusetts to reach its recently increased goal of net-zero GHG emissions by 2050. Only then should it turn to looking for additional ways to cut costs. We have already witnessed how the short-sightedness of weaning industries off of programs and incentives like the CES can stunt industries, as happened with the solar industry in the region. It is essential that these programs are maintained and increased in order to sustain renewable energy industries and meet the state's increasing climate mandates.

With respect to Alternate Compliance Payments ("ACP") and adjusting the rates, as a policy matter, ACPs act as protection against market volatility and are not intended as a penalty on consumers or resource owners. MassDEP should carefully consider and request additional stakeholder feedback on the ramifications of any changes to the ACP on renewable resource providers. For instance, a decision by MassDEP to decrease the ACP would also decrease the amount of REC revenue that renewable resource owners would receive throughout the terms of their projects. In turn, this risks posing a financial threat to some of New England's renewable resources.

IV. MassDEP Should Limit Allowance Banking and Auction Sales As Much As Possible

In Topic #3, MassDEP requests feedback on whether there should be limits on allowance banking, stating that limiting such banking could increase liquidity in the near term. CLF agrees that there should be strong limits on allowance banking. The purpose of the 310 CMR 7.74 emissions cap is to impose limits on the carbon emissions of power plants. Any part of this program that allows polluting generation facilities to avoid that purpose, including through allowance banking, should be curtailed.

Similarly, MassDEP should not permit the sale of allowances at auction in advance of each compliance year. Given that the Commonwealth has increased its target for 2050 GHG emissions

reductions to net zero, up from 80% at the time 310 CMR 7.74 program was enacted, MassDEP must pursue all options to reduce the emissions impact from electric generation.

V. MassDEP Should Clarify Reporting Requirements for Municipal Light Plants

Finally, in Topic #4, MassDEP requests feedback on whether certain clarifications would be necessary with respect to municipal light plans ("MLP"). CLF agrees that the clarification suggested by MassDEP should be incorporated. Specifically, 310 CMR 7.75 should explicitly prevent MLPs from double-counting emissions attributes that have been purchased by another entity regardless of their new Greenhouse Gas Emission Standards. Once another entity has purchased an emissions attribute, MLPs should not be permitted to report that attribute as non-emitting generation, therefore allowing for a single attribute to be counted multiple times.

Thank you for your consideration of these comments. We look forward to working with MassDEP as it continues the review process for these programs, and we encourage MassDEP to conduct stakeholder meetings, develop further information, and facilitate public hearings as it plans the next steps of this process.

Sincerely,

Andrew Yarrows
Legal Fellow
Conservation Law Foundation

Annika Hellweg
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May 28, 2021

Massachusetts Department of Environmental Protection (MassDEP)
One Winter Street
Boston, MA 02108
Submitted via email to:
climate.strategies@mass.gov

RE: Response to The MassDEP Clean Energy Standard (CES) 2021 Program Review Stakeholder Discussion Document

Constellation NewEnergy, Inc., on behalf of itself and its affiliate, Exelon Generation Company, LLC (collectively, "Constellation"), hereby submits its comments in response to the MassDEP's request for stakeholder comments on Massachusetts Clean Energy Standard, 310 CMR 7.74 and 7.75, pursuant to 310 CMR 7.74(11) and 310 CMR 7.75(11). Constellation supports Massachusetts clean energy goals. Constellation encourages the MassDEP to implement requirements in furtherance of the clean energy goals that are straightforward, easily calculable, and implemented on a prospective basis to allow impacted participants to manage their businesses more effectively and help minimize the impact on ratepayers. As such, Constellation submits the following comments:

Topic 1: Stringency of 310 CMR 7.74 and 7.75

Constellation encourages the MassDEP to implement an exemption for retail customers' fixed price contracts executed with retail suppliers prior to the effective date of any change.

As the MassDEP knows, retail electricity customers utilize the retail market to enter into electricity supply agreements to achieve budget certainty, often with multi-year terms of service. Regulatory changes can significantly impact these existing contractual arrangements. The implementation of such clauses will have a direct and immediate financial impact on customers that have otherwise contracted for budget certainty by fixing their electricity price. Regulatory changes subject these customers to additional charges that may not be within their budgets. Furthermore, an exemption of this type is consistent with past precedent. The MassDEP and other Massachusetts agencies and the legislature have included similar exemptions for existing retail contracts when changing the various renewable attribute programs (including, but not limited to, rules related to the Clean Energy Standard under 310 CMR 7.75, and under Massachusetts General Laws related to Renewable Energy Standards under 25A Sec. 11 F).

In addition, Constellation encourages the MassDEP to minimize the number of regulatory changes by choosing a path that implements those changes after the 2025 and 2030 CECPs are published on or before July 1, 2022. Regulatory changes can be cumbersome and costly to manage. While Constellation supports the environmental goals of the Commonwealth and will comply with any decision that the MassDEP ultimately makes, a streamlined approach which accomplishes the clean energy goals of the Commonwealth is the most practical path forward.

Topic 2: Clean Energy Standard Technical Review

Constellation supports a change to the alternative compliance payment rates. The current formulaic methodology that is based on a % of the RPS Class I ACP rate fails to provide an easy and predictable

method for determining compliance. This creates uncertainty that results in suppliers needing to estimate their compliance obligations and to include estimated costs in rates charged to consumers to protect against that risk. If the compliance obligation is less than the suppliers estimated, customers will have paid more for CES-E compliance. By providing cost certainty, the MassDEP can eliminate risk premiums associated with such uncertainty - resulting in more accurate pricing for consumers.

Topic 3: 310 CMR 7.74 Technical Review

Constellation supports the MassDEP's current allowance banking provisions and appreciates the program's flexibility which allows facilities to retain unused allowances and use them for compliance in future years. The MassDEP's ability to adjust the number of allowances auctioned each year downward to ensure that the number of allowances available for use in a year cannot exceed the aggregate emissions limit for the prior year has ensured that emissions decline each year while maintaining price stability. Should MassDEP move forward with implementing changes to the current banking provisions, Constellation respectfully requests that such changes be implemented only on a prospective basis so that they do not impact any of the allowances already banked under existing regulations. Doing so will protect stakeholders who have relied on the existing regulations in purchasing allowances to comply with the law. As noted above, there is Massachusetts precedent for making changes to regulations on a prospective basis only to protect the interests of stakeholders who have reasonably relied on existing law.

Constellation NewEnergy, Inc. is a leading competitive energy company providing power, natural gas, renewable energy, and energy management products and services for homes and businesses across the continental United States. We are one of the largest suppliers in Massachusetts, providing integrated energy solutions — from electricity and natural gas procurement and renewable energy supply to energy efficiency and distributed energy solutions — that help customers strategically buy, manage and use their energy. Today, approximately 2 million residential, public sector and business customers, rely on our commitment to innovation, dependability, transparency and service.

Respectfully Submitted,

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EVERSOURCE ENERGY

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Eversource Energy Service Company, on behalf of NSTAR Electric Company, ("NSTAR Electric") d/b/a Eversource Energy (collectively "Eversource" or the "Companies"), submits this comment letter to the Massachusetts Department of Environmental Protection ("MassDEP") in response to the May 2021 request for comments from stakeholders on the scope of MassDEP's review of 310 CMR 7.75: Clean Energy Standard ("CES") regulation promulgated August 11, 2017. Eversource operates New England's largest utility system serving more than 3.6 million electric and natural gas customers in Connecticut, Massachusetts, and New Hampshire. In order to meet its obligations to provide vital public services, Eversource ensures system reliability and safety standards are maintained in compliance with national, regional, and industry standards, regulations and policies.

Eversource views clean energy as a critical element of the energy mix in New England, and that costs to customers should be fair and reasonable. Eversource is committed to continuing to serve as a clean energy catalyst in the region and is, therefore, actively investing in solar, storage and electric vehicle infrastructure as a means of advancing critical Commonwealth energy policies. The comments below are offered in order to strike a balance between advancing the Commonwealth's clean energy policies and ensuring that customers are not burdened with excessive costs. Cost estimates provided in these comments represent the maximum cost exposure associated with proposed policy changes and explanations of calculations are provided in the footnotes.

Increasing the CES standard from 40 percent to 60 percent in 2030

Eversource supports the Commonwealth's continuing efforts to reduce emissions and recognizes the challenges, and opportunities, that are associated with reaching net zero emissions by 2050. Eversource is also mindful that achievement of Massachusetts' climate goals must result from securing the most cost-effective resources for the benefit of electricity customers, who are ultimately responsible for the costs associated with the Commonwealth's policies. A variety of incentives and mandatory renewable purchase programs have been established over the years in Massachusetts, and this review is both timely and important to ensure that duplicate or excessive payments are not being offered to suppliers and developers in the markets.

An increase in the CES from 40 percent to 60 percent by 2030 will increase the total CES obligation by approximately 9,100,000 MWh, imposing additional costs up to $182 million dollars on Massachusetts electric customers in 2030 alone.[1]

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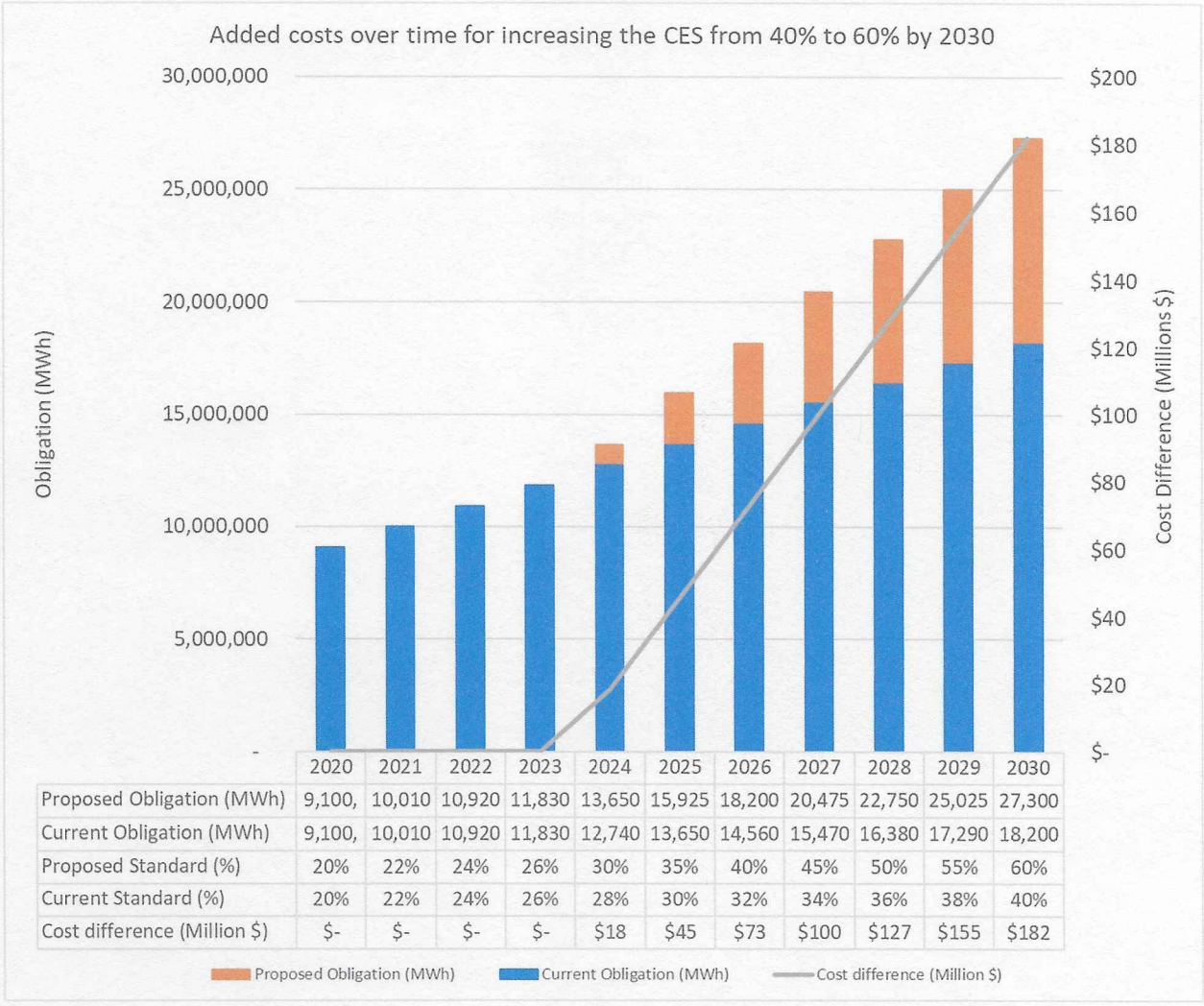
[1] As of the end of 2020, total load from investor-owned utilities in Massachusetts was approximately 45,500,000 megawatt-hours ("MWh") (source: *Electric Customer Migration Data,* Department of Energy Resources, 2020 Monthly Electric Customer Migration Data). A 40 percent CES obligation in 2030 would require that 18,200,000 MWh be sourced from non-emitting sources while a 60 percent CES obligation would require that 27,300,000 MWh be sourced from non-emitting sources. Starting in 2021, assuming the draft regulations filed in April 2021 are finalized, the CES Alternative Compliance Payment ("ACP") will be 50 percent of the Renewable Portfolio Standard ("RPS") Class I ACP, which will be $60/MWh in 2021, $50/MWh in 2022, and $40/MWh in 2023 and

Figure 1, below, illustrates the growth in these costs over time, using the example provided by MassDEP in its 2021 Program Review Stakeholder Discussion Document issued in May 2021.[2]

Figure 1[3]:



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Proposed Obligation (MWh)	9,100,	10,010	10,920	11,830	13,650	15,925	18,200	20,475	22,750	25,025	27,300
Current Obligation (MWh)	9,100,	10,010	10,920	11,830	12,740	13,650	14,560	15,470	16,380	17,290	18,200
Proposed Standard (%)	20%	22%	24%	26%	30%	35%	40%	45%	50%	55%	60%
Current Standard (%)	20%	22%	24%	26%	28%	30%	32%	34%	36%	38%	40%
Cost difference (Million $)	$-	$-	$-	$-	$18	$45	$73	$100	$127	$155	$182

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beyond (source: *225 CMR 14.00 Renewable Energy Portfolio Standard – Class I,* https://www.mass.gov/doc/225-cmr-1400-rps-class-iphase-1final-redline/download). The additional cost to customers in 2030 associated with the proposed increase to the CES obligation could be up to approximately $182 million. If the changes to the RPS Class I ACP in the draft regulations are not adopted, the costs to customers could be significantly higher.

[2] MassDEP 2021 Program Review Stakeholder Discussion Document, https://www.mass.gov/doc/310-cmr-774-775-electricity-sector-program-review/download, May 2021.

[3] The example provided by MassDEP increased the standard by 5 percent each year, instead of the current 2 percent, starting in 2026. That trajectory would not reach 60 percent by 2030, so for illustrative purposes Figure 1 shows the standard increasing by 4 percent in 2024 and then by 5 percent each year between 2025 and 2030, reaching the 60 percent target in the final year.

As the new standard deviates further from the current standard over time, costs continue to grow. The total cost to customers, for the period through 2030, of the proposed change to the standard could be as high as approximately $701 million.

Any review of the CES program should evaluate whether developers have the proper incentives to bring new clean energy resources online. To date, Eversource has been unable to procure any Clean Energy Certificates ("CECs") and instead has relied on RPS Class I Renewable Energy Credits ("RECs") to meet its CES obligations. It is unclear if increasing the CES by 20 percent: (1) will create a market for CECs above the RPS; (2) represents a de facto increase in the Commonwealth's RPS requirement; or (3)represents an increase in the ACP.

Increasing the CES-E standard from 20 percent of 2018 electricity sales to 25 percent

As previously stated, Eversource supports the Commonwealth's efforts to reduce emissions including through the utilization of existing clean energy resources, which is the goal of the CES-E program. However, Eversource is also mindful that increasing the CES-E standard will come at a cost to customers. An increase in the CES-E from 20 percent to 25 percent will increase the CES-E obligation by approximately 2,250,000 MWh, imposing additional costs up to $9 million dollars annually, if implemented in 2023 or later, on Massachusetts electric customers.[4]

While Eversource supports maximizing the utilization of existing clean energy resources, those resources will retire over time. Eversource encourages the MassDEP to reduce the CES-E obligation over time in line with the amount of available cost-effective resources that can serve Massachusetts customers during any one period. The closure of a large-scale nuclear or hydro power facility could severely limit the ability of the electric distribution companies to procure the quantity of required existing clean energy if that requirement does not reflect the available supply.

Municipal Light Plants ("MLP") and the CES standard

Eversource strongly supports the inclusion of municipalities in the CES and the CES-E programs. Clean energy goals benefit all Massachusetts residents, and the costs incurred to achieve those goals should be borne equally by all electric customers, regardless of whether they are served by an investor-owned utility

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[4] MassDEP is considering increasing the CES-E standard, which requires retail electric suppliers to purchase 20 percent of 2018 electricity sales from existing non-emitting sources, to 25 percent. As of the end of 2018, total load from investor-owned utilities in Massachusetts was approximately 45,000,000 MWh (source: *Electric Customer Migration Data,* Department of Energy Resources, 2018 Monthly Electric Customer Migration Data). The current 20 percent CES obligation requires 9,00,000 MWh to be sourced from existing non-emitting sources while a 25 percent CES obligation would require 11,250,000 MWh to be sourced from existing non-emitting sources. With an ACP rate of 10 percent of the RPS Class I ACP, which will be $60/MWh in 2021, $50/MWh in 2022, and $40/MWh in 2023 and beyond, assuming the draft regulations filed in April 2021 are finalized, (source:*225 CMR 14.00 Renewable Energy Portfolio Standard – Class I,* https://www.mass.gov/doc/225-cmr-1400-rps-class-iphase-1final-redline/download), the additional cost to customers associated with increasing the CES-E standard would be approximately $11.25 million in 2022, if implemented in that year, and $9 million annually if implemented in 2023 or later. If the changes to the RPS Class I ACP in the draft regulations are not adopted, the costs to customers could be significantly higher.

or an MLP. Given the importance of these goals and the significant costs and efforts needed to achieve them, no entity or municipality should be exempt from compliance with MassDEP's regulations. As such, Eversource supports the clarifications deemed necessary by MassDEP to help MLP understand their obligations and comply accordingly.

Technical review of the CES and CES-E standards

The current structure of numerous, overlapping policies, all of which have the same underlying goal of increasing the adoption of clean energy and reducing greenhouse gas emissions, has made implementation of these policies complex and costly.

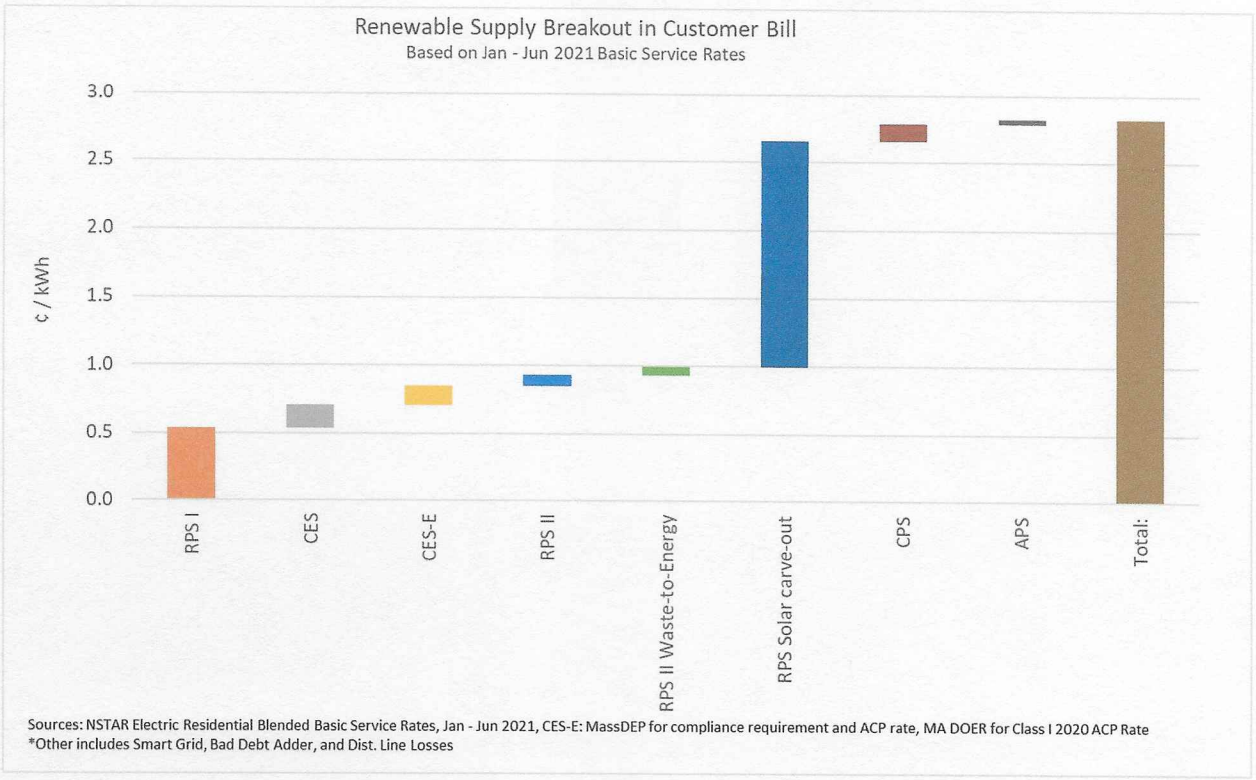
When considering a change to the overall suite of clean energy programs, Eversource urges simplicity. Retail electric suppliers set their rates based upon known costs that can be hedged efficiently. Added uncertainty and complexity increases costs, which are ultimately passed on to customers.

Additionally, Eversource supports including as many resources as possible in any future policies, as long as they help to meet the goal of providing clean energy to Massachusetts. Allowing as many resources as possible, with different technologies and from different locations, including outside of ISO-NE, to participate in these programs increases competition and would reduce costs for Massachusetts customers while maintaining system reliability.

Eversource supports the banking of CECs because it increases the flexibility of suppliers to fulfill their obligation, allowing them to pursue projects that are in the best interest of customers. Banked CECs also help stabilize prices and prevent negative implications such as prices falling to zero for certificates in a given year after the customer need is met.

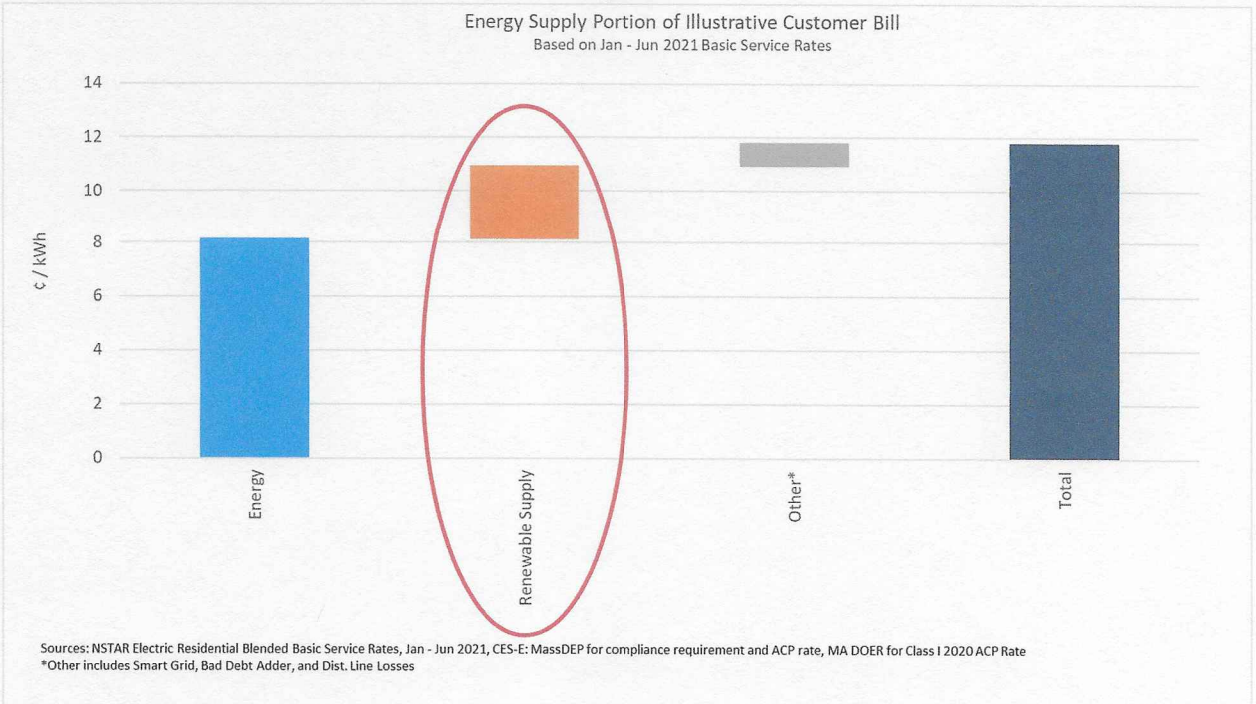
Eversource values clean energy as an important part of the energy mix in New England and is continuing to take an active role in its transformation. Electric distribution companies also have a public service obligation to provide safe and reliable service at a reasonable cost to customers. Currently, Eversource's customers pay for CECs, Existing Clean Energy Certificates ("CEC-Es"), Class I, Class II, Class II Waste-to-Energy, Alternative Portfolio Standard ("APS"), and Class I Solar I and Class I Solar II RECs, and Clean Peak Certificates all of which are broken out in Figure 2, below. The combined rate to customers for these programs, is approximately 2.83¢ per kilowatt-hour, or approximately 24 percent of the supply portion of their bill (see Figure 3). This amounts to $1.29Bn/Year in subsidies by electric customers of investor owned utilities ($28.3/MWH X 45.5M MWH). Eversource urges the MassDEP to remain cognizant of the significant costs associated with these policies and to take all necessary steps to further reduce costs to customers.

Figure 2:



Sources: NSTAR Electric Residential Blended Basic Service Rates, Jan - Jun 2021, CES-E: MassDEP for compliance requirement and ACP rate, MA DOER for Class I 2020 ACP Rate
*Other includes Smart Grid, Bad Debt Adder, and Dist. Line Losses

Figure 3



Sources: NSTAR Electric Residential Blended Basic Service Rates, Jan - Jun 2021, CES-E: MassDEP for compliance requirement and ACP rate, MA DOER for Class I 2020 ACP Rate
*Other includes Smart Grid, Bad Debt Adder, and Dist. Line Losses

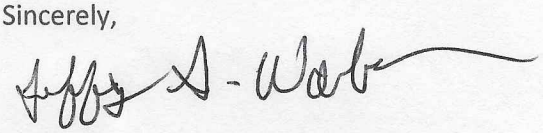
Any review of the CES, CES-E, or other clean energy policies must demonstrate that such programs actually increase the amount of clean energy resources that serve Massachusetts electricity customers. Ratepayers do not benefit from policies that add costs, but which fail to produce new clean energy resources and reduce emissions. The justification for these policies, i.e., "paying more for electricity will lead to more clean resources being developed," must be supported by evidence demonstrating achievement of the policies' goals and electricity distribution companies need to be able to explain to customers, with clear and demonstrable documentation, that added costs are leading to the benefits intended by the Commonwealth.

Consistent with its obligations to customers, Eversource must ensure that costs to ratepayers remain reasonable and fair, and that any changes made to the CES and CES-E programs will have as low a customer impact as possible. As the Commonwealth's clean energy and environmental goals become increasingly more comprehensive, stakeholders, including Eversource, need to continue to work together to ensure that the most cost-effective clean energy resources are secured for the benefit of Eversource's customers.

Eversource supports delaying any changes to the CES and CES-E programs until after July 1, 2022 when amendments will be published to address the 2025 and 2030 Clean Energy and Climate Plans ("CECPs"). For the sake of simplicity and ease of implementation, it would be best to avoid having multiple rulemaking processes over the next two years.

Eversource thanks MassDEP for its careful consideration of these comments and looks forward to continuing to work with MassDEP and other stakeholders to develop competitive, cost-effective solutions to meet the Commonwealth's important energy and environmental goals. Should you have any comments or questions, please contact Keith McWhorter, Senior Energy Supply Analyst, at (781) 441-8348.

Sincerely,



Jeffery S. Waltman
Manager, Planning and Power Supply

May 31, 2021

310 CMR 7.75 Program Review Scope Proposal: Comments Submitted by FirstLight Power

FirstLight Power (FirstLight) is a leading clean power producer and energy storage company in New England with a portfolio that includes 1.4 gigawatts (GW) of pumped-hydro storage, battery storage, hydroelectric generation, and solar generation. Our largest asset, the Northfield Mountain pumped hydroelectric facility, provides nearly 1,200 MW of emissions-free energy and clean energy storage capacity, and it serves as a critical asset to maintain regional reliability on the New England electric grid. As the Commonwealth advances its bold vision for achieving carbon-neutrality by 2050, large-scale energy storage facilities will be a critical element of ensuring that we can build an electric grid that is clean, reliable, affordable and equitable in line with the goals of Massachusetts.

We appreciate the opportunity to comment on the proposed scope for the upcoming program review of 310 CMR 7.75, the Clean Energy Standard (CES). FirstLight agrees that the questions and topics proposed in the program review scope are appropriate and warrant further discussion. In particular, we believe that there may be opportunities to simplify and streamline the Commonwealth's numerous clean energy and renewable programs and that such an effort may yield additional benefits and value for Massachusetts ratepayers. Additionally, FirstLight recommends that MA DEP also consider a full examination of the CES-E program eligibility requirements. Currently the program is designed in such a way that most, if not all existing Massachusetts-based clean energy resources are ineligible for the program. As a result, current participating resources are limited to out-of-state nuclear power and internationally imported hydropower.

The stated purpose of the CES-E program is to maintain the baseline of existing clean energy that is already counted towards Massachusetts' goals. The Department has voiced concerns over "shuffling" of resources between jurisdictions to explain the exclusion of existing resources that have previously participated in other states' programs. FirstLight recognizes this concern, but recommends that this concern be balanced against the needs and contributions of in-state resources to help the state meet its escalating clean energy targets. As baseload existing renewables such as hydropower become increasingly scarce in relation to rapidly increasing

regional clean energy targets, there will additional pressure on local clean energy resources to export to other states if they are not incentivized to be retained in Massachusetts. The net unintended effect of the policy therefore will be to have Massachusetts electricity ratepayers paying to import baseload hydro from out of state, while in-state local hydro resources--*importantly, the ones that contribute employment, property tax revenue, and support local economic activity and clean energy jobs*—are forced to export out of state. This potentially perverse outcome should be considered more closely as part of the upcoming CES-E program review.

In addition, the regional dynamics are evolving, and in-region resources may be forced to look outside their traditional markets in New England to find markets that fairly compensate these resources. New York in particular is moving aggressively to meet near-term electric-sector renewable goals (70% renewable energy by 2030 is required under New York law) and existing hydro, wind and solar resources that are not eligible for Massachusetts' CES-E may seek to export.[1] Whether by retirement (if power prices stay suppressed to uneconomic levels) or exporting, Massachusetts is not well served to erode its baseline of existing zero-emissions resources, which only increases the challenge of meeting the ambitious goals enacted under Senate Bill 9 - An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy.

For these reasons, we recommend that the Department consider a full review of the program eligibility in addition to the scope proposal already offered.
Thank you for your consideration.

Sincerely,

Len Greene
Director, Government Affairs & Communications
FirstLight Power
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[1] In particular, the Tier 4 program in New York provides potential eligibility for long-term contracts for out of state existing hydro to incentive those resources to help New York meet their ambitious targets. https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/Tier-Four

GREEN ENERGY CONSUMERS ALLIANCE

Secretary Katie Theoharides
Massachusetts Executive Office of Energy and Environmental Affairs
100 Cambridge St. Suite 900
Boston, MA 02114

May 28, 2021

Commissioner Martin Suuberg
Massachusetts Department of Environmental Protection
1 Winter St. 2nd Floor
Boston, MA 02108

Re: 310 CMR 7.74 and 7.75 2021 Program Review Stakeholder Discussion Document

Dear Secretary Theoharides and Commissioner Suuberg,

Thank you for the opportunity to comment on regulations pertaining to reducing CO2 emission from electricity generating units (310 CMR 7.74 and 7.75). In addition to the regulatory requirement, this review is germane to the passage of S9 and ongoing development of the Massachusetts Clean Energy and Climate Plan. Decarbonization of the power sector is foundational to reducing emissions 50% by 2030 and to net zero by 2050 as required by state law. The review of 310 CMR 7.74 and 7.75 holds great potential to lead to accelerated decarbonization of the electric sector, which will support the timely, cost-effective meeting of Massachusetts' climate goals.

Green Energy Consumers Alliance ("Green Energy Consumers") is a non-profit organization with a mission to harness the power of energy consumers to speed the transition to a low-carbon future. Since 1982, we have run a series of programs and services for residents of Massachusetts to enable smart energy choices. The experience we've gained interacting with energy consumers and suppliers informs our advocacy work at the state and local level.

Green Energy Consumers supports the initiation of topical stakeholder meetings and the development of draft regulations following stakeholder input. We believe that updating the regulations is necessary to streamline, keep pace with, and (in several cases) accelerate decarbonization of electricity generation in the Commonwealth. Our specific comments on the stakeholder discussion document follow below.

Topic #1: Stringency of 310 CMR 7.74 and 7.75

Stakeholder Discussion Document:

Consistent with the content of the Interim CECP and the new climate legislation, MassDEP suggests that stakeholders consider commenting on the following potential amendments to the regulations:

- *Increase the stringency of the CES from 40% to 60% or more in 2030. For example, this could be addressed by increasing the standard by 5% or more each year from 2026 – 2030 (instead of the 2% each year increase in the current regulation). Waiting until 2025 before escalating the annual rate of increase would allow time for supply to become available before the changes take effect. In combination with the CES-E, these changes would place the Commonwealth on a path toward a fully decarbonized electricity sector by 2040.*

Green Energy Consumers Reply:

Green Energy Consumers considers it to be absolutely necessary to increase the CES from 40% to greater than 60% in 2030. We strongly encourage an increase of the CES to at least **40% by 2023**, when CES-qualifying power from Hydro Quebec is expected to come online, and to **100% by 2030**, by which point Massachusetts is likely to be receiving power from at least 1,600 MW of offshore wind projects.

More than half of the power sector emission reductions in the Clean Energy and Climate Plan come from adjusting the Clean Energy Standard (CES) to "at least 60%" by 2030. Without such an increase, already-planned clean energy procurements will flood the REC market and render the CES and Renewable Energy Portfolio Standard (RPS) ineffective. In 2023 or 2024, Massachusetts will begin receiving about 20% of its power from Hydro Quebec. Shortly thereafter, we will have 1,600 megawatts of offshore wind power coming from the Vineyard Wind and Mayflower Wind projects. On top of that, we will have increasing amounts of solar power all the way through 2030. These additions will add up to more clean power than needed to meet the current CES in 2030. If the standard is not adjusted upwards, Massachusetts would have to sell off a lot of that clean power to other states and forfeit the right to those associated emission reductions. To keep pace with planned renewable energy development and to continue sending market signals, we strongly support raising the CES to at least 60% by 2023 and to 100% by 2030.

We're optimists that there are many ways to reduce emissions in ways that are inherently fair or that can be made to fair to everyone. Increasing the CES is inherently fair insofar as everyone pays into it, everyone benefits, and low-income people can qualify for electricity rate discounts. Offshore wind prices are proving to be affordable, and with the right workforce development efforts in place, we can ensure that everyone is given a fair shot at the good-paying jobs that will be created in the growing offshore wind and solar industries.

If Massachusetts expects to remain a leader in clean energy, we must increase the CES to 100% by 2030. The federal administration has announced a goal of 100% renewable electricity nationwide by 2035; with our strong history of climate leadership and our offshore wind resources, Massachusetts has a head start on most other states, so it's reasonable to expect to hit that goal by 2030.

In our region, Rhode Island appears to be headed towards adopting policies to reach 100% renewable electricity by 2030. In addition to former Governor Raimondo's 2020 executive order setting a 100% by 2030 goal, a bill to increase the Renewable Energy Standard to 100% by 2030 is expected to come to a vote in the RI Senate in the coming weeks.

A 100% CES is one of the easiest short-term emissions reductions policies for Massachusetts to implement. We know the CES works, and—unlike several of the other proposed CECP strategies—the framework for the

policy is already in place. A 100% CES could make up for potential shortfalls from other CECP strategies, like the 1 million heat pump goal or transportation electrification, some of which may be more expensive to carry out. In addition, since the 2030 CECP's plan for emissions reductions in the transportation and buildings sector largely rely on electrifying transportation and heating, greater progress in the electricity sector maximizes the impact of each electric vehicle and heat pump installed by 2030.

The 2021 Climate Legislation requires the administration to set five-year interim emissions limits. Accelerating the initial CES increase of 60% to a date before 2025 could help the state meet any limit proposed for 2025. The climate bill also increases the Renewable Portfolio Standard by 5% between 2025 and 2030, making a 100% CES by 2030 even more doable. For all these reasons, a CES much greater than 60% will be necessary. A 100% by 2030 CES could be the key to ensuring that the state meets the 2030 limit in the most cost-effective manner possible.

Stakeholder Discussion Document:

- *Increase the CES-E from 20% of 2018 electricity sales to 25%. An increase from 20% to 25% could "lock in" a modestly larger contribution from pre-2010 clean generators. Making this change by 2026 would help ensure that new clean generators added quickly between 2026 and 2030 replace emitting generators, not existing clean generators.*

Green Energy Consumers Reply:

While Green Energy Consumers Alliance supports increasing the CES-E in order to ensure that new clean generation replaces fossil fuels, not existing clean energy, we would want to see clear documentation that pre-2010 clean generators are being left out of the current 20% CES-E requirement. Further, any increase to the CES-E should occur in conjunction with a corresponding increase to the CES, such that the CES continues to support new clean energy generation.

Stakeholder Discussion Document:

- *Maintain the stringency of 310 CMR 7.74 without modification. Emissions from the instate power plants regulated under 310 CMR 7.74 have trended well below regulatory limits, so further reducing those limits may not be necessary to achieve reductions by 2030. However, even if the limits in 310 CMR 7.74 are not changed as a result of the 2021 program review, ongoing monitoring will continue to ensure that power plant emission levels support achieving the 2030 statewide greenhouse gas (GHG) emissions limit established in December 2020.*

Green Energy Consumers Reply:

While reducing in-state power plant emissions limits may not be necessary, we do not see any downside to making sure that regulations keep pace with emissions trends. The goal of emissions regulations is to apply downward pressure to emissions in the state; the emissions limits in 310 CMR 7.74 should be revised continue to encourage emissions reductions. This is in line with the recent climate legislation that upped Massachusetts' climate ambition to 50% emissions reductions by 2050.

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Stakeholder Discussion Document:

Stakeholders may also comment on the timing of any regulatory amendments that would affect the stringency of 310 CMR 7.74 or 7.75.

Green Energy Consumers Reply:

The sooner we adopt emissions reductions regulations, the more emissions will be avoided, and the more costs will be saved on decarbonization long-term. Stakeholders can reasonably expect that certain policies will be "no regrets" when it comes to addressing the 2025 and 2030 CECPs to be published by July 1, 2022. For example, upping the CES to 60% by 2023 and 100% by 2030 is likely to satisfy any proposals put forth by the CECP, and such ambition in the electric sector could help us get a head start on decarbonization from the transportation and building sectors.

Waiting for the 2025 and 2030 CECPs to adopt new regulatory amendments would set Massachusetts back on our path to meeting the 2030 emissions limit.

Topic #2: Clean Energy Standard Technical Review

Stakeholder Discussion Document:

In addition to the overall stringency of the CES (Topic #1), MassDEP seeks input on the following CES-related topics, and encourages stakeholders to suggest other topics:

- *A comprehensive "global" CES has been posited by some stakeholders as a substitute for, or complement to, the suite of RPS/APS/CES/CES-E policies that currently exist in Massachusetts and New England. How, exactly, would such a policy be structured? For example, how would costs be minimized in a single policy given the need to support technologies with widely differing costs (i.e., new rooftop solar vs. pre-2010 hydropower facilities)?*

Green Energy Consumers Reply:

The suite of policies that track and incentivize different renewable energy technologies in Massachusetts should prioritize the highest quality renewable energy—that is, the technologies currently supported by RPS Class I and the Energy Diversity Act of 2016. These policies are the critical ones for meeting state climate goals and should be expanded.

In contrast, the value of the other mandates--such as RPS – Class II, APS, and CES-E—is less clear. This is not to say that they have no value; rather we recommend that EEA and MassDEP conduct a thorough review of the relative merits of these other mandates, especially with regard to how they do or do not contribute to state climate goals. Such publicly documented information could form the foundation of the design of a future comprehensive CES.

GREEN ENERGY CONSUMERS ALLIANCE

Stakeholder Discussion Document:

- *Are changes needed to the alternative compliance payment (ACP) rates? For example, the rates could be specified in regulation as $35/MWh for the CES and $10/MWh for the CES-E (similar to current levels), instead of as a % of the RPS Class I ACP rate.*

Green Energy Consumers Reply:

Green Energy Consumers strongly supports setting a dollar value per MWh for CES ACP rates. If proposed amendments to RPS Class I regulations are adopted, the RPS Class I ACP would drop to $40/MWh in 2023 and thereafter. The current system would then set CES compliance payments to $20 (50% of ACP), a value that we could reasonably expect to be below CEC trading prices a significant portion of the time. This would invalidate the CES as an emissions reductions mechanism.

Green Energy Consumers opposed lowering the RPS Class I ACP to $40/MWh; however, given that that regulation change appears likely, we would recommend that the ACP for the CES be set as close to the RPS Class I ACP as possible—but no longer as a value tied to the RPS Class I ACP.

Any lowering of ACP rates should be accompanied by substantial increases to the CES, as we recommend in our replies to Topic #1. The purpose of the ACP is to balance markets as demand is driven upwards by the CES; thus, lowering the ACP should be tied to increases in the CES.

Stakeholder Discussion Document:

- *Should the structure of the standard be refined to address customer-sited behind-the meter generation such as rooftop solar power? Under the current program structure, this generation may be credited toward compliance, but the portion of the energy used on site is not included in the basis of the compliance obligation because it is never sold.*

Green Energy Consumers Reply:

Green Energy Consumers strongly supports ending double counting of behind the meter generation. Closing this loophole would is a way to increase Massachusetts' highest quality renewable energy without needing to up the annual RPS percentage.

Conclusion

Green Energy Consumers Alliance strongly supports the program review of 310 CMR 7.74 and 7.75 and the initiation of a draft regulation process that brings electric generator regulation in line with Massachusetts' climate goals. In particular, a strong Clean Energy Standard will be crucial to achieving 50% emissions reductions by 2030 and net zero by 2050. With this review, the EEA and MassDEP has an opportunity to get a head start on implementation of the CECP and 2021 Climate Roadmap Legislation.

GREEN ENERGY CONSUMERS ALLIANCE

Green Energy Consumers Alliance looks forward to participating in topical stakeholder meetings and future opportunities to comment on draft regulations of 310 CMR 7.74 and 7.75.

Thank you for the opportunity to comment. Please reach out with further questions.

Kai Salem
Policy Coordinator, Green Energy Consumers Alliance
kai@greenenergyconsumers.org

May 31, 2021

Via email to climate.strategies@mass.gov

Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

H.Q. Energy Services (U.S.) Inc. ("HQUS"), a U.S. subsidiary of Hydro-Québec ("HQ"), appreciates the opportunity to submit the following comments as part of the 2021 program review of the Massachusetts Department of Environmental Protection's ("MassDEP") 310 CMR 7.75: Clean Energy Standard ("CES").

COMMENTS

Topic #1: Stringency of 310 CMR 7.74 and 7.75

Increasing the stringency of CES

On December 30, 2020, the Secretary of the Executive Office of Energy and Environmental Affairs ("EEA") established a statewide greenhouse gas ("GHG") emissions limit of 45% below the 1990 GHG emissions level for 2030. At the same time, EEA issued the Interim Clean Energy and Climate Plan for 2030 ("2030 CECP"), which was a portfolio of policies and actions designed to achieve the 2030 emissions limit. The 2030 CECP recommended increasing the CES in 2030 from 40% to 60% in order to exceed the RPS and not be overtaken by the clean energy that the Massachusetts electric distribution companies procured from HQUS to be delivered over the New England Clean Energy Connect ("NECEC") project under Section 83D. In the interim, Governor Baker signed into law *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy*, St. 2021, c. 8, which mandated a 2030 GHG emissions limit of 50% below the 1990 level. Thus, the current recommendation of increasing the CES to 60% in 2030 may be insufficient.

Further, MassDEP requested comment on the glide path for increasing the CES from 40% to 60% in 2030. MassDEP suggested the CES could be increased by 5% or more each year from 2026 through 2030 instead of 2% each year under the current regulations. However, the Department of Energy Resources ("DOER") estimated that when NECEC is placed in service on May 31, 2023, the clean energy that will be delivered annually under the Section 83D contracts

alone will likely represent 17% of Massachusetts total load and 20% of the electric distribution companies' load.[1] The project "will result in nearly half (47%) of electricity consumed in Massachusetts being generated from clean energy."[2] Thus, increasing the CES should not be deferred to 2026.

Increasing the CES-E from 20% of 2018 electric sales to 25%

MassDEP requested comment on increasing the CES-E to 25% in order to lock in "a modestly larger contribution from pre-2010 clean generators" to ensure that new clean generators added between 2026 and 2030 replace emitting generators and not existing clean generators. MassDEP has stated that CES-E should be set at a level with a "purpose of maintaining (vs. increasing) the contribution of the resources to Massachusetts' electricity supply," but that a higher standard could be supported by historical data.[3] The current CES-E level of 20% is unduly conservative given past documentation showing higher percentages of Massachusetts load being met through existing clean generation (e.g. 2012 GHG Inventory references 34% of Massachusetts' electricity being served by existing non-RPS resources).[4] Raising CES-E closer to such a level would maintain, and not increase, the contribution of existing clean energy generation. Although some stakeholders in the past have expressed concerns about the potential cost of the CES-E program, maintaining existing clean energy generation is more cost effective than developing new generation. Therefore, a higher CES-E will play a critical role in meeting the mandatory statewide GHG emissions targets at the lowest overall cost to ratepayers.

Topic #2: Clean Energy Standard Technical Review

Changes to the Alternative Compliance Payment ("ACP") Structure

MassDEP should decouple the ACP for both CES and CES-E from those of DOER's Renewable Portfolio Standard ("RPS") program as changes that may be necessary in one program may result in unintended consequences in a linked program. DOER plans to reduce the RPS Class I ACP rate to $40/MWh by 2023 and will promulgate the new regulations next month.[5] This will have the effect of setting the ACP rates drastically lower than the level that MassDEP contemplated when it considered the 2018 RPS Class I rate of $70/MWh. The change will render MassDEP's program ineffective at maintaining existing clean energy generation and attracting new clean energy generation. In fixing the ACP rates for its own programs, MassDEP should also take into account ACPs for existing clean energy programs throughout the region, as well as prevailing values for voluntary environmental attribute programs to ensure that it can preserve historical volumes of CES-E resources.

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[1] Department of Energy Resources Letter in Support of Section 83D Contracts (July 23, 2018), p. 4, D.P.U. 18-64/18-65/18-66, *available at* https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/9637594

[2] *Id.*

[3] Background Document on Proposed Amendments to: 310 CMR 7.75 Clean Energy Standard (2019), p. 5, *available at* https://www.mass.gov/doc/310-cmr-775-background-document-october-2019/download

[4] 2017 Stakeholder Document: Options for Expanding the CES, p. 4, *available at* https://www.mass.gov/doc/2017-stakeholder-document-options-for-expanding-the-ces/download

[5] DOER filed the proposed final regulations with the Joint Committee on Telecommunications, Utilities, and Energy on May 26, 2021, and will file them with the Secretary of the Commonwealth after June 25, 2021.

Changes to the requirements that apply to generators located outside of the ISO-NE Control Area

Current documentation requirements for generators located outside of ISO-NE are unnecessarily burdensome. The requirements to demonstrate physical delivery of associated clean energy under the *Special Provisions for a Generator Located in a Control Area Adjacent to the ISO-NE Control Area*, 31 CMR 7.75(7)(b), can best be accomplished by unit specific tracking via NEPOOL-GIS. MassDEP can simply rely upon data from NEPOOL-GIS to ensure that energy is being delivered from a qualified generation facility. To the extent MassDEP requires additional information in order to perform its oversight, future modification to NEPOOL-GIS is the best course of action.

CONCLUSION

HQUS appreciates the opportunity to comment on the 2021 program review of the Clean Energy Standard. The initial recommendations that we have highlighted will ensure that the Commonwealth can attract new clean energy generation and retain existing clean energy generation that are needed to achieve its mandatory GHG emission reduction goals.

Sincerely,

Stephen C. Molodetz
Vice President of Business Development
HQUS

May 28, 2021

Comments
310 CMR 7.74 Yr 2021 Program Review

These comments are being submitted to support the MassDEP Year 2021 Program Review of the 310 CMR 7.74 Massachusetts Fossil Fuel Electric Generation Reduction Rule.

While GHG is clearly an important concern, Massachusetts Programs designed to address the issue should be appropriate and sensible, and not simply based on ideology and a desire to remain in the forefront of the movement toward zero GHG emissions

BACKGROUND

1) GHG Emissions are a global issue, and the contribution (and effect of reductions) by Massachusetts are minimal
    a) That is not to say Massachusetts should not act to reduce GHG emissions, simply that the actions should be commensurate with, and appropriate to, the potential benefits
2) Electrical demand in Massachusetts is likely to increase substantially if the transition to: (a) electric cars; and (b) heat pumps for residences and commercial facilities grows rapidly as expected.
    a) While no attempt was made to estimate the exact amount of new Electric Generation that would be required to support this transition, crude calculations suggest it could perhaps increase the demand for electricity in the state by 50% or more – see Attachment.
3) Electric Generators in Massachusetts, on average, have high efficiencies, which means they are relatively low CO2 sources. The heat rates of many units are below the ISO marginal heat rate.
    a) Currently Massachusetts Generators are responsible for < 1% of the CO2 emitted in the state, so the benefit of shutting them down would be minimal
4) Massachusetts Electric Generation/Demand Trends since advent of 310 CMR 7.74
    a) Between Yr 2017 (prior to 310 CMR 7.74) and Yr 2020, Electrical Generation by facilities subject to 310 CMR 7.74 has declined by ~ 40% (~ 21,600,000 MWhs in Yr 2017 to ~ 12,900,000 MWhs in Yr 2020) and this decline has occurred in the face of major non-fossil fuel Generation loss when Pilgrim Nuclear Plant shutdown
        i) While no attempt was made to estimate the effect of the cost of 7.74 Allowances on this decline in dispatch, it is expected that the impact of Allowance costs was significant, as this cost was borne only by Massachusetts Generators in the ISO Region. And with the termination of all 310 CMR 7.74 Allowance distributions starting in Yr 2020, Allowance costs may well rise, potentially accelerating declines in dispatch of Massachusetts Fossil Fuel Electric Generators.
    b) ISO data indicates that the percentage of Massachusetts Electrical Demand supplied by Massachusetts Electrical Generators has dropped from 61% to 43% between Yr 2017 (pre-7.74) and Yr 2019 – see attachment, and it is anticipated this percentage has continues to drop, as Electrical Generation declined significantly in Yr 2020, for which no ISO data is available. This gap between Massachusetts Electrical supply and demand implies electrical supply has shifted to other states, whose generators are likely less efficient than those in Massachusetts. In other

words, the decline in Generation, and CO2 emissions, by Massachusetts Fossil Fuel Generators has resulted in little benefit to regional CO2 emissions, and may even have increased them.

5) A substantial increase in Renewable Generation could significantly decrease the demand for electricity supply from Nuclear facilities (Millstone and Seabrook), and result in their early Retirement, as they are already in economic distress. Retirement of these large generators could enhance the need for continued Fossil Fuel generation.

MASSACHUSETTS PLANNED RENEWABLE SOURCES to Replace Fossil Fuel Generation

1) Import of Electricity from Hydro Quebec: the Maine Clean Energy Connect Project
   a) The Maine Clean Energy Connect project would import electricity from HydroElectric Generators in Canada to Massachusetts along a new electrical line running thru the state of Maine. The line capacity would be ~ 1,200 MW.
      i) The Schedule, and even status, of this Project is uncertain
         (1) While the Maine Clean Connect project has apparently received all required permits, some of the impact statements and permits are still being legally contested by Environmental Groups
         (2) There is a Ballot Petition to be voted on in the November 2021 election, that if passed, might well kill the project
      ii) The environmental cleanliness of Hydro-power is unclear
         (1) It has been suggested Hydro Projects can be significant emitters of methane, a strong GHG gas. I have no expertise on this subject, and therefore do not necessarily support these claims. However, it is my understanding there are no new major Hydro-Generation projects planned anywhere in the U.S., in part due to Environmental concerns (recent increases in electrical output from Hydro facilities in the U.S. have apparently been almost exclusively due to upgrades at existing large facilities supplemented by a few very small projects). It does not seem entirely reasonable to import Hydroelectricity from Canada, and effectively encourage its expansion there, when it's expansion has been essentially rejected in the U.S. for environmental reasons.
2) Offshore Wind Turbines: While Offshore Wind appears to be a good potential source of Electrical Generation, there are significant questions about its near term realization
   a) There are currently no large scale wind projects operating in the U.S. so it has no proven track record in the U.S.
   b) It is my understanding the Turbines planned for use by the Vineyard project have not been used commercially, and are significantly larger than the Turbines used in Europe
   c) The transferability of the experience from Wind Projects in Europe to the U.S. is unclear
      i) It is my understanding that Wind Projects in Europe have not been located in waters where major fishing occurs, but coordination with fishing activities in Massachusetts has been a significant issue. Maine is proposing to prohibit Offshore Wind due to its potential conflict/interference with fishing
      ii) The projects in Europe have been located in seas, while the Massachusetts Wind Projects will be situated well out in the Atlantic Ocean. It is unclear if ocean conditions differ

significantly from those in the North Sea. In particular, if ocean conditions are harsher or gustier, it could affect reliability, capacity factors, maintenance requirements, etc.

d) For Wind Turbines to provide a reliable, constant source of electrical generation, it would seem likely that storage will play a significant role. It is unclear if the integrating of major storage capacity is being undertaken as part of the proposed Wind Projects. If not, the potential benefits of these projects may be significantly reduced

Based on the lack of a proven track record for Wind, uncertain timelines for implementation of replacement Renewable Generation sources (Wind and Import of Hydroelectricity), and other outstanding issues, it would not seem prudent or sensible to decimate an existing, efficient, effective Fossil Fuel Electric Generation Industry in Massachusetts until these Renewable sources prove themselves a viable, reliable, adequate substitute. Particularly when: (a) the existing Electric Generation sector is a very minor contributor to Massachusetts GHG emissions, and (b) the need for a significant increase in electric generation will be required to support the conversion to electric cars and heat pumps.

Rather than considering the possible acceleration of the 310 CMR 7.74 Program, or even maintaining it at current levels, consideration should be given to pausing the annual tightening (lowering) of the annual 7.74 CO2 Cap. The evidence suggest that the Massachusetts Fossil Fuel Electric Generation sector is declining much more rapidly than the 7.74 State Cap, likely due to the impact of 310 CMR 7.74 Allowance Costs, and may well experience an irreversible extinction in the near future well before Renewable replacements are in place.

Perhaps if Climate Change is a cataclysmic near term problem, Massachusetts should consider lowering the highway speed limit to 55 miles/hr, and actually enforcing it. It was a measure introduced by President Jimmy Carter in the late 1970's as a simple, easy, if inconvenient, method for significantly reducing gasoline usage, and would have a proportionate benefit on CO2 emissions. In that way everyone could contribute, and share in the burden of addressing Climate Change.

Sincerely

Bob Machaver

MUNICIPAL ELECTRIC ASSOCIATION OF MASSACHUSETTS

C/O Ferriter Scobbo & Rodophele PC

125 High Street, 26th Floor

Boston, MA 02110

PUBLIC COMMENTS

To: The Massachusetts Executive Office of Energy and Environmental Affairs and the Massachusetts Department of Environmental Protection

FROM: Municipal Electric Association of Massachusetts

DATE: May 31, 2019

RE: Comments- MassDEP GHG reporting requirements for municipal light plants

The Municipal Electric Association of Massachusetts ("MEAM") submits these comments pursuant to the request of the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") and the Massachusetts Department of Environmental Protection ("Mass DEP") regarding the proposed scope of review of 310 CMR 775 MLP greenhouse gas ("GHG") emissions reporting requirements .

MEAM is a statewide association composed of 40 municipal light plants ("MLPs") in the Commonwealth of Massachusetts.

The question posed in the EEA/MassDEP request of May 7, 2021 is as follows:

"Are any clarifications necessary in relation to the GHG reporting requirements under 310 CMR 7.75? For example, is there a need to clarify that the prohibition on reporting non-emitting generation for which others own the emissions attributes will continue to apply regardless of how MLPs structure their GGES program."

MEAM's response is that municipal light plants fully intend to comply with all requirements contained in c. 8 of the Acts of 2021 ("climate legislation) which are applicable to MLPs, including the proper reporting requirements which do not include so-called " double counting" to the Department of Energy Resources ("DOER"). As a result of the new law, MEAM suggests at this time that the only "clarification" needed is that the reports to the DEP and DOER be consistent and uniform in their content as MLPs follow the greenhouse gas emissions standards applicable to MLPs specified by the new climate legislation.

It is MEAM's understanding that DOER is in the process establishing reporting requirements to address the new law. MEAM would be pleased to engage with both DOER and MassDEP as they deem appropriate in order to effect a uniform reporting requirement applicable to MLPs that would address the needs of both departments consistent with the c. 8 of the Acts of 2021.

May 28, 2021

Mr. William Space
Senior Technical Advisor for Climate Programs
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: 310 CMR 7.74 & 7.75 Program Review

Dear Mr. Space,

The Massachusetts Municipal Wholesale Electric Company (MMWEC), the state's joint action agency for Massachusetts municipal utilities representing 20 municipal light plant (MLP) members and 28 MLP project participants, appreciates this opportunity to submit comments related to the program review of 310 CMR 7.74 Reducing CO2 Emissions from Electricity Generating Units and 310 CMR 7.75 Clean Energy Standard.

Municipal utilities in Massachusetts support public policy goals to reduce carbon emissions in the electric sector. Massachusetts municipal utilities have been supportive of the recently passed climate legislation c. 8 of the Acts of 2021. In this legislation, municipal utilities advocated for the establishment of a Municipal Lighting Plant Greenhouse Gas Emission Standard. This Municipal Lighting Plant GGES set the minimum percentage of non-carbon emitting energy sold by each Municipal Lighting Plant (MLP) to all retail end-user customers purchasing electricity to 50 percent non-carbon emitting energy by 2030, 75 percent non-carbon emitting energy by 2040 and energy sales achieving net-zero greenhouse gas emissions by 2050. Close to half of MMWEC member MLPs' portfolios already meet the 2030 emission standard evidencing MMWEC member MLP's commitment to the Commonwealth's climate goals. Our comments regarding 310 CMR 7.74 and 7.75 are offered in that context.

<u>Topic #1 – Stringency of 310 CMR 7.74 & 7.57</u>

MMWEC does not support further tightening of emission requirements on in-state generators (e.g., 310 CMR 7.74). The principal reason is that the glide path to emission reduction has already been put in place within the existing 310 CMR 7.74. The economic dispatch mechanism embedded in ISO New England market rules rations generation based on the costs of production. For Massachusetts generators, the costs of procuring air allowances impacts bidding into the energy markets and the determination of dispatch from ISO New England. The further tightening of air allowances will favorably position out of state emitting generators in the economic dispatch queue. This will be counterproductive to the policy goals established by 301 CMR 7.74, as emissions will not be reduced and indeed could actually increase due to the differences in air emission controls among the New England states. The current pace of air allowance reductions and the smooth incorporation of the regulation into the energy markets is a success and further adjustments are not merited.

Relating to the stringency of the CES from 40% to 60% or more in 2030, MMWEC and its member MLPs are not subject to these standards. However, with the passage of the recent climate legislation MMWEC believes there is merit for review and amendments to level match requirements under the climate legislation. The interest MMWEC and its member MLPs have is to reduce inconsistencies within the regulations to adopt the Commonwealth's objectives expressed in legislation and the Massachusetts 2050 Decarbonization Roadmap.

Topic #2 – Clean Energy Standard Technical Review

MMWEC does not support further adjustments to the structure of the standard to address customer-sited behind the meter generation. MMWEC's lack of support for adjustments is based on concerns related to the logistics involved in monitoring, calculating and ultimately adjusting sales data. Current programs involving MLPs meter at the inverter for these types of projects. This metering procedure ensures the recording of actual performance evidenced by a meter read. This provides a reliable and accurate method to record the contribution of this type of generation. Any refinement as suggested in the Review Stakeholder Discussion Document may introduce inconsistencies and contradictions to existing FERC governing tariffs. While MMWEC member MLPs are not subject to this standard, our commentary based on our experience with customer-sited behind the meter generation is offered.

Topic #3 – 310 CMR 7.74 Technical Review

The banking of air allowances is a necessary tool available to MMWEC to manage emissions produced by its Massachusetts located emitting generating assets. Placing additional limits on the current banking provisions would be detrimental in our ability to plan and execute dispatch bidding strategies that result in reduced emissions in compliance with our air allowance allocations. Our experience has been that air allowance liquidity has not been a problem. Changes that may allow for the ability to make air allowance purchases well in advance of the compliance year would introduce an element of speculation which is inconsistent with the intent of the legislation, which is to appropriately price carbon for those generators which are dispatched into the market. Keeping the procurement opportunities as close to the time they are needed to cover generation results in the most transparent and efficient price discovery.

Bid limits under 310 CMR 7.74(6)(h)1.g are essential to prevent market manipulation. MMWEC would support further reduction to the maximum amount a bidder can offer into the market. This concern increases in its relevance as the amount of air allowances offered into the auctions is reduced over time. An inherent equitable playing field question is also raised if limits are not adjusted. The market position of an individual generator vis-a-vis another generator will be altered if limits are not adjusted to protect all auction participants. In MMWEC's view, facility-specific bid limits will magnify risks that an individual generator can exhort inappropriate market power in the auction process.

Topic #4 – Municipal Light Plants (MLPs) and 310 CMR 7.75

MMWEC is in agreement with the comments provided to the Department from the Municipal Electric Association of Massachusetts. Those comments are provided below:

> MEAM's response is that municipal light plants fully intend to comply with all requirements contained in c. 8 of the Acts of 2021 ("climate legislation") which are applicable to MLPs, including the proper reporting requirements which do not include so-called "double counting" to the Department of Energy Resources ("DOER"). As a result of the new law, MEAM suggests at this time that the only "clarification" needed is that the reports to the DEP and DOER be consistent

and uniform in their content as MLPs follow the greenhouse gas emissions standards applicable to MLPs specified by the new climate legislation.

It is MEAM's understanding that DOER is in the process establishing reporting requirements to address the new law. MEAM would be pleased to engage with both DOER and MassDEP as they deem appropriate in order to effect a uniform reporting requirement applicable to MLPs that would address the needs of both departments consistent with the c. 8 of the Acts of 2021.

MMWEC adds that under 310 CMR 7.75(9)(c)5.b and c, MLPs currently submit the annual AQ31 Optional GHG Emissions Reporting Form and Spreadsheet for Municipal Retail Sellers of Electricity. For now, there is no need for clarification. Instead, MMWEC's focus is on the general reporting principles that will harmonize 310 CMR 7.75 with the regulations that will be promulgated for c. 8 of the Acts of 2021. These principles would include one uniform report to fulfill all MLP reporting requirements in this regard. The reports would accurately reflect each MLP's portfolio composition in compliance with c. 8 of the Acts of 2021. Since 310 CMR 7.75 does not apply to MLPs and the current AQ31 reporting process is a voluntarily agreed upon process, MMWEC can foresee, upon promulgation of regulations under c. 8 of the Acts of 2021 that the current MLP AQ31 reporting process is substituted by a new reporting process that is consistent with the general reporting principles detailed above. MWMEC looks forward to engagement with the departments and playing a constructive role in the development of the report.

MMWEC appreciates your consideration of these comments.

Sincerely,

Ronald C. DeCurzio
Chief Executive Officer

nationalgrid

June 1, 2021

Via email to: climate.strategies@mass.gov

Christine Kirby
Assistant Commissioner, Bureau of Air and Waste
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: National Grid Comments on Expanding the Clean Energy Standard

Dear Assistant Commissioner Kirby:

On behalf of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid ("Company" or "National Grid"), I am pleased to offer comments on the possible amendments to the Clean Energy Standard ("CES") regulations, 310 C.M.R. 7.75, put forth for comment by the Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") and Department of Environmental Protection ("MassDEP"). National Grid's comments address possible amendments included in the EEA and MassDEP Stakeholder Discussion Document, "2021 Program Review Stakeholder Discussion Document" ("Discussion Document").[1]

As you know, on May 7, 2021, MassDEP notified interested stakeholders of a program review in accordance with regulatory provisions in the CES, and requested written comments on a number of specific topics. EEA and MassDEP promulgated the CES regulations on August 11, 2017. The purpose of the CES is to achieve greenhouse gas ("GHG") emissions reduction goals, as required by the Global Warming Solutions Act ("GWSA"), by establishing a CES that will increase the level of clean electricity that is purchased from the regional electric grid for consumption in Massachusetts. The CES is designed to function in a manner similar to and compatible with the existing Renewable Energy Portfolio Standard ("RPS"), 225 C.M.R. 14.00 et seq., by requiring retail electricity sellers to annually procure a minimum percentage of "clean generation attributes" (sometimes called Clean Energy Certificates or "CECs") that corresponds to a percentage of electricity sales. See, e.g., 310 C.M.R. 7.75(2) and (4). CECs are produced by any resource that meets the CES eligibility requirements, which includes all RPS Class I resources, plus non-RPS Class I resources that are approved by MassDEP. CES obligations can be satisfied with RPS Class I Renewable Energy Certificates ("RECs") or from CECs associated with units approved by MassDEP.

[1] Available at: https://www.mass.gov/doc/310-cmr-774-775-electricity-sector-program-review/download.

Prior to addressing the topics in the Discussion Document in detail, as argued in National Grid's comments on the Massachusetts Interim Clean Energy and Climate Plan for 2030, National Grid would prefer that the most cost effective clean energy procurements should be employed in Massachusetts to combat climate change.[2] However, National Grid recognizes that MassDEP may not have the ability to revise the CES as broadly as National Grid could envision, and thus, the following comments address the most cost effective solutions available within the framework of MassDEP's review here.

A. Topic #1: Stringency of 310 CMR 7.74 and 7.75: Question 1 -- Increase the CES from 40% to 60% or more in 2030?

The Company agrees that the CES should be expanded to exceed the RPS, in order to avoid having the RPS "overtake" the volume of clean energy anticipated to be delivered under the Section 83D hydroelectric contracts. However, the Company believes there are other, better options than increasing the CES obligation from 40% to 60% by 2030. Instead, the Company would suggest DEP increase CES obligation percentages in the 2020s by recognizing the Section 83D contracts within the CES – which should help minimize the potential for increased electricity costs.

Reasons to Include Section 83D in the CES

Section 83D of the Energy Diversity Act was enacted partly to reduce GHG emissions in the Commonwealth.[3] Energy procured pursuant to the Energy Diversity Act will generate Clean Energy Certificates, which can be used to comply with the CES. Based on 2020 wholesale data for investor owned utilities ("IOU") electric load, which includes but is not limited to the electric distribution companies ("EDCs"), the energy procured under the Section 83D contracts will equate to approximately 21.66% of combined load.[4] Also, the CECs received by the Massachusetts EDCs under Section 83D contracts cannot be used to meet RPS Class I requirements, they cannot be sold, and with limited banking, they must be retained. St. 2016, c.188, s. 12, Section 83D(h). Section 83D CECs can only be used to comply with the CES requirements when they exceed the RPS Class I requirement. Based on new legislation,[5] the RPS Class I and CES requirements will

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2 "National Grid believes the fundamental requirements for success include: (1) the ability to procure the clean energy required through competitive, regional wholesale markets allowing all clean resources, regardless of technology or age/vintage, to compete based on their costs; and (2) greater use of regional and interregional coordinated transmission planning to allow for more reliable and cost-effective interconnections of these clean resources." National Grid Comments on the Massachusetts Interim Clean Energy and Climate Plan for 2030 (March 22, 2021), at p. 22.

3 "An Act to Promote Energy Diversity," St. 2016, c.188, s. 12.

4 Section 83D requires the EDCs to solicit and enter into a long-term contract for 9.45 terrawatt-hours ("TWh"), which is then divided by 43,624,906 megawatt-hours ("MWh") (i.e., 2020 IOU Load) = 21.66%.

5 "An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy," St. 2021, c. 8, s. 32.

rise each year and will be equal in 2028 and 2030. Without further changes, the EDCs' Section 83D generation will not count towards any standard in certain years, when there is no CES requirement in excess of the RPS Class I requirements. Therefore, most of the Section 83D generation will not fully qualify for the CES or will not qualify at all because it is not RPS Class I eligible and the CES does not exceed the RPS Class I standard by much, whenever it does.[6] To illustrate these obligations, and how they interact, please see Table 1, below.

Table 1: Current CES and RPS obligations, and Percentage of Section 83D Generation Usable for CES (2024 – 2035)

	CES	RPS Class I	% 83D eligible
2024	28%	24%	4%
2025	30%	27%	3%
2026	32%	30%	2%
2027	34%	33%	1%
2028	36%	36%	0%
2029	38%	39%	0%
2030	40%	40%	0%
2031	42%	41%	1%
2032	44%	42%	2%
2033	46%	43%	3%
2034	48%	44%	4%
2035	50%	45%	5%

For example, the CES in 2025 is 30% and 27% of that is the RPS Class I requirement, resulting in only 3% of the CES that can be met by Section 83D generation. In 2025 the Section 83D generation is estimated to be approximately 18.89% of IOU load, but only 3% of that will be used for CES compliance. The remaining 15.89% will not count towards any standard.

Alternative Proposal – A Separate CES Specific to Generation from Section 83D

As an alternative, National Grid recommends that MassDEP establish a separate CES, specifically for all of the generation from the Section 83D contracts, for the full term of the contracts ("CES-83D"). Compliance with CES-83D should be automatic for all IOU distribution customers, including those on competitive supply, because all IOU distribution customers, including those on competitive supply, pay for the Section 83D contracts. It is unnecessary for MassDEP to set a compliance obligation percentage for Section 83D prior to a calendar year. The percentage of CES-83D can be calculated immediately following the completion of a compliance year when

[6] While the Section 83D generation will not be used for CES compliance, it will be used in the Commonwealth's greenhouse gas inventory reductions and help meet the goals of the Global Warming Solutions Act. Thus, it is important that the Section 83D generation be recognized in the CES requirements, as the Company proposes.

actual generation and actual IOU wholesale load is known. Once the Section 83D contract expires, MassDEP should eliminate this CES-83D standard.

There are several justifications that support this alternative proposal:

1. As shown in note 3, above, while Section 83D generation is approximately 20% of the current CES compliance load obligation, this percentage is expected to decrease with further electrification, which means there will be a shortfall of 83D generation to meet a rigid increase of the CES by 20% in 2030.
2. The hydroelectric project selected for the Section 83D contracts is not yet commercially operational, and an increase in the CES (such as CES-83D) should not be effective until it has become commercially operational, or it will drive up costs unnecessarily.
3. As noted above, the CECs that the EDCs receive pursuant to the Section 83D contracts cannot be sold – the EDCs must retain them.[7] Compliance with CES-83D should be automatic for all IOU distribution customers, including those on competitive supply.
4. Simply increasing the CES by 20% to account for the volume of clean energy received through the Section 83D contracts will not prevent future RPS increases again "overtaking" the Section 83D contract generation.

Each of these justifications is discussed in more detail below.

1. <u>MassDEP's Proposed 20% Increase in the CES Compliance Obligation Will Exceed the Amount of Expected Section 83D Generation, Assuming Continued Electrification in Massachusetts</u>

The Section 83D contract should result in 9.45 TWH of clean generation, annually. At current load levels, this is more than 20% of the compliance load obligation. However, the ISO New England's Forecast Report of Capacity, Energy, Loads, and Transmission ("CELT") Report is projecting that generation from the Section 83D contract will be less than 18% of IOU load by 2030. Therefore, if the CES is increased by 20%, it will probably result in a shortfall in CEC supply from the Section 83D generation. This shortfall may have to be addressed by the purchase of more expensive RPS Class I RECs, causing additional costs for electricity customers.

Table 2: Projection of Investor-Owned Utility Compliance Obligation Compared to Section 83D Generation (2020 – 2030)

[7] Section 83D(h) requires the utilities to retain all certificates that are not RPS Class I, and even if they could be sold, currently, no other New England state has a clean or renewable energy standard that allows large scale hydroelectricity to qualify.

	MA NET CELT Forecast (MWH)	% MLP[8]	Compliance Load Obligation (MWH)[9]	83D Generation	CES-83D
2020			43,624,906	9,450,000	21.66%
2021	55,619,000	14%	47,832,340	9,450,000	19.76%
2022	57,158,000	14%	49,155,880	9,450,000	19.22%
2023	57,545,000	14%	49,488,700	9,450,000	19.10%
2024	58,010,000	14%	49,888,600	9,450,000	18.94%
2025	58,177,000	14%	50,032,220	9,450,000	18.89%
2026	58,552,000	14%	50,354,720	9,450,000	18.77%
2027	59,245,000	14%	50,950,700	9,450,000	18.55%
2028	60,308,000	14%	51,864,880	9,450,000	18.22%
2029	61,167,000	14%	52,603,620	9,450,000	17.96%
2030	62,299,000	14%	53,577,140	9,450,000	17.64%

The Company's proposal for a CES-83D results in a separate percentage that would be calculated following a calendar year. These percentages would roughly equate to the percentages in the CES-83D column in Table 2, above, once the Section 83D project becomes commercially operational (currently expected in 2024).

2. A Scheduled CES Increase May Not Match the Project's Commercial Operation Date, Increasing Customer Costs

The project has various milestones to reach before it commences operation sometime within the next several years. Considering the variables, the Company does not believe that a specific timeline of CES increases is in the best interest of customers. The Discussion Document provides an example of increases that could be made to meet 60% by 2030. It suggests increasing the standard by 5% or more each year from 2026 through 2030 (instead of the 2% annual increase, in the current regulation). If the project is delayed, then the CES would result in higher and unnecessary costs to customers, because RPS Class I RECs would need to be purchased to meet the CES that was increased to account for the Section 83D project. Any increase in demand for RPS Class I RECs will also increase REC prices, thereby increasing overall REC compliance costs compared to the Company's proposal.

[8] Municipal electric utilities include municipal electric departments, municipal light boards, and municipal light plants.

[9] The Massachusetts CELT forecast includes all load including MLPs. An estimate of MLP load is removed to derive the CES Compliance Load Obligation.

Furthermore, when the project comes online, the Company's proposed separate CES-83D would actually result in a higher CES, overall. Table 3, below, compares the current CES, the Discussion Document's proposal, and the Company's proposed CES-83D. If the project is fully operational prior to 2025, then the CES – Total under the Company's proposal would be higher than the Discussion Document's proposal from 2025 through 2030. For example, in 2028 the Discussion Document's proposal would be a CES of 45% compared to the current CES of 36%. The Company's proposal would maintain the current CES of 36% but would add the separate Section 83D generation total of 18.22% to have a CES – Total of 54.22%. The Company's proposal results in a 9.22% higher CES than the Discussion Document's proposal (54.22% - 45%) at no extra costs to customers. The resulting difference is simply due to accounting for 83D generation separately in a CES-83D standard.

Table 3: Comparison of Current Standard, Discussion Document Standard, and National Grid Proposed Standard

			National Grid Proposal		
	CES - Current	Discussion Document	CES - Current	CES - 83D	CES - Total
2021	22%	22%	22%		22.00%
2022	24%	24%	24%		24.00%
2023	26%	26%	26%		26.00%
2024	28%	28%	28%		28.00%
2025	30%	30%	30%	18.89%	48.89%
2026	32%	35%	32%	18.77%	50.77%
2027	34%	40%	34%	18.55%	52.55%
2028	36%	45%	36%	18.22%	54.22%
2029	38%	50%	38%	17.96%	55.96%
2030	40%	55%	40%	17.64%	57.64%

3. Because the Project's Generation Cannot Be Used for the RPS and Its Certificates Must be Retained by EDCs, Some Massachusetts Distribution Customers are Paying for Products That They Won't Receive and Can't Use

First, Section 83D(h) states, in part:

> (h) An electric distribution company may elect to use any energy purchased under such contracts for resale to its customers, and may elect to retain renewable energy certificates to meet the applicable annual renewable portfolio standard requirements under said section 11F of said chapter 25A. If the energy and renewable energy certificates are not so used, such companies shall sell such purchased energy into the wholesale market and shall sell such purchased renewable energy certificates attributed to Class I renewable portfolio standard

> eligible resources to minimize the costs to ratepayers under the contract; *provided further, that a distribution company shall retain renewable energy certificates that are not attributed to Class I renewable portfolio standard eligible resources. . . .* (emphasis added)

Also, as noted above, Section 83D generation creates CECs and not Class I RECs. For these two reasons, the CECs cannot be sold or transferred to competitive suppliers that are also serving load. For all distribution customers, who are paying for the Section 83D generation, the CECs are only used to comply with CES. Compliance with CES and RPS is demonstrated by retiring certificates in retail electric suppliers' (competitive suppliers and EDCs) NEPOOL-GIS accounts. However, no mechanism exists to allow all IOU customers to benefit from the CECs that are retired in the EDCs account. The EDCs cannot transfer CECs to competitive suppliers, which means that these 83D CECs cannot be used to satisfy the CES for competitive supplier customers, whether or not it is increased in 2030 by 20%.[10]

The Company's proposal to create a separate CES-83D standard remedies this. The Company will retire all CECs on behalf of all IOU customers, and the competitive suppliers will not have to demonstrate compliance because the EDCs would do this on their behalf. The competitive suppliers will not have to add risk premiums to their supply prices to cover potential shortfalls between CECs and a 20% CES increase. The percentage of CES-83D can be calculated immediately following the completion of a compliance year by MassDEP when actual generation and actual IOU wholesale load is known.

[10] Additionally, potential future changes in law – such as allowing CECs to be transferred or sold to competitive suppliers -- would still be problematic. First, there are many competitive suppliers within Massachusetts and the EDCs would have to determine and transfer the appropriate number of CECs to each one, which would require significant effort. Second, if another state qualifies this generation as a type of clean energy certificate, there is a possibility that those competitive suppliers may use those CECs to comply with another state's requirements. Third, if there was a rigid percentage requirement such as 20% by 2030, competitive suppliers would have a risk that the CECs delivered by the EDCs would not equate to 20%. In a high load year, the CECs provided may only satisfy 16% of the 20% requirement, and in a low load year, it may be 21.5%. In such situations, the competitive suppliers must add risk premiums to their prices to customers, resulting in higher overall consumer costs.

4. Increasing the CES by 20% Does Not Prevent the RPS from "Overtaking" the Section 83D Generation

Under the current RPS regulations, an increase of the CES to 60% from 40% in 2030 will mean that the Section 83D hydroelectric procurements will count towards the CES. In 2030, the RPS Class I percentage will be 40% and therefore the 83D generation will count towards the 20% CES requirement above the RPS. However, between now and 2030 there is the possibility that the RPS percentages will be legislatively increased, and therefore the 83D generation will once again be overtaken by the RPS. The Company's proposal for a separate CES-83D will prevent any future RPS Class I increases from overtaken the 83D generation.

Summary

The Company's proposal has several advantages over a rigid annual increase of the CES. It results in higher percentages from 2025 through 2030, as shown in Table 3. It allows compliance with the CES for all IOU customers while adhering to the restrictions on CECs pursuant to Section 83D(h). The Company's proposal prevents the RPS from "overtaking" the 83D generation. And finally, it is more cost effective. It eliminates risk premiums that may be added by competitive suppliers. It also aligns perfectly with the 83D generation which eliminates the possibility that the increase in CES compliance will be met by more expensive RPS Class I RECs. The MassDEP should consider and approve this proposal if the CES is expanded to specifically include 83D generation.

B. Topic # 1: Stringency of 310 CMR 7.74 and 7.75: Question 2 -- Increase the CES-E from 20% of 2018 electricity sales to 25%?

The Company is generally neutral on an expansion of the CES-E but, for the reasons explained below, opposes an increase to a 25% CES-E for every year. The Company recommends an increase to an amount equal to 25% of 2018 sales, because the relative share of CES-E will fluctuate in future years as loads fluctuate. The Company proposes four modifications:

1. Assume that there will be changes to the supply of CES-E generation, whether due to generator retirements or other factors, and address them in annual calculations of the CES-E.
2. Decrease the Alternative Compliance Payment ("ACP") to protect customers.
3. Adjust the formula to include some forecasted load to account for future electrification.
4. As the sum of the percentages of all standards (CES, CES-83E, RPS Class II, RPS Class II Waste Energy) approach 100% of load, reduce the CES or CES-E to prevent absurd results like the sum of percentages exceeding 100% of load.

Reasons to Include Existing Generation in the CES

All clean energy resources, including existing generation, play a vital role in helping the Commonwealth achieve and maintain reductions in its GHG emissions and avoid the impacts of global warming, which meets the purpose of the CES. As MassDEP noted in the "310 C.M.R. 7.75: Clean Energy Standard, Review of Options for Expanding the CES – Stakeholder Discussion Document", the loss of existing low- and zero-emissions generators prior to 2050 could make it more difficult to achieve the GHG emissions reductions required under the GWSA.

In addition, if MassDEP includes all clean resources in the CES, it should reduce overall costs of CES compliance for customers and achieve the goals of the GWSA. First, competition will determine the best prices, which should achieve the most cost-effective means of CES compliance for customers. Further, it is likely that it will be more cost-effective to maintain existing operational units than to build new units. Additionally, it provides a diverse resource mix which allows the bulk power system to operate more reliably. Finally, there is no "windfall" to existing resources of being qualified under the CES, as some parties have alleged in the past, because both existing and new resources are actually contributing to emissions reduction goals.

National Grid supports the CES-E obligation that is separate from the CES obligation, with its own vintage requirements, and its own ACP. Doing so continues existing clean resources' contribution to the Commonwealth's GWSA goals.

The CES-E Should Not Be an Obligation of 25% of Each Year's Load

The MassDEP Stakeholder Discussion Document, "Expanding the Clean Energy Standard February 2019" states that, in 2014, Massachusetts imported 12 to 13 TWh from Canada and from the Seabrook nuclear power plant, and 12 TWh equates to approximately 26% of 2018 IOU electric load.[11] National Grid opposes an annual standard of a 25% CEC-E because, assuming no changes to the available supply of existing generation, the 12 TWh supply of existing generation will become less than 25% of load as a result of anticipated future electrification.

Table 4: Comparison of Proposed CES-E to Expected Future IOU Electric Load

	MA NET CELT Forecast	% MLP	Compliance Load Obligation (MWH)	Existing Generation	CES-E
2018			46,448,304	12,000,000	25.84%
2019			44,705,754	12,000,000	26.84%
2020			43,624,906	12,000,000	27.51%
2021	55,619,000	14%	47,832,340	12,000,000	25.09%
2022	57,158,000	14%	49,155,880	12,000,000	24.41%

[11] In 2018, IOU load was 46,448,304 MWh.

2023	57,545,000	14%	49,488,700	12,000,000	24.25%
2024	58,010,000	14%	49,888,600	12,000,000	24.05%
2025	58,177,000	14%	50,032,220	12,000,000	23.98%
2026	58,552,000	14%	50,354,720	12,000,000	23.83%
2027	59,245,000	14%	50,950,700	12,000,000	23.55%
2028	60,308,000	14%	51,864,880	12,000,000	23.14%
2029	61,167,000	14%	52,603,620	12,000,000	22.81%
2030	62,299,000	14%	53,577,140	12,000,000	22.40%

The future anticipated load increases as a result of electrification, as illustrated above, demonstrates that obligation percentages should not remain fixed when the supply of existing clean generation does not change. The Company would support an expansion of the CES-E that decreases the obligation percentage downward when load increases because the supply of CES-E generation is finite.

1. Mass DEP Should Adjust the CES-E If the Supply of Existing Clean Generation Changes

Increasing the CES-E from 20% of 2018 electricity sales to 25% establishes a baseline CES-E that is adjusted for future years by updated loads.[12] However, this 25% baseline is established by CES-E generation expected in 2018 of 12 TWh and 2018 load. MassDEP should annually monitor the 12 TWh and lower it in situations such as generation retirements or some other permanent decrease in load. Once the 12 TWh is lowered, the 2018 baseline should be reset lower and used for future CES-E calculations.

2. Mass DEP Should Lower the ACP for the CES-E

In general, increasing demand while maintaining the same supply will result in increased prices and costs for customers. Accordingly, MassDEP should lower the ACP for the CES-E. Customers already will pay more if the CES-E is increased to 25%, and they should be protected from further price increases by establishing a lower ACP.

3. Forecasted load should be included for at least a portion of the CES-E calculation

As stated in 310 CMR 7.75(4)(b), the calculation for CES-E percentages uses historical load for four years prior before the calendar year for which the percentage requirement applies. For example, the 2030 CES-E percentage will be based on the load in 2026. However, with the

[12] See 310 CMR 7.75(4)(b) - Clean Energy Standard for Clean Existing Generation Units (CES-E). For calendar year 2021 and 2022, the percentage requirement for clean existing generation attributes shall be 20%. For calendar years 2023 through 2050, percentage requirements for clean existing generation attributes shall be determined by dividing 20% by the percentage provided by the Department pursuant to 310 CMR 7.75(9)(b)4. for the year four years before the calendar year for which the percentage requirement applies, rounded to the nearest percent (i.e., if the percentage provided pursuant to 310 CMR 7.75(9)(b)4. For 2026 is 105%, then the percentage requirement for clean existing generation attributes in 2030 would be 20% ÷ 105% = 19%).

anticipated load growth due to electrification, historical load four years prior may be a poor proxy for future years. The table below shows annual growth per the ISO-NE CELT report for Massachusetts. It also shows the growth in load between a specific calendar year and four years prior. Annual growth due to electrification is between 1-2% from 2027 to 2030. Growth in load from four years prior is more significant.

Table 5: Percentage of Forecasted Load Growth by Year and Over Four Preceding Years

	MA NET CELT Forecast	% MLP	Compliance Load Obligation (MWH)	Annual Growth	Growth from 4 Years Prior
2018			46,448,304		
2019			44,705,754	-3.75%	
2020			43,624,906	-2.42%	
2021	55,619,000	14%	47,832,340	9.64%	
2022	57,158,000	14%	49,155,880	2.77%	5.83%
2023	57,545,000	14%	49,488,700	0.68%	10.70%
2024	58,010,000	14%	49,888,600	0.81%	14.36%
2025	58,177,000	14%	50,032,220	0.29%	4.60%
2026	58,552,000	14%	50,354,720	0.64%	2.44%
2027	59,245,000	14%	50,950,700	1.18%	2.95%
2028	60,308,000	14%	51,864,880	1.79%	3.96%
2029	61,167,000	14%	52,603,620	1.42%	5.14%
2030	62,299,000	14%	53,577,140	1.85%	6.40%

A methodology relying solely on historical data will likely result in CES-E percentages that are inaccurate and higher than necessary. With a static supply of CES-E generation, at best, this will result in high demand and prices near the ACP, resulting in increased costs to customers. For example, the 2030 CES-E percentage will be determined by the 2026 load divided by the 2018 load. This is 108% (50,354,720/46,448,304). Per the calculation, the 25% CES-E established in 2018 is divided by the 108% to determine the 2030 CES-E obligation of 23.15%. Retail electricity suppliers must purchase CES-E CECs equal to 23.15% multiplied by the load of 53,577,140 MWh, or 12,402,116, which is greater than the expected CES-E generation of 12 TWH. This would lead to a constrained market with prices close to the ACP. The CES-E for 2030 should be 22.4% to result in purchases of 12,000,000 CES-E CECs.

4. Mass DEP Should Reduce the CES or CES-E percentages as Load Approaches 100%

As shown in Table 6, below, retail electricity suppliers meet various standards to ensure an adequate mix of clean and renewable energy supply (CES, RPS Class I within the CES, CES-E, proposed CES-83D, RPS Class II, and RPS Class II Waste Energy). Some of these standards

increase annually. Eventually, the cumulative effect of these standards will achieve 100% of total load. Unless there is a legislative change to RPS I and II to "freeze" the current annual increases, MassDEP should reduce the CES or CES-E to offset any annual increases in RPS Class I and II to avoid customers from paying for more than 100% of load.

Table 6: Projected Effect of Current Standards for CES, CES-E, CES-83D, RPS Class I and RPS Class II

	CES	CES-E	CES-83D	RPS Class II	RPS Class II WE	Total
2030	40%	22.40%	17.64%	3.60%	3.50%	87%
2031	42%	22.40%	17.64%	3.60%	3.50%	89%
2032	44%	22.40%	17.64%	3.60%	3.50%	91%
2033	46%	22.40%	17.64%	3.60%	3.50%	93%
2034	48%	22.40%	17.64%	3.60%	3.50%	95%
2035	50%	22.40%	17.64%	3.60%	3.50%	97%
2036	52%	22.40%	17.64%	3.60%	3.50%	99%
2037	54%	22.40%	17.64%	3.60%	3.50%	101%
2038	56%	22.40%	17.64%	3.60%	3.50%	103%
2039	58%	22.40%	17.64%	3.60%	3.50%	105%
2040	60%	22.40%	17.64%	3.60%	3.50%	107%

This illustrative table assumes that CES-E is calculated with forecasted load and that a CES-83D is approved. For this illustration, 2030 percentages are used as a proxy for future years for all standards except the CES which increases 2% annually. Starting in 2037, the total of all standards would be 101%. At this point, MassDEP should begin to lower the percentage requirements of either CES-E or the CES to equal and not exceed 100% of load.

C. Topic #2: Clean Energy Standard Technical Review: Question 1 – What are the structure and benefits of a "global" CES?

Introduction

While the CES "wraps around" the RPS Class I, which is a separate renewable standard administered by the Department of Energy Resources ("DOER"), there are other renewable and clean energy policies that are not captured by the CES that also contribute to a clean energy future, and the CES should capture all of them. While MassDEP lacks authority to amend standards administered by the DOER, it could indirectly manage cost and decision making for Commonwealth ratepayers by tracking and reporting on all clean energy initiatives and providing comprehensive reports for future state policy decisions. MassDEP could fill a void and become the leading state agency on environmental standards to influence future legislation rather than having each agency and standard operate independently.

National Grid proposes an expansion of the CES to have separate compliance percentage obligations for the following:

- RPS Class I, as specified in 225 C.M.R. 14.00;
- RPS Class II, as specified in 225 C.M.R. 15.00;
- RPS Class II Waste Energy (WE), as specified in 225 C.M.R. 15.00;
- Alternative Energy Portfolio Standard ("APS"), as specified in 225 C.M.R. 16.00;
- CES-E equivalent to 12 TWh and a compliance percentage determined annually; and
- CES-83D equivalent to 9.45 TWh annually and a compliance percentage determined annually following the completion of a compliance year.

The four additional standards (RPS Class II, RPS Class II WE, APS, and CES) were all enacted by the Legislature to reduce electricity-based GHG emissions and help combat climate change. As such, all four standards should be included in the CES because, like the RPS Class I which is included in the CES, they will help the Commonwealth achieve its GWSA goals. Including these standards also aligns with MassDEP's goal to not replace existing clean energy generation with new clean energy generation. Including the CES-E, CES-83D, RPS Class II, RPS Class II Waste Energy, and APS demonstrates that the Commonwealth is close to its clean energy goals under existing regulations.

However, not included or shown in Table 6 are the requirements for the APS and CES that also apply to IOU load. These standards require the acquisition of certificates to meet certain percentages of load and are depicted in Table 7, below.

Table 7: Combined APS and CES Annual Obligations

Year	APS	CES	Total
2020	5.00%	1.50%	6.50%
2025	6.25%	9.00%	15.25%
2030	7.50%	16.50%	24.00%
2035	8.75%	24.00%	32.75%
2040	10.00%	31.50%	41.50%
2045	11.25%	39.00%	50.25%
2050	12.50%	46.50%	59.00%

Under the current regulations and laws, the Commonwealth may have its entire IOU load met by these various clean policies earlier than many expect. The total CES compliance obligation will be the sum of the renewable and clean energy policies and will fluctuate annually because some compliance obligations are calculated annually by DOER (RPS Class II) and MassDEP (CES-E and CES-83D). However, the total CES obligation for a given year can be reasonably approximated based on forecasted generation and load.

The Company proposes that MassDEP should periodically review the projected generation and load and propose changes as necessary. These periodic reviews provide flexibility. MassDEP can create another CES obligation that can be met by RPS Class I RECs or CECs if the generation supply or load changes. One example is if the Seabrook nuclear facility retires, or there is a regulation change such as the elimination of RPS Class II Waste Energy, MassDEP could create a CES obligation that can be met by RPS Class I RECs or CECs to replace the generation. Another example is if load forecasts increase and 83D and CES-E generation no longer approximate 20% and 25% of IOU load, MassDEP could create a CES obligation for the shortfall. Such examples would be known years in advance and MassDEP has adequate time to implement any changes.

Summary

National Grid's comments and additional proposals on the CES combine the Commonwealth's fragmented clean energy efforts and will provide a comprehensive view of Massachusetts' true progress in combatting climate change. A CES that aggregates and simplifies all of the Commonwealth's clean energy policies will provide the public and the Legislature with more information, enhanced transparency, and allow for improved decisions and resource planning. Cost-effective decisions cannot be made with an incomplete assessment of Massachusetts' status in meeting its clean energy goals. National Grid's CES proposals are also more cost-effective and will help maintain the stability of the grid better than alternative proposals such as a 100% RPS Class I, while accomplishing the same goal. National Grid's proposal also results in a more diverse and reliable fuel mix for Massachusetts by ensuring continued base load generation.

D. Topic # 2: Clean Energy Standard Technical Review: Question 2 -- Are changes needed to the ACP rates?

The ACP allows a retail supplier to comply with the CES and CES-E when it cannot purchase CECs to meet the minimum standards, but the ACP also provides a cap on EDCs customers' costs. The CES and CES-E ACP rates act as ceiling prices to protect electricity customers against unreasonably high market prices for CECs which are often purchased at a price close to the ACP rates when there is a shortage of CECs to meet demand. For the RPS and APS, REC shortages have occurred for all the portfolio standards at some point and the applicable ACPs provided some customer protection. The ACP rate is intended to reduce the EDCs customers' exposure to higher program costs as the percentage requirements annually increase.

Starting 2021, the CES ACP rate is 50% of the RPS Class I ACP rate. The CES-E ACP rate is set to 10% of the RPS Class I ACP rate. The Massachusetts DOER recently filed final amendments to RPS Class I. One of the amendments lowers the RPS Class I ACP to $60 in 2021, $50 in 2022, and $40 in 2023 and thereafter. Since the RPS Class I ACP rate was first set in 2003, new renewable energy technologies have driven development costs lower. Other states have recognized this and set the ACP rates at levels reflecting the lower development costs for renewable energy generation resources in today's market. The DOER's modifications to the RPS Class I ACP better aligns with regional ACP rates, but more importantly it protects customers from

unjustifiably high costs and prevents windfall profits to generators during REC shortages, while continuing to stimulate new generation by reflecting current market conditions. Furthermore, containing the costs of compliance with standards is imperative given the expansion of policies combatting climate change.

Under the current CES regulations, the final DOER amendments would lower the CES ACP rate to $30 in 2021, $25 in 2022, and $20 in 2023 and thereafter. The DOER amendment would lower the CES-E ACP rate to $6 in 2021, $5 in 2022, and $4 in 2023 and thereafter.

CES ACP Rate

The Company believes that the current regulations should be maintained for the CES ACP rate and ACP rate should be $30 in 2021, $25 in 2022, and $20 in 2023 and thereafter. The MassDEP, when creating regulations for CES, likely recognized that high prices were unnecessary to stimulate development. Also, the CES allows a broader range of resources to qualify as CECs which allows resources not eligible to RPS to qualify. Therefore, it does not require as much incentive to stimulate resources to apply to become a CES resource. Also, a lower CES ACP rate likely does not impact the market significantly. As shown in the first table in these comments, most of the CES will be met by RPS Class I requirements. And under either the MassDEP proposal to increase the CES to 60%, or the Company's proposal to create a separate 83D requirement, most certificates above the RPS Class I requirements will be met by 83D CECs which do not have market prices. Therefore, the CES ACP may only apply to a small fraction of load and would not impact prices significantly. However, the lower ceiling price will benefit customers. When the 83D contract expires in the 2040s, customers should pay lower prices for those CECs in comparison to RPS Class I RECs.

CES-E ACP Rate

In prior comments, National Grid advocated that the CES-E ACP rate should be 10% or lower of the RPS Class I ACP amount (approximately $7) at the time of implementation. National Grid stated a lower ACP than originally proposed was necessary in order to: (1) provide a ceiling price; (2) prevent high costs for CES-E CECs in shortage markets; and (3) recognize that existing resources are already built and operating. These existing clean resources have historically delivered energy to Massachusetts solely for energy and capacity revenue, and will likely continue to do so in the future with or without a CES-E. The CES-E, while incenting the continued delivery of clean generation, is not necessarily needed by all such generators to continue their operations. The CES-E CEC provides an unanticipated additional revenue stream to these generators. Also, if MassDEP expands the CES-E to 12 TWh, the generators will receive higher revenue dollars, although not on a dollar per MWh basis. Furthermore, no other state has a CES-E or demand for certificates from these existing clean resources. Finally, it is much easier to set a lower ACP rate initially, and increase it later if needed, rather than to set a higher ACP rate initially and then lower it later because it was overly generous.

Based on more recent market conditions, the Company believes the CES-E ACP rate should be set at $5 or lower. National Grid has been able to procure sizable volumes of CES-E CECs for 2021 below $2. 2021 CES-E CECs are often quoted in environmental broker sheets below $4. Prior to the DOER's proposed amendments to RPS Class I ACP, the CES-E ACP rate was expected to be a little over $7. The market could have priced those CECs anywhere between $0 and $7. The important conclusion is that prices between $2 and $4 are sufficient incentive for this generation to apply to becomes CES-E resources and sell CECs to Massachusetts. National Grid's experience in other jurisdictions supports the conclusion that $2 to $4 per each CES-E CEC is sufficient revenue for these generators. In Rhode Island, National Grid is required to purchase RECs for its Existing obligation under the Renewable Energy Standard. The Existing REC class is the same technology as the New REC class, but it includes generators that became commercial prior to 1998. National Grid is able to procure RECs at less than $2, which demonstrates that generators would be willing to certify their output under a standard even for a small increase in revenue.

As described in the section regarding expanding the CES-E, increasing the CES-E to 25% of 2018 of electric sales and the using historical load that does not reflect future electrification will lead to increased demand and possible constrained markets. Therefore, an ACP rate of $7 would provide a windfall to these resources. Current market conditions, in which CES-E resources have sold CES-E CECs to National Grid below $2 and CES-E CECs can be acquired in the market for less than $4, demonstrate that an ACP rate of $5 or lower is suitable. This $5 ACP rate would protect customers from significantly increased costs while "locking in" a modestly larger contribution from pre-2010 clean generators. Making this change by 2026 would help ensure that new clean generators added quickly between 2026 and 2030 replace emitting generators, not existing clean generators.

E. Topic # 2: Clean Energy Standard Technical Review: Question 3 -- Should the structure of the standard be refined to address customer-sited behind-the-meter generation such as rooftop solar power?

As noted in the Discussion Document, behind-the-meter ("BTM") generation is not included in the CES compliance load obligation, and yet it may result in RECs. The Discussion Document provides the following example to rectify this mismatch between this REC supply and compliance demand:

> For example, if this energy is estimated to account for 2% of total electricity consumption in the state in a year, this could be addressed by requiring retail electricity sellers to adjust their sales upward by 2% when calculating their CES compliance obligations.

National Grid opposes adjusting the CES to include BTM generation, for several reasons. An overwhelming majority of the owners of BTM generation facilities within the EDCs' service territories are solar energy generating facilities, typically participating in net metering and/or the Solar Massachusetts Renewable Energy Target ("SMART") program. Accordingly, most are generating and consuming renewable energy on-site and are already being subsidized by EDC

ratepayers. Some net metering customers receive RECs (either RPS Class I or SRECs), which can be sold to retail electricity suppliers and used to comply with the RPS or CES. Customers that participate in the SMART program transfer their RECs to the EDCs in exchange for SMART compensation. Requiring retail electricity sellers to adjust their sales and compliance obligations to account for BTM energy consumption would violate cost-causation principles. Increased standards would also result in more demand for RECs for compliance, resulting in higher costs and REC prices. In a constrained supply year, this might result in prices at or near the Alternative Compliance Payment.

Additionally, this proposal is impractical because of the competitive market for alternative supply to Basic Service. Competitive suppliers include the cost to comply with the various standards in their contract prices offered to customers. Without knowing the total BTM generation in a year in advance (2% in the example), the competitive suppliers could not provide competitive prices. If this measure is adopted, competitive suppliers likely would increase risk premiums in their supply offers to minimize the risk that they purchase too few RECs, resulting in higher customer costs. If MassDEP provided a BTM generation percentage in advance that should be applied to load, the competitive suppliers would no longer need to include risk premiums. However, MassDEP's goal to include the BTM generation in the compliance load obligation would not be completely met if the proposed BTM generation percentages differs from actual. For example, retail electricity sellers may be instructed to increase the compliance obligation load by 2% for next year, however the actual BTM generation may be 4% for that year, and therefore the goal is not met.

One possible solution would be to increase the compliance load obligation for each customer by that customer's annual BTM generation. In that way, only the customers that benefit from these lucrative programs would directly bear the higher costs of increased compliance load obligation. However, this solution seems complicated, unpopular, and difficult to implement. Also, competitive suppliers may not have insight into the BTM generation of their customers, and therefore not know how many RECs it will need to procure on the customers' behalf. It also likely would be difficult for MassDEP to determine the final compliance obligation load for each retail electricity seller.

F. Topic # 2: Clean Energy Standard Technical Review: Question 4 -- Should there be any changes to the requirements that apply to generators that are not located in ISO-NE?

Energy delivery into ISO-NE should continue to be required to create a NEPOOL-GIS certificate used for compliance with any standards in New England. However, MassDEP should not begin to require capacity market participation because it would be detrimental to New England electricity customers, as explained below.

In its December 4, 2020 submittal to the Legislature, the DOER addressed the capacity requirement in its rulemaking for RPS Class I and RPS Class II. The DOER removed capacity requirement language from its proposed amendments to RPS Class I and RPS Class II regulations. In doing so, the DOER stated:

> New England states and neighboring states/provinces use robust methodologies and tracking systems to ensure the accurate tracking of attributes for the purposes of RPS compliance and greenhouse gas accounting. The Department has reviewed imports and found no evidence of either intentional or inadvertent double-counting. With respect to RPS capacity commitment obligations, it is impractical to assess this occurrence given the different market structure in the NY Independent System Operator region as compared to the ISO-NE region. The Department has reviewed relevant provisions of the [Green Communities Act] GCA and determined that the proposed changes are appropriate and consistent with the GCA.[13]

Adding a capacity requirement to the CES may financially benefit some market participants. The requirement will likely reduce the supply of RECs and CECs that may be used for compliance standards in ISO-NE. This probably would increase the price for generators that have certificates to sell, giving them a financial windfall and increasing the expense for electricity customers.

Additionally, a capacity requirement may impact certificates that qualify for CES-E, 83D (in which the contract does not require capacity participation in ISO-NE), and some executed contracts pursuant to Section 83A, which are also with resources located outside of New England.

Finally, before approving such a requirement, MassDEP should consider the added difficulties for out-of-region facilities to participate in the Forward Capacity Market ("FCM"), and also that these facilities may have greater financial risk than FCM participants that are located in ISO-NE.

G. Conclusion

National Grid appreciates the opportunity to submit these comments, and we would happy to elaborate on them or answer any questions, as needed.

Sincerely,

Ian M. Springsteel
Director
U.S. Retail Regulatory Strategy for National Grid Service Company

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13 https://www.mass.gov/doc/rps-reponse-to-comments-12-04-20/download at page 17.

May 31, 2021

Kathleen A. Theoharides
Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

By Electronic Mail: climate.strategies@mass.gov

***Re*: Scoping Comments on 310 CMR 7.75: Clean Energy Standard 2021 Program Review**

Dear Secretary Theoharides:

On May 7, 2021, the Massachusetts Department of Environmental Protection issued a request for stakeholder input on the scope of its 2021 program review of the Clean Energy Standard. NextEra Energy Resources, LLC (NEER) appreciates the opportunity to provide comments and commends the Baker-Polito Administration for fashioning efficient and effective programs and policies to reduce greenhouse gas emissions equitably and cost-effectively.

NEER is a clean energy leader and is one of the largest wholesale generators of electric power in the U.S., with approximately 23,900 megawatts of net generating capacity, including approximately 23,370 megawatts of net generating capacity across 38 states and 520 megawatts of net generating capacity in 4 Canadian provinces. NEER, together with its affiliated entities, is the world's largest generator of renewable energy from the wind and sun and a world leader in battery storage. The business operates clean, emissions-free nuclear power generation facilities in New Hampshire and Wisconsin as part of the NextEra Energy nuclear fleet, which is one of the largest in the United States.

NEER's interest in the Clean Energy Standard (CES) and Clean Energy Standard-Existing (CES-E) principally arises as it is the majority owner and operator of the Seabrook Station nuclear facility located in Seabrook, New Hampshire.[1] As one of the two remaining nuclear assets in New England, Seabrook Station safely and reliably generates electricity for the benefit of 1.2 million families and businesses in the region. Its operation prevents the emission of nearly four

[1] NextEra Energy Seabrook, LLC owns 88.23% of Seabrook Station. The other owners are Massachusetts Municipal Wholesale Electric Company (MMWEC) (11.59%) and two Massachusetts municipal utilities, the Taunton Municipal Lighting Plant (0.1%) and the Hudson Light & Power Department (0.08%)

million tons of carbon dioxide annually, which is the equivalent of taking almost 700,000 cars off the road. The plant is operated in a highly responsible manner, and the Seabrook Station team is dedicated to protecting the environment while meeting the energy needs of the region.

NEER's comments are focused on ensuring the CES-E program is not diluted to a point where it becomes inconsequential to those entities that participate.

To that end, NEER provides the following suggestions:

- NEER supports the Executive Office of Energy and Environmental Affairs' (EEA) and the Massachusetts Department of Environmental Protection's (MassDEP) proposal to evaluate an increase in the CES-E to "lock in" a larger contribution from pre-2010 clean generators to align the regulation with the mandates of Senate Bill 9 - An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy, and the Interim Clean Energy and Climate Plan for 2030.

  While the stakeholder discussion document suggests an increase from 20% to 25% of 2018 electricity sales to comprise the CES-E, NEER recommends the MassDEP consider an increase beyond 25%, as maintaining existing clean generation remains the most cost-effective way for Massachusetts to meet its greenhouse gas reduction mandates.

- NEER urges the MassDEP to include in its scope of review a prohibition on entities reselling into the CES-E clean energy credits acquired in separate transactions. The CES-E is presently oversupplied and continuing to allow entities to resell clean energy credits into the CES-E exacerbates that problem and undermines the stated purpose of ensuring that new clean generators do not replace existing clean generators.

- In conjunction with its review of expanding the CES-E and limiting the resale of clean energy credits, NEER recommends the MassDEP review either increasing or eliminating the maximum annual cap of 2,500,000 MWh per qualifying existing generation facility.

- Lastly, NEER supports a review of possible changes to the CES-E alternative compliance payment (ACP). NEER supports including in MassDEP's scope of review whether the CES-E ACP should be specified by regulation as a dollar figure instead of a percentage of the RPS Class I ACP rate. NEER views this as particularly important given the pending decrease in the RPS Class I ACP.

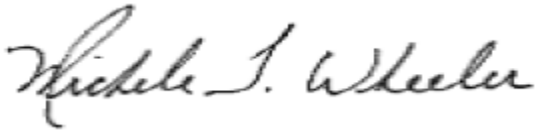
While NEER is supportive of the CES-E program, we continue to urge Massachusetts -- either on its own or in coordination with its regional state partners -- to pursue technology-neutral solicitations for both existing and new emissions-free energy and attributes to take advantage of the most cost-effective and economic solutions that exist today. A solicitation for both new and existing clean resources is the most efficient mechanism to lock in existing resources while bringing new clean resources on line.

A technology-neutral solicitation gives the Commonwealth the flexibility to procure a blend of resources to help achieve its goals of decarbonizing the Commonwealth's economy "equitably and affordably."[2] Technology-neutral procurements will allow the Commonwealth to procure cost-effective, emissions-free resources with the ability to deliver immediately, while incentivizing the development of new emissions-free resources. A procurement program designed to allow existing resources to compete will ensure Seabrook continues to contribute to meeting the Commonwealth's greenhouse gas reduction mandates.

This concept was successfully put into practice in Connecticut with its Zero-Carbon Resources procurement in 2018. In addition to selecting a variety of new renewable projects -- including solar, storage, and offshore wind -- the Connecticut Department of Energy and Environmental Protection selected approximately 1.9 million megawatt hours annually for an eight-year term from Seabrook Station. Seabrook Station was selected because of its price of 3.3 cents per kilowatt hour levelized, which then-Governor Malloy stated was "projected to save Connecticut ratepayers $18 million per year over its eight-year term."[3] NEER stands ready to submit a similarly competitive offer to Massachusetts that would lock in cost-effective, emissions-free energy from Seabrook Station for its citizens.

NEER appreciates the work of the Baker-Polito Administration and the Executive Office of Energy and Environmental Affairs and looks forward to continued participation in the Clean Energy Standard 2021 Program Review.

Respectfully submitted,



Michele T. Wheeler
Vice President, Regulatory & Political Affairs
NextEra Energy Resources, LLC

[2] Draft Clean Energy and Climate Plan (Dec. 30, 2020) https://www.mass.gov/doc/interim-clean-energy-and-climate-plan-for-2030-december-30-2020/download

[3] Press Release, Gov. Malloy Announces Zero-Carbon Resource Selections (Dec. 28, 2018) https://portal.ct.gov/Malloy-Archive/Press-Room/Press-Releases/2018/12-2018/Gov-Malloy-Announces-Zero-Carbon-Resource-Selections

Partnership for Policy Integrity Comments on DEP Program Review for 310 CMR 7.74 and 7.75

Submitted on 5/31/2021 to **climate.strategies@mass.gov**

The following comments are provided in response to the DEP request for public comment pursuant to 310 CMR 7.74(11) and 310 CMR 7.75(11). PFPI's comments on the scope of the review, which is supposed to be completed "Not later than December 31, 2021", focus mostly on the need to improve the scientific basis for the regulations and the obvious need to bring certain sections of the regulations into conformance with the clear legislative direction found in newly enacted Next Generation Climate Roadmap Bill.

1. **A Comprehensive Review is Needed for the CES**

The DEP regulations for "Reducing CO2 Emissions from Electricity Generating Facilities" (310 CMR 7.74), and the "Clean Energy Standard" (310 CMR 7.75) or CES should be subject to a comprehensive review with full stakeholder and public participation. PFPI recommends that DEP empanel a Technical Working Group of experts to assist in this review process. This review should focus on the need to significantly revise the structure of the interrelated RPS/APS/CES/CES-E suite of DEP/DOER regulations in order to take a comprehensive approach to eliminating CO_2 emitting facilities. Currently the DEP regulations follow the lead taken by DOER and incorporate components of the DOER regulatory program that are incompatible with the CES. Specifically, the incentivization of biomass combustion, with no cap on generating capacity, puts the concept of annual CO_2 reductions at risk. A Technical Working Group, or panel of experts, will require enough time to ensure that a good faith effort is possible. PFPI would consider participating in the Technical Working Group if invited.

2. **Increased Stringency of the CES Requires the Rapid Phase-out of Biomass Combustion**

The regulations and associated increased performance goals, along with the more ambitious timeframe required by the new climate legislation, will necessitate the more rapid phase-out of emitting sources of electrical generation, especially the most carbon-intensive and polluting combustion sources like forest-derived biomass and garbage incineration. The regulations also need to be amended to address the Environmental Justice directions found in the new climate law. Eliminating biomass and garbage combustion from the RPS, APS, and CES is essential to meeting CO2 reduction efforts and addressing disparate public health impacts from emitting sources of electrical generation.

3. **Conformance with the DOER RPS Rulemaking Process is Necessary**

The DEP program review should be closely coordinated with the on-going DOER revision of the RPS regulations, which has been separated into two phases. The second phase of the RPS revisions will deal exclusively with the highly controversial biomass component of the DOER

standards. The DEP program review for the CES should carefully follow the RPS revision process and use this opportunity to ensure that the proposed changes are done in a way that compliments the suite of RPS/APS/CES/CES-E policies in light of the updated legislative direction and the need to incorporate Environmental Justice principles and more protective public health measures. As was recently articulated in the revocation of the Final Plan Approval for the Springfield Biomass Facility, the role of policies and incentives that drive the development and installation of new highly-polluting emitting sources of electrical generation in Environmental Justice communities needs a comprehensive review. The DOER rulemaking currently underway and the DEP CES program review require close coordination, as well as full, extensive public participation.

4. The Concept of Biogenic Carbon Requires Scientific Review

The existing regulatory structure relating to the concept of "biogenic carbon" needs to be evaluated in light of the increased emphasis on the role of forests in addressing the climate crisis, as laid out in the 2030 Clean Energy and Climate Plan and the 2050 Decarbonization Roadmap. The critical role of forest carbon sequestration and storage requires a very careful analysis of incentives that are likely to increase the removal of stored carbon from forest ecosystems and reduce the future potential for carbon removal from the atmosphere. The entire concept of biogenic carbon, and the actual impact that combustion has on the already overburdened atmosphere, needs to be scientifically addressed. This topic should be among the topics reviewed by the Technical Working Group.

5. The Concept of Sustainable Forestry Practices Requires a Technical Review

The loosely defined term "sustainable forestry" creates a problematic regulatory issue related to biomass combustion. The simplistic concept of "Eligible Biomass" found in 310 CMR 7.70 includes the qualifier that sustainably harvested woody biomass qualifies as renewable, but then concludes with the statement that "Sustainably harvested shall be determined by the Department." This sort of regulatory construction results in a program that lacks foundational principles or scientific justification. A comprehensive treatment of this concept of sustainable forestry can be found in the California Public Utilities Commission decision Decision 14-12-081 beginning on page 21 under section 2.2.3 (Bioenergy Using Byproducts of Sustainable Forest Management), which finds that there is no uniquely authoritative definition of sustainable forest management. At a minimum, this concept has been used to describe forestry systems that harvest less biomass than the net growth increment each year, a condition that even if met is not sufficient to ensure that biomass has reduced carbon emissions compared to fossil fuels. DEP should complete a comprehensive review of the existing qualification and verification process for forest-derived fuels and should seek the assistance of a panel of experts to ensure that the regulatory foundation contained in the RPS/APS/CES creates a scientifically-based policy and program that can be implemented without resorting to arbitrary and capricious decision-making.

6. The RPS and the APS Lack Conformance and Proper Construction

As part of the comprehensive program review for the suite of RPS/APS/CES policies, and in conjunction with the DOER, the DEP should insist that the current programs for incentivizing

thermal biomass combustion conform with the new legislative direction concerning protection of public health and addressing Environmental Justice. The existing RPS and APS regulations rely extensively on “guidelines” that can be amended at will separate from the regulatory rule-making process. Yet the section of the RPS/APS regulations having to do with biomass can not be implemented without the close adherence to these “guidelines” which are in fact rules, standards, and regulations that are merely being called “guidelines” to enable easy amendment. This regulatory construction is an abuse of discretion and should be rectified during this program review process.

PFPI appreciates this opportunity to provide comments on the scope of the DEP Program Review for the regulations to reduce CO_2 emissions and the Clean Energy Standard. If you have any questions concerning these comments, please direct them to the attention of PFPI’s director, Mary Booth, at mbooth@pfpi.net.

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June 1, 2021

By E-Mail to climate.strategies@mass.gov

MassDEP
One Winter St.
Boston, MA 02108

Subject: 2021 Program Review Stakeholder Discussion Document

In response to the public hearing notice issued by the Massachusetts Department of Environmental Protection ("MassDEP") seeking comment on the scope of the program review for 310 CMR 7.75 (Clean Energy Standard or CES) and 310 CMR 7.75 (Electricity Generator Emissions Limits), RENEW Northeast, Inc. ("RENEW") submits these comments concerning changes to the CES.[1]

RENEW has supported the requirement on retail electricity sellers to purchase annually clean energy certificates from existing clean generators. As a general principle, RENEW supports policies that will enable Massachusetts to claim benefits from the most cost-competitive carbon-free resources, and increase the likelihood that the Global Warming Solutions Act ("GWSA") greenhouse gas reduction requirements can be attained cost effectively.

Topic #1: Stringency of 310 CMR 7.74 and 7.75

- Increase the stringency of the CES from 40% to 60% or more in 2030. For example, this could be addressed by increasing the standard by 5% or more each year from 2026 – 2030 (instead of the 2% each year increase in the current regulation). Waiting until 2025 before escalating the annual rate of increase would allow time for supply to become available before the changes take effect. In combination with the CES-E, these changes would place the Commonwealth on a path toward a fully decarbonized electricity sector by 2040.

RENEW: With a significant amount of new contracted clean energy resources pursuant to Sections 83C and 83D anticipated to arrive before 2025, RENEW recommends MassDEP not wait until 2025 to accelerate the CES beyond the current 2 percent per year to ensure the Commonwealth can reach 60 percent by 2030 to meet emissions limits set by the Massachusetts Clean Energy and Climate Plan for 2030.

[1] The comments expressed herein represent the views of RENEW and not necessarily those of any particular member of RENEW.

• Increase the CES-E from 20% of 2018 electricity sales to 25%. An increase from 20% to 25% could "lock in" a modestly larger contribution from pre-2010 clean generators. Making this change by 2026 would help ensure that new clean generators added quickly between 2026 and 2030 replace emitting generators, not existing clean generators.

RENEW: The cost to consumers to comply with a CES-E can be reduced by increasing the pool of non-emitting resources eligible under a CES-E. RENEW recommends MassDEP eliminate the restrictions favoring non-U.S. imports over in-region resources. The current rules disqualify cost-effective non-emitting resources, particularly the fleet of small hydropower, contributing to the 1990 baseline. These resources will face further challenges as increased deliveries of Canadian hydropower and domestic solar further erode energy prices. Making this change will enable Massachusetts to claim carbon benefits from potentially the most cost-competitive carbon-free resources, and increase the likelihood that the GWSA greenhouse gas reduction requirements can be maintained through 2050. RENEW recommends MassDEP analyze the benefits of increasing the CES-E beyond the "modestly larger" amount of 25 percent.

Topic #2: Clean Energy Standard Technical Review

• A comprehensive "global" CES has been posited by some stakeholders as a substitute for, or complement to, the suite of RPS/APS/CES/CES-E policies that currently exist in Massachusetts and New England. How, exactly, would such a policy be structured? For example, how would costs be minimized in a single policy given the need to support technologies with widely differing costs (i.e., new rooftop solar vs. pre-2010 hydropower facilities)?

RENEW: With the New England States now examining potential reforms to existing clean energy programs and wholesale markets through their Energy Vision process, RENEW recommends MassDEP not pursue consolidation of clean energy attributes as that effort would be premature.

• Are changes needed to the alternative compliance payment (ACP) rates? For example, the rates could be specified in regulation as $35/MWh for the CES and $10/MWh for the CES-E (similar to current levels), instead of as a % of the RPS Class I ACP rate.

RENEW: On May 26, 2021, DOER finalized regulations that will result in reductions to RPS Class I ACP rates. Due to its ACP phase down having created considerable uncertainty for investors in the clean energy industry, RENEW recommends MassDEP mitigate that uncertainty by moving the program's ACP to fixed dollar amounts instead of as a percentage of RPS Class I rates.

With the CES and RPS Class I programs being closely related, the CES ACP for 2023 and beyond should be set a $40/MWh to align with the changes to RPS Class I ACP. The ACP for the CES-E should be set at $20/MWh which is a level that will induce retail sellers to procure CES-Es rather than make ACP payments. This level also reflects the intended optimization and maintenance of existing non-emitting resources. If the ACP is set too low, retail sellers might be more inclined to pay the ACP rather than procure CES-Es, and/or the valuation may be insufficient to encourage existing non-emitting resources to continue operating and contributing towards GWSA requirements.

• Should the structure of the standard be refined to address customer-sited behind-the-meter generation such as rooftop solar power? Under the current program structure, this generation may be credited toward compliance, but the portion of the energy used on site is not included in the basis of the compliance obligation because it is never sold. For example, if this energy is estimated to account for 2% of total electricity consumption in the state in a year, this could be addressed by requiring retail electricity sellers to adjust their sales upward by 2% when calculating their CES compliance obligations. That way, in the year when the standard is 50%, there would be enough clean energy to cover 50% of total electricity consumption (vs. only retail sales) in Massachusetts.

RENEW takes no position on this CES issue.

• Should there be any changes to the requirements that apply to generators that are not located in ISO-NE? For example, should the capacity market participation requirements or energy delivery documentation requirements be revised?

RENEW: The capacity market requirements should be consistent with the Class I RPS accreditation regulations for imports.

Topic #4: Municipal Light Plants (MLPs) and 310 CMR 7.75

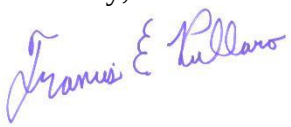
MLPs are required to report greenhouse gas emissions under 310 CMR 7.75. Under the new climate legislation referenced above, each MLP is required to establish a greenhouse gas emissions standard (GGES). EEA and MassDEP seek stakeholder input on the following question related to the GGES requirements:

• Are any clarifications necessary in relation to the GHG reporting requirements under 310 CMR 7.75? For example, is there a need to clarify that the prohibition on reporting non-emitting generation for which others own the emissions attributes will continue to apply regardless of how MLPs structure their GGES programs?

RENEW supports measures to prohibit double counting of attributes.

Thank you for the opportunity to offer this feedback on the CES.

Sincerely,



Francis Pullaro
Executive Director

July 21, 2021

VIA ELECTRONIC MAIL

The Commonwealth of Massachusetts
Department of Environmental Protection
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Boston, Massachusetts 02108
Email: climate.strategies@mass.gov

RE: 310 CMR 7.74 and 310 CMR 7.75 2021 Program Review Stakeholder Discussion Comments

On behalf of its more than 100,000 members and supporters in Massachusetts, the Sierra Club respectfully submits the following comments in response to the Massachusetts Department of Environmental Protection's (MassDEP) 2021 Program Review Stakeholder Discussion Document relating to 310 CMR 7.74 and 310 CMR 7.75.

Topic #1: Stringency of 310 CMR 7.74 and 7.75

a. *Increase the stringency of the CES from 40% to 60% or more in 2030. For example, this could be addressed by increasing the standard by 5% or more each year from 2026 – 2030 (instead of the 2% each year increase in the current regulation). Waiting until 2025 before escalating the annual rate of increase would allow time for supply to become available before the changes take effect. In combination with the CES-E, these changes would place the Commonwealth on a path toward a fully decarbonized electricity sector by 2040.*

Sierra Club supports an increase of the CES to at least 60% by 2030 and strongly urges that the Commonwealth pursue a target higher than 60%. In addition, given the Commonwealth's procurement of new clean energy resources pursuant to Sections 83C and 83D that are anticipated before 2025, Sierra Club urges that MassDEP not wait until 2025 to accelerate the CES beyond the current 2 percent per year to ensure that clean energy resources are deployed at the necessary rate to rapidly transform the electric sector to meet climate targets.

Sierra Club supports the pursuit of a fully decarbonized electric sector by 2040 but cautions that procuring hydroelectric imports from new impoundments to meet that target would not result in a truly zero carbon electric supply. New impoundments are highly carbon intensive as they inundate natural landscapes that function as carbon sinks; inundation not only causes a loss of these natural sinks, but also results in emissions from biomass decomposition, resulting in

energy that is not zero-carbon.[1] The carbon footprint of new impoundments is further amplified by ongoing net differences between the carbon uptake and respiration of the pre-flooding and post-flooding biomes and water columns.[2] There are also significant environmental justice concerns associated with Canadian hydroelectric impoundments, as land belonging to First Nations has been flooded for these projects.

Sierra Club notes that because Massachusetts is part of the larger New England electric grid, the Commonwealth must take care to pursue decarbonization of its electric sector in a way that accelerates the retirement of fossil generators and replaces that generation with renewable energy, rather than in a way that results in increased fossil generation in adjacent states. Sierra Club also supports a focus on the retirement of the fossil generators with the most negative impacts on pollution and public health in environmental justice communities.

b. *Increase the CES-E from 20% of 2018 electricity sales to 25%. An increase from 20% to 25% could "lock in" a modestly larger contribution from pre-2010 clean generators. Making this change by 2026 would help ensure that new clean generators added quickly between 2026 and 2030 replace emitting generators, not existing clean generators.*

Sierra Club supports development of new clean energy resources in New England and would want to better understand how much CES-E generation already exists in Massachusetts and in other New England states before calling for an increase in the CES-E. An increase to the CES-E would need to support renewables in New England rather than result in procurement of RECs from states outside the region.

Topic #2: Clean Energy Standard Technical Review

a. *A comprehensive "global" CES has been posited by some stakeholders as a substitute for, or complement to, the suite of RPS/APS/CES/CES-E policies that currently exist in Massachusetts and New England. How, exactly, would such a policy be structured? For example, how would costs be minimized in a single policy given the need to support technologies with widely differing costs (i.e., new rooftop solar vs. pre-2010 hydropower facilities)?*

Sierra Club does not support combining the RPS/APS/CES/CES-E programs at present as the programs incentivize different technologies of varying usefulness in meeting state climate targets and would not want to diminish the effectiveness of the more critical policies.

b. *Should there be any changes to the requirements that apply to generators that are not located in ISO-NE? For example, should the capacity market participation requirements or energy delivery documentation requirements be revised?*

Sierra Club agrees with RENEW Northeast that the capacity market requirements should be consistent with the Class I RPS accreditation regulations for imports.

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[1] William Steinhurst, et al., Synapse Energy Economics, Inc., Hydropower Greenhouse Gas Emissions: State of the Research, February 14, 2012, p. 2.
[2] *Id.*, at 2.

Topic #4: Municipal Light Plants (MLPs) and 310 CMR 7.75

a. *Are any clarifications necessary in relation to the GHG reporting requirements under 310 CMR 7.75? For example, is there a need to clarify that the prohibition on reporting non-emitting generation for which others own the emissions attributes will continue to apply regardless of how MLPs structure their GGES programs?*

Sierra Club believes that clarification is necessary to signal that the prohibition on reporting non-emitting generation for which others own the emissions attributes will continue to apply regardless of how MLPs structure their GGES programs. Sierra Club supports measures to prohibit double counting of environmental attributes.

Respectfully submitted,

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May 31, 2021

Martin Suuberg
Commissioner
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108-4746

Via email to: climate.strategies@mass.gov

Re: Program Review of 310 CMR 7.74 and 7.75

Dear Commissioner Suuberg,

Bellingham Power Generation, LLC, Blackstone Power Generation, LLC, and Masspower, LLC (the "Companies") submit the following comments in response to the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) and the Massachusetts Department of Environmental Protection (MassDEP) 2021 Program Review Discussion Document.

Vistra Corp. is the ultimate parent of the Companies and operates through its subsidiaries in six of the seven competitive markets in the U.S. Vistra Corp's generation fleet totals approximately 39,000 MW, including over 3,000 MW of Natural Gas Combined Cycle generation resources that participate in the ISO-NE competitive markets. In Massachusetts, the Companies own and operate Bellingham (289 MW nameplate capacity for each unit), Blackstone (289 MW nameplate capacity for each unit), and Masspower (260.9 MW nameplate capacity). Serving nearly five million residential, commercial, and industrial retail customers with electricity and gas, Vistra Corp. is one of the largest competitive residential electricity providers in the country and offers over forty renewable electricity plans.

Vistra Corp. is committed to being an industry leader in the effort to address climate change, while transitioning our fleet to no-to-low carbon sources. Vistra Corp. advocates for economically rational and market-based policies and solutions to address greenhouse gases consistent with the goals of the UNFCCC Paris Agreement, and believes it is important to develop policies that address climate change while balancing the need for reliable and affordable power and considering the impact on the domestic economy. While the Commonwealth's efforts to curb CO_2 emissions through these regulations is a step in the right direction, we believe that the regulations and programs of 310 CMR 7.74 and 7.75 should be reviewed to consider changes that would continue the Commonwealth's goals while minimizing unnecessary costs within the context of national movement toward a global solution.

Topic 1: Stringency of 310 CMR 7.74 and 7.75

The Companies appreciate the goal of placing the Commonwealth on a path toward a fully decarbonized electricity sector by 2040, but this should not come at the expense of reliable, affordable electricity. Further, as currently designed and implemented, the Massachusetts program would not reduce carbon emissions in the aggregate.

The Companies have concerns that the fast pace of the transition could lead to regional reliability impacts. Should the Commonwealth decide to increase the Clean Energy Standard, it must also consider how the region will ensure electric reliability.

Importing existing hydropower from outside of Massachusetts does not necessarily address the global climate concern as it merely displaces thermal sources inside Massachusetts without incentivizing the development of new renewables. Also, when those electrons that were once going elsewhere flow into Massachusetts, something must replace them. Most likely, traditional, fossil-fueled generation fills the void. External hydroelectric generation would be further incentivized to flow into Massachusetts to capture the value of the new Clean Energy Standard- Eligible (CES-E) Renewable Energy Certificates (REC). By making electricity more expensive to produce inside Massachusetts due to the need to purchase allowances for each ton of CO_2 emitted, the program encourages leakage by driving less efficient, carbon-intensive sources in other states to provide imported electricity at a lower cost. The Commonwealth should consider how to advance greater carbon reductions regardless of state borders and address the leakage issue.

Plant-specific out-of-market subsidies for existing resources do not reduce carbon and interfere with efficient operation of the region's competitive power market. The Companies are not aware of any data or analysis that demonstrates that the resources targeted by the proposed CES-E are likely to retire anytime in the near future without subsidies. There is no justification for subsidizing otherwise economic existing resources to achieve the state's emissions reduction objectives. If the state seeks to subsidize existing resources to achieve its carbon emissions objectives, an approach that is location-, resource- and technology-neutral is a reasonable alternative.

In light of the Biden Administration's commitment to transitioning the energy sector as a whole to a carbon-free grid and the to-date accomplishment of emission reductions within the Commonwealth, maintaining the stringency of 310 CMR 7.74 without modification is the prudent course to provide an opportunity for the development of a more global approach that does not jeopardize the delivery of cost-effective electricity to the residents of the Commonwealth. In fact, the Commonwealth should consider how to phase out the program or how to provide for a transition to a larger, national program. By participating in the development of a national program, the Commonwealth can ensure that climate goals are more widely adopted rather than focusing on just one state. Carbon reduction goals need to cover a larger geographic area in order to be effective. This can be seen in the Commonwealth's participation in RGGI, a regional carbon reduction program, which has seen significant reductions in emissions across the region.

Topic 2: Clean Energy Standard Technical Review

The stakeholder document asks how a comprehensive "global"[1] CES could substitute for or complement Massachusetts and New England policies as they currently exist. A global CES would enhance efficiency, as it would establish a national CES market that would enable the country to achieve clean energy goals utilizing the broadest, most cost-effective set of clean energy resources. That being said, a global CES might be best if compliance is measured on a regional basis. For instance, the global CES would establish the compliance requirement and determine how resources are able to earn clean energy credits, but load serving entities within New England would need to show they are buying clean energy credits from within New England or deliverable to New England. The construction of such a policy has complex implications, particularly if such policy is intended to enable power produced by renewable resources in one region of the country to satisfy the compliance obligations in another region of the country. This area of review requires more discussion among stakeholders than the short time period provided by this initial open comment period. We recommend that the Commonwealth explore more comprehensive discussion in this area as it continues its review.

With regard to the alternative compliance payment rate, we believe they should remain as proposed as a percentage of the Renewable Energy Portfolio Standard Class 1 Alternative Compliance Payment (ACP). Load serving entities have already engaged in transactions based on an assumption that the cost is limited by the ACP and no higher. If the price increases, we believe it would be appropriate to include a grandfathering provision for existing contracts.

Topic 3: 310 CMR 7.74 Technical Review

The most efficient way to administer this program is to not allow banking of unused allowances on the account level. Unused allowances should be transferred into the following year's auction. The original owner would be compensated by receiving the clearing prices for those allowances.

Additionally, auction bid limits need revision. An issue arises from the current construction in that creates an advantage for a smaller generator who produces less electricity. Under the existing structure, smaller generators are benefited by the ability to obtain a year's worth of its allowances earlier in the calendar year than a larger generator. Because of the limits of the auction process, a small generator can bid on and be awarded the entire compliance lot of allowances in any single auction. The Companies cannot obtain a year's worth of allowances to operate and must seek as much as one-third of the allowances offered at every auction throughout the year to be able to comply when the year closes. Even so, we might still have to enter the secondary market to find sufficient allowances. By obtaining its entire compliance obligation earlier in the year, a smaller generator can position itself more favorably in the energy market, hedging forward its exposure. Meanwhile the Companies have less certainty about the final quantity of allowances that can be obtained and the cost of those allowances to purchase if we must go to the secondary market for our allowance needs. A pro-rata calculation to limit purchases would help. By limiting bidding to a percentage of the allowances available multiplied by 125% the generator's capacity, the distribution of allowances from

[1] When using the term "global," we assume that the reference is to geographical expansion to a national program and not the "all-inclusive" definition that would imply the incorporation of more sources, not necessarily a larger footprint.

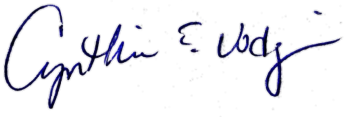
an auction could be made more equitable. Note that while the total mass emissions from a smaller generator is smaller, its generation may not be more efficient than the larger generators so ameliorating this problem does not create an environmental concern.

Topic 4: Municipal Light Plants (MLPs)

The Companies believe that MLPs should have their own program. Costs born from participating in the trading program may be passed through to their consumers through rate recovery, which is not available to competitive generators. If the MLPs are included in this program, the competitive generators would be at a disadvantage. Inclusion only serves to drive our operational cost higher without benefit.

We look forward to participating in the stakeholder process for this review. Should you have any questions regarding these comments, please contact Ms. Susana Hildebrand at (512) 230-5704 or Susana.Hildebrand@vistracorp.com.

Best regards,



Cynthia E. Vodopivec
Senior Vice President
Environmental Health & Safety

WEST BOYLSTON MUNICIPAL LIGHTING PLANT

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May 31, 2021 (Sent via email)

Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Subject: 310 CMR 7.74 and 7.75 Program Review Comments

Dear MassDEP,

Thank you for the opportunity to submit comments related to the 2021 program review of 310 CMR 7.74 and 7.75.

Topic #4: Municipal Light Plants and 310 CMR 7.75

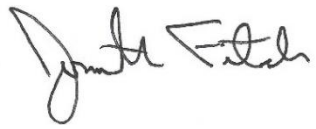
WBMLPs locally elected Board of Light Commissioners adopted a Greenhouse Gas Emission Standard (GGES) on August 6, 2019 and amended the GGES on February 4, 2020 to match the new climate legislation (c. 8 of the Acts of 2021) which requires "net-zero" GHG emissions by 2050. The MLP GGES does not allow double counting of environmental attributes. WBMLP intends to demonstrate ownership of environmental attributes through RECs, contracts, or attestation that no other entity is claiming these attributes. WBMLP suggests at this time that the only "clarification" needed is that annual reports to the DEP and DOER be consistent and uniform in their content.

Additional Comments: GHG Emission Inventories, Projections, Emission Reports, and Emission factor Calculations.

MassDEPs "Greenhouse Gas Baseline, Inventory & Projections", "Retail Seller GHG Emissions Reports", and "Emission Factor Calculations" for the energy sector should be updated and published more rapidly to measure progress towards our GHG emissions reduction goals.

On behalf of WBMLP's ratepayers please consider our concerns and comments regarding the 2021 program review.

Sincerely,



General Manager