

310 CMR 7.75: Clean Energy Standard
Stakeholder Comments on Expanding the CES
Comment Deadline - March 29, 2019

Associated Industries of Massachusetts
Bay State Hydropower Association
Brookfield Renewable
Calpine Corporation
Conservation Law Foundation
Energy New England
Eversource Energy
FirstLight Power Resources
Gard, Mary (Wellesley, MA)
Gorman, James (Wellesley, MA)
Great River Hydro
Green Energy Consumers Alliance
Harvard University Engineering and Utilities
Hydro-Quebec Energy Services US
Mass Climate Action Network
Massachusetts Municipal Wholesale Electric Company
Municipal Electric Association of Massachusetts
Nalcor Energy
National Grid
New England Power Generators Association
NextEra Energy Resources
Northeast Gas Association
RENEW Northeast
Retail Energy Supply Association
Rys, Richard (Princeton, MA)
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March 22, 2019

Department of Environmental Protection
1 Winter Street
Boston, MA 02108

**RE: Request for Stakeholder Comments - Expanding the Clean Energy Standard –
February 2019**

To Whom It May Concern:

Associated Industries of Massachusetts (AIM) is pleased to provide the following comments to the above-mentioned request.

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.

This stakeholder exercise is required under 310 CMR 7.75(10). In their background documents DEP specifically asks for comments in three areas: increasing the stringency of the Clean Energy Standard (CES); applying the CES to municipally owned utilities; and adding a new CES-E to encourage retention of existing clean energy sources. AIM's members are directly and indirectly impacted by the outcome of this stakeholder discussion.

AIM has followed the development of the CES from its initial proposal and submitted several sets of comments throughout the regulatory process. We want to thank the Department for continuing this discussion in an open and transparent manner.

**DEP SHOULD INCREASE THE STRINGENCY OF THE CES ONLY IF IT CAN BE
DONE WITHOUT ANY PRICE INCREASE**

DEP is proposing an increase in the stringency of the CES standard in 2020 and 2021. At their stakeholder meeting DEP stated they believe enough regional clean energy supply exists so that this change will not result in REC and CEC price impacts and it will not trigger any Alternative Compliance Payments (ACPs).

AIM does not have access to the type of data that would verify whether this is accurate. As you know, Massachusetts currently has one of the highest costs for electricity in the continental United States and therefore urges the DEP to proceed only with well researched information and

a transparent analysis to understand what such an increase in the CES will do to electricity prices.

If such information concludes that increasing the CES stringency will not result in ratepayer impacts, AIM supports such an increase. There are many who believe that the Commonwealth is not moving fast enough to transition to a clean energy future despite the investment of billions of dollars in clean energy projects over the next few years. Therefore, increasing the CES will accurately reflect what is really occurring in the marketplace and allow the Commonwealth to take credit for output that can be used to satisfy the Global Warming Solutions Act (GWSA).

MUNICIPAL LIGHT PLANTS SHOULD NOT BE INCLUDED IN THE CES

Municipal light plants (MLPs) operate under a completely different regulatory, operational and financial model than investor owned utilities (IOUs). They are owned by ratepayers and are managed on a local basis pursuant to statute. Unlike IOUs they do not have shareholders. Some of the MLPs operate in towns where there are very few commercial and industrial customers and therefore they serve mostly a residential customer base. Small increases to rates can have large individual impacts. Also, if prices become too expensive and customers begin to reduce their usage too quickly through onsite generation such as solar, the ability of the MLP to spread the cost of maintaining the distribution system is borne solely by the remaining ratepayers.

This does not mean MLPs are not committed to increasing clean power in their supply portfolios. Many own interests in facilities that generate zero-carbon power and some purchase large amounts of zero carbon power, including solar and wind. In fact, many have purchased large amounts of zero carbon power for years, even without a mandate to do so. Unfortunately, they have not been recognized as the leaders in clean energy procurement they are because much of their purchases are not currently recognized as CES eligible. MLP ratepayers should not be penalized for jumping on the clean energy bandwagon well before it became a requirement for IOUs.

We urge the DEP to continue to work with the MLPs and the legislature to develop a proper accounting mechanism that recognizes their clean power generation purchases or ownership. Those discussions should occur before DEP places any regulatory burdens on their ratepayers.

DEP MUST RECOGNIZE EXISTING CLEAN ENERGY SOURCES FOR THEIR CONTRIBUTION TO CARBON EMISSION REDUCTIONS

AIM recognizes the importance of pre-2010 clean energy sources to our carbon reduction efforts. In fact, DEP's own reports come to a similar conclusion. Their GWSA 10-year progress report states that *"In the 2040's, assuming existing regional resources such as regional nuclear power plants and pre-2020 imported hydropower remain on line, the 80% [CES] standard will be sufficient to ensure that Massachusetts electricity supply will be completely decarbonized by 2050"*. This is a monumental accomplishment.

However, AIM believes that this goal (or even a more aggressive one) can be accomplished in a simpler manner than proposed and one that avoids many of the pitfalls of establishing a new CES-E.

Currently there are at least 7 classifications that an energy supplier (and customer) must comply with to be compliant with Massachusetts electricity supply laws and regulations, each with its own minimum purchase requirements and ACPs. The CES-E would add an eight.

They are as follows:

- RPS Class I – primarily post-1997 wind, solar, small hydropower (30 MW and below) and biomass
- Solar Carve Out – part of RPS Class I but a separate compliance scheme
- RPS Class II Renewables – like RPS Class I but with a commercial operation date prior to January 1, 1998 and with size requirements on hydropower (under 7.5MW)
- RPS Class II Waste-to-Energy – units that burn solid waste to generate steam or electricity
- AEPS (Alternative Energy Portfolio Standard) – primarily Combined Heat and Power (CHP), flywheel storage, and efficient steam technologies
- CES – includes the RPS Class I as above – but non-RPS Class I clean generation units (primarily large-scale hydropower) having a post-2010 vintage requirement and those selected as part of the Energy Diversity Act
- Clean Peak Standard – clean energy technologies that can supply electricity or reduce demand during seasonal peak demand periods established by DOER
- CES-E - (proposed - the subject of these comments). Non-RPS clean generation units with a pre-2010 vintage (primarily large-scale hydropower and nuclear)

Each one of these categories is treated differently (with costs varying significantly across categories), yet in the end virtually all contribute carbon free and efficient power to Massachusetts ratepayers.

At the end of the day, the goal should be to reduce carbon and frankly it is irrelevant whether the sources are existing or new. That is why we believe that it is not necessary to add a new CES-E as it will add another definition (and requirement) to an already complicated list of state-only definitions surrounding renewable and clean power.

In the early days of renewable and clean power development, DEP may have had a reason to support incentives for certain technologies as such technologies needed financial support. Today it is not even clear if a CES credit will have a monetary value over time. With Massachusetts committed to virtually 100% zero carbon power, eventually the RECs and CECs become meaningless, since every source is eligible.

As a result, we urge DEP to simply increase the CES slowly so that all sources that otherwise meet the CES eligibility be granted full eligibility for compliance with the existing CES.

This method has two positive outcomes. First, it recognizes the importance of existing sources and keeps them operating; and second, it eliminates many if not all the complicated questions that are included in your stakeholder document. No longer would DEP be concerned with the amount of CES-E eligible sources, nor would they be concerned with any planned or unplanned retirements of CES-E sources or establishment of a separate ACP. This would simplify compliance and send a unifying message to stakeholders.

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 for the cost-effective benefits they provide. Bringing all the existing clean energy sources under one umbrella will allow Massachusetts to meet our clean energy goals efficiently and in a cost-effective way.

Thank you for allowing us to make these comments and we look forward to working with your office in any way possible to help transition Massachusetts to a clean energy economy.

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

Sincerely yours,

A handwritten signature in black ink, reading "Robert A. Rio". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Robert A. Rio, Esq.
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Via Email

March 29, 2019

Massachusetts Dept. of Environmental Protection
ATTN: William Space
One Winter Street
Boston, MA 02108

**Re: Comments: Mass DEP 2019 Discussion Document:
Proposed Expansion of the Clean Energy Standard:**

Dear Mr. Space:

On behalf of the Bay State Hydropower Association (“BSHA” or the “Association”) and its members, I want to thank the Department for re-opening the stakeholder process on this matter, the opportunity to submit written comments today, and the open process being conducted.

The Association was established in 2007 with the goal of advancing the use of hydropower, an indigenous and clean energy source, in Massachusetts and the region that positively affects the environment and energy future of the Commonwealth. The BSHA is comprised of hydropower facility owners and operators throughout Massachusetts; it represents nearly 90 percent of the hydro facilities in the state, most of which are small facilities.

Association’s members believe the Department’s inclusion of existing clean (non-emitting) energy supply in the Department’s Clean Energy Standard (CES) is essential for good policy and practical reasons. Existing clean generation (in-state and imports) is the foundation on which new clean energy supply contributes to the Commonwealth’s 2050 emission reduction goal. It is essential for reaching the Commonwealth’s emissions goal. As the 2019 discussion paper states in the context of clean energy imports to Massachusetts: “... retention of existing non-emitting would help ensure that new clean

energy replaces emitting generation and reduces emissions.” The same can be said for existing in-state non-emitting generation facilities.

The Association participated in the 2017 stakeholder process and submitted comments on November 30, 2017. These comments reflect proposals in the Department’s 2019 discussion document and responds to questions propounded in the slide presentation provided by the Department at the two stakeholder meetings held on March 14th and 19th. The Association comments of November 30, 2017 are incorporated by reference here in so far as the issues discussed in those comments are pertinent to the 2019 discussion document’s proposals.

CES-E Program Comments

Turning to the creation of a CES-E program, the Association applauds the Department for reopening this process and urges adoption as soon as possible, but with some important recommended changes from the proposal in the 2019 discussion document.¹ Here are the key points.²

- While existing non-emitting generation attributes committed to other clean energy programs should not participate to avoid double counting, there should not be an arbitrary waiting period as suggested in the discussion paper of 5 years before a qualifying facility could participate in a CES-E program.
- The CES-E should not be limited to 15% of annual Massachusetts load; rather it should be the equivalent of today’s base of non-emitting power.
- The alternative compliance should be set at a realistically level; not the percentage of Class I RPS suggested in the discussion document.

The goal of the GWSA is to achieve mandatory emission reductions and that requires stable reliable renewable clean energy, whether new or existing. Such supply will

¹ A CES-E program now will be essential in driving to an integrated CES program in the near future as suggested in the final question in the 2019 discussion document. See also, discussion below about an integrated CES.

² The Association is pleased to see that the 2019 discussion paper does not contain a vintage date, as the 2017 paper did that was set at 1990.

be needed to contribute to the achievement of the Commonwealth's aggressive emission reduction and renewable energy goals.³

Care needs to be taken in regard to large existing non-emitting facilities. During the original stakeholder process that resulted in the Department's CES regulations, it was suggested by several commentators that a 100 MW size limit or a 30 MW size limit would be appropriate for existing clean energy generation in the CES as a suitable demarcation line ensuring support for smaller clean energy generators and providing diversity of supply for reliability purposes. Crafting such a line is not unusual since the State's solar program and net metering programs do just that.

The CES-E proposal in the discussion documents suggests that the clean energy supply required of a supplier be limited to a geographically historic limit. This is an unsound approach. The supply should be based on the total of the historic use of clean non-emitting generation by Massachusetts consumers.

Finally, the Department should adopt a realistic alternative compliance payment (ACP) that provides a bandwidth to support the program. Such an ACP could 75% of the Class I RPS ACP. The ACP suggested in the discussion document is inadequate.

Integrated CES Program

A final note, the Association would like to respond to the last bullet in the 2019 discussion document about integration of CES and CES-E. While that suggests a possibility at some time in the future, now may be the best time to put in place an integration plan. The end game is 80% non-emitting generation supply for Massachusetts demand in 2050. This can only be achieved efficiently and on a least cost basis for ratepayers by ensuring new (post 2010) and existing non-emitting generation are committed to the Massachusetts electricity demand by that date.

While new clean generation is necessary, it is essential that existing supply remains a robust contributor otherwise it is unlikely the 2050 goal can be met at all. This is particularly so if the current CES program delivers new non-emitting generation that may displace existing non-emitting generation that has been providing supply for the Massachusetts electricity demand.

³ The discussion document suggests that a goal of including existing clean energy supply is to provide support for this long term supply. Focusing a CES-type program, e.g. CES-E, on existing smaller hydropower generation will significantly contribute to this objective. Hydropower facilities are durable clean energy sources historically.

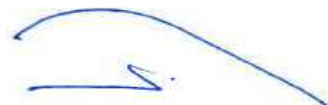
A single CES program incents both the development of new supply and the retention of existing supply and is most likely to be less expensive for ratepayers while still achieving the climate change policy goals.⁴ Such a program would not be bounded by “pre” and “post” operational dates for a non-emitting facility or other eligibility criteria. A single integrated CES program adopted now could be phased-in by 2021, so that the Commonwealth’s 2020 emission goal is achieved.

Conclusion

The BSHA and its members very much appreciate the Department focusing on existing clean energy resources and their historic and continuing invaluable contribution to the clean energy supply that Massachusetts electric customers enjoy. This supply is the foundation on which new supply is added toward achieving the GWSA mandated emission reduction goals. The clean energy produced by existing or new generation is the same in getting to the Commonwealth’s objectives; both should be recognized and supported either in individual programs or together in one program.

The Association urges the Department to adopt a clean energy standard approach that recognizes the equality of new and vintage clean energy generators and the combined value they represent.

Sincerely,



Thomas A. Tarpey, President
Bay State Hydropower Association

⁴ As suggested earlier, Hydro non-emitting facilities can be counted on for decades into the future, certainly by 2050. They are unlike other technologies that have more limited usable operational life spans. This makes such facilities highly valuable and essential if Massachusetts is to achieve its 2050 goal.

RESPONSE OF BROOKFIELD RENEWABLE TO
REQUEST FOR WRITTEN COMMENTS ON
OPTIONS FOR AMENDING THE CLEAN ENERGY
STANDARD

In response to the Department of Environmental Protection's (DEP) request for written comments in the above referenced stakeholder process, Brookfield Renewable is pleased to submit the following written comments.

Brookfield Renewable's presence in New England includes over 1,300MW of carbon-free resources in ISO-NE and a further 1,000MW that can be imported to New England from New York and Quebec. Our renewable hydro, wind and pumped storage resources are available to help meet the energy needs and environmental objectives of Massachusetts and the region. In Massachusetts, our facilities include a 600MW pumped storage facility (Bear Swamp) and a 10MW hydroelectric facility (Fife Brook), as well as our North American System Control Center in Marlborough. Brookfield Renewable is also affiliated with TerraForm Power, Inc., which owns and operates approximately 217MW of wind and 135MW of distributed solar resources in New England.

As described in detail throughout, Brookfield Renewable recommends the following:

- The DEP should establish a more stringent Clean Energy Standard to ensure more efficient economy-wide emissions reductions.
- The DEP should expand the Clean Energy Standard program to include existing resources; however, expansion should focus on a "global Clean Energy Standard" that does not bifurcate based upon resource vintage.
- To the extent the DEP pursues a separate program for existing resources, the DEP should allow participation of clean energy resources located in New York. The DEP should also enable participation of small-scale hydropower resources that are located in net exporting States and are not simultaneously being used for clean energy compliance elsewhere. Activity in prior years should not be restrictive to participation.

- The DEP should consider whether there are regional market-based approaches to more efficiently meet the goals of the Clean Energy Standard and an accompanying Clean Energy Standard for existing resources.

Clean Energy Standard Stringency

Brookfield Renewable strongly supports Massachusetts' efforts to reduce greenhouse gas emissions and to promote clean electricity sources. In particular, we appreciate and support the DEP's proactive efforts to consider increasing the stringency of the current Clean Energy Standard (CES).

As communicated in prior submittals by Brookfield Renewable and through our engagement during the March 14, 2019 stakeholder meeting on this topic, Brookfield Renewable is first and foremost supportive of establishing a CES program that is deliberately structured to align with Massachusetts' statutorily-required greenhouse gas reduction mandates. This means establishing annual CES targets that, at minimum, incent and retain the resource mix necessary to achieve required emissions reductions in the electricity sector. However, Brookfield Renewable believes that an opportunity exists for the DEP to consider even more ambitious targets than those required to meet existing minimum reduction requirements. Pursuing deeper greenhouse gas reductions in the electricity sector could provide the necessary flexibility to compensate for slower reacting sectors, such as transportation and manufacturing, thereby resulting in more efficient emission reduction outcomes on an economy-wide basis.

Existing Resource Participating in the CES

Brookfield Renewable appreciates DEP's efforts to consider the inclusion of existing resources in the CES. However, we urge the DEP to expand CES resource eligibility requirements to reflect a "global CES" construct, which establishes eligibility based upon a generating unit's non-emitting attributes rather than its assumed historic contribution to the State's energy mix or its vintage. By assuming historic contributions, the program will in a sense "lock in" such contributions for existing resources, impeding improved utilization of existing resources and technologies, rather than encourage optimized use of such resources, as would happen if eligibility of generating units is based on their non-emitting attributes. By transitioning away

from the discriminatory resource eligibility requirements contained in the CES and proposed CES-E and moving toward a program with broad resource eligibility, both the Commonwealth's economy-wide greenhouse gas reduction mandates and electric ratepayers would be best served. While we understand from DEP staff during both the March 14, 2019 and March 19, 2019 stakeholder meetings that a concept closer to a "global CES" is under consideration by the Department as a potential construct in the longer-term, we ask that the DEP not defer this question until the planned 2021 program review, and instead act quickly to establish a program that more appropriately advances the clean energy and environmental goals of the State.

Establishing a CES-E

In the absence of moving forward with a global CES as described above, Brookfield Renewable supports establishing a CES-E with the goal of supporting the retention of existing clean energy resources and as a deliberate step toward implementing a broader, more comprehensive CES framework. However, Brookfield Renewable recommends that the DEP consider several changes to its proposed thinking on this construct.

First, we question the proposed CES-E standard of 15% of annual load, which the DEP describes as "conservative" when compared to historical clean energy imports.¹ Because 15% of load is not tied to any statutory or regulatory reference point, the figure appears arbitrary. At minimum, the DEP should establish a mandate that retains the equivalent of the totality of the State's historical baseline of clean energy supply rather than a percentage of the baseline.

Second, while we understand the resources proposed for inclusion under a CES-E standard would be limited by the State's Greenhouse Gas Emissions Inventory methodology, Brookfield Renewable disagrees with several eligibility concepts described in the DEP's discussion document. With regard to the concept of imports, Brookfield Renewable urges the DEP to expand its eligible locations to include New York as an exporting jurisdiction, in addition to New Hampshire and Quebec. Historically, ISO-NE has relied on New York for imports to meet the region's energy requirements.² Overlooking this contribution – no matter its size – would be arbitrary and contradictory to the State's approach to emissions accounting and has the potential

¹ MassDEP Stakeholder Discussion Document: Expanding the Clean Energy Standard, February 2019. Footnote 3.

² <https://www.iso-ne.com/about/key-stats/resource-mix/>

to result in less economic outcomes. Therefore, we urge the DEP to include eligibility for New York's existing renewable resources, including the State's significant existing hydropower portfolio.

In addition, Brookfield Renewable questions the DEP's proposed exclusion of small-scale hydropower that has been used for compliance with other clean energy programs in the prior five years. The DEP has described this as a necessary restriction to address "shuffling" concerns. However, the CES-E, as described, is aimed at retaining a clean energy supply equivalent to historic conditions. Since this is about baseline retention and not the achievement of incremental reductions, except through new entry in the future, it should not matter whether a resource was previously utilized for compliance in a neighboring State/jurisdiction so long as such resources are not contributing to a CES-E goal in excess of historical trends. Therefore, an existing clean energy facility located in a net exporting State/region should not be restricted from CES-E participation unless the facility is contemporaneously selling environmental attributes into a clean energy program administered in another State/jurisdiction.

Supporting a Market-Based Approach for Achieving a Cleaner Energy Mix

As DEP formulates a potential CES-E, it is worth considering whether market-based alternatives exist to more efficiently achieve CES/CES-E goals. Brookfield Renewable strongly supports a robust carbon price as the most efficient approach for the outcomes sought through this program. However, there are meaningful alternative approaches that have been proposed in the absence of carbon pricing. For instance, as part of NEPOOL's prior Integrating Markets and Public Policy (IMAPP) process, changes to ISO-NE's wholesale markets were proposed to achieve state policy goals and improve valuation of non-emitting generation attributes. One such proposal, the Forward Clean Energy Market (FCEM), is a market-based construct for the procurement of non-emitting generation designed to achieve four main objectives: i) procure non-emitting generation on a least-cost basis by allowing new and existing generation to compete for the public policy needs of the state; ii) ensure finance-ability of new projects by allowing for multi-year price lock-ins (price stability); iii) avoid outcomes where the consumer pays twice for the same product as happens today; and iv) ensure appropriate cost allocation (beneficiary pays principle). These principles align well with the DEP's existing CES and its interest in resource retention as

proposed through the CES-E. Indeed, within the context of the CES and the state's other existing carbon reduction and renewable energy programs, the FCEM would allow Massachusetts to both retain greater amounts of existing resource and incentivize more new build precisely because the State's mandates, could be met utilizing a more efficient and cost-effective market-based mechanism.

Brookfield Renewable recognizes that consideration of the FCEM or an alternative market-based approach may not be entirely within the DEP's mandate or within the remit of this particular rulemaking process. However, we believe there is great value in looking at these issues through a holistic, regional lens and working with other New England states to identify whether a multi-state, market-based solution is available to provide outcomes that benefit the region in the most efficient way.

Conclusion

Brookfield Renewable appreciates the considerable effort from the DEP to date to implement the CES, and we thank the Department for consideration of our input throughout. While we are interested in seeing the CES evolve to consider retention of important existing resources including the region's small-scale hydropower, we remain most supportive of a "global" solution that does not bifurcate between new and existing resources. Furthermore, we encourage the DEP to consider whether regional market-based solutions are available to maximize emissions reductions at lowest costs to consumers and we urge pursuit of such opportunities to the fullest extent possible.

Respectfully submitted,



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

March 29, 2019
Hon. Martin Suuberg
Commissioner
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: Potential Expansion of the Clean Energy Standard under 310 CMR 7.75

Dear Commissioner Suuberg:

Calpine Corporation (“Calpine”) respectfully submits these comments pursuant to the Department’s February 2019 Stakeholder Discussion Document requesting input on potential expansion of the existing Clean Energy Standard (CES) program.

Calpine operates the largest fleet of natural gas combined-cycle and combined-heat-and-power facilities in the U.S. and is also the nation’s largest producer of electricity from renewable geothermal resources. Calpine owns and operates approximately 26,000 megawatts (MW) of capacity that serves consumers in 17 U.S. states and the Province of Ontario. In the Commonwealth, Calpine operates the 750-MW Fore River Energy Center in Weymouth, and our retail subsidiary, Calpine Energy Solutions, supplies approximately 1,670,000 megawatt-hours (MWh) of electricity to Massachusetts’ commercial and industrial load. These comments, therefore, reflect Calpine’s perspective on the proposed changes from the point of view of both the wholesale and retail competitive markets.

Calpine takes no position on expanding the CES to include municipally-owned utilities. However, while Calpine continues to support constructive carbon reduction policies,¹ we do not support the creation of a “CES-E” requirement related to existing resources.

1. Calpine respectfully disagrees with the statement in the Stakeholder Discussion Document that, “...a policy that encourages retention of existing non-emitting imports would help ensure that new clean energy replaces emitting generation and reduces emissions.”

A CES-E will not reduce carbon emissions. Even if existing out-of-state, non-emitting generation were to retire, which is highly uncertain, it appears likely that those resources would be replaced by other non-emitting energy resources, such as the approximately 2,800

¹ Calpine supported the Commonwealth’s early efforts in this regard in cases such as: *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007)

MW of offshore wind that is currently in the planning and/or approval phase across New England.

Providing an additional revenue stream, through a subsidy, to existing non-emitting imports will not help ensure that new clean energy displaces emissions from existing resources. However, such a subsidy will inevitably distort the efficient operation of the competitive electricity markets. Calpine is not aware of any formal evaluation showing that the approach contemplated by the CES-E is the most cost-effective way to support revenue-adequacy of existing generating assets that may – or may not – be otherwise uneconomic. The evidence consistently shows that market-based approaches can achieve the same, if not better, environmental objectives through more cost-effective means for consumers.

2. There is no evidence that the Seabrook nuclear station or large-scale imported hydro requires any kind of subsidy. This is particularly true for Hydro-Quebec (HQ), which certainly has no plans to retire any of its existing hydro generating capacity in the foreseeable future. Indeed, HQ needs to increase Provincial generation and/or imports from other markets in order to meet its own native demand in Quebec. HQ has also been awarded a bid under the Massachusetts 83D RFP to provide Massachusetts with 9.45 terrawatt-hours per year of subsidized electricity imports beginning as early as late-2022. It would be unnecessary and imprudent to provide any additional subsidy for Canadian hydro. Finally, if these resources eventually do need a subsidy, the likely cause will be low energy prices created by other state subsidized resources. Subsidies will continue to beget more subsidies to the ultimate detriment of consumers.

HQ has substantial ability and incentive to choose how to manage its system between the use of imports, exports, and hydro generation to optimize the profitability of its system. In reality, delivered energy may or may not be from non-emitting generating resources. There is considerable evidence within the context of pending proceedings before the Massachusetts Department of Public Utilities (“Department”) and the Maine Public Utilities Commission (PUC) that demonstrates HQ does not have sufficient hydro capacity to ensure incremental clean energy sales into New England.

If, however, Massachusetts decides to proceed with a CES-E, the Department should establish mechanisms that guarantee the Commonwealth achieves the actual carbon emission reductions for which customers are paying. It is also essential that, before deciding to finalize such a regulation, the Department fully evaluate the imputed carbon price to ensure that the program is the most cost-effective way to achieve the emission reductions.

3. Calpine agrees with the general consensus among economists and numerous energy and environmental experts that an economy-wide carbon price is the most cost-effective and efficient way to address greenhouse gas emissions. While there may be understandable objectives underlying various policies on a stand-alone basis, the current piecemeal approach, with numerous individual programs, results in increasingly redundant objectives. Adding layer upon layer of new compliance requirements is not an efficient and transparent carbon policy. Apart from programs such as RGGI and the Part 7.74 trading program, the

combination of policies masks the effective carbon price consumers are paying, and the CES-E would only exacerbate this concern.

Governor Baker recently committed to working with the other New England Governors and ISO-New England to evaluate market-based mechanisms that value the contribution of existing resources. Compared to a CES-E, a market-based mechanism, with a clear price signal that prices the externality of carbon emissions, would allow all resources, including existing resources, as well as consumers to effectively respond to that price and ensure the Commonwealth achieves its greenhouse gas emission reduction targets at the lowest cost.

4. Massachusetts already has by far the most complex RPS program design of any deregulated state in the country, comprised of seven different classes of renewable requirements – each with its own separate set of regulations and guidelines. This makes annual compliance very burdensome for electric suppliers and creates additional administrative costs that are ultimately borne by consumers.

Currently, Massachusetts has the RPS Class I program (which includes SREC I & II programs), RPS Class II, a Clean Energy Standard, a Clean Peak Standard, and the greenhouse gas emission limitations under CMR Part 7.74, as well as participation in RGGI. (And these are in addition to ongoing programs to promote energy efficiency and net metering to subsidize behind-the-meter solar.) Massachusetts is also pursuing additional large-scale renewable procurements under Section 83C. Adding the complexity of additional green attribute compliance requirements makes the Massachusetts market overly complicated and ultimately more expensive.

Calpine does not agree that, as suggested in the Discussion Document, “Market conditions indicate that sufficient supply exists in the regional certificate market to support a small increase in the standard in 2020 and 2021 without triggering the use of ACPs for compliance.” In fact, our experience suggests that the cumulative effect of the layering of these programs is already becoming so complicated for compliance entities that it tends to incentivize the use of Alternative Compliance Payments rather than promoting more environmentally-beneficial commercial decisions.

Further, there is evidence to suggest that the supply/demand balance of MA Class 1-eligible RECs is already extremely tight, such that even a small increase in the regulatory requirements could result in a supply/demand imbalance, causing market prices to rise significantly and further incentivizing the use of Alternative Compliance Payments.² Moreover, such an impact from an increase in the Clean Energy Standard would extend well beyond 2020 and 2021.

5. Power sector carbon emissions in New England have declined by 46 percent since 1990, not including the additional carbon emission reductions that are expected in the near future due

² The REC markets are dynamic with several factors impacting their supply and demand. Therefore, the proposed CES increase must be considered within the context of the broader, regional REC market. For example, policies are being considered in other states within the region that would increase demand for RECs, including pending legislation in New York to limit the export of renewable energy to New England.

to the states' various ongoing public policy initiatives (e.g., offshore wind). These emission reductions occurred despite growing demand for electricity. During the same period, New England transportation sector carbon emissions increased by 9 percent, despite substantial progress on efficiency (gas mileage) and the implementation of emissions technologies. It appears likely that the most efficient and cost-effective opportunities to reduce greenhouse gas emissions at this juncture are to focus on transportation and buildings, rather than increasingly higher-cost efforts in the electric power sector.

6. According to data from ISO-NE, the wholesale market price for electricity has declined by 56 percent over the past 10 years. However, U.S. Energy Information Administration (EIA) data show that Massachusetts has the highest retail rates in New England, and those rates will continue to rise for the foreseeable future as the impacts of 83C, 83D and other programs become reflected in retail rates.

The total cost to retail customers associated with meeting the state's annual RPS obligations has climbed to over \$20/MWh, at a time when the average cost of energy is under \$40/MWh, resulting in an RPS cost to consumers today that is over 50 percent of the cost of energy. Calpine also notes that average Massachusetts wholesale energy prices currently reflect an additional cost of approximately \$2-\$3/MWh due to the combined effect of RGGI and the Part 7.74 programs.

There is a direct correlation between the state's environmental public policy initiatives and the ongoing upward pressure on consumer energy bills, which should be taken into consideration as the Department considers revisions to the CES. A CES-E will simply add to the ratepayer burden of increasing retail electricity prices – without any guarantee that it will reduce the amount of carbon released into the environment.

7. If Massachusetts decides to proceed with developing a CES-E standard it should be a market-based program that allows Massachusetts load to manage its own price and compliance risk. The program should not result in electric distribution companies imposing a non-bypassable charge on retail consumers. Calpine would also encourage the Department to include appropriate grandfathering provisions to protect customers that purchase their electricity under existing term contracts.

Thank you for the opportunity to submit comments on this important issue. Please do not hesitate to contact me at Steven.Schleimer@calpine.com if you have any questions or need additional information.

Sincerely,



Steven S. Schleimer
Senior Vice President Governmental and Regulatory Affairs

cc: William Space

March 29, 2019

By Electronic Mail (climate.strategies@state.ma.us)

The Hon. Martin Suuberg, Commissioner
Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Subj: Comments re: Expanding the Clean Energy Standard

Dear Commissioner Suuberg,

Please accept the following comments by Conservation Law Foundation (“CLF”) in response to the Department of Environmental Protection’s (“DEP’s”) February 20, 2019 request for comment regarding a potential expansion of the 310 CMR 7.75 Clean Energy Standard (“Section 7.75” or the “CES”).¹ CLF’s comments and recommendation, explained in detail herein, are summarized as follows:

Regarding Increasing the Standard

- DEP should increase the CES compliance requirement for 2020 and 2021 as much as current market assessments indicate can likely occur without triggering the use of ACPs for compliance in those years.

Regarding Municipal Utilities

- DEP should revise the CES to require compliance by all municipal utilities (“MLPs”)²—without exception—as Retail Energy Sellers subject to the CES beginning in 2021.
- DEP should allow MLPs to settle for purposes of CES compliance any clean energy attributes they own as the result of an existing ownership interest in, or long-term contracts with, generation that qualify as Clean Generation, or would so qualify but for the vintage requirement in Section 7.75(7)(a)(2).
- DEP should require that MLPs may only claim clean or renewable energy (or related emissions profile) for which they own, and have settled or retired, the associated clean or renewable attribute.
- DEP should require all MLPs to comply with the existing Section 7.75(4)(a)

¹ DEP, *Discussion Document Expanding the Clean Energy Standard* (Feb. 2019) (the “2019 Discussion Document”).

² The term “MLP” herein includes all municipally-owned utilities in the Commonwealth delivering electricity and/or gas including municipal electric departments, municipal light boards, and municipal light plants; *accord id.* at p.1 (defining “MLPs” for purposes of this public stakeholder discussion).

Table A schedule of required clean energy sales no later than 2035. In doing so, DEP should (i) require full disclosure from each MLP regarding its existing portfolio and ability to meet the Table A schedule no later than 2035 and (ii) as might be reasonably needed to so accommodate, establish one or more unique MLP “on ramps” to achieve full compliance by 2035.

Regarding Existing Clean Generators

- Absent evidence that immediate action is necessary in order to ensure the Commonwealth meets its GWSA emissions reduction mandate for 2020, DEP should not implement its proposed CES-E.
- DEP should instead pursue, for implementation as soon as possible, a multi-state or regional, market-based mechanism to procure clean energy (likely together with an expanded CES modified to account for such a market) which is likely to achieve the stated goal for the CES-E more cost-effectively and with greater emissions reductions.
- If DEP determines there is a need to expand the CES to include existing resources before such a new market-based mechanism is in place, it should do so creating an “all available resource” CES (without regard to commercial operation date or location within the New England or adjacent control areas) with compliance obligations that are increased so as to achieve 100% clean electricity in 2050.

COMMENTS

A. DEP Should Increase the CES Compliance Requirement for 2020 and 2021.

CLF appreciates and strongly supports DEP’s proposal³ that it require Retail Energy Suppliers to provide up to 2-percent more clean energy in 2020 and 2021 than is currently required by Section 7.75(4)(a). Doing so has the potential to reduce the Commonwealth’s electric sector emissions in those years significantly, by the equivalent of almost 300,000 metric tons of carbon dioxide (MTCO_{2e}),⁴ which would directly and materially help to ensure that Massachusetts meets its mandatory Global Warming Solutions Act (“GWSA”) emissions limits in those years.

Given the certain emissions reduction benefit of doing so, there is no other issue or information that must be considered in determining whether to increase the standard. DEP should increase the CES obligation in the early-2020s as much as it determines can

³ 2019 Discussion Document at 1.

⁴ See DEP, *Statewide Greenhouse Gas (GHG) Emissions Baseline & Projection Update* (Jul. 2016), App. S (2016 Emissions from Electricity Consumed in Massachusetts) (indicating total electric load of 58,240,744 MWh and a non-biogenic GHG emissions factor of 496 lbs./MWh for MA electricity consumption based on region-wide generation and imports).

likely be supported without triggering the use of ACPs for compliance,”⁵ exempting as necessary existing electricity supply contracts in a manner comparable to that in Section 7.75(5)(d).

B. DEP Should Require MLPs to Comply with the Clean Energy Standard.

CLF here updates and reasserts its comments filed on November 20, 2017 regarding the inclusion of MLPs in the CES:⁶

DEP can and should require MLPs to participate in the CES. DEP’s assessment of the law – that it presently has the statutory authority, pursuant to the GWSA and other laws, to regulate Muni greenhouse gas (“GHG”) emissions and to include MLPs in the CES⁷ – is correct. And unless MLPs are brought into compliance with the GWSA, the Commonwealth will be unable to meet the law’s required 2050 emissions reduction limits.

1. *The CES Should Be Revised to Include MLPs as Retail Energy Sellers subject to the CES.*

CLF strongly supports DEP’s inclusion of all MLPs as Retail Energy Sellers subject to the CES in essentially the same manner – and for the same reasons – that DEP originally proposed in its Dec. 16, 2016 draft of 310 CMR 7.75 (“Section 7.75”). MLPs provide – through self-generation, long-term contract, spot market purchases, or otherwise – almost 15% of the electricity consumed in the Commonwealth.⁸ In doing so, they are directly responsible for the release of millions of tons of GHGs each year into the atmosphere, emissions included in the inventory of “statewide greenhouse gas emissions” required by the GWSA, and which are subject to the GWSA’s mandatory and enforceable emissions reduction limits.⁹ Indeed, the Commonwealth has already

⁵ See DEP, *Options for Amending the CES - Stakeholder Discussion Slides* (March 2019) (“2019 Discussion Slides”) at 6.

⁶ Conservation Law Foundation, *Comments re: Proposed Changes to 310 CMR 7.75 Clean Energy Standard Relating to Municipal Utilities and Existing Clean Generators* (Nov. 30, 2017) (“2017 CLF Comments”) at 2-6.

⁷ EEA/DEP, *Response to Comment on: 310 CMR 7.74 Reducing CO2 Emissions from Electricity Generating Facilities [&] 310 CMR 7.75 Clean Energy Standard* (August 2017) (“2017 Response to Comment”), 18-20 (GWSA expressly includes MLPs and gives EEA and DEP the authority, without exception, to regulate MLPs for purposes of setting emissions levels and limits on the electric power sector); accord *2019 Discussion Document* at 1 (MLP emissions are reported to and included in DEP’s statewide GHG emissions inventory as required by the GWSA).

⁸ See, e.g., MAPC, *Municipal Light Plants in Massachusetts: Spotlight on Clean Energy Initiatives* (July 2016), 2 (MLPs provided at least 13% of the state’s electricity in 2014).

⁹ See *supra* note 5; accord G.L. c. 21N, §§ 1 (defining “statewide greenhouse gas emissions” include without exception “all emissions of greenhouse gases from the generation of electricity delivered to and consumed in the commonwealth”).

determined – correctly – that the state cannot meet its long-term GWSA emissions reduction requirements unless emissions associated with the sale of electricity by MLPs are regulated and reduced.¹⁰ As a result, the CES should be revised to include MLPs as Retail Energy Sellers subject to the CES.

2. *The CES Should Be Revised to Allow MLPs to Settle for Purposes of CES Compliance Certain Clean Energy Attributes They Own.*

Because MLPs are allowed to own generation assets and also frequently enter into substantial long-term contracts for electricity supply, many have existing ownership interests in, or long-term contracts with, generation assets that otherwise would qualify as Clean Generation except for the commercial operating date “vintage requirement” in 310 CMR 7.75(7)(a)(2). Of particular relevance here are the minority ownership interests of some thirty MLPs in the both the Seabrook Station and Millstone Unit 3 nuclear facilities,¹¹ and the ownership interests of certain MLPs in, or existing long-term power purchase agreements with, existing non-RPS hydropower facilities.

In order to fairly accommodate MLPs into the CES, then, CLF recommends that DEP modify the CES to account for such existing ownership interests or long-term contracts in a manner parallel to that proposed by DEP for including in the CES the attributes of energy procured pursuant to the Energy Diversity Act of 2016 (Chapter 169 of the Acts of 2008, Section 83D).¹² That is, DEP should revise the CES as necessary (likely by modifying the Section 7.75(2) definition of “Clean Generation Attribute” as well as Section 7.75(6)(b)(3)) to allow MLPs to settle for purposes of CES compliance any clean energy attributes they own as the result of – and only for the duration of – an existing ownership interest in, or long-term contracts with, generation that otherwise would qualify as Clean Generation except for the vintage requirement in 310 CMR 7.75(7)(a)(2).

Doing so (rather than subtracting such power from MLP compliance

¹⁰ See, e.g., DEP, *Background Document On Proposed New And Amended Regulations 310 CMR 7.00 [&] 310 CMR 60.00* (Dec. 16, 2016), 27 (“In 2050, consistent with the GWSA requirement to address all electricity emissions, MLPs will be required to deliver the same percentage of clean energy as all other retail sellers.”); *2017 Response to Comment* at 19 (“Given the central role of the electric sector in achieving the required GWSA GHG emissions reductions of 25% and at least 80% by 2020 and 2050, respectively, it would be inconsistent with the goals of the entire GWSA scheme to exempt parts of the electric sector from regulations that require reductions in GHG emissions from that sector.”).

¹¹ More than half of the Commonwealth’s MLPs collectively own almost 12% of the Seabrook facility and almost 5% of Millstone Unit 3.

¹² EEA/DEP, *Draft Amendments to 310 CMR 7.75(2) and (6)* (Nov. 3, 2017); see also, CLF, *Comments re: Options for Expanding the CES: The 2016 Energy Diversity Act* (Oct. 30, 2017) (recommending a similar approach).

requirements)¹³ would most consistently and fairly allow MLPs who own clean energy attributes as the result of pre-existing ownership/long-term contracts to participate in the CES and help achieve the emissions reduction goals of the CES without undue administrative cost or burden.

3. *DEP Must Ensure MLPs Stop Deceptive “Double-Counting” Practices Regarding Clean a Generation They Own, But Whose Environmental Attributes They Do Not Retain.*

In response to DEP’s December 2016 proposal to include MLPs in the CES, at least fourteen MLPs argued that they should be given permission to continue “double counting” clean energy from generation they control, but whose environmental attributes they profitably sell and thus no longer own. More recently, the MLPs have asked the Legislature for such permission.¹⁴

But regardless of how MLPs are made subject to the CES, DEP must ensure that this deceptive practice ceases and, going forward, is strictly prohibited. Double counting of environmental attributes directly undermines the Commonwealth’s long-standing and (otherwise) successful Renewable Portfolio Standard program. It directly depresses demand for new renewable generation, by doubling apparent, but not actual, supply. The practice is uniformly considered to be active deception, and is prohibited under federal and state law.¹⁵ Accordingly, DEP must expressly ensure that Massachusetts MLPs are no longer allowed to do so.

4. *In the Absence of Evidence Indicating Specific Need Otherwise, DEP Should Require MLPs to Fully Comply with the CES As Soon As Is Practicable and in Any Case No Later Than 2035.*

MLPs have to-date provided no credible public evidence supporting a conclusion by DEP that they cannot efficiently and cost-effectively comply with the existing 310

¹³ Cf. 2019 Discussion Slides at 9.

¹⁴ See H.2836 (2019) (“An Act relative to greenhouse gas emissions standards for municipal lighting plants”) (proposed Section 11F3/4(c), allowing MLPs to claim as their own self-generated clean energy “regardless of whether the renewable energy credits associated therewith have been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales”).

¹⁵ 16 C.F.R. § 260.15 (“Renewable energy claims.”); *id.* at § 260.15(a) (“It is deceptive to misrepresent, directly or by implication . . . that a service uses renewable energy.”); *id.* at § 260.15(d); *accord, e.g.*, State of Vermont Office of the Attorney General, *Guidance for Third-Party Solar Projects* (available at: <http://www.ago.vermont.gov/assets/files/PressReleases/Consumer/Guidance%20on%20Solar%20Marketing.pdf>) (instructing that it is deceptive to state *or imply* an asset as “renewable,” “clean,” or “green” if the RECs from that asset are sold).

CMR 7.75(4)(a) Table A schedule of required clean energy sales beginning in 2021.¹⁶ To the extent, however, that the ability of certain MLPs to comply with the existing CES compliance schedule for all other Retail Energy Sellers is limited by existing long-term contract commitments, and specific evidence of such limitations is produced, CLF would support DEP’s development of one or more MLP-specific CES compliance schedules based on such evidence so long as any such MLP-specific compliance schedule requires and results in all MLPs meeting the existing 310 CMR 7.75(4)(a) Table A schedule of required clean energy sales by 2035 (i.e., 50% of all retail sales with clean generation attributes)¹⁷ and thereafter.

B. DEP Should Incorporate Existing Clean Generators Using a New Multi-State or Regional Market Rather than the Proposed CES-E; Alternately, DEP Should Expand the CES to Include All Existing Clean Generation Rather than Create a Separate CES-E Program or Carve-Out.

CLF supports and applauds DEP’s proactive effort to expand the CES in support of achieving 100% clean energy by 2050. However, as previously stated,¹⁸ CLF continues to recommend that DEP not pursue its proposed CES-E as a method for doing so. Instead, CLF urges DEP to pursue, for implementation no later than Dec. 31, 2024, a multi-state or regional, market-based mechanism to procure clean energy which is likely to achieve the stated goal for the CES-E more cost-effectively and with greater emissions reductions. However, if DEP determines there is a need to expand the CES to include existing resources before a new market-based mechanism is in place, it should do so creating an “all available resource” CES—without regard to commercial operation date or location within the New England or adjacent control areas—with total program compliance obligations (for all Retail Energy Sellers including MLPs) increased so as to achieve 100% clean electricity in 2050.

1. *There Is Time for and Renewed Regional Interest in Developing a Multi-State or Regional Market Approach.*

While CLF agrees that DEP should be working to “encourage[] retention of

¹⁶ Indeed, it would appear that many MLPs could meet the existing CES compliance schedule today. *See* Comments of John P. Coyle on Behalf of Fourteen MLPs (Feb. 24, 2016), at 10 (indicating at least seven MLPs in 2013 had energy sale portfolios that, in the absence of double-counting violations, would already exceed CES compliance levels for 2018, the inaugural compliance year for the CES).

¹⁷ Because the term of PPAs and other long-term energy supply agreements are typically no more than 15 to 20 years, the vast majority of such agreements in place today likely will have expired by the end of 2034, some 15 years from now.

¹⁸ *See 2017 CLF Comments* at 6-10 (proposed backward-looking, inventory driven CES-E is likely difficult to administer, would be unnecessarily restrictive as to generator location and vintage date, and risks subsidizing existing clean generation that is less efficient and more costly than newer clean energy capable of delivering the same environmental attribute and outcome).

existing non-emitting imports [to] help ensure that new clean energy replaces emitting generation and reduces emissions,”¹⁹ it sees no need for and little value in DEP rushing to implement a program to require the purchase of clean energy credits from, effectively, Seabrook and Hydro-Quebec alone. Neither resource appears likely to retire or change historical delivery patterns in the next several years: Seabrook has just successfully completed a costly, eight-plus year federal relicensing effort to extend its operating life to 2050, and Section 83D contracts currently before the Department of Public Utilities for approval are designed to ensure Hydro-Quebec maintains its recent historical exports into New England as it provides Massachusetts over 9 TWh of newly contracted power annually for the next twenty years.

At the same time, in the wake of Connecticut’s recent 10-year power purchase agreement with Millstone, there is renewed interest among New England states to work together to develop a multi-state or regional mechanism that values the contribution that existing nuclear and other clean energy resources make towards achieving New England’s 2050 climate commitments.²⁰ CLF strongly urges DEP and the Executive Office of Energy and Environmental Affairs to commit leadership and staff energy to materially advancing such an effort rather than to the implementation of what likely amounts to a temporary, CES-E “half-solution.”

2. *A Multi-State or Regional Market Approach Would More Effectively and Efficiently Allow the Incorporation of Existing Clean Generators Into DEP’s Long-Term GWSA Emissions Reduction Strategy.*

A multi-state or regional market mechanism would avoid the flaws that are likely inherent in the proposed CES-E while achieving the stated goals for the program more efficiently and cost-effectively. Such an approach could be designed to unbundle and deliver via a competitive mechanism both the electricity and the desired environmental attributes that all clean generators – existing and new alike – can offer, and to do so at least cost. And it would be consistent with, and materially advance, the important GHG accounting goals DEP is pursuing by delivering to Massachusetts clean energy credits, and the exclusive ownership rights associated with them, for all clean generation that is delivered to and consumed in the Commonwealth through and beyond 2050.

Several forward clean energy market concepts were developed and proposed by New England Power Pool (“NEPOOL”) stakeholders during NEPOOL’s 2016-17

¹⁹ 2019 Discussion Document at 2.

²⁰ New England Governors’ Commitment to Regional Cooperation on Energy Issues (Mar. 15, 2019), <https://portal.ct.gov/-/media/Office-of-the-Governor/News/20190315-New-England-governors-statement-of-cooperation-on-regional-energy.pdf?la=en>

Integrating Markets and Public Policy (“IMAPP”) effort.²¹ Whether administered by the states or by ISO-New England (“ISO-NE”), a forward clean energy market would allow Massachusetts, together with other states in the region, to procure clean and renewable electricity (measured in delivered megawatt-hours) annually in the amounts required to meet its GWSA emissions reductions goals. And by using a forward-looking market mechanism, the Commonwealth would likely: (i) gain the ability to procure such resources at least cost, while retaining or retiring existing resources and attracting new ones;²² (ii) ensure financeability of new projects by allowing for multi-year price lock-ins, (iii) gain, and enjoy the economic benefit of, increased visibility of competitive prices by placing all emissions-reducing resources on equal footing; and (iv) be able to share emissions compliance costs with other participating states fairly and in proportion to each state’s climate and energy laws and regulations.

Based on our experience advocating before public utility commissions across New England, and as a voting member of NEPOOL, we believe that with sufficient political commitment a multi-state (state administered) or regional (ISO-NE administered) clean energy market could be developed and implemented in the next two to three years (to commence trading in 2023). Regardless, the development and implementation of any such clean energy market should be coordinated both with state emissions reduction goals as well as with ISO-NE’s three-year ahead Forward Capacity Auction.²³

3. *An Expanded “Global” CES, Rather than the Proposed CES-E, Would be a Preferable First-Step.*

To the extent DEP determines there is an immediate need to expand the CES to account for the emissions benefits conferred by existing clean energy resources, CLF recommends that DEP strongly consider expanding the CES to include all available clean energy resources without regard to commercial operation date or location within the New England or adjacent control areas. Doing so will allow all available clean generation resources to participate and compete, driving down program compliance costs,²⁴ while

²¹ See, e.g., CLF, Brookfield Renewables, NextEra Energy Resources, and National Grid, *Dynamic Clean Energy Market Proposal* (May 17, 2017) (available at: <http://www.nepool.com/IMAPP.php>).

²² Initial quantitative modeling by the Brattle Group indicates that a forward clean energy market structure would allow Massachusetts to procure the clean and renewable energy it requires for GWSA compliance at a significant savings – on the order of \$200 million annually – compared to current procurement strategies.

²³ As a result, a clean energy market should be fully operational no later than Dec. 31, 2026 so as to be integrated with (or to replace in whole or in part) ISO-NE’s 2027 forward capacity market for 2030 generating resources.

²⁴ We see little risk or issue regarding Alternative Compliance Payment levels which could remain set at levels designed to incentivize the development of new clean energy resources. Through at least 2030, CEC supply in a global CES should far exceed program-driven demand making the likelihood of ACP compliance by Retail Energy Sellers very low.

meeting what appears to be DEP's main concern (as expressed at the March 19 Boston stakeholder meeting) regarding the ability to accurately track and account for clean energy emissions attributes as part of the Commonwealth's GWSA GHG inventory accounting. Because it would engage all clean generation in, or routinely capable of delivering into, New England it would also be a better precursor to viable and competitive multi-state or regional clean energy market.

CONCLUSION

CLF appreciates the opportunity to comment on DEP's proposed changes to the Section 7.75 Clean Energy Standard and applauds DEP's commitment to ensuring the Commonwealth has the right programs in place to achieve Massachusetts' GWSA emissions reduction mandate effectively and efficiently. To that end, CLF recommends that: (i) DEP should increase the CES stringency by at least 1-2% in 2020 and 2021; (ii) DEP should fully incorporate all MLPs into the existing CES program, requiring them to meet the existing Section 7.75(4)(a) Table A schedule of required clean energy sales no later than 2035; and (iii) in lieu of implementing its proposed CES-E, DEP should actively work to develop and implement as soon as possible a multi-state or regional clean energy market for all existing and new clean (and renewable) energy generation.

Sincerely,

CONSERVATION LAW FOUNDATION

By its Attorney



David Ismay
Senior Attorney
Conservation Law Foundation



March 28, 2019

VIA EMAIL TO: climate.strategies@mass.gov

RE: Comments on expansion of 310 C.M.R. 7.75

On February 20, 2019, the Massachusetts Department of Environmental Protection (“DEP”) issued a new stakeholder document (“Stakeholder Document”) seeking input regarding possible options for expanding the Clean Energy Standard (“CES”) at 310 C.M.R. 7.75. ENE is a Chapter 164, Section 47C municipal light plant (“MLP”) cooperative that provides energy management and related services to MLPs and others. ENE appreciates DEP’s efforts to understand how MLPs might fit in the state’s scheme to achieve further emissions reductions while acknowledging a “one-size fits all” approach may not work for MLPs.

The Stakeholder Document suggests that one option could be to apply the CES to MLPs by 2021, but that the CES “could be reduced, or phased in more slowly, in recognition of the fact that MLPs are not subject to RPS or the 2016 Energy Diversity Act and may need more time to comply.” The Stakeholder Document also addressed other modifications for the applicability of CES to MLPs such as permitting certificates from clean generation output purchased under existing contracts to be counted toward compliance and a size threshold that would exclude the smallest MLPs.

As DEP may be aware, a bill was filed on January 18, 2019 by Representative Thomas Golden and Senator Ann Gobi (see HB-2863, attached to these comments) and referred to the Joint Committee on Telecommunications, Utilities and Energy in late February. This proposed legislation addresses many of the same issues raised for discussion in the Stakeholder Document and establishes a “greenhouse gas emission standard” for MLPs that would be administered by the Department of Energy Resources. Importantly, it requires the minimum amount of non-carbon emitting energy sold by MLPs to reach 80% by 2050, and requires MLPs who do not comply to make alternative compliance payments. Many of the concepts contained in the proposed legislation were based on those coming out of the ongoing CES dialogue with DEP.

In light of the proposed legislation, and in consideration of preserving administrative efficiency and resources, ENE respectfully suggests that DEP refrain from taking additional steps on applying CES to MLPs at least until the legislative process is allowed to run its course. In the alternative, ENE suggest that DEP, at most, consider expansion of reporting requirements for MLPs as set forth in the Stakeholder Document, *i.e.*, requiring MLPs to report all their use and ownership of clean and emitting generation, in lieu of the current optional reporting of such generation.



ENE appreciates the opportunity to submit these comments for DEP's consideration.

Sincerely,

John G. Tzimorangas

John G. Tzimorangas
President and Chief Executive Officer
Energy New England

HOUSE No.

The Commonwealth of Massachusetts

PRESENTED BY:

Thomas A. Golden, Jr. and Anne M. Gobi

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to greenhouse gas emissions standards for municipal lighting plants, for the purpose of promoting the Commonwealth's goals of reducing greenhouse gas emissions while acknowledging and preserving the statutory scheme of chapter 164 which places municipal lighting plant operations, finances, and rates under local control.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
<i>Thomas A. Golden, Jr.</i>	<i>16th Middlesex</i>
<i>Anne M. Gobi</i>	<i>Worcester, Hampden, Hampshire and Middlesex</i>
<i>Alice Hanlon Peisch</i>	<i>14th Norfolk</i>
<i>Frank A. Moran</i>	<i>17th Essex</i>
<i>Carolyn C. Dykema</i>	<i>8th Middlesex</i>
<i>John J. Lawn, Jr.</i>	<i>10th Middlesex</i>
<i>Joan Meschino</i>	<i>3rd Plymouth</i>
<i>Tommy Vitolo</i>	<i>15th Norfolk</i>
<i>Michael O. Moore</i>	<i>Second Worcester</i>
<i>Shaunna L. O'Connell</i>	<i>3rd Bristol</i>
<i>Bradford Hill</i>	<i>4th Essex</i>
<i>Patricia A. Haddad</i>	<i>5th Bristol</i>
<i>Susan Williams Gifford</i>	<i>2nd Plymouth</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>

<i>Donald H. Wong</i>	<i>9th Essex</i>
<i>Diana DiZoglio</i>	<i>First Essex</i>
<i>Aaron Vega</i>	<i>5th Hampden</i>
<i>Hannah Kane</i>	<i>11th Worcester</i>
<i>Kimberly N. Ferguson</i>	<i>1st Worcester</i>
<i>Michael F. Rush</i>	<i>Norfolk and Suffolk</i>
<i>Mark J. Cusack</i>	<i>5th Norfolk</i>
<i>Bruce E. Tarr</i>	<i>First Essex and Middlesex</i>
<i>Thomas P. Walsh</i>	<i>12th Essex</i>
<i>Sheila C. Harrington</i>	<i>1st Middlesex</i>
<i>Angelo L. D'Emilia</i>	<i>8th Plymouth</i>
<i>Paul R. Feeney</i>	<i>Bristol and Norfolk</i>
<i>F. Jay Barrows</i>	<i>1st Bristol</i>
<i>Bradley H. Jones, Jr.</i>	<i>20th Middlesex</i>
<i>Stephan Hay</i>	<i>3rd Worcester</i>
<i>Norman J. Orrall</i>	<i>12th Bristol</i>
<i>Bud L. Williams</i>	<i>11th Hampden</i>
<i>Daniel Cahill</i>	<i>10th Essex</i>
<i>James T. Welch</i>	<i>Hampden</i>
<i>Randy Hunt</i>	<i>5th Barnstable</i>
<i>Richard M. Haggerty</i>	<i>30th Middlesex</i>
<i>Louis L. Kafka</i>	<i>8th Norfolk</i>
<i>Donald F. Humason, Jr.</i>	<i>Second Hampden and Hampshire</i>
<i>Lenny Mirra</i>	<i>2nd Essex</i>
<i>Joseph F. Wagner</i>	<i>8th Hampden</i>
<i>Harold P. Naughton, Jr.</i>	<i>12th Worcester</i>
<i>Tackey Chan</i>	<i>2nd Norfolk</i>
<i>Elizabeth A. Poirier</i>	<i>14th Bristol</i>
<i>Kate Hogan</i>	<i>3rd Middlesex</i>
<i>James Arciero</i>	<i>2nd Middlesex</i>
<i>John C. Velis</i>	<i>4th Hampden</i>
<i>John F. Keenan</i>	<i>Norfolk and Plymouth</i>
<i>Daniel R. Carey</i>	<i>2nd Hampshire</i>
<i>Joan B. Lovely</i>	<i>Second Essex</i>
<i>Susannah M. Whipps</i>	<i>2nd Franklin</i>
<i>Paul Brodeur</i>	<i>32nd Middlesex</i>
<i>Patrick M. O'Connor</i>	<i>Plymouth and Norfolk</i>
<i>Harriette L. Chandler</i>	<i>First Worcester</i>
<i>Walter F. Timilty</i>	<i>Norfolk, Bristol and Plymouth</i>

<i>James J. O'Day</i>	<i>14th Worcester</i>
<i>James K. Hawkins</i>	<i>2nd Bristol</i>
<i>James M. Murphy</i>	<i>4th Norfolk</i>

HOUSE No.

[Pin Slip]

The Commonwealth of Massachusetts

In the One Hundred and Ninety-First General Court
(2019-2020)

An Act relative to greenhouse gas emissions standards for municipal lighting plants, for the purpose of promoting the Commonwealth's goals of reducing greenhouse gas emissions while acknowledging and preserving the statutory scheme of chapter 164 which places municipal lighting plant operations, finances, and rates under local control.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 Chapter 25A of the General Laws, as so appearing, is hereby amended by adding the
2 following section:-

3 Section 11F3/4. (a) To assist in ensuring that the commonwealth's greenhouse gas
4 emissions goals are achieved each municipal lighting plant shall establish a greenhouse gas
5 emissions standard for such municipal lighting plant which shall be known as the "Municipal
6 Lighting Plant GGES."

7 (b) Subject to subsection (f) hereof, the Municipal Lighting Plant GGES shall set the
8 minimum percentage of non-carbon emitting energy sold by each municipal lighting plant to all
9 retail end-user customers purchasing electricity pursuant to rates established pursuant to section
10 58 of chapter 164 as follows: (1) seven percent by 2021; (2) forty percent by 2030; (3) sixty
11 percent by 2040; and (4) eighty percent by 2050.

(c) In satisfying the minimum percentages set forth in subsection (b) hereof, municipal lighting plants may either purchase or self-generate non-carbon emitting energy. Energy from resources using the types of technology set forth in subsection (d)(1) below, acquired via ownership interest or purchase pursuant to contracts executed prior to the effective date of this act, regardless of whether the renewable energy credits associated therewith have been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales or used to satisfy obligation in jurisdictions other than the commonwealth, shall qualify in calculating the minimum percentages contained in subsection (b) after the effective date of this act.

(d) For the purposes of this statute, “non- carbon emitting” shall be defined as:

(1) energy from facilities using the following generation technologies, but only to the extent that any renewable energy credits associated therewith have not been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales or used to satisfy obligations in jurisdictions other than the commonwealth: (i) solar photovoltaic; (ii) solar thermal electric; (iii) hydroelectric; (iv) nuclear; (v) marine or hydrokinetic energy; (vi) geothermal energy; (vii) landfill methane; (viii) anaerobic digester gas; (ix) biomass fuel; (x) wind energy; and (xi) any other generation qualifying for Renewable Portfolio Standards under section 11F of chapter 25A or department of environmental protection’s Clean Energy Standard regulation under 310 C.M.R. 7.75 ; or

(2) generation that has net lifecycle GHG emissions, over a twenty-year life cycle, that yield at least a fifty percent reduction of greenhouse gas emissions per unit of useful energy relative to the lifecycle greenhouse gas emissions from the aggregate use of the operation of a

new combined cycle natural gas electric generating facility using the most efficient commercially available technology as of the date of the statement of qualification application to the department of environmental protection for the portion of electricity delivered by the generation unit; or

(3) clean energy credits such as renewable energy certificates derived from each megawatt hour of generation from a resource, that are produced, documented or classified in the NEPOOL GIS according to their ability to meet Renewable Portfolio Standards requirements in the commonwealth or any New England state that have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than the commonwealth; or

(4) generation from resources otherwise determined by the department to qualify as non - carbon emitting hereunder; or

(5) any combination of the foregoing.

(e) A municipal lighting plant shall file, using a form and by the date, specified by the department, demonstrating compliance with subsection (b) hereof. If a municipal lighting plant fails to comply with the requirements of subsection (b), it shall make an one-time alternative compliance payment, to be known as the “Municipal Lighting Plant ACP” for the year of non-compliance, and on the anniversary of each year that said non-compliance continues thereafter, in the amount 0.25 times the Renewable Portfolio Standard ACP set forth in the department’s regulations at 225 C.M.R. 14.00 et seq. per kilowatt hour based on the amount of such deficiency, escalated annually by the Consumer Price Index, but in no event shall said ACP exceed \$0.010 per kilowatt hour. Such Municipal Lighting Plant ACP shall be deposited into a fund which shall be maintained and administered by the municipal light plant and such fund shall be used by

56 the municipal light plant to fund greenhouse gas emissions reduction and related programs in its
57 service territory.

58 (f) Each municipal lighting plant shall file a compliance status report with the
59 Department one year prior to each established date as contained in subsection (b).

60 (g) Compliance with the foregoing subsections shall fully satisfy any and all current and
61 future requirements regarding the commonwealth's implementation of the Global Warming
62 Solutions Act as might be applied to municipal lighting plants, including the provisions of
63 chapter 21N of the general laws, as may be amended from time to time.

March 29, 2019

Ms. Sharon Weber
Deputy Division Director, Air & Climate Programs
Department of Environmental Protection
One Winter Street 7th Floor
Boston, MA 02108

Re: Eversource Comments on Amending the CES

Dear Ms. Weber:

Eversource Energy Service Company, on behalf of NSTAR Electric Company d/b/a Eversource Energy ("NSTAR Electric") and NSTAR Gas Company d/b/a Eversource Energy ("NSTAR Gas"), (collectively "Eversource" or the "Companies"), submits this comment letter to the Massachusetts Department of Environmental Protection ("MassDEP") in response to the February 2019 request for comments from stakeholders on the MassDEP's options for amending the 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 and policies.

The option of adding a CES-Existing ("CES-E") standard has the potential to add significant costs to customers. Based on round numbers, it could cost approximately \$50 - \$70 million in additional costs to customers every year.¹ While Eversource values clean energy as an important part of the energy mix in New England, the Companies also have a public service obligation to provide safe and reliable service at a reasonable cost to customers.² Consistent with this obligation, the Companies need to ensure the costs to ratepayers remain reasonable and fair, and that any changes made to the CES will have as low a customer impact as possible. As the Commonwealth's clean energy

¹ MassDEP is proposing a new standard, CES-E, that would require retail electric suppliers to purchase 15 percent of electricity sales from existing non-emitting sources. As of the end of 2018, total load from investor owned utilities in Massachusetts was approximately 45,000,000 megawatt-hours (source: *Electric Customer Migration Data*, Department of Energy Resources, 2018 Monthly Electric Customer Migration Data). The new standard would require approximately 6,750,000 megawatt-hours to be from existing non-emitting sources (15 percent of 45,000,000 megawatt-hours). With an ACP rate between 10 percent and 15 percent of Class I ACP (currently at \$70.44 for the 2019 compliance year and assumed to be \$70 for this example), the ultimate additional cost to customers is approximately \$50 million (with ACP rate at 10 percent) and \$70 million (with ACP rate at 15 percent) every year.

² Currently, Eversource's Basic Service customers pay for Clean Energy Certificates, Class I, Class II, Class II Waste-to-Energy, APS, Class I Solar I and Class I Solar II Renewable Energy Certificates at a rate of approximately 2.3 ¢ per kilowatt-hour, up approximately 800 percent from less than 0.3 ¢ per kilowatt-hour in 2010. Additionally, customers will pay for Clean Peak Certificates and the Solar Massachusetts Renewable Target Program in the near-future adding additional costs.

and environmental goals become increasingly more stringent, stakeholders, including Eversource, need to continue to work together to ensure that the most cost-effective renewable resources are secured for the benefit of Eversource's customers. If in the event that, as posited by the MassDEP at the March 14 and 19, 2019 stakeholder discussions, there is sufficient existing regional clean energy supply such that the proposed CES-E will not increase costs to customers due to Renewable Energy Certificate ("REC") and Clean Energy Certificate ("CEC") price impacts or Alternative Compliance Payments ("ACPs"), Eversource is supportive of the proposed CES-E as a means of continuing to advance the Commonwealth's clean energy and environmental goals.

The Companies also urge MassDEP to consider simplicity and the ability for retail electric suppliers to administer the CES. Ultimately, predictability helps retail suppliers ensure that all standards are met at the lowest cost to customers.

Increasing the stringency of the CES in 2020

Do you support increasing the stringency of the standard in 2020 and 2021? Is an increase of 1-2% appropriate? Are there any particular issues or information that should be considered in determining whether to increase the standard? How should existing electricity supply contracts be treated if this modification is made?

In its Stakeholder Discussion Document issued in February 2019,³ MassDEP indicates that increasing the standard above the current regulatory requirement of 20 percent in 2020 "could provide additional reductions to help compliance with GWSA [Global Warming Solutions Act] emissions limits." While Eversource supports regulations that will be successful in meeting the standards set forth in the GWSA by reducing emissions to the Commonwealth at the lowest cost for customers, the electricity sector has already achieved significant reductions in greenhouse gas ("GHG") emissions above the 25 percent reduction by 2020 called for in the GWSA. In fact, the electric sector has achieved nearly double the percent reduction by 2020 called for in the GWSA⁴, thanks in part to Renewable Portfolio Standard ("RPS") targets and recent robust legislative mandates for NSTAR Electric and the other Massachusetts electric distribution companies to enter into long-term renewable and clean energy generation contracts.⁵

Eversource supports the Commonwealth's continuing diligent efforts to regarding critical energy and environmental goals. Eversource is also mindful that achievement of those goals must necessarily result from securing the most

³ MassDEP Stakeholder Discussion Document, Expanding the Clean Energy Standard, <https://www.mass.gov/files/documents/2019/02/20/ces-shdd0219.pdf>, February 2019.

⁴ The 1990 baseline of CO₂ for electric generation is 25.6 MMTCO₂e (*Statewide Greenhouse Gas Emissions Level: 1990 Baseline and 2020 Business as Usual Projection*, Massachusetts Department of Environmental Protection, July 2009). In 2016, MassDEP reported that emissions from the electric sector were 14.70 MMTCO₂e (*MA Electricity GHG Emissions by Sector*, <https://www.mass.gov/service-details/ma-ghg-emission-trends>, 2016 Total), which represents over a 40 percent decline from 1990 – nearly double the 25 percent reduction by 2020 called for in the GWSA.

⁵ Sections 83C and 83D of the 2016 Energy Diversity Act and the potential doubling of the Commonwealth's Offshore Wind procurement target in response to the 2018 Act to Advance Clean Energy require significant continued investment in clean energy resources.

cost-effective renewable resources for the benefit of its customers, who are ultimately responsible for the costs associated with the Commonwealth's policies. Massachusetts ratepayers currently pay some of the highest retail prices of electricity in the nation.⁶ Currently, all Massachusetts customers could pay upwards of \$1,000 million annually to comply with the RPS and the CES.⁷ An increase to the CES will impose additional significant costs on Massachusetts electric customers as detailed earlier in these comments. To avoid burdening customers with additional costs, the MassDEP should not increase the CES unless and until it is demonstrated that the electric sector is at risk of non-compliance with its equitable share of the goals set forth in the GWSA. Given the significant reductions that have already been achieved in the electric sector and the long-term mechanisms in place to ensure continued compliance with the GWSA goals, the MassDEP should not increase the CES standard at this time.

However, if an increase to the CES is implemented, Eversource supports exempting from any new requirements existing electricity supply contracts that were entered into prior to the modification. Any modification to those contracts and the Department of Public Utilities-approved rates associated with the contracts would result in additional costs being passed on to customers.

Including municipally-owned utilities

Do you support including [municipal lighting plants] MLPs in the CES? Do you support the phase-in schedule that was proposed in 2016? Do you support exempting the smallest MLPs? How should contractual and ownership relationship with "existing" nuclear and hydro facilities be addressed? Do you support the reporting-only approach, making reporting of clean energy mandatory? Is there any way to accommodate municipal [renewable energy] RE projects that sell RECs without double counting?

Eversource strongly supports including municipalities in the current CES and the proposed CES-E, if implemented. Clean energy goals benefit all Massachusetts residents, and the costs incurred to achieve those goals should be borne equally by electric customers, regardless of whether they are served by an investor-owned utility or a MLP. Given the importance of these goals and the significant costs and efforts needed to achieve them, no entity should be exempt from compliance with MassDEP's regulations.

Existing clean generation resources under the proposed CES-E

As noted in previous comments submitted in response to the CES, Eversource supports allowing all non- or low-emitting resources to qualify for the CES, regardless of commercial operation date. The proposal that MassDEP has used in its latest Stakeholder Discussion Document issued in February 2019,⁸ the CES-E, requires a percent of current electricity sales that must come from existing non-emitting resources above and beyond the existing

⁶ *Average Price of Electricity to Ultimate Customers by End-Use Sector*, U.S. Energy Information Administration, Data for December 2018, released February 27, 2019.

⁷ As noted in footnote 1, total load from investor owned utilities in Massachusetts was approximately 45,000,000 megawatt-hours at the end of 2018. Assuming all investor owned utilities pay the same rate as Eversource Basic Service customers of 2.3 ¢ per kilowatt-hour, as explained in footnote 2, the potential annual cost to Massachusetts ratepayers is upwards of \$1,000 million.

⁸ MassDEP Stakeholder Discussion Document, Expanding the Clean Energy Standard, <https://www.mass.gov/files/documents/2019/02/20/ces-shdd0219.pdf>, February 2019.

standards. As noted above, the CES-E has the potential to add significant additional costs to ratepayers, approximately \$50 - \$70 million per year.⁹ While this has the potential to encourage the sale of these attributes to Massachusetts, there is no guarantee that another jurisdiction would not take the same approach and provide a more generous offer. For example, Connecticut is taking a similar approach in its current zero carbon contract with Millstone. Since by definition these non-emitting resources are already under commercial operation, Massachusetts should avoid engaging in a bidding war for these resources as this will simply increase costs for Massachusetts customers without actually providing incremental or additional clean energy generation.

Eversource also urges MassDEP to make this process as simple as possible to administer and to predict. Retail electric suppliers set their rates based upon known costs that can be hedged efficiently. Any uncertainty increases costs that are ultimately passed on to customers.

Eversource offers the following specific comments on the CES-E:

- *Is a stringency of approximately 15 percent of current electricity sales reasonable? Should the standard be expressed in percentage or MWh?*
Eversource supports a stringency level that is reflective of the historical average that is used in MassDEP's inventory calculation, expressed as a percent.
- *Are the location and vintage eligibility requirements reasonable?*
Eversource encourages eligibility requirements that support capturing the existing clean energy generation in the historical average used in MassDEP's inventory calculation.
- *Should there be special provisions to address the possibility of a significant CES-E retirement that would affect the CES-E market, or attempt to limit the number of MWh an individual generator may contribute in a year?*
Based on the Companies' understanding, the purpose of the proposed CES-E is to ensure existing clean energy generation currently accounted for in MassDEP's inventory calculation continue in the future. Accordingly, it is not necessary to limit the individual generator's contribution in a given year since it is the clean energy generation, not the origination of that generation, that is important. Allowing flexibility in compliance will ensure retail electricity suppliers the requisite ability to adapt in order to ensure the lowest cost to customers.
- *How could smaller hydro generators in NH and MA be included without encouraging certificate "shuffling"?*
Currently there is a mechanism for existing small hydro to value its clean energy generation in the form of MA Class II Renewable Energy Credits ("RECs"). Eversource does not support additional incentives for small hydro generators.
- *If municipalities are added to the CES, should they be subject to the CES-E?*

⁹ See calculation in footnote 1.

As noted above, Eversource fully supports including municipalities in all aspects of the CES, including the proposed CES-E.

- *ACP rate*

As an initial matter, it is important to recognize that paying the Alternative Compliance Payment ("ACP") in any circumstance does not provide extra clean energy attributes to Massachusetts customers. The ACP rate should be set with the recognition that Massachusetts customers are paying some of the highest electricity costs in the nation. Eversource recommends a very low ACP rate for the proposed CES-E in recognition that this program is for existing resources.

- *Qualification*

The requirements for qualification should be such to ensure deliverability of clean energy generation to the Commonwealth through use of the NEPOOL GIS unit-specific tracking.

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 for meeting the Commonwealth's important energy and environmental goals. Eversource is committed to serving as a clean energy catalyst in the region, pursuing Company-owned solar, storage and electric vehicle infrastructure.

Should you have any comments or questions, please contact Katherine Wilson, (781) 441-3789.

Sincerely,



Jeffery S. Waltman

Manager, Planning and Power Supply



March 29, 2019

FirstLight Power Resources Comments: MassDEP Stakeholder Discussion Document Expanding the Clean Energy Standard 310 CMR 7.75

Company Overview

FirstLight Power Resources (FirstLight) is one of the largest providers of hydropower and energy storage in New England. Our conventional and run-of-river hydropower facilities are located in Massachusetts and Connecticut and produce over 690,000 MWh of emissions-free generation annually. We also own and operate Northfield Mountain pumped hydro storage station, which is the largest energy storage facility in New England capable of providing 8,729 MWh of stored electricity on a daily basis. Our facilities represent over \$1.2 billion of private investment in the region, provide 120 high quality jobs, and pay more than \$12 million per year in local property taxes.

CES-E Program Should Be Designed to Maintain Existing Clean Energy Resources

We appreciate the Massachusetts Department of Environmental Protection's (MA DEP) acknowledgement of the value that existing clean energy resources bring to the Commonwealth. Conceptually the CES would ideally create an environment that fosters the continued success of both new and existing clean energy resources, which are necessary to attain Massachusetts' carbon reduction goals. A global CES that includes both new and existing clean energy resources would provide the Commonwealth with the mechanism needed to ensure that these resources are both developed and maintained into the future.

The proposed CES-E concept however would not only bifurcate new and existing resources into separate tranches, it would also preclude a large number of existing clean energy resources from participating in the program entirely. Limiting the CES-E program in such a manner would create a significant competitive disadvantage for many existing resources needed to maintain Massachusetts' progress towards achieving its greenhouse gas emissions goals. Most notably the proposed CES-E construct would seem to preclude resources located within the Commonwealth from participating in the program and place these local resources at a competitive disadvantage to others located outside of Massachusetts.

Recommendations

FirstLight has been a strong advocate for maintaining equitable competitive solutions to achieve desired public policy outcomes and we view the CES as a viable method to further incentivize and maintain the progress made in decarbonizing the electric sector. However; FirstLight views the segregation of existing clean energy resources as inappropriate and potentially harmful to the achievement of the Commonwealth's GHG reduction goals. FirstLight urges the MA DEP to consider adopting a global CES program that allows both new and existing resources to participate. Short of instituting a global CES program, FirstLight recommends the Department to eliminate requirements that would limit participation in the CES-E program to the resources deemed eligible under the proposed qualifications.

Len Greene
Director, Government & Regulatory Affairs
FirstLight Power Resources
Len.Greene@firstlightpower.com

Held, Jonathan (DEP)

From: Strategies, Climate (DEP)
Sent: Thursday, March 21, 2019 12:20 PM
To: Garfinkle, Jordan (DEP)
Subject: FW: Request for Stakeholder Input on Updating the Clean Energy Standard

From: Mary Gard
Sent: Thursday, March 21, 2019 12:19:21 PM (UTC-05:00) Eastern Time (US & Canada)
To: Strategies, Climate (DEP)
Subject: Re: Request for Stakeholder Input on Updating the Clean Energy Standard

William Space
Department of Environmental Protection
One Winter Street
Boston, MA
02108

Dear Mr. Space:

I am writing today to request that the DEP revise the Clean Energy Standard rules to include Municipal Light Plants. I am a citizen of an MLP town (Wellesley) and have followed this issue for many years. While Wellesley is making great strides in reducing its emissions, it has only been on a voluntary basis, and there are many MLP towns that are doing very little. We will never achieve our state's goals as put forth in the Global Warming Solutions Act if we don't include everyone.

Of the three options for MLP inclusion that you have outlined in your proposal, Option #3 is best, as it would maintain the same definition of clean energy as all other retail sellers and would not allow for old Nuclear and Hydro to count in the future (Niagara Falls, Seabrook, Millstone) . MLPs could increase their renewable portfolio incrementally, eventually achieving 80% in 2050. (Many MLPs could comply with current RPS standards simply by retiring their RECs, which they have not been required to do.)

Option #1, with a slower timeline for MLPs and special accommodations, misses the mark by going far too slowly, and Option #2, a monitoring only approach, is completely unacceptable, given what we know now is a very tight deadline for avoiding complete climate catastrophe.

And finally, there should be no exemptions based on the size of an MLP. That undermines the whole point of including everyone. We have learned that any small town can install solar or wind, enter renewable contracts, or work through large industry associations, Energy New England and Massachusetts Municipal Electric Association, to enter obtain clean power. At this point, there are no excuses.

We want our town, and all MLP towns, to be part of the solution, not a roadblock. Thank you for your consideration in this matter.

Mary Gard

Held, Jonathan (DEP)

From: Strategies, Climate (DEP)
Sent: Saturday, March 02, 2019 11:09 PM
To: Garfinkle, Jordan (DEP)
Subject: FW: Update to the CES- Citizen Comments

From: James Gorman
Sent: Saturday, March 2, 2019 11:08:39 PM (UTC-05:00) Eastern Time (US & Canada)
To: Strategies, Climate (DEP)
Subject: Update to the CES- Citizen Comments

Dear Mass DEP,

I am a resident of Wellesley, MA, which has an MLP. I am writing in favor of requiring MLPs to meet the CES, at the same time schedules as investor owned utilities as required in the 2016 proposal. They should maintain the same definition of clean energy as all other retail sellers. I personally do not think that old contracts providing nuclear and hydro power should count. The CES renewable portfolio standard should aim to promote the generation of new renewable energy capacity and power. Further, as a bridging mechanism, MLPs can readily comply with a yearly increase through the purchase of "clean energy credits" (renewable energy credits, or RECs). I support increasing the standard from 20% to 22% in 2020 in order to ensure we meet our Global Warming Solutions Act, and I support requiring MLPs to catch up with IOUs as fast as possible, reaching 80% by 2050. This approach will ensure that all Municipal Light Plants will make progress on their portfolios in a timely manner and not be able to maintain their status quo by relying on legacy nuclear portfolios. It is possible for them to do this because the Clean Energy percentage is already much lower than the IOU's, and only increases at 1/30 of the IOU's requirement each year, a very achievable standard. Further, many MLPs could meet the 2021 goal by simply retiring RECs for energy they have contracted with. This is the best way to make sure that MLPs are contributing to the progress we make on renewables along with everyone else. While Wellesley is likely to be in compliance with this schedule at least in the 2020s, I believe that just the likelihood of impending legislation to this effect has contributed to Wellesley making the decision to retire its RECs. It is important that MLPs across the state be held to a common minimum commitment. This makes it much easier for each MLP to make the difficult decisions.

Respectfully yours,

James Gorman

Member, Wellesley MLP Ad Hoc GHG Emissions Reduction Advisory Committee



March 29, 2019

Martin Suuberg, Commissioner
Department of Environmental Protection
1 Winter Street
Boston, MA 02108

--- Submitted electronically via climate.strategies@mass.gov

Re: Comments – Expanding the Clean Energy Standard

Dear Commissioner Suuberg:

Green Energy Consumers Alliance (formerly Mass Energy) is a 501(c)3 organization based in Boston. Our mission is to harness the power of energy consumers to speed the transition to a low-carbon future. We advocate at the state level for policies that will reduce greenhouse gas (GHG) emissions and that help people gain access to and benefit from clean energy technology. Green Energy Consumers Alliance supports the CES as an important means of curbing electric sector emissions; one capable of helping to transform the composition and emissions profile of our regional electricity supply. This is especially true if the CES were to be expanded.

Thank you for the opportunity to offer comment regarding potential expansion of 310 CMR 7.75 Clean Energy Standard (CES). Green Energy Consumers Alliance supports increasing stringency of the standard and extending compliance to municipal light plants (MLPs). We offer the following for your consideration:

Increasing the standard

Green Energy Consumers Alliance supports increasing the stringency of the CES in 2020 and 2021. An increase could provide additional GHG emission reductions needed to comply with the Global Warming Solutions Act (GWSA). If sufficient resources exist to meet the increase of 2% without triggering the use of alternative compliance payments, as was indicated in the background information, then DEP should increase stringency in those years by 2%.

Municipally-owned utilities

Green Energy Consumers Alliance strongly supports requiring ALL MLPs to comply with the CES. Smallest MLPs should not be exempt and reporting of clean energy should be required in all instances. MLPs currently serve 50 communities in the Commonwealth, comprising 14% of electricity consumed. Some MLPs also possess generation facilities that emit GHGs. It is simply not possible to achieve GWSA compliance in the electric sector without addressing the emissions contributed by MLPs. They must be made to participate in meeting the efficiency and clean energy standards required of retail electricity suppliers.

greenenergyconsumers.org

Boston: 284 Amory Street, Boston, MA 02130 | Phone: 800-287-3950
Providence: 2 Regency Plaza, Suite 8, Providence, RI 02903 | Phone: 401-861-6111

As noted in comments submitted by Green Energy Consumers Alliance in 2017, we support a phase-in schedule for MLPs, allowing them to gradually displace fossil fuel resources with clean energy. However, that schedule should be based on what is required to achieve sufficient GHG emission reductions and should exclude attributes of any resources owned or contracted for by the MLPs whose renewable attributes are being sold to or claimed by other entities for RPS compliance. Double-counting green attributes is misleading and does nothing to reduce emissions or combat climate change. Some MLPs are already working to aggressively reduce GHG emissions (e.g., Concord) and have demonstrated a desire to rapidly decarbonize. This reinforces that MLPs can and should be able to comply with state clean energy requirements.

We thank the Department for welcoming additional feedback.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Eugenia Gibbons', written in dark ink.

Eugenia Gibbons, Policy Director

617-524-3950

eugenia@greenenergyconsumers.org



March 29, 2019

Martin Suuberg, Commissioner
Department of Environmental Protection
1 Winter Street
Boston, MA 02108

--- Submitted electronically via climate.strategies@mass.gov

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Eugenia Gibbons, Policy Director

617-524-3950

eugenia@greenenergyconsumers.org



Engineering & Utilities

March 29, 2019

By Electronic Mail (climate.strategies@state.ma.us)

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

RE: Expanding the Clean Energy Standard, 2019 Options for Amending the Clean Energy Standard (CES)

Thank you for the opportunity to provide comments on the Department of Environmental Protection's (DEP) February 20, 2019 request for comment regarding a potential expansion of the 310 CMR 7.75 Clean Energy Standard (CES). As a large end user of electricity, a licensed competitive self-supplier in Massachusetts, and an organization with strong commitments to clean energy, the Clean Energy Standard has many impacts on Harvard University.

We understand DEP is currently seeking stakeholder input on three aspects of the CES, 1) increasing the stringency of the standard, 2) applying the CES to municipally-owned utilities, 3) and including existing clean generation resources.

Increasing the stringency of the Standard

No, DEP should not implement a short term increase in the stringency of the standard for 2020-2021 by 1-2%.

While Harvard University generally supports the Commonwealth's efforts to comply with the Global Warming Solutions Act (GWSA), it is unclear if such a short term stringency increase would meaningfully achieve any *actual* additional emission reductions to the atmosphere and/or promote development of new clean energy resources. CES program requirements implemented to achieve the 25% emission reduction by 2020 relative to the 1990 baseline should be clearly tied to actual emission reductions to the atmosphere. Triggering Alternative Compliance Payments (ACPs) should absolutely be avoided, as requiring electricity suppliers to comply with the CES via ACPs results in no additional emissions reductions. Prior to any short-term increase in CES stringency, the DEP should develop a strong understanding on what such an increase would do to REC prices. The expected 2020-2021 ACP value is more than double the current Class I REC market prices for 2020, hence a significant cost could still be incurred without triggering ACPs. These ratepayer cost impacts would need to prove to be a cost effective means to achieve *actual* additional emissions reductions and not simply a mechanism to increase the non-emitting certificates applied to the Commonwealth's 2020-2021 GHG inventory.

Applying the Standard to municipally-owned utilities

Yes, DEP should revise the CES to require compliance of all municipal utilities, with no exceptions, as Retail Energy Sellers subject to the CES.

Applying the program requirements of the GWSA equally to all sectors of the Commonwealth enables the most equitable, cost effective approach to reducing GHG emissions. DEP has the authority to regulate municipal utilities, and absent their compliance with the CES, the Commonwealth cannot achieve the 2050 emission reduction limits. For these reasons, Municipalities should be included in the CES as soon as possible.



Engineering & Utilities

In applying the CES to municipal utilities, the DEP must ensure that municipal utilities stop their current practice of “double-counting” clean generation they own but whose associated environmental attributes (e.g. RECs) they do not own.

Including existing clean generation resources in the Standard

No, DEP should not implement its proposed CES-E.

There is no clear evidence a CES-E is currently necessary in order to prevent retirement of the Seabrook nuclear facility, loss of energy imports delivered from Hydro-Quebec, nor any other existing non-emitting energy resource. Furthermore, there appears to be no evidence that the CES-E is necessary to ensure the Commonwealth meets its GWSA emissions reduction mandate for 2020. Existing non-emitting generation and imports are important resources and their retention should be encouraged in so long as such efforts are cost effective GHG reduction strategy relative to new clean generation resources or other available GHG mitigation opportunities. In place of the proposed CES-E, the DEP should instead begin to explore a multi-state or regional, market-based mechanism to procure clean energy which is likely to achieve the stated goal for the CES-E more cost-effectively and with greater emissions reductions. Several such forward clean energy market concepts were developed and proposed by New England Power Pool stakeholders during the 2016-17 Integrating Markets and Public Policy effort.

Please contact me at (617) 496-7225 or at michael_macrae@harvard.edu if you have any questions regarding this submittal.

Sincerely,

Michael Macrae, PhD
Energy Analytics Manager



March 29, 2019

Via email to climate.strategies@state.ma.us

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

Dear Massachusetts Department of Environmental Protection (Mass DEP),

H.Q. Energy Services (U.S.) Inc. ("HQUS"), the U.S. subsidiary of Hydro-Québec ("HQ") in the United States, appreciates the opportunity to provide comments on the ongoing discussion regarding amendments to the Clean Energy Standard and creation of a Clean Energy Standard for existing clean energy generation ("CES-E"). As further set forth below, HQUS supports the creation of a CES-E and is committed to working with the Commonwealth on a design that can meet the state's objectives.

Hydro-Quebec Background:

HQ is one of the largest suppliers of clean energy in North America. HQ generates, transmits and distributes energy within the province of Québec and exports electricity to external markets in Northeast North America including New England. Over 99 percent of Hydro-Québec Production's¹ electricity generation supply is produced from a hydropower system of more than 62 geographically diverse stations that comprise over 37,000 MW of capacity². This hydropower fleet is supported by a system of 27 reservoirs that allows for 176 TWh of electricity storage (greater than New England's total annual electricity usage). An extensive network of over 21,000 miles of transmission reliably and efficiently delivers electricity to customers within Québec and to external markets.

¹ Hydro-Québec Production generates power for the Québec market and sells its surpluses on wholesale markets.

² Besides its hydro fleet, HQP owns one gas-fired power plant that is used as a back-up generator.

Hydropower resources developed in Québec and operated by HQ have a greenhouse gas (“GHG”) emissions profile similar to wind and solar, and significantly less than fossil fuel generation³. Deliveries from HQ contribute significantly to Massachusetts’ existing clean energy supply, represent approximately 74% of imports into New England, and serve approximately 12.6% of New England’s annual electricity demand⁴.

Do you support implementing a CES-E Concept?

HQUS supports the efforts of the Mass DEP to establish a program (the CES-E) to maintain historic levels of clean energy imports into the state. As is reflected in the stakeholder discussion document, Hydro-Québec has a history of delivering significant quantities of clean energy into New England -- and Massachusetts would like to maintain its share of these deliveries, and other existing clean energy resources into the future.

More importantly, HQUS supports Massachusetts’ efforts to ensure that resources procured under the CES and RPS program replace emitting resources and do not displace existing non-emitting generation. Existing clean energy resources are very likely to be the most cost effective resource available for achievement of clean energy and climate goals. In this regard, we believe it is productive for Massachusetts to take this step now as the state, and other jurisdictions, face increasingly stringent carbon reduction mandates in the coming years.

Are the proposed eligibility requirements reasonable with respect to vintage?

HQUS urges that the CES-E not include a vintage date eligibility requirement. Existing resources which have historically provided Massachusetts with low carbon electricity are equally as important to the state’s GWSA mandates as newer resources. Loss of these resources would be detrimental to the state’s decarbonization efforts and require the acquisition of new, more costly, clean energy resources to prevent backsliding. Additionally, inclusion of these resources will increase competition in the program, ensuring that the state’s carbon abatement efforts are achieved at the lowest cost to consumers.

Calculating the Quantity Requirement- Is a stringency of approximately 15% of current electricity sales reasonable?

³ Hydro-Québec, Environnement et développement durable; CIRAIG; Tirado-Seco, 2014, Comparing Power Generation Options and Electricity Mixes, 48 p., annexes. (Study available on Hydro-Québec’s website at <http://www.hydroquebec.com/sustainable-development/documentation-center/pdf/comparing-power-generation-options-and-electricity-mixes.pdf>).

⁴ ISO-NE Resource Mix, updated 1/18/19, <https://www.iso-ne.com/about/key-stats/resource-mix>

The 2019 Mass DEP stakeholder discussion document proposes setting a CES-E standard of 15%, “consistent with recent historical data”. A 15% standard is significantly lower than the initial iteration of the CES-E program proposed in the *2017 Stakeholder Document: Options for Expanding the CES* (“The 2017 Proposal”) - which was, itself, already lower than actual historic deliveries. The 2017 Proposal used the 2012 Massachusetts Greenhouse Gas Emission Inventory which showed that approximately 34% of Massachusetts electricity was served by existing non-RPS clean energy resources, including 19% Large Hydro Imports from Canada, 10% from Pilgrim Nuclear, and 5% from Seabrook. As stated in HQUS’ comments⁵ on The 2017 Proposal, the GHG Inventory counts only generation delivered over direct interconnections from the Hydro-Québec control area. This methodology excludes a significant amount of Quebec-sourced clean energy (several TWh/yr.) that is wheeled into New England through the New Brunswick and New York control areas.

HQUS would caution that in order to ensure the programs’ goal of maintaining and maximizing historical clean energy deliveries into Massachusetts, the program should include the most recent import and production data available. Imports into New England and output of specific generators are not static over time. By using older data, the Commonwealth may inadvertently set a quantity requirement that is out of date with the performance of historical resources. In the case of Hydro-Québec, exports to external markets, including New England, have increased over time, but are not secured into the future.

HQUS urges MassDEP to use the most recent production & import data available, and to consider the Quebec-sourced clean energy deliveries wheeled through other control areas in its formulation of a CES-E standard - these deliveries can be verified and traced back to their generating source using industry accepted tracking mechanisms. Doing so will ensure that the most cost effective clean energy resources continue to operate in the region and that the cost of decarbonization is achieved using as diverse of a set of resources as possible.

Include an ACP option, based on 15% of the RPS Class I ACP amount

The 2019 MassDEP stakeholder discussion document proposes setting an ACP equal to 15% of the MA RPS Class I ACP, currently set at \$70.44 for compliance year 2019. While HQUS believes that an increase over the 10% of ACP included in The 2017 Proposal is necessary, we would comment that other regions seeking to retain existing non-emitting resources have proposed compensation significantly greater than was proposed in the 2019 document. For example, in New York, legislation⁶ which would compensate existing generators at 75% of the value of a Class I REC for that class year is under serious consideration.

HQUS urges MassDEP to be cognizant of other programs in the region to retain existing clean energy resources, these programs are likely to represent efforts to retain similar resources which face similar challenges/decisions regarding their future deliveries.

⁵ HQUS 2017 Comments <https://www.mass.gov/files/documents/2019/02/20/ces-combined.pdf>

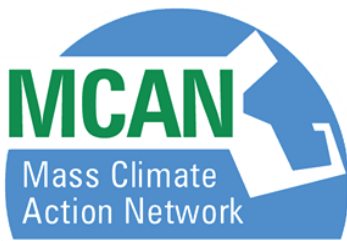
⁶ A4294/S23 An Act in relation to maintaining the continued viability of the state’s existing large-scale, renewable energy resources, passed the NY Senate in February 2019 and is currently under consideration in the Assembly.

Conclusion

HQUS supports the establishment of a CES-E program in Massachusetts to retain existing, cost effective, non-emitting resources in the region. HQUS appreciates the opportunity to comment at this time, and welcomes continued stakeholder discussion opportunities to ensure that any program design is consistent with the most recent imports & production data and provides an incentive level sufficient to maintain and maximize historical deliveries.

Sincerely,

Stephen Molodetz,
Vice President- HQUS



Massachusetts Climate
Action Network

36 Bromfield St.
Suite 306
Boston, MA 02108
www.massclimateaction.net

29 March 2019

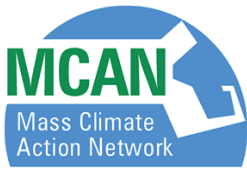
To the Department of Environmental Protection,

Regarding including Municipal Light Plants in the Clean Energy Standard 310 C.M.R. 7.75

At Massachusetts Climate Action Network we recently released our report card on the clean energy and climate practices of all 41 of the Municipal Light Plants (MLPs) in Massachusetts. During the research process, we calculated the MLP supply portfolios and included the amounts of non-emitting and renewable energy in each of them. This report can be found at bit.ly/mlpreport. We used the same methodology that the Department of Environmental Protection uses for its annual greenhouse gas inventory with data from the year 2017. We have also convened five summits of MLP customers who want to see their Municipal Light Plant at minimum do as well on renewable energy as the investor-owned utilities (IOUs). We have been in touch with the experiences and local policy issues of MLP customers on the ground. This puts us in a unique position to comment based on both significant data analysis and a grassroots perspective. Please accept these comments in answer to your request for input regarding including MLPs in the Clean Energy Standard (CES).

Including MLPs: We support including MLPs in the CES in the most ambitious way possible as noted in our comments from 2017. Eleven other states across the U.S. include Municipal Light Plants in their Renewable Portfolio Standards: California, New York, Washington, Oregon, Colorado, Minnesota, Wisconsin, Indiana, Michigan, North Carolina and Vermont. Including MLPs in the clean energy standard is the bare minimum. If we are to be a leader on clean energy but are behind eleven states in this area, then we need to rethink our identity and our policies. Exempting 15% of our electricity supply leaves significant solutions off the table that could make or break our ability to meet our GWSA goals.

Phase-in schedule: We support a more ambitious phase-in schedule than the one proposed in 2016 as it is imperative for climate change and because it is possible. We support Conservation Law Foundation's comment on meeting the same percentage as the investor-owned utilities by 2035 or keeping MLPs to the same schedule as IOUs. The MLPs are able to purchase clean energy certificates to match a percentage of their portfolios without breaking any long term nuclear or fossil fuel contracts.

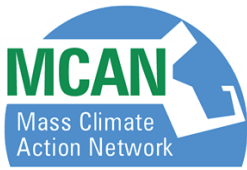


Second, it is not true that MLPs have too much ownership to be nimble with their portfolios as most MLPs actually purchase a majority of their portfolio as non-fuel specific energy from the grid. This is either through the day-ahead spot market or multi-year hedges with non-fuel specific suppliers such as NextEra. It is not until 2030, if MLPs are required to follow the current IOU goals for the CES, that two MLPs would have to purchase voluntary RECs or CECs to cover their long-term ownership with nuclear. This is because the ownership percentages for nuclear and old hydropower do not make up more than fifty percent of most MLPs portfolios. Many of the current non-fuel-specific long-term power contracts that MLPs have will have expired by 2021, as they are only one to five year contracts. Additionally, we know of a clause in at least one contract that allows for a 10% reduction in off-taking per year until the end of the contract. There should be investigation into clauses in these contracts regarding changes in state regulation. Essentially, if there is a will, there is a way and the data has shown that there isn't much of a will by the MLPs without legal requirement.

Third, Seabrook's license currently expires in 2030 and the license extension has been delayed due to safety concerns. MLPs should be advocates for retiring that power plant so that they can end their ownership obligation and use that room in their portfolio to invest in renewable energy to meet the Clean Energy Standard.

Ideally, the clean energy standard should meet the same schedule for MLPs and IOUs to avoid confusion with the public, MLP customers, elected officials, and state agencies. It is already extremely confusing for MLP customers to understand what their MLP is providing them. This confusion undermines the structure of customer ownership because local decisions cannot be made without full and accurate understanding of the MLPs practices regarding clean energy. Keeping one standard for all electricity benefits the MLP structure by making it easier for elected light board members and customers to understand the process and make informed policy decisions. Further, making a separate schedule would undermine progress and commitments that some MLPs have already made. For example, Belmont has voluntarily made a policy to meet the investor owned utility schedule. Creating a separate and slower schedule for MLPs would undermine Belmont's progress. When Belmont says it is going to meet the CES, it becomes confusing as to whether it is going to meet the 6% by 2021 version or the 22% by 2021 version.

The MLPs that retired enough RECs as of 2017 to meet and exceed a 6% 2021 goal are, Belmont, Concord, Hingham. Two more, Wellesley and Holyoke will have retired enough RECs to meet that goal by 2018 according to conversations with their staff. Concord and Belmont have further made commitments to purchase more voluntary RECs and change their portfolios to meet or exceed the Clean Energy Standard. All of these MLPs did so without raising their kWh rates.



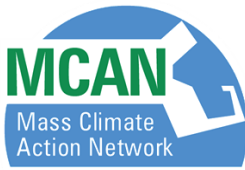
In conclusion, five MLPs will already be meeting the 6% version by 2018, 24 more could immediately meet that standard in 2019 by retiring or purchasing RECs associated with power purchases, and that leaves only 11 more MLPs that will have to make any significant changes in two years to meet a 6% minimum with IOU standard definition of clean energy. If Niagara Falls is included, that number drops to only one MLP, Mansfield. If old nuclear is included, no MLP would have to change its portfolio at all to meet a 6% standard by 2021. Further, if nuclear is included only 16 would have to change their portfolios outside of retiring RECs in order to meet the 2025 goal of 30% for the investor-owned utilities. Therefore, if nuclear or hydro are included it is even more imperative to keep MLPs on the same schedule as the IOUs.

Exempting the smallest MLPs: No, we do not support exempting the smallest MLPs as there is no reason they cannot comply. In fact there is evidence to show that small MLPs can participate in the solution. If old nuclear or hydro is included, all four of the smallest MLPs (below 2,000 customers) already meet the 2021 goal of 6%. If old nuclear and hydro are not included, Paxton would only have to retire its RECs to get to 11% CES qualified. For future compliance, both Energy New England and Massachusetts Municipal Wholesale Electric Company have capacity to assist small MLPs with any contracts, REC purchases, or reporting requirements to meet the standard.

Contractual ownership: Our position is that MLPs should meet the same standards as the Investor Owned Utilities and should not have their own definition of clean energy based on contractual ownership of nuclear. Allowing MLPs to rely on old nuclear ownership would not sufficiently advance the CES goal of reducing CO₂ emissions from power plants in Massachusetts because it would allow at least $\frac{2}{3}$ of MLPs to continue to do nothing until 2030. For example, under the 2016 proposed schedule approximately two thirds of MLPs would not have any CO₂ reductions in their energy supply from now until 2030 if old nuclear were counted.

Another possible approach to this problem could be that MLPs are required to add a certain percentage of CES qualified energy every year until they meet 100% non-emitting energy. So instead of a 22% CES qualified total by 2021, it could be a 22% additional CES qualified energy. This would mean that the two MLP's with 80% nuclear ownership would be required to improve their portfolios, therefore contributing to the Commonwealth's stated goals, but could stop once they have added 20% so that they wouldn't have to infringe on their nuclear contracts.

Reporting-only approach: No we do not support this approach. Although we wholeheartedly support MLPs being required to report, it is not enough to ensure MLPs move forward with the rest of the state. This is further evidenced by the fact that MLPs are currently required to report financial returns annually to the Department of Public Utilities, but lack of enforcement has allowed two MLPs to not submit returns since 2013 and 2014.

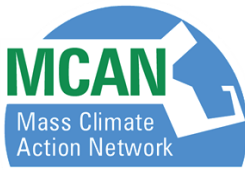


Double counting: It is absolutely not possible to allow MLPs to sell RECs without double counting and should not be done. This is for five reasons: 1) it is considered deceptive and unfair by federal law, 2) it would undermine the regional energy tracking and incentive system, 3) MLPs are being judged as retail sellers not as developers, 4) investor-owned utilities participate in the same kinds of long-term renewable contracts as MLPs, and 5) MLP REC sales likely contribute to the currently oversaturated REC market. An entity at the executive branch should further be in charge of enforcing the double counting issue with Municipal Light Plants to their customers. [Double counting qualifies as unfair or deceptive](#) under [section fifteen of the Federal Trade Commission's Act 15 U.S.C. § 45](#) and [has been considered false marketing in Vermont](#) in 2015 by the AG.

Besides being a practice in violation of federal law, selling RECs and getting credit for energy without the RECs would undermine the entire regional system and standards for accounting for emissions. The IOUs, universities, towns, and private companies are not permitted to participate in this practice and there is no reason for MLPs to not be held to the same standard.

Further, Municipal Light Plants are electric retail sellers and this standard is judging them as such. The Clean Energy Standard is not attempting to require action from renewable developers as the incentive of RECs serves that purpose. To the extent that a Municipal Light Plant owns or invests in a renewable project such as Berkshire Wind, they should only be given "credit" for contributing to renewables in Massachusetts in the same way that any other developer of renewable projects is given "credit." Developers are not given that credit through reporting on ghg emissions since they are not a retail seller. The credit we give and standards we hold our retail sellers to are different and they rely on providing renewable and non-emitting MWhs, not on what extent someone helped finance a renewable project in addition to REC purchases. Since Municipal Light Plants are vertically integrated and can act as both developer and retail seller, they essentially have the option of choosing. Do they want to be given credit as the developer and sell RECs to get that credit monetarily? Or do they want to be given credit as the retail seller and retain the RECs to provide clean energy? The MLP is free to do either and can even use a variety of approaches, with some projects used to generate income through RECs and some contracts used to provide clean energy. However, it may not do both for the same MWh or double counting occurs. There is no need for any other "credit" given to MLPs for acting as a developer as there is none for municipalities and institutions.

Long term contracts with renewable generators through power purchase agreements are not a unique contribution of Municipal Light Plants. Investor Owned Utilities are required to enter into these contracts under the Green Communities Act, but they do not get to double count that energy as non-emitting without a REC or receive extra "credit" in some other way relative to the Clean Energy Standard for their off-taker contribution. Universities and towns also enter into renewable PPAs, but they do not claim it as renewable without the RECs. Other organizations and businesses do the same. Municipalities, for example Cambridge, even directly invest in solar fields but know they cannot claim any of the environmental benefits without owning the



RECs. Solar fields are developed by developers in IOU territory all over the state of Massachusetts. Municipal Light Plants do not contribute anything additional to renewable energy in Massachusetts that other organizations, businesses, and developers do not. The argument that if MLPs didn't purchase the power or act as the developer that a significant amount of renewable energy would not be built has no supporting evidence.

From additional preliminary research that we have done on MLP solar policies, their policies in town often inhibit renewable energy from being built. Leasing is not allowed and distributed generation is discouraged through metering rates that are lower than those in IOU territory. In 2017, our research found that at least 761,543 MWhs of RECs were claimed by other parties for energy that Municipal Light Plants purchase. This likely contributes to the saturation of the REC market and the low prices which are inhibiting further renewable development. The Clean Energy Standard should encourage MLPs to retire those RECs and take them out of the saturated market in order to do their fair share.

Sincerely,

Oriana Reilly
Massachusetts Climate Action Network's
Municipal Light Plant Program Coordinator

A handwritten signature in blue ink that reads 'Oriana Reilly'.



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

March 29, 2019

Re: Expanding the Clean Energy Standard

The Massachusetts Municipal Wholesale Electric Company (MMWEC), the joint action agency for Massachusetts municipal utilities representing 20 municipal light plant (MLP) members and 28 project participants, welcomes the opportunity to submit stakeholder comments to the MassDEP's proposal to expand the Clean Energy Standard (CES) regulation, 310 CMR 7.75, requiring utilities and competitive suppliers to procure certificates to demonstrate the use of clean energy to generate the electricity that they sell in Massachusetts.

While the MLPs are not subject to the Renewable Portfolio Standard, MLPs are willing to do their part to support the Clean Energy Standard. Municipal utilities in Massachusetts support public policy goals to reduce carbon emissions in the electric sector, despite no mandate to do so. Through the end of 2018, MMWEC member utilities owned 58.2 megawatts of wind generation, 47.5 megawatts of solar and 17.5 of megawatts of energy storage, with an additional 8 megawatts of energy storage coming online in 2019. That's compared to just 5.46 megawatts of wind, no solar and no energy storage in early 2010.

MMWEC and its members and project participants are pleased that MassDEP has recognized the public power business model and the unique differences between consumer-owned utilities and investor-owned utilities. MLPs operate under a not-for-profit business model based on local control over decisions affecting electric service, rates and resource choices. This model has worked for over 100 years, as MLPs work to bring superior service at the lowest cost to their customers.

Because many MLPs have long-term contracts for energy, it would be difficult and costly for them to adhere to year-by-year standards for carbon emissions. A construct with defined requirements in ten-year increments provides MLPs the flexibility they would need to adjust their power portfolios going forward.

MMWEC encourages DEP to deem qualified towards these minimum percentages all carbon-free energy acquired via qualifying clean resources, including solar, nuclear, hydro, wind, landfill methane, biomass, geothermal energy, and any other generation qualifying for RPS under section 11F of chapter 25A or MassDEP's Clean Energy Standard. We would encourage DEP to move away from the energy imports/exports view of clean generation currently taken by DEP and view the energy from an ISO-New England markets perspective.

MMWEC encourages DEP to deem qualified toward meeting the standard all existing carbon-free resources acquired through contracts prior to 2010. This includes nuclear and large-scale imported hydro, including the Massachusetts MLPs' NYPA allocation. If MLPs are to be compelled to comply with

the DEP's proposed CES-E, 100 percent of MLPs' carbon-free resources should count towards compliance.

MMWEC believes that carbon-free resources, such as solar and wind, in which the renewable energy certificates (RECs) have been sold should be "grandfathered in" and count towards the standard. These projects would not have been built without the investment of the municipal utilities, and the RECs were sold under different regulations. Going forward, MMWEC supports counting new renewable projects towards the standard only if the RECs have not been sold.

DEP should not subtract non-emitting megawatt hours from covered electricity sales, so that all MLPs must increase new clean energy purchases every year. This amounts to "punishing" MLPs for meeting the standard ahead of schedule.

MMWEC recognizes that improved reporting on carbon-free resources would benefit DEP. As joint owners of the Seabrook Station and Millstone 3 nuclear units, MMWEC receives what are known as emissions-free energy credits (EFECs) from Seabrook Station and retires them on behalf of Seabrook project participants. MMWEC has not designated the EFECs to each project participant in the GIS system for 2017, but can for 2018. Most project participants do not have their own GIS accounts, but MMWEC can specify which systems they can be attributed to. The generation from Seabrook is recorded on each member's AQ 31 annually. Going forward, MMWEC will also receive the EFECs from Millstone 3, beginning with 2018 reporting. While this will be the first year MMWEC will receive EFECs into its GIS account, the generation has always been recorded on project participants' AQ 31 filings.

MMWEC supports MassDEP's intention to require MLPs to file a report annually demonstrating their use and ownership of carbon-free and carbon-emitting generation. MMWEC is willing to work with DEP to amend the AQ-31 report to better reflect the carbon-free resources MLPs have in their power supply portfolios.

Again, thank you for seeking feedback on these proposed changes to the Clean Energy Standard. For further information, please contact:

Kate Roy
Director of Communications & External Affairs
Massachusetts Municipal Wholesale Electric Company (MMWEC)
327 Moody St.
Ludlow, MA 01056
kroy@mmwec.org
413-308-1351

MUNICIPAL ELECTRIC ASSOCIATION OF MASSACHUSETTS
c/o Ferriter Scobbo & Rodophele, PC
125 High Street, 26th Floor
Boston, MA 02110

PUBLIC COMMENTS

TO: Massachusetts Department of Environmental Protection
FROM: Municipal Electric Association of Massachusetts
DATE: March 29, 2019
RE: Comments – MassDEP Clean Energy Standard (310 CMR 7.75)

The Municipal Electric Association of Massachusetts (“MEAM”) submits these comments pursuant to the request for public comment of the Massachusetts Department of Environmental Protection (“MassDEP”) regarding the expansion of the Clean Energy Standard (“CES”) 310 CMR 7.75.

MEAM is a statewide association composed of 40 municipal light plants in the Commonwealth of Massachusetts. MEAM submits these comments without waiving any legal rights for it or its members regarding any proposed MassDEP regulation(s) applicable to Municipal Light Plants (“MLPs”). See MEAM’s comments of February 24, 2017 regarding legal authority of Mass DEP to adopt a CES that includes all MLPs.

The Mass DEP Stakeholder Discussion Document of February 2019 at page 2 acknowledges “the unique circumstances of MLPs “ and identifies a number of “ potential modifications” relating to an application of CES requirements to MLPs.

MEAM reiterates its previous public comments (See public comments of MEAM dated November 30, 2017) and adds the following the comments within the context of such “ potential modifications”:

1. Any CES program promulgated by the Mass DEP related to MLPs must be voluntary.

This program cannot be accomplished by regulation. MEAM continues to view any MassDEP authority over MLP’s to be limited to reporting requirements under G.L. c.21N Sec. 2(a)(5). (See above referenced February 24, 2017 comments)

2. The primary elements of a proposal to meet a voluntary CES obligation should include the following:
 - (a) The calculation of a clean energy standard, shall include existing CES-E’s such as nuclear power, hydroelectric facilities and any other pre-existing clean, non-carbon emitting or renewable power.
 - (b) Existing renewable projects wherein REC’s have been retained by MLPs must be included in any calculation of clean energy. Additionally, consideration must be given to those renewable projects in which the REC’s were not retained by MLPs since MLPs were never subject to the Renewable Portfolio Standard (“RPS”). Consequently, there was no need to retain such RECs in order to meet RPS requirements.

- (c) Any concept of “incremental annual increases” would be rejected out of hand.
MLPs’ renewable projects could periodically be of a larger magnitude than an incremental increase. In addition, because MLPs have load serving responsibilities, long term contracts and similar obligations in which MLPs have entered to meet their load serving requirements must be considered as each MLP moves to reach its clean energy goals. If not, then the MLPs could have contracts and obligations significantly in excess of their load requirements. Consequently, incremental goals should be in the five and ten year range to allow critical long term power supply planning and integration for MLPs.
- (d) Creation of a municipal light plant Alternative Compliance Payment (“ACP”) which would entail MLP payments be set aside by an MLP in the event that such MLP did not reach its periodic target goals. Such funds would be used to fund future clean energy projects for such MLP service territory.
- (e) Smaller MLP’s (to be determined) could be exempt from the voluntary plan or have different target dates to meet 2050 goals to achieve their clean energy goals.

MEAM would work with the MassDEP if MassDEP determines that there was a need to expand reporting standards under G.L. c.21N Sec. 2(a)(5) in order to accomplish its goals.

March 29, 2019

Martin Suuberg, Commissioner
Massachusetts Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Re: **Comments on the Proposed Expansion of the *Clean Energy Standard***

Commissioner Suuberg:

Nalcor Energy thanks you for the opportunity to provide comments to the Department of Environmental Protection (DEP) on the Stakeholder Discussion Document *Expanding the Clean Energy Standard February 2019* (Discussion Document).

Nalcor is a Canadian provincial crown corporation with responsibility for the development of Newfoundland and Labrador's energy resources. Nalcor currently operates over 7,000 megawatts (MW) of electrical generating capacity that is predominately hydroelectric and is also actively developing additional large scale hydroelectric projects with the next project under construction and scheduled to come on-line in 2020.

The Massachusetts Clean Energy Standard (310 CMR 7.75) currently requires that qualifying clean resources meet the requirements of NEPOOL GIS Operating Rule 2.7(c) which in turn requires the generating unit to be located in a control area adjacent to the ISO-NE Control Area. As a result of these requirements, energy from clean generation units in Newfoundland and Labrador does not qualify as clean energy in Massachusetts.

The Discussion Document released by the DEP outlines several options for expansion of the CES including the possibility of allowing energy from clean energy generation units in Newfoundland and Labrador to qualify under a CES-E standard:

"Additionally, inclusion of existing non-emitting generators in Newfoundland or Labrador that can track imports through Quebec into New England could also be

considered, as these generators are not connected to other control areas, and their addition to the program could lower costs by creating competition among generators that can support maintaining existing imports from Quebec."

As an owner, operator and developer of hydroelectric projects, Nalcor Energy is pleased to have the DEP recognize that clean energy imports from Newfoundland and Labrador can assist Massachusetts with meeting its clean energy goals. The inclusion of non-emitting energy generators in Newfoundland and Labrador as qualifying clean energy generators in the expansion of the CES would be a positive step that will ensure energy from additional hydroelectric units in Canada can contribute to the state's clean energy targets.

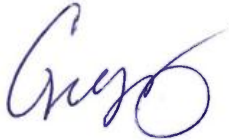
The discussion document limits the expansion consideration to inclusion of energy from clean generation units in Newfoundland and Labrador that can be tracked "*through Quebec into New England*". The completion of two major transmission initiatives, the Labrador Island Link and the Maritime Link (see attached map), means that energy from Newfoundland and Labrador can now also be delivered via a path through the Maritime provinces and into New England via the Maine – New Brunswick interface thereby creating even greater competition amongst clean energy suppliers. The DEP should consider broadening the requirement to tracking imports from the point of generation in Newfoundland and Labrador to the ISO-NE Control Area and removing the reference to deliveries to New England via Quebec. NERC e-tags are unique identifiers and can be used to track the particular path to ensure the origin and final destination of the energy.

Recommendation: Broaden the eligibility under the CES-E to include imports of energy from Newfoundland and Labrador that can be tracked from a non-emitting clean energy generating unit in Newfoundland and Labrador to the ISO-NE Control Area. The addition of these generators to the program could lower costs by creating competition among generators that can support maintaining existing imports from Eastern Canada.

Nalcor is pleased the DEP recognizes clean energy imports from Newfoundland and Labrador can assist Massachusetts with meeting its clean energy goals and supports the expansion outlined in the Discussion Document while requesting the DEP consider broadening the eligibility as discussed above.

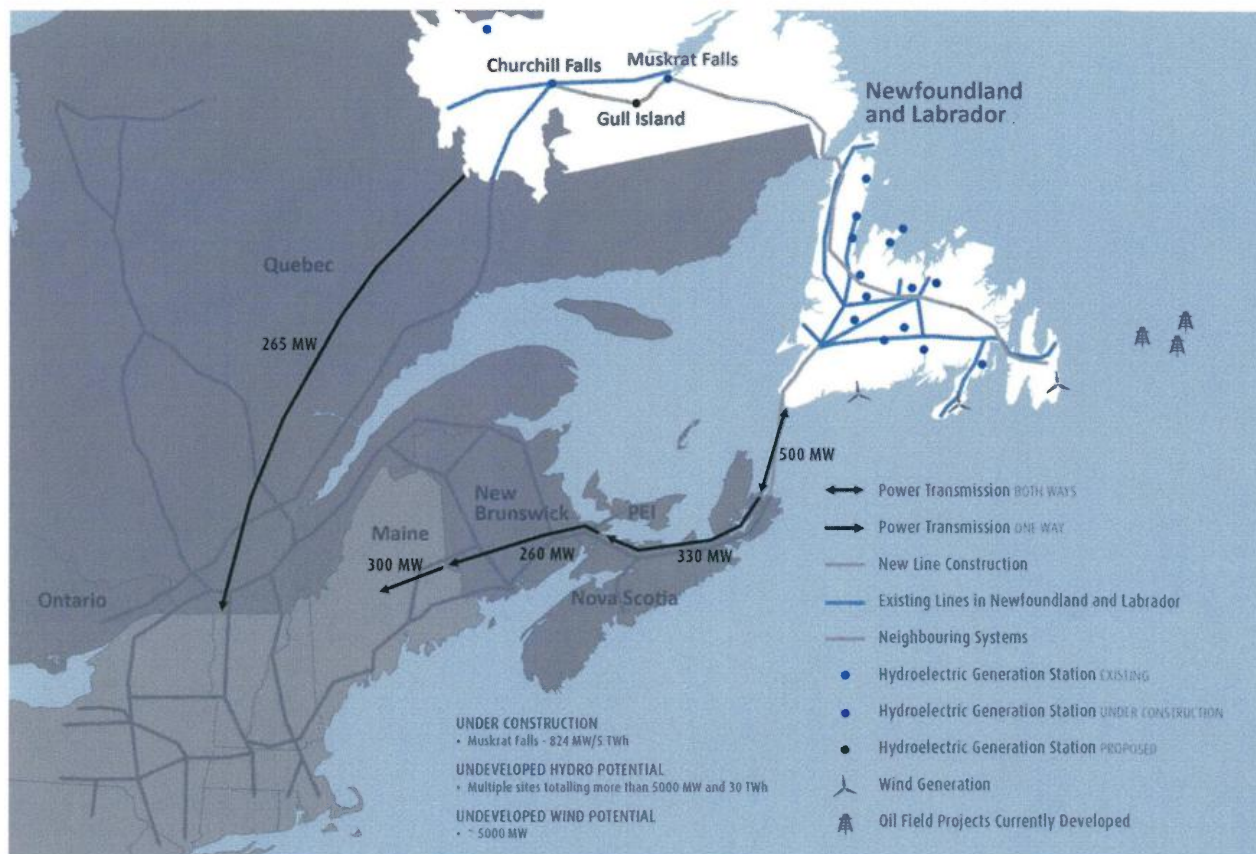
Nalcor thanks the Department for the opportunity to provide these comments and your considered attention to them. I look forward to working with you and other stakeholders to help Massachusetts meet its energy diversity and carbon reduction objectives.

Sincerely,

A handwritten signature in blue ink, appearing to read "Greg Jones", with a stylized flourish at the end.

Greg Jones
General Manager
Nalcor Energy Marketing

Transmission Routes from Newfoundland and Labrador





March 29, 2019

Via email to: climate.strategies@state.ma.us

William Space and Jordan Garfinkle
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: National Grid Comments on Expanding the Clean Energy Standard

Dear Mr. Space and Mr. Garfinkle:

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 expansion of the Clean Energy Standard (“CES”) regulations, 310 C.M.R. 7.75, put forth for comment by the Commonwealth of Massachusetts Department of Environmental Protection (“MassDEP”). National Grid’s comments address all three topics on which MassDEP sought comments: (1) increasing the stringency of the CES; (2) including existing generation in the CES; and (3) applying the CES to municipal electric utilities.¹ National Grid’s comments also include additional proposals on how MassDEP could expand the CES further.

On August 11, 2017, MassDEP promulgated the CES regulations. 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. On February 20, 2019, MassDEP notified interested stakeholders of its proposals to expand the CES, it convened two stakeholder meetings, and requested written comments on these proposals.

In addition to its comments regarding MassDEP’s proposals, National Grid also proposes that MassDEP expand the CES by including various Massachusetts renewable policies under one

¹ Such electric utilities include municipal electric departments, municipal light boards, and municipal light plants (“MLPs”).

standard. These renewable policies were enacted by the Legislature to support renewable energy and reduce emissions. National Grid's proposal combines the Commonwealth's fragmented clean energy efforts and provides a comprehensive view of Massachusetts' progress in combatting climate change. Combining the various clean initiatives paid for by customers into one standard provides transparency and will demonstrate that the state will likely have 100% clean energy from existing generation and existing policies sometime in the mid to late 2030s. National Grid's proposal also is more cost-effective and will help maintain the stability of the grid better than alternative proposals.

1. MassDEP Should Not Increase the CES Standard because it will impose an Increased Cost and Burden on Only Certain Electricity Customers.

One MassDEP proposal for expanding the CES is to amend the CES and increase the standard above the current regulatory requirements for 2020 and 2021. In requesting stakeholder comment on this option, MassDEP solicited responses to the following questions:

- *Do you support increasing the stringency of the standard in 2020 and 2021?*
- *Is an increase of 1-2% appropriate?*
- *Are there any particular issues or information that should be considered in determining whether to increase the standard?*
- *How should existing electricity supply contracts be treated if this modification is made?*

The Company opposes MassDEP's proposal to increase the compliance percentage in 2020 and 2021 from the current regulatory requirements of 20% and 22%, respectively.

First, as MassDEP itself has acknowledged, an increase to the CES is not projected to be necessary. In its March 14, 2019 stakeholder meeting, MassDEP acknowledged that the Commonwealth appears likely to meet its 2020 GWSA goals. If the GWSA goals are already likely to be met, any increase in the compliance percentage is unnecessary. In addition, MassDEP should consider the ongoing implementation of the recently approved Solar Massachusetts Renewable Energy Target ("SMART") program, which provides incentives to up to an additional 1,600 MW of customer-owned solar generation as well as the Clean Peak Energy Standard ("CPS") and its associated compliance obligations, which will go into effect in 2020. Such programs may result in further decreased emissions, beyond what has already been projected, which will help the Commonwealth surpass its GWSA goals. Aside from the fact that an increase in the CES compliance percentage is unnecessary, it will only lead to higher costs to customers and a windfall of profits to RPS Class I resources. For these reasons, MassDEP should minimize the costs borne by customers of investor-owned utilities ("IOUs") and decline to increase the current standard.

An increase of 1% in the CES for IOU customers equates to approximately 468,644 additional RPS Class I RECs in 2020.² At current market prices for 2020 RPS Class I RECs, a

² IOU load in 2016 was 46,864,429 megawatt-hours ("MWh"), according to the "Massachusetts 2016 Renewable Portfolio Standard (RPS) and Alternative Portfolio Standard (APS) Annual Compliance Report."

1% increase will cost IOU customers at approximately an additional \$8.6 million in 2020 alone.³ This increase in costs would double if MassDEP increases the CES by 2%. However, increasing the CES will also increase the demand for all RPS Class I RECs, thereby increasing their market prices and affecting IOU customers' compliance with the current CES. The current regulatory requirement for CES in 2020 is 14.34%, which must be met by RPS Class I RECs.⁴ Accordingly, the current standard will require load serving entities to purchase a total of 6,719,141 RPS Class I RECs to satisfy the IOU customers' compliance obligations in 2020. If the market price of RPS Class 1 RECs increases by \$1, the additional cost will be an additional \$6.7 million in 2020. While National Grid cannot predict with certainty exactly how much higher RPS Class I RECs will be if MassDEP increases the CES obligation for 2020, the table below shows a range of projected increased IOU customer costs due to increased RPS Class I REC prices resulting from a higher obligation:

Figure 1: Estimated Range of Cost Increases to CES Compliance

Per \$ Price Increase to Class I REC	Resulting Incremental Cost to IOU Customers in 2020 (in \$)
0.50	3,359,570
1.00	6,719,141
2.00	13,438,281
3.00	20,157,422
4.00	26,876,563
5.00	33,595,703

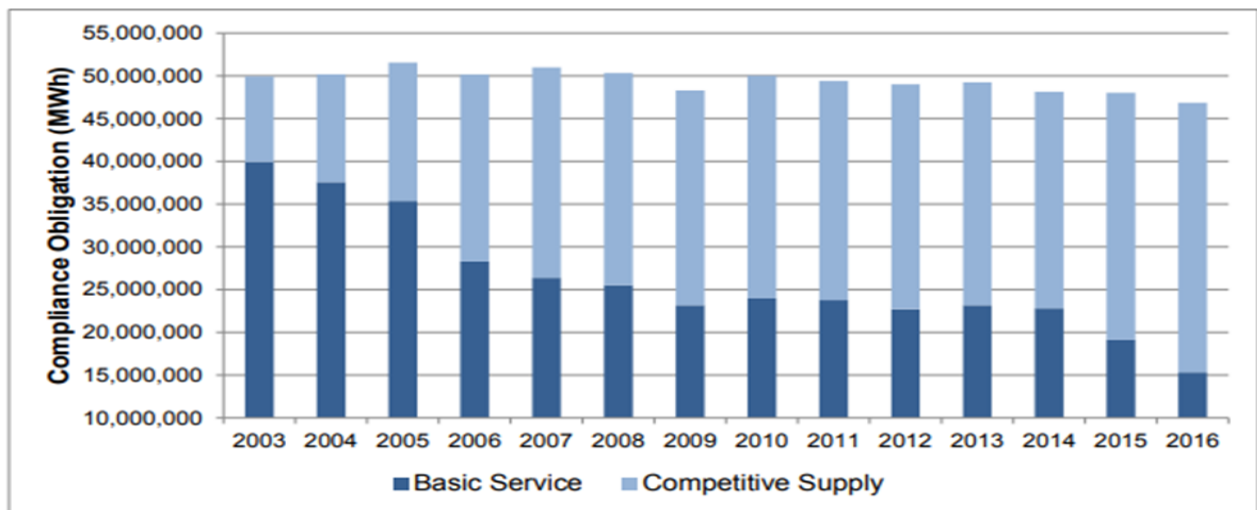
RPS Class I RECs often can qualify for other states' renewable energy standards because of very similar eligibility requirements. Because of this, REC prices for each state's compliance often trade at similar prices (this includes Rhode Island New, New Hampshire Class I, Connecticut Class I RECs). If MassDEP increases the CES obligation even though GWSA goals are already likely to be met, it will result in increased compliance costs in these other states and will provide an unwarranted windfall of profits to RPS Class I resources throughout the region, paid for by New England customers. Finally, a similar illustration of the increase in IOU customer costs could be made if MassDEP increases CES in 2021. Given that an increase in the CES already seems unnecessary to meet GWSA goals at this time, the potential cost increases to IOU customers should deter the MassDEP from making this change to surpass its GWSA goals. If MassDEP seeks greater certainty of meeting and surpassing the GWSA goal for 2020, it should expand the CES to Municipal Utilities starting 2020 as described below, rather than imposing additional costs on IOU customers, who are already subject to significant costs resulting from the CES.

³ The Company used a price of \$18.25 for a RPS Class I Vintage 2020 REC, which was recently provided to the Company by environmental brokers.

⁴ The current CES obligation is 20% in 2020. Using 2019 minimum standard for RPS Solar Carve-Out and Solar Carve-out II Minimum Standards as proxy for 2020, the amount of RPS Class I RECs the Company will need to comply with CES is 14.34% (i.e., 20% - 1.75% - 3.91% = 14.34%).

However, in the event that MassDEP decides to move forward with an increase to current CES obligations for 2020, no existing electricity supply contracts should be exempt. Many IOU customers purchase their commodity service from competitive suppliers through long-term contracts, and a significant portion of National Grid's distribution customers purchase power through the Company's Municipal Aggregators' tariff. Also, more than 40 of the towns served by Company that take service under the Municipal Aggregators tariff have existing electricity contracts ending in 2020 or later. If the MassDEP were to exempt any of this electricity load from an increase to the CES obligation, it will result in an IOU's Basic Service customers bearing a disproportionate share of the increase. This is because Basic Service generally employs shorter contracts and may not qualify for such an exemption. In addition, if the MassDEP were to apply a CES increase mostly to Basic Service customers, it is not guaranteed to significantly further the state's GWSA goals because Basic Service load as a percentage of IOU load has decreased significantly over the years, as illustrated in the graph below:

Figure 2: Retail Load Obligation by Supplier Type, 2003-2016⁵



Accordingly, if MassDEP does decide to move forward with a CES increase, it should not exempt any load from such increase, or it risks imposing a disproportionate share of the cost burden on Basic Service customers, and it may not even achieve the additional reductions that are sought by the increase.

2. MassDEP Should Include Municipal Utilities in the CES Immediately.

Another MassDEP proposal for expanding the CES concerns options for including municipal utilities in the CES. In requesting stakeholder comment on these options, MassDEP solicited responses to the following questions:

- *Do you support including MLPs in the CES?*

⁵ Source: Massachusetts 2016 Renewable Portfolio Standard (RPS) and Alternative Portfolio Standard (APS) Annual Compliance Report.

- *Do you support the phase-in schedule that was proposed in 2016 (6% in 2021 rising to 80% in 2050)? A different schedule?*
- *Do you support exempting the smallest MLPs?*
- *How should contractual and ownership relationships with “existing” (pre-2010) nuclear and hydro facilities be addressed?*
 - *Count all non-emitting MWh toward compliance? (i.e., MLPs with sufficient nuclear and hydro MWh in a particular year could comply without the use of “new” clean energy.)*
 - *Subtract non-emitting MWh from covered electricity sales? (i.e., All MLPs must increase new clean energy purchases every year.)*
- *Do you support the reporting-only approach, making reporting of clean energy mandatory?*
- *Is there any way to accommodate municipal RE projects that sell RECs without double counting?*

First, the GWSA established goals to reduce GHG emissions, and avoid the impacts of global warming -- important goals for the entire Commonwealth. All Massachusetts residents and businesses will benefit from achievement of these goals, and all electricity customers, including customers of municipal utilities, should contribute equally to achievement of these goals. To date, only IOU customers are subject to the CES, but Mass DEP should direct that municipal utilities are subject to the CES obligations as soon as possible, on the same timeline as the IOUs, and with the same percentages for electricity sales, without a separate phase-in period. Any continued delay in applying the CES to municipal utilities makes achieving the GWSA goals more difficult. Further, as discussed in the section above, having different requirements for IOUs than for municipal utilities creates disproportionate cost burdens for customers of IOUs versus customers of municipal utilities because customers of IOUs are funding the CES for clean energy, compliance with the RPS obligations for Class I and Class II, Alternative Energy Portfolio Standard (“APS”), other environmental goals, and the state’s 2020 and 2050 emissions reductions goals. From 2012 through 2018, National Grid estimates that all IOU customers in Massachusetts (including customers who receive their electric supply from competitive suppliers) have spent over \$4 billion to comply with the RPS Class I, RPS Class II, and APS requirements. In comparison, customers of municipal utilities have borne no such costs because they do not have to comply with these obligations.

In addition, even if municipal utilities are subject to the same CES requirements as IOUs, customers of IOUs still will be making a larger contribution to meeting the state’s climate goals because IOU customers will continue to have to pay for RPS Class II, APS, and CPS obligations in addition to paying for the CES and RPS Class I obligations that count toward the CES. Additionally, municipal utilities’ compliance with the CES may cost less than the IOUs’ compliance with the CES because municipal utilities will have a lower ceiling price. The majority of the IOUs’ compliance with CES will be their compliance with their RPS Class I obligation. In contrast, the municipal utilities’ compliance costs will derive solely from the CES. Starting in 2021 the CES alternative compliance payment (“ACP”), which acts as a ceiling price to contain costs, is only half of the RPS Class I ACP. If there is a shortage of RPS Class I RECs, IOUs may have to procure RPS Class I RECs at higher prices than the CES ACP for the majority

of their load in order to meet their CES obligation, whereas municipal utilities are protected by a lower ceiling price and can meet their CES obligations by making a lower-cost CES ACP.

Further, on average, municipal utilities charge lower rates to their customers than IOUs.⁶ Part of this difference in rates is because municipal customers have not been paying the charges for state renewable energy programs and other state policies, which include the RPS, APS, CES, net metering, the SMART program, and long-term contracting costs that IOU customers must pay. For National Grid's Massachusetts residential customers, these costs add up to approximately 5.259 cents per kWh.⁷ Municipal utilities customers' rates would increase by only 0.4 cents per kWh if they complied with a 20% CES obligation in 2020.⁸ This suggests that municipal utilities customers' bills can accommodate the expense of a modest contribution to the costs of clean energy in Massachusetts in the form of CES compliance costs.

MassDEP's authority to apply the CES to municipal utilities stems from its authority to issue regulations requiring reductions in GHG emissions by all entities within the "electric sector", which includes municipal utilities. Specifically, M.G.L. c. 21N, section 3(c) gives the authority to the MassDEP to "set emissions levels and limits associated with the electric sector". "Electric sector" is a broad term and there are no entities that are listed as being excluded from that sector. As MassDEP notes in its August 2017 "Response to Comment on 310 CMR 7.74 *Reducing CO₂ Emissions from Electric Generating Facilities*, 310 CMR 7.75 *Clean Energy Standard*", at page 19, "[g]iven the central role of the electric sector in achieving the required GWSA GHG emissions reductions of 25% and at least 80% by 2020 and 2050, respectively, it would be inconsistent with the goals of the entire GWSA scheme to exempt parts of the electric sector from regulations that require reductions in GHG emissions from that sector."

The MassDEP Stakeholder Discussion Document, "Expanding the Clean Energy Standard February 2019" ("2019 Discussion Document"), lists a number of possibilities for how the CES could be applied to municipal utilities. The 2019 Discussion Document suggests a phase-in, or reducing the obligation for municipal utilities, utilizing certificates that do not qualify for CES for compliance, and excluding the smallest municipal utilities. The 2019 Discussion Document also includes an alternative to a percentage standard compliance. The alternative is a "monitoring-only approach." A third alternative is the previously proposed compliance for municipal utilities. For 2021 to 2049, it suggests a lower standard for municipal utilities than for other retail suppliers because municipal utilities are not subject to the RPS. It suggests two options, either: (1) starting in 2020, setting the standard at 6% plus a small fraction

⁶ See, e.g., https://www.mmwec.org/wp-content/uploads/mmwec-2016_2nd_version.pdf, at 3. The average IOU residential customer rate is 21.1 cents per kilowatt-hour ("kWh") as compared to 14.3 cents per kWh for the average municipal utility residential customer.

⁷ These costs are broken out by program, per kWh, as follows: the RPS/APS/CES charge is 2.312 cents; the Energy Efficiency Program Charge is 1.805 cents; the Renewables Charge is 0.05 cents; the Renewable Energy Recovery Factor is 0.087 cents; the SMART program charge is 0.146 cents; and the Net Metering Recovery Surcharge is 0.859 cents.

⁸ Calculated as \$18.25 (2020 RPS Class I REC) x 20% (CES 2020 obligation) x 1.07 (loss factor) / 10 = 0.39 cents per kWh.

(1/30) of the 16% that will be required for non-municipal utilities, with the fraction going up by 1/30 each year; or (2) discounting the standard for municipal utilities by the full amount of the RPS standard for the year.

National Grid opposes any less stringent CES compliance standard for municipal utilities than applies to IOUs. As noted above, less stringent CES compliance standards for municipal utilities unfairly places a higher cost of complying with Massachusetts GHG reductions goals on customers of IOUs, and makes it less certain that Massachusetts will meet its long term GWSA goals. Also, customers of IOUs will continue to bear the burden of costs for RPS Class II compliance, APS, long-term contracts, net metering, SMART, and other environmental policy goals and requirements to which municipal utilities are not subject. In addition, IOU customers will be required to pay for additional programs in the future that municipal customers will not be required to pay for, including additional long-term contracts pursuant to Sections 83C and 83D of the Green Communities Act, and the CPS. IOU customers are already bearing a much higher cost for achieving the Commonwealth's environmental goals as compared to customers of municipal utilities. Aside from costs, applying the same standards to municipal utilities provides more assurance that the Commonwealth will meet such goals.

In addition, National Grid opposes any size threshold for municipal utility compliance with the CES. For example, in 2017, there were a total of 26 competitive suppliers operating in Massachusetts that served less than 3,000 customers.⁹ Each of these competitive suppliers was required to comply with the RPS and APS despite having a relatively small number of customers, and the RPS and APS are complex standards to meet, with six different categories of certificates. Complying with the CES (or RPS, APS, etc.) is much easier than some other procurement functions of a supplier, which suggests that municipal utilities should be able to come into compliance quickly with the CES. For example, National Grid purchases most of its RECs on a short-term basis. It would be simple for municipal utilities to enter the market and meet their obligations by purchasing RECs on a short-term basis, as well.¹⁰ Municipal utilities should be able to meet CES obligations on their own, but if they prefer, they could engage the help of a third party for compliance. A municipal utility's worst-case scenario is paying an ACP of \$35.22 per MWh (for 2019). To comply with RPS requirements from 2010 through 2016, IOUs have had to purchase RPS Class I RECs at prices over \$35, including the purchase of solar RECs for several hundred dollars each year, since 2010 to the present. IOUs have been complying with Massachusetts' renewable policies at added costs for customers for many years, and it is time that the customers of municipal utilities begin to do their part.

As MassDEP noted in the "310 C.M.R. 7.75: Clean Energy Standard, Review of Options for Expanding the CES – Stakeholder Discussion Document" ("2017 Discussion Document"), some municipal utilities have ownership and contractual relationships with clean resources but sell the RECs to other electricity sellers that are subject to the RPS. The 2017 Discussion

⁹ https://www.eia.gov/electricity/sales_revenue_price/pdf/table16.pdf.

¹⁰ There is an ample supply of RPS Class I RECs that can be used for compliance, and there are a variety of brokers who could facilitate these purchases. A municipal utility can issue a Request for Proposal for certificates, or it can aggregate with other municipal utilities to have more buying power.

Document proposes that if municipal utilities do not sell the RECs, they can subtract the MWh associated with these contractual and ownership interests from the calculation of the number of CECs required for compliance, or that they could use these RECs for compliance with the CES. National Grid believes that the municipal utilities' use of these RECs for compliance would be the easier and simpler option, and thus is preferable. However, if MassDEP allows municipal utilities to exercise either option, such option(s) should be clarified to state that only resources that produce RPS Class I RECs or new CECs are acceptable for compliance with the CES, assuming that there are no further amendments to the current regulations. Resources that are not eligible as RPS Class I resources (such as nuclear and large hydropower) should be considered for compliance **only** if an existing CES ("CES-E") is established. MassDEP should not allow a municipal utility's contract or ownership relationship with pre-2010 nuclear or hydro facility to qualify for the CES; only the CES-E. Municipal utilities and their customers should do their part and purchase RPS Class I RECs to comply with the CES, just as IOU customers do. In addition, National Grid does not believe that there is a way to count municipal utilities' projects that sell RECs for purposes of the CES without double-counting.

3. MassDEP Should Establish a CES-E Standard that is Separate, Applies to Utilities Equally, and Has a Lower ACP.

MassDEP's third proposal for expanding the CES is to amend the CES to add a separate requirement to support existing clean generators – the introduction of the CES-E. MassDEP requested stakeholder comment on this option, including responses to the following questions:

- *Do you support implementing the CES-E concept?*
- *Is a stringency of approximately 15% of current electricity sales reasonable? Should the standard be expressed in % or MWh?*
- *Are the proposed eligibility requirements reasonable with respect to location and vintage?*
- *Should there be special provisions to address the possibility of a significant CES-E retirement that would affect the CES-E market, or attempt to limit the number of MWh an individual generator may contribute in a year?*
- *How could smaller hydro generators in NH and MA be included without encouraging certificate "shuffling?"*
- *If MLPs are added to the CES, should they be subject to the CES-E?*
- *Are there ways to coordinate this policy with other states?*

All clean energy resources play a vital role in helping the Commonwealth reduce its GHG emissions and avoid the impacts of global warming, which meets the purpose of the CES. Existing resources will help achieve and maintain such reductions. As MassDEP noted in the 2017 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. 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.

However, MassDEP should ensure that the CES-E obligation is separate from the current CES obligation, with its own vintage requirements and its own ACP. Doing so would continue existing clean resources’ contribution to the Commonwealth’s GWSA goals. MassDEP’s proposed vintage and location eligibility requirements, as outlined in the 2019 Discussion Document, are reasonable. However, MassDEP’s proposed 15% CES-E requirement is too low because it understates historical imports. The 2019 Discussion Document states that, in 2014, Massachusetts imported 12 to 13 terawatt-hours (“TWh”) from Canada and from the Seabrook nuclear power plant, and 12 TWh equates to 25% of 2014 IOU electric load.¹¹ Therefore, MassDEP should annually set the CES-E to 12 TWh, divided by forecasted electric load. As electric load fluctuates, the CES-E obligation percentage should change annually. If MassDEP sets the CES-E annually, it will have the flexibility to alter the obligation percentage if there is a change in generation (such as generation retirements) or if there is a change in electric load (such as greater reductions from conservation or energy efficiency).

Further, all load-serving entities – investor-owned utilities, competitive suppliers, and municipal utilities – should have the same obligation percentages for each requirement, including the CES-E. All residential, commercial, and industrial customers in Massachusetts should contribute to its efforts to achieve its GWSA goals. If MassDEP continues to require that only customers of IOUs must meet these percentage obligations, it continues the unfair burden on IOU customers that is not being shared with other customers in the state, even though municipal utility customers nonetheless benefit from the resulting GHG reductions. In addition, if municipal utilities have contracts or ownership with CES-E generators that exceed their CES-E requirement, they should be allowed to bank or sell any excess CES-E CECs.

The ACP for CES-E should be 10% or lower of the RPS Class I ACP amount at the time of implementation, 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. The proposed 15% of the RPS Class I ACP amount within the 2019 Discussion Document’s is higher than necessary. These existing clean resources have historically delivered energy to Massachusetts solely for energy and capacity revenue. 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. A CES-E ACP that is 15% of the RPS Class I ACP equates to \$10.57 using the 2019 RPS Class I ACP. In 2018, the preliminary average annual real-time price for wholesale power in New England was \$43.54 per MWh. A CES-E CEC of \$10.57 is equivalent to 24% of the energy revenue for these generators. Because these generators continue to operate without this unplanned additional revenue stream, a 15% ACP is excessive. A CES-E CEC in

¹¹ As mentioned in note 2, above, 2016 IOU load was 46,864,429 MWh.

the range of \$2 to \$4 would be more appropriate because a \$4 CEC would be approximately 10% of energy revenue. 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.

While some commenters may argue that \$2 to \$4 per each CES-E CEC is not sufficient revenue to incent CES-E-eligible generators to apply to the MassDEP and qualify for the CES-E, National Grid's experience in other jurisdictions has been different. 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. There are also significant amounts of generation in excess of the 12 TWh that could apply to qualify for the CES-E and, therefore, there should not be a shortage of resources. Also, other states that pursue a clean energy policy will likely use a certificate framework similar to the CES. The best way to coordinate with other states is to have similar requirements, one of which is the level of the ACP. The Massachusetts RPS Class I ACP is significantly higher than the applicable ACP of other New England states. Therefore, setting the CES-E ACP at a percentage of RPS Class I for the CES-E may lead to different ceiling prices in different states. If there are shortage conditions, this could lead to CES-E CECs being sold only in the higher priced jurisdictions first.

4. National Grid Offers Additional Proposals on how MassDEP Should Expand the CES.

A. Introduction

The CES "wraps around" the RPS Class I, which is a separate renewable standard administered by the Department of Energy Resources ("DOER"). However, there are other renewable and clean energy policies that are not captured by the CES. Each of these policies contributes to a clean energy future, and National Grid proposes that MassDEP expand the CES to capture each of them. The result would be one government agency tracking and reporting on all clean energy initiatives, and providing comprehensive reports for future state policy decisions.

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;
- APS, as specified in 225 C.M.R. 16.00;
- CPS, which is in rulemaking;
- CES-E equivalent to 12 TWh and a compliance percentage determined annually; and
- 83D equivalent to 9.45 TWh annually and a compliance percentage determined annually following the completion of a compliance year.

In addition to expanding the CES to include these various clean and renewable energy policies, the Company proposes that MassDEP periodically review the projected generation and load, and propose changes as necessary. The Company elaborates on these policies, which are not already included or proposed to be included in the CES below:

B. Section 83D Long-Term Contracts

As mentioned above, the CES wraps around the RPS Class I compliance requirements, as illustrated in the following table:

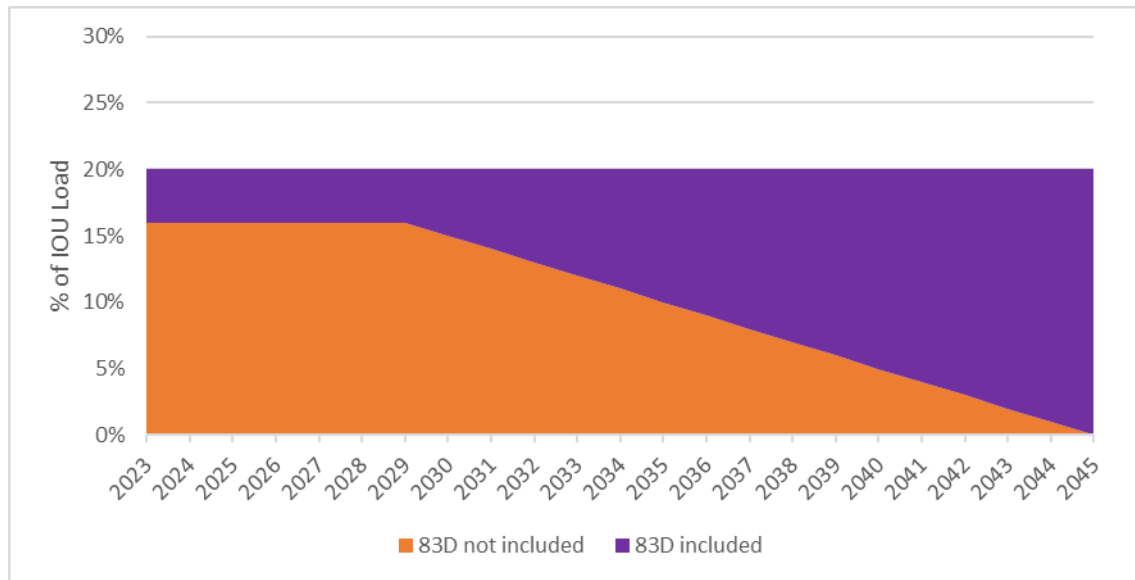
Figure 3: Breakdown of Current CES Compliance Obligations

Year	CES	RPS Class I	RPS Class I REC or CEC
2018	16%	13%	3%
2019	18%	14%	4%
2020	20%	16%	4%
2025	30%	26%	4%
2030	40%	35%	5%
2040	60%	45%	15%
2050	80%	55%	25%

All energy that is procured pursuant to St. 2016, c.188, s. 12, “An Act to Promote Energy Diversity” (the “Energy Diversity Act”) is considered a CEC and can be used to comply with the CES. Section 83D of the Energy Diversity Act was enacted in August 2016, in part, to reduce GHG emissions in the Commonwealth. Based on 2016 wholesale IOU electric load, the Section 83D contracts equate to approximately 20% of load.¹² CECs from Section 83D cannot be used for the RPS Class I requirement; Section 83D CECs can only comply with the requirements specified in the column titled “RPS Class I REC or CEC”. Therefore, there are many years that the Section 83D generation does not fully qualify for the CES because it exceeds the percentages in the column titled “RPS Class I REC or CEC”. This is illustrated in the following graph:

¹² Section 83D requires a long-term contract for 9.45 TWh, which is then divided by 46,864,429 MWh (2016 IOU Load) = 20.16%.

Figure 4: Generation from Section 83D Contracts Usable and Not Usable for the CES



The clean energy resources that are the subject of the Section 83D contracts are expected to become commercially operational in December 2022. Because only 4% of the CES requirement can be met by RPS Class I RECs or CECs, the clean energy generation shown in orange within the graph does not count towards CES compliance. The CECs equivalent to 16% of IOU load will be retired without recognition towards any renewable requirement or the CES. Section 83D generation equating to 20% of IOU load would not fully count towards the CES until 2045, which is after the contract has ended. Customers will pay for the environmental attributes in the Section 83D contracts without being able to claim all the benefits in the CES or any other environmental standard.

National Grid firmly believes that MassDEP should establish a separate CES compliance obligation for IOUs, specifically for the all generation from the Section 83D contracts, for the full term of the contract (“CES-83D”). By law, IOUs are not able to sell excess CECs from the Section 83D contracts, but must retain them. Compliance with CES-83D should be automatically assured for all IOU distribution customers, including those on competitive supply. 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 actual generation and actual IOU wholesale load is known. In general, MassDEP can assume a CES-83D annual obligation of approximately 20% based on current load, but can adjust upward or downward based on IOU load forecasts.

CES-83D would not apply to municipal utilities customers because they do not pay for the Section 83D contracts. The percentage CES-83D applied to IOUs should apply as the same percentage to municipal utilities as the CES. For example, if CES-83D is expected to be 19% in a given year, municipal utilities should have an additional 19% compliance obligation that can be met by an RPS Class I REC or a CEC.

C. MassDEP Should Include the Requirements from the Green Communities Act and An Act to Advance Clean Energy in the CES

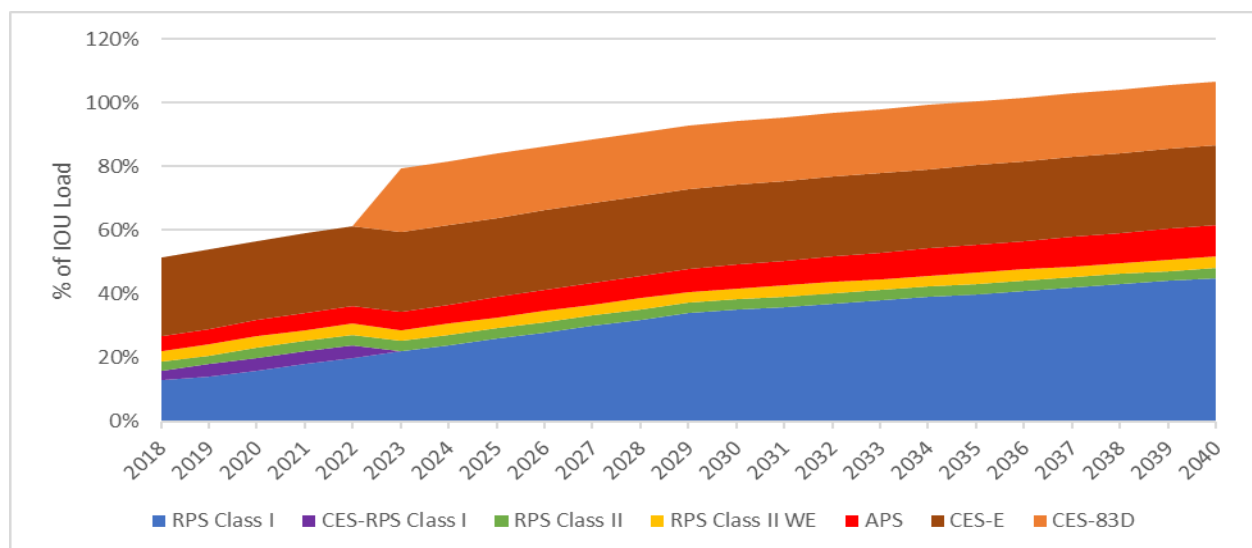
RPS Class II was established by the Green Communities Act in 2008 with the purpose of providing incentives for the continued operation of pre-1998 renewable energy plants and waste energy plants located in Massachusetts. There are two separate compliance requirements. The RPS Class II requirement is set annually by a formula that responds to changing market conditions. The RPS Class II Waste Energy requirement is set at 3.5% annually.

The APS also was established by the Green Communities Act of 2008, now codified at M.G.L. c. 25A, § 11F½ (statute). In general, the APS offers an opportunity for Massachusetts individuals, businesses, institutions, and governments to receive an incentive for using certain types of alternative energy technologies. These alternative energy technologies contribute to the Commonwealth's clean energy goals by increasing energy efficiency and reducing the need for conventional fossil fuel-based power generation.

The CPS was established in 2018 and shall increase by 0.25% annually. The CPS is a program requiring retail electricity providers to meet a baseline minimum percentage of sales with qualified clean peak resources that dispatch or discharge electricity to the electric distribution system during seasonal peak periods, or alternatively, reduces load on the system.

Together, these four standards (RPS Class II, RPS Class II WE, APS, and CPS) were all enacted by the Legislature to reduce GHG emissions and 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, APS, and CPS demonstrates that the Commonwealth is close to its clean energy goals under existing regulations. This is depicted in the graph below:

Figure 5: Projected Effect of National Grid Proposal



Under the current regulations and laws, the Commonwealth may have its entire IOU load met by these various clean policies by 2035. 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.

D. MassDEP Should Conduct Ongoing Reviews of the CES

The Company proposes that MassDEP periodically reviews 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.

5. Conclusion

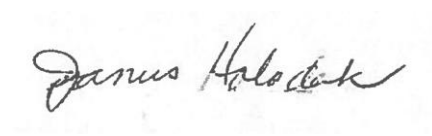
National Grid's recommendations and additional proposals on the CES combine the Commonwealth's fragmented clean energy efforts, and will provide a comprehensive view of Massachusetts' true progress in combatting climate change. A CES that aggregates and simplifies all of the Commonwealth's clean energy 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.

National Grid appreciates the opportunity to comment on these proposed options for expanding the CES, and thanks MassDEP for its consideration of these comments. If you have any questions, please do not hesitate to contact me at 781-907-1000.

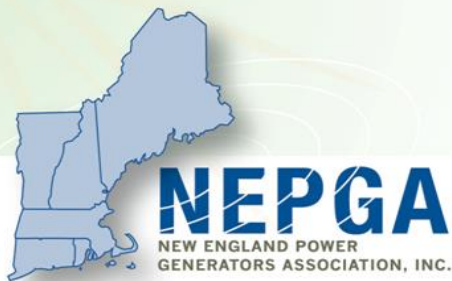
Very truly yours,

NATIONAL GRID

A handwritten signature in dark ink, reading "James G. Holodak, Jr.", is centered below the company name. The signature is fluid and cursive.

James G. Holodak, Jr.

Vice President, Regulatory Strategy and Integrated Analytics



33 Broad St, 7th Floor, Boston, MA 02109

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www.nepga.org

March 29, 2019

Honorable Martin Suuberg
Commissioner
Massachusetts Department of Environmental Protection
One Winter Street, Second Floor
Boston, MA 02108

Dear Commissioner Suuberg:

The New England Power Generators Association (“NEPGA”)¹ appreciates the opportunity to provide comments to the Massachusetts Department of Environmental Protection (“MassDEP”) on its proposed amendments to CMR 7.75: *Clean Energy Standard* (“CES”). NEPGA takes no position with respect to expanding the CES to include municipal utilities. However, NEPGA opposes including large-scale Canadian hydro imports in the CES, which would only extend an unnecessary subsidy to a resource that does not need additional support. Instead, NEPGA urges MassDEP to remove the post-2010 vintage requirement to allow all qualified resources, regardless of age or technology, to participate in the CES.

First, NEPGA does not agree that a CES-E that includes existing large-scale, provincially-owned Canadian hydroelectric resources with proposed long-term contracts with Massachusetts consumers would help ensure replacement of emitting generation and a reduction of greenhouse gas (GHG) emissions under the Global Warming Solutions Act (GWSA). Adding existing provincially-owned Canadian hydro imports to a CES-E would only provide an additional revenue stream for entities that do not need the ratepayer-backed subsidy. It flies in the face of the purpose of a CES to mandate market-share for resources that are not supported by long-term contracts and would not otherwise be recognized for some of the clean energy attributes that Massachusetts has mandated.

Second, if the CES is intended to increase the amount of clean energy generation needed to help the Commonwealth meet the GHG reduction mandates under the GWSA, NEPGA suggests that MassDEP simply remove the vintage requirements under the current CES. CES eligibility is currently limited to only those resources that

¹ The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.

commenced commercial operation after December 31, 2010 (also referred to as “new” resources). These vintage requirements deny existing resources the opportunity to contribute their low and zero-carbon attributes and potentially leads to premature retirements of otherwise qualified clean energy generators. Failure to recognize these resources will also unnecessarily lead to inefficient and costlier program compliance, with added costs borne by ratepayers. An open, non-discriminatory CES that includes participation of pre-2010 resources will enable the Commonwealth to more quickly and cost-effectively meet the emissions reduction goals required by the GWSA. NEPGA urges MassDEP to remove vintage as a requirement from the CES, allowing all otherwise eligible new and existing resources to compete under the standard.

NEPGA has consistently pointed to a meaningful price on carbon dioxide emissions, on an economy-wide basis, as the best manner for Massachusetts and other New England states to meet emissions mandates. Such an in-market model, that is consistent across all New England states, is the best way to meet environmental policy objectives and help stop the cycle of additional subsidies or carve-outs to ensure reliability or retention of valuable resources. Nonetheless, the comments outlined above are intended to work within the scope of the CES and the questions posed by MassDEP.

NEPGA thanks MassDEP for its consideration of these comments.

Respectfully submitted,

/s/

Dan Collins
Director of Government Affairs

March 29, 2019



Meghan Leahy
Director
Legislative and Regulatory Affairs
19 Charles Street
Charlestown, MA 02129
meghan.leahy@NEE.com
617.320.9883

March 29, 2019

By Electronic Mail: climate.strategies@mass.gov

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

Re: Proposed Clean Energy Standard-Existing

Dear Commissioner Suuberg:

With appreciation for the opportunity to comment and for the Department's on-going work to fashion efficient and effective programs and policies, NextEra Energy Resources, LLC (NEER) is pleased to provide comments on the proposed Clean Energy Standard-Existing (CES-E).

NEER is a clean energy leader and is one of the largest wholesale generators of electric power in the U.S., with approximately 21,000 megawatts of net generating capacity, primarily in 36 states and Canada as of year-end 2018. NEER, together with its affiliated entities, is the world's largest operator 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, Iowa and Wisconsin.

NEER's interest in the Department's implementation of a CES-E principally arises from its majority ownership and operation of Seabrook Station located in Seabrook, New Hampshire.

Specifically, NEER supports the Department's proposal to include existing clean generators that the Department has determined "are located in a state or adjacent control area that has consistently been a significant exporter of clean energy to Massachusetts, on a net annual basis",¹ as those

¹ *MassDEP Stakeholder Discussion Document, Expanding the Clean Energy Standard, February 2019*,
<https://www.mass.gov/files/documents/2019/02/20/ces-shdd0219.pdf>

generators can directly support Massachusetts' achievement of a CES-E. Maintaining existing nuclear resources as part of a clean generating fleet serving the ISO-NE electricity market is an important component to lessening greenhouse gas (GHG) emissions and meeting the Commonwealth's Global Warming Solutions Act mandates. The Commonwealth's environmental priorities can be best served if there is an allowance for Seabrook – a facility that demonstrates a best-in-class operating history, as well as compliance with applicable health and safety standards – to qualify for a CES-E.

Retaining the existing (pre-2010) clean generators, including the Seabrook nuclear plant, would reduce annual GHG emissions by 7–10 million metric tons for the ISO-NE region and 4–5 million metric tons for Massachusetts, relative to a scenario without the existing clean generators.

Massachusetts customers would also see potential net cost savings of \$120–\$150 million per year relative to a scenario without the existing clean generators, because energy and capacity market prices would be lower with existing clean resources than without them and the associated customer savings would outweigh the cost of the CES-E program.²

Below, please find specific responses to select questions posed by the Department.

1. Limiting CES-E Certificates for Seabrook

Limiting the CES-E certificates that could be received by Seabrook to 5% of Massachusetts' electric sales in each year of the CES-E program, as per the Department's proposal, would shift the burden of two types of risk to Seabrook. First, Massachusetts' sales could decline in the future, hence reducing the CES-E certificates available to Seabrook. Second, as discussed below in Section 2, the amount of certificates available to Seabrook could be less than 5% of sales if the CES-E program revises the level and mix of CES-E eligible supply in each year.

Therefore, the Department should consider freezing the CES-E certificates for Seabrook at the beginning of the program and set the level for each future year at the 5% of the annual average of Massachusetts' historical electric sales (or greater to capture additional contribution by Seabrook). Alternatively, CES-E certificates available to Seabrook in each future year could be set at a fixed percentage of Seabrook's annual generation.

2. Level of CES-E Eligible Generation in Future Years

While this topic is not explicitly mentioned in the Department's stakeholder discussion document, it is unclear whether the currently proposed CES-E program will revise the level of CES-E eligible

² Assumes that the price of the CES-E certificates average at \$10/MWh equal to 15% of RPS Class I Alternative Compliance Payments

generation and the mix of CES-E eligible resources in future years. Adjusting the level of CES-E eligible generation in the future could potentially reduce the CES-E certificates provided to existing clean generation over time, and undermine the main objective of “retention of existing non-emitting imports”³ for achieving the GHG-reduction benefits of such existing generation.

3. Freezing the CES-E Requirements Over Time (15% of Massachusetts’ Sales vs. Fixed Terawatt Hours)

Setting the CES-E annual requirement at 15% of electric sales in Massachusetts and adjusting the percentage in each year to keep the CES-E requirement the same in megawatt hours would be more administratively cumbersome than setting the requirement as a fixed annual megawatt hour value from the outset. Therefore, the Department should consider setting the CES-E requirement as a fixed megawatt hour value that would be applicable to each future year.

4. Integration of CES and CES-E requirements over time

a. Option 1: Allow CES-Eligible Resources to Qualify for CES-E

The attractiveness of combining the CES and CES-E requirements over time depends on whether the CES-E prices would be anchored to the CES prices, and whether the CES-eligible resources are allowed to receive both CES and CES-E certificates. From a market design perspective, allowing all CES-eligible resources to also qualify for CES-E could discourage the retention of existing non-emitting resources. However, if the CES-E certificate prices are anchored to CES certificate prices, this potential adverse effect may be mitigated.

If CES-eligible resources also qualify for CES-E certificates, they should be allowed to receive either CES or CES-E certificates, but not both. Otherwise, CES-eligible resources could flood the CES-E certificate market with near-zero offer prices because they are already compensated through the CES program. In that case, CES-E certificate prices would likely be near-zero, and make the CES-E program ineffective.

Setting CES-E certificate prices to a fixed percentage of CES certificate prices could reduce price risk for CES-E certificates as compared to the current proposal to implement a stand-alone CES-E program. First, the CES program has larger clean energy requirements and a larger pool of suppliers than the CES-E program, so anchoring the CES-E prices to CES prices could address potential concerns about limited liquidity for the CES-E certificates. Second, if the amount of CES-E qualified generation from existing clean resources exceeds the fixed amount of CES-E requirements, the price of CES-E certificates could potentially drop to zero under a stand-alone CES-E program with no price linkage to the CES market. This too would make the CES-E program ineffective in supporting the existing clean generation at the levels seen historically. Therefore,

³ *MassDEP Stakeholder Discussion Document, Expanding the Clean Energy Standard, February 2019*, <https://www.mass.gov/files/documents/2019/02/20/ces-shdd0219.pdf>

combining the CES and CES-E requirements by anchoring the CES-E certificate prices to CES certificate prices could improve the effectiveness of the CES-E program.

b. Option 2: Transition of Resources from CES to the CES-E After Operating for 20 Years

This option could discourage development of new resources due to requiring CES resources to transition to the lower-priced CES-E certificates after 20 years, hence reducing the incentive for new CES-eligible resources to come online ahead of the levels needed to meet CES targets.

NEER appreciates the work of the Department and the opportunity to comment on this important issue. NEER's representatives are available at the Department's convenience to provide any additional information or analysis related to its facilities or its experience in other jurisdictions.

Respectfully submitted,

/s/Meghan Leahy
Meghan Leahy
Director
Legislative and Regulatory Affairs
NextEra Energy Resources



March 28, 2019

Mr. Jordon Garfinkle
Mass. Department of Environmental Protection
One Winter Street, 7th floor
Boston, MA 02108

Re: CES Regulation, Proposed Amendments

Dear Mr. Garfinkle:

The Northeast Gas Association (NGA) appreciates the opportunity to provide comments on the current stakeholder review process being undertaken by the Department of Environmental Protection (DEP) in regards to The Clean Energy Standard (CES) regulation, 310 CMR 7.75.

NGA is a non-profit trade association of natural gas companies based in Needham. Our members are the local gas distribution companies (LDCs) that serve the states of Massachusetts, Connecticut, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont. Our members also include interstate pipeline companies that transport natural gas into the region; liquefied natural gas (LNG) suppliers; compressed natural gas (CNG) suppliers; and other industry participants.

Our comments focus on two areas: consideration of the beneficial contribution of combined heat and power (CHP) facilities to the Commonwealth's energy system as a low-carbon power input; and the continuing value of the baseload generation role of natural gas in supporting the Commonwealth's transition to cleaner power generation sources.

CHP as a Component of CES

Combined heat and power – or CHP – offers great benefits for the Commonwealth and in our view should be included within the categorization of the CES.

As defined on the MA Department of Energy Resources web site, "Combined Heat and Power (CHP) system (or cogeneration) can effectively and reliably generate useful heat and electric power using less fuel than a typical system that generates power only. CHP systems offer tremendous opportunities for customers with predictable and consistent heat and power needs (particularly large commercial, industrial, and institutional facilities), providing potential for significant economic savings and reductions in fuel consumption and greenhouse gas emissions."

Natural gas fuels about 70% of existing CHP capacity in the U.S. and is likely to be the key fuel input for CHP going forward. As NRRI observes: "The abundance of natural gas will make gas-fired CHP systems the preferred technology of the future. The scale of CHP systems ranges from the micro, residential scale of around 1 kW to large-scale industrial systems with a capacity greater than 100 MW."

The U.S. EPA notes that "gas turbines produce a high quality (high temperature) thermal output suitable for most combined heat and power applications...There is a significant amount of gas turbine based CHP

capacity operating in the United States located at industrial and institutional facilities. Much of this capacity is concentrated in large combined-cycle CHP systems that maximize power production for sale to the grid. However, a significant number of simple-cycle gas turbine based CHP systems are in operation at a variety of applications including oil recovery, chemicals, paper production, food processing, and universities."

CHP is environmentally beneficial. EPA reports that, "because of their relatively high efficiency and reliance on natural gas as the primary fuel, gas turbines emit substantially less carbon dioxide (CO₂) per kilowatt-hour (kWh) generated than any other fossil technology in general commercial use."

We encourage DEP to include CHP as part of the Commonwealth's plan to expand the implementation of the CES.

Continuing Central Role for Natural Gas in Power Generation in the Commonwealth – Supporting Reliability and Improved Air Quality

Massachusetts and the entire New England region have made significant strides in reducing air emissions from the power generation sector in the last several years. As reported by ISO New England, the region over the last sixteen years has reduced sulfur dioxide emissions by 98%, nitrous oxide emissions by 74%, and carbon dioxide emissions by 34%. Natural gas is the key reason for this improved air quality situation, as it has displaced more polluting fuels in the regional power mix.

A new natural gas combined-cycle power plant (674 MWs) began operation in Salem in mid-2018; and a new 200 MW gas peaker unit is expected to begin operation this spring in Medway. These units contribute to power system reliability in the Commonwealth with highly efficient and up-to-date technology that bring overall benefits to the state's economy and environment. We urge the DEP to strive, as it seeks to ensure further CES advancement, to balance environmental achievement with economic sustainability.

Natural gas is pivotal in our view to the Commonwealth's progress to date in meeting the 2020 GHG targets, and will continue to help the Commonwealth meet its environmental and economic goals in the years ahead.

We appreciate your consideration of our comments.

Thank you.

Sincerely,



Thomas M. Kiley
President & CEO



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Email: fpullaro@renew-ne.org
Web: renew-ne.org

March 29, 2019

Via climate.strategies@state.ma.us

Massachusetts Department of Environmental Protection
One Winter St.
Boston, MA 02108

Subject: MassDEP Stakeholder Discussion Document on Expanding the Clean Energy Standard

In response to the MassDEP communication inviting public comment on the February 20, 2019, Clean Energy Standard ("CES") Discussion Document, RENEW Northeast, Inc. ("RENEW") submits these comments.¹

RENEW is a non-profit association uniting environmental advocates and the renewable energy industry whose mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in the Northeast from the region's abundant, indigenous renewable resources. RENEW has focused on highlighting the value of grid-scale renewable resources- specifically land-based and offshore wind, solar and hydropower- and the benefits of transmission investment to deliver renewable energy to load centers in the Northeast. RENEW members own and/or are developing large-scale renewable energy projects and high-voltage transmission facilities across the Northeast. They are supported by members providing engineering, procurement and construction services in the development of these projects and members that supply them with multi-megawatt class wind turbines.

RENEW has supported the requirement on retail electricity sellers to purchase annually clean energy certificates from existing clean generators (a "CEC-E"). 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 maintained through 2050.

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

The cost to consumers to comply with a CES-E can be reduced by increasing the pool of non-emitting eligible resources. This can be accomplished by granting eligibility to cost-effective legacy non-emitting resources, particularly the region's fleet of small hydropower, that are contributing to the 1990 baseline. RENEW therefore supports MassDEP's proposal to make clean energy generators eligible under a CES-E if they do not qualify as clean generation units under the CES because they commenced operation before 2010.

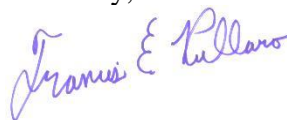
As a purpose of a CES-E is to retain the baseline of non-emitting resources and not to achieve incremental emissions reductions, RENEW does not support the provisions in the Discussion Document that (1) limit eligibility to imports from adjacent states and control areas that have been net exporters; and (2) exclude resources previously utilized for compliance in a neighboring area. In the interest of economic efficiency for the benefit of consumers, all imports should be eligible provided they are not contributing to a CES-E goal in excess of historical trends.

The Discussion Document proposes the CES-E standard be set at 15 percent of annual load. RENEW suggests that the standard retain the equivalent of the Commonwealth's historical baseline of clean energy supply rather than a percentage of the baseline to ensure maintenance of the existing level of non-emitting supply through 2050.

RENEW recommends the Alternative Compliance Payment ("ACP") value be set at a level to induce retail sellers to procure CES-E certificates rather than make ACP payments. That level should reflect 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. An ACP set at 15 percent of the Class I Renewable Portfolio Standard ACP will almost certainly encounter these issues and hinder MassDEP's efforts to maintain these existing resources for the long term.

Thank you for the opportunity to provide these comments.

Sincerely,



Francis Pullaro
Executive Director

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 7.75: CLEAN ENERGY STANDARD
- REVIEW OF OPTIONS FOR EXPANDING
THE CES

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:
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MARCH 29, 2019

**COMMENTS OF
RETAIL ENERGY SUPPLY ASSOCIATION
RE 2019 STAKEHOLDER DISCUSSION DOCUMENT**

The Retail Energy Supply Association (“RESA”)¹ hereby submits its comments in response to the Department of Environmental Protection’s (“Department”) Stakeholder Discussion Document Expanding the Clean Energy Standard February 2019 (“Discussion Document”).

INTRODUCTION

RESA is a non-profit organization and trade association that represents the interests of its members in regulatory proceedings in the Mid-Atlantic, Great Lakes, New York, and New England regions. RESA members are active participants in the retail competitive markets for electricity, including the Massachusetts retail electric market. Several RESA member companies are licensed by the Department of Public Utilities (“DPU”) to serve customers in Massachusetts and are presently providing electricity service to customers in the Commonwealth. Accordingly, RESA and its members have an interest in ensuring that the expansion of the Clean Energy

¹ The comments expressed in this filing represent the position of the Retail Energy Supply Association (RESA) as an organization but may not represent the views of any particular member of the Association. Founded in 1990, RESA is a broad and diverse group of retail energy suppliers dedicated to promoting efficient, sustainable and customer-oriented competitive retail energy markets. RESA members operate throughout the United States delivering value-added electricity and natural gas service at retail to residential, commercial and industrial energy customers. More information on RESA can be found at www.resausa.org.

Standard (“CES”) does not have an adverse effect on its members, their customers, or the continued success of the competitive retail electric market in Massachusetts.

BACKGROUND

In August 2017, the Department adopted the CES, which required that the electric distribution companies (“EDCs”) and competitive suppliers (collectively, “Retail Sellers”) procure a minimum percentage of electricity sales from clean energy resources beginning in 2018.² On February 20, 2019, the Department posted the Discussion Document describing options for expanding the CES to achieve additional emissions reductions in support of the Global Warming Solutions Act (“GWSA”).³

In the Discussion Document, the Department sought stakeholder input on increasing the CES, applying the CES to municipally-owned utilities (“Municipal Utilities”), and including existing clean generation resources.⁴ RESA now hereby submits its comments in response to the Discussion Document.

COMMENTS

In evaluating the options for expanding the CES, RESA urges the Department to ensure that it protects existing customer expectations, applies the CES to the Municipal Utilities, and structures the parameters of any CES-E in a way that provides as much regulatory certainty as possible.

² 310 C.M.R. 7.75(4).

³ Discussion Document, at 1.

⁴ *Id.*

I. ANY CES OBLIGATION INCREASE WILL INCREASE COSTS TO RATEPAYERS

In the Discussion Document, the Department requested comment on increasing the CES above the current requirement of 20% in 2020⁵ because doing so, “for example, to 21% or 22%, could provide additional reductions to help ensure compliance with GWSA emission limits.”⁶ In support of this increase, the Discussion Document noted that “sufficient supply exists in the regional certificate market to support a small increase in the standard in 2020 and 2021 without triggering the use of ACPs [alternative compliance payments] for compliance.”⁷

Although increasing the CES may not trigger the use of ACPs, it will nevertheless impose additional, unexpected costs on Retail Sellers, which will ultimately be borne by ratepayers. Even if every Retail Seller is able to procure sufficient CES certificates to meet an increased standard, these entities will incur costs to procure these additional certificates. Further, under the basic principles of supply and demand, any increase in the CES requirement will increase the demand for, and price of, CES certificates; thereby, further increasing the cost. Ultimately, consumers will bear the burden of these increased costs through increased Basic Service rates or increased competitive supply prices.

Increasing the CES above the current regulatory requirement will also exacerbate inequities in the ratemaking treatment of CES compliance costs. Currently, the rate-regulated EDCs recover certain costs associated with Basic Service electric supply, including certain CES compliance costs, through rates applicable to *all customers*, even customers who elect to receive

⁵ Discussion Document, at 1.

⁶ *Id.*

⁷ *Id.*

energy supply from a competitive supplier.⁸ As a consequence, competitive supply customers are compelled to bear some responsibility for CES compliance costs for energy that they did not consume. This ratemaking treatment is grossly inequitable because it imposes responsibility on competitive supply customers for costs that they did not cause; thereby, subsidizing Basic Service customers. Increasing the CES compliance obligation will produce a corresponding increase in the cost responsibility of competitive supply customers for costs that they did not cause and exacerbate the harm of this anticompetitive feature of Basic Service ratemaking.

II. THE DEPARTMENT SHOULD PROTECT EXISTING RATEPAYER EXPECTATIONS

In addition to an increase to the existing CES obligations for 2020 and 2021,⁹ the Discussion Document also contemplates a potential “CES-E” standard for existing clean energy generators.¹⁰ Both an increased CES and a newly-created CES-E obligation have the potential to frustrate consumer expectations because they could affect existing contracts that were priced based on the current CES requirements and may have terms of service that extend over multiple years.

While competitive suppliers may have contractual and legal means to address change of law circumstances, these mechanisms will have a direct and immediate financial effect on customers that have contracted for a fixed price and will be subject to new and unanticipated charges that are not within their budgets. These unanticipated charges could place customers in

⁸ See D.T.E. 99-60-C (Oct. 6, 2000), at 13. The Basic Service power supply costs recovered from all customers consist of Basic Service reconciliation costs, which include CES compliance reconciliation costs. See D.T.E. 99-60-C (Oct. 6, 2000), at 13; *see also*, e.g., M.D.P.U. No. 1352, Massachusetts Electric Company and Nantucket Electric Company Basic Service Adjustment Provision (Effective Apr. 1, 2018), at Sheet 1 (“The over- or under-recovery of power supply costs shall be allocated to the Company’s rate classes . . .”), Sheet 3 (identifying as a cost of providing Basic Service “the cost of acquiring Clean Energy Credits or remitting Alternative Compliance Payments to comply with the Clean Energy Standard pursuant to Mass. Gen. Laws c. 21N, the Global Warming Solutions Act, and 310 C.M.R. 7.75”).

⁹ Discussion Document, at 1.

¹⁰ *Id.* at 2-4.

untenable positions because they may be required to pay these new costs per the terms of their contractual agreements. Such an unexpected cost impact would be particularly difficult for local and state governments, as well as institutional customers, such as hospitals, colleges, and universities, that generally have limited budgetary flexibility. Moreover, such unexpected changes would undermine the consumers' underlying confidence that the competitive electricity market can provide and deliver the type of pricing products they desire and have contracted to meet their energy needs. Accordingly, in order to avoid disrupting these existing agreements, just as the Department recognized an exemption from the CES for existing contracts at the time it promulgated the original regulations,¹¹ it should recognize a comparable exemption from any increased CES requirements or new CES-E compliance obligation.

III. MUNICIPAL UTILITIES SHOULD BE SUBJECT TO THE CES

In the Discussion Document, the Department requested comment on options for the potential application of the CES to Municipal Utilities.¹² In those cases in which Municipal Utilities have been exempted from certain requirements, the legislature has done so explicitly.¹³ In this case, the GWSA specifically imposes upon “municipal electric departments and municipal light boards” the requirements applicable to Retail Sellers.¹⁴ Accordingly, pursuant to the plain language of the GWSA, the CES should be applied to Municipal Utilities.

Moreover, Municipal Utilities contribute to greenhouse gas (“GHG”) emissions and should concomitantly be required to contribute to their reductions. Similarly, municipalities and Municipal Utilities customers, like other consumers and residents of the Commonwealth, benefit

¹¹ See 310 C.M.R. 7.75(5)(d).

¹² See Discussion Document, at 2.

¹³ See, e.g., M.G.L. c. 25A, § 11F(i) (“A municipal lighting plant shall be exempt from the obligations under this section so long as and insofar as it is exempt from the requirements to allow competitive choice of generation supply under section 47A of chapter 164.”).

¹⁴ M.G.L. c. 21N, § 2(a)(5) (“[T]his requirement shall apply to all retail sellers of electricity, including electric utilities, municipal electric departments and municipal light boards . . .”).

when GHG emissions are reduced through the CES and the Department's efforts. Thus, the Municipal Utilities' customers should not be allowed to reap the benefits of GHG emissions reductions paid-for by other Massachusetts electric customers without contributing to the costs securing those GHG emissions reductions. Accordingly, Municipal Utilities should be subject to the same CES obligations as Retail Sellers.

Imposing the CES on Municipal Utilities will ensure that the obligation is instituted in a fair, balanced and competitively neutral fashion. Because Municipal Utilities are exempt from numerous regulatory requirements, competitive suppliers are already faced with questions from customers about why they can purchase power for a significantly lower cost from Municipal Utilities. Permitting Municipal Utilities to avoid or limit obligations under the GWSA will only further exacerbate this issue, particularly when the Municipal Utilities' customers receive the benefits of reduced GHG emissions that the CES produces and for which all other ratepayers have paid. Thus, including Municipal Utilities in the CES will allow CES costs to be shared equitably by all the customers benefiting from it.

To reduce the immediate impact on Municipal Utilities, the Department could adopt an appropriate phase-in to allow the Municipal Utilities reasonable time to comply. For instance, the phase-in schedule originally proposed by the Department would gradually implement the CES for Municipal Utilities so that, by 2050, all Retail Sellers, including Municipal Utilities, would be subject to the same standard.¹⁵ By adopting this type of approach, the Department could ensure the CES is implemented in a more competitively neutral manner while still affording Municipal Utilities a more gradual phase-in of the obligations; thereby, avoiding potential rate shock to the ratepayers of the Municipal Utilities.

¹⁵ See Discussion Document, at 2.

The cost impact to customers of Municipal Utilities could be further reduced if competitive suppliers were authorized to provide electric supply to Municipal Utility customers. For instance, competitive suppliers' knowledge of, and experience with, procuring renewable energy certificates ("RECs") and clean energy certificates, as well as the volumes of such certificates that competitive suppliers procure to satisfy obligations over a large portfolio, could enable competitive suppliers to procure these certificates at a lower cost than the Municipal Utilities; thereby, reducing the costs of compliance that would be imposed on their ratepayers.

IV. IF IT ADOPTS A CES-E, THE DEPARTMENT SHOULD PROVIDE AS MUCH REGULATORY CERTAINTY AS POSSIBLE

RESA appreciates the Department's consideration of allowing existing resources that will help the Commonwealth to reduce GHG emissions to participate in the CES. However, if the Department establishes a CES-E structure, it should ensure that the compliance requirements are straightforward, easily calculable, and identified for a multi-year period to allow businesses to manage their affairs more effectively and reduce risk premiums; thus, mitigating costs borne by ratepayers.

A. CES-E Compliance Obligations Should Be Fixed And Predictable And Based On A Percentage Of Sales

The Discussion Document raises the prospect of establishing a mechanism to adjust the CES-E compliance obligation percentage to maintain the amount of energy required if electricity sales change.¹⁶ As an alternative, the Discussion Document contemplates that the CES-E compliance obligation be expressed in Megawatt-hours ("MWh").¹⁷ If this MWh approach is

¹⁶ Discussion Document, at 2-3.

¹⁷ *Id.* at 3 n.4.

adopted, the Discussion Document proposes that a formula be used to apportion the MWh standard among Retail Sellers based on electricity sales.¹⁸

A formula or other methodology that fails to provide an easy and predictable method for determining compliance creates uncertainty that forces suppliers to estimate their compliance obligations and to include a significant premium in what they charge consumers to protect against that risk; thereby, increasing prices to ratepayers. Furthermore, if the compliance obligation is ultimately less than the suppliers estimated, customers will have paid more for CES-E compliance than was actually necessary. Conversely, by providing quantity and cost certainty, the Department can eliminate risk premiums associated with such uncertainty - resulting in lower prices for consumers. Thus, RESA urges the Department to provide quantity and cost certainty regarding any CES-E compliance obligations. Otherwise, customer contracts are likely to include a substantial risk premium to protect suppliers from future quantity risk. RESA requests that the Department adopt one of the following two proposals to eliminate or, at least, mitigate the uncertainty associated with the annual compliance obligation.

First, rather than using a formula or other methodology with unknown and unpredictable variables to calculate the compliance obligation, just as it did with the CES obligation,¹⁹ RESA proposes that the Department provide a schedule that allows suppliers to know *with certainty* at the time the CES-E is adopted what their compliance obligations will be for the life of the obligation. Such certainty will allow suppliers to make appropriate forward CES-E certificate contracting decisions and eliminate the need to include risk premiums in their customer contracts to cover quantity uncertainty.

¹⁸ Discussion Document, at 3 n.4.

¹⁹ 310 C.M.R. 7.75(4) (providing standard through “2050, and each year thereafter”).

Alternatively, if the Department requires flexibility to respond to changing conditions or to balance supply and demand, RESA proposes that, at the time the CES-E is adopted, the Department publish a schedule that establishes the compliance obligation for at least the first three (3) years and then, each subsequent year, establish the compliance obligation for the compliance year three (3) years forward. The Department should then only consider changes inside of the pre-established three (3) year period to rectify extreme imbalances that could not otherwise be addressed through adjustments in the obligation in later years.

If the Department does not provide quantity certainty for several years, customers with multi-year fixed price arrangements²⁰ will still be faced with increased risk premiums to account for the quantity uncertainty in the later years of those agreements. Conversely, by establishing a three (3) year forward compliance obligation, the Department can eliminate this risk premium in the majority of customer contracts. Customers, particularly commercial and institutional customers, place a high value on price certainty for budgeting and planning purposes. Suppliers can best provide such certainty if future cost of service obligations can be predicted with reasonable accuracy. Establishing and maintaining a program that fixes the forward obligations for at least three (3) years forward accomplishes this objective. Further, taking such an approach would reduce the criticality of including exemptions for existing contracts for any future program modifications.

In addition, rather than adopting a CES-E compliance obligation based a specific MWh amount that will need to be modified based on unknown and unpredictable factors, the Department should use a percentage-of-sales-based mechanism that allows suppliers to determine their compliance obligations with ease. Such an approach will also mitigate the need for substantial

²⁰ See Energy Switch Massachusetts website (available at: <http://www.energyswitchma.gov>) (displaying multiple fixed price offers that extend thirty-six (36) months into the future) (last visited Mar. 28, 2019).

risk premiums in customer contracts to cover quantity uncertainty. A percentage-of-sales approach would have the added benefit of ensuring that the CES-E obligation varies in concert with overall energy use, which can change because of economic factors as well as the success of energy efficiency and conservation programs.²¹

B. CES-E Eligible Resources Should Be Clearly Defined And Tradeable

The Discussion Document contemplates that certain resources would be CES-E eligible.²² However, those resources are ambiguously defined and it is unclear how Retail Sellers would know that a resource satisfies one or more of those requirements. For instance, given the regional nature of the ISO New England electric system, it is not clear how a Retail Seller would know whether a resource is “located in a state or adjacent control area that has consistently been a significant exporter of clean energy to Massachusetts, on a net annual basis,”²³ or “can track imports through Quebec into New England.”²⁴ So that suppliers can ensure that they have satisfied the obligation without having to engage in any independent analysis that could result in a different interpretation than that of the Department, the Department should establish clear parameters as to what will qualify as a CES-E resource. Accordingly, as it did with when it adopted the CES initially, RESA encourages the Department to establish a qualifications process that makes resource owners responsible for demonstrating that their facilities satisfy the requirements to qualify as CES-E resources.²⁵

²¹ New Jersey’s Governor recognized these benefits of a percentage-based approach compliance obligation when signing legislation changing a New Jersey solar REC compliance obligation from an approach based on specified amounts of energy to an approach based on a percentage of energy sales. *See* 2012 Legis. Bill Hist. NJ S.B. 1925 (Jul. 23, 2012) (available at: <https://nj.gov/bpu/pdf/announcements/2012/20120723.pdf>) (describing New Jersey Governor Christie’s comments on bill S-1925) (last visited Mar. 29, 2019).

²² Discussion Document, at 3.

²³ *Id.*

²⁴ *Id.*

²⁵ *See, e.g.*, 310 C.M.R. 7.75(8) (establishing a qualification process for Clean Energy Generation resources).

In addition, if the Department establishes a separate CES-E structure, it should not be effective until CES-E certificates can be defined, created, tracked, traded and retired in the New England Power Pool Generation Information System (“NEPOOL GIS”). In this way, the Department will mitigate any ambiguity or confusion about which existing resources are CES-E eligible and provide a familiar and established process²⁶ by which Retail Sellers can demonstrate compliance.

C. The CES-E Should Include An ACP Option

The Discussion Document considers including an ACP option in the CES-E.²⁷ RESA supports this proposal.

Without an ACP, in years where there are not sufficient CES certificates available to permit all Retail Sellers to meet their compliance obligations, there will be no other manner in which to achieve compliance; thereby, creating market uncertainty. Moreover, even in years where there may be sufficient CES-E certificates available, if they are controlled by a small number of generators, those resources would be able to exert significant market power over those certificates; thereby, resulting in higher costs that will ultimately be borne by ratepayers.

An ACP recognizes that there may not be sufficient CES-E certificates available in the market at a reasonable price and, as a practical matter, places a ceiling on the price of CES-E certificates. In doing so, it avoids a small number of generators being able to artificially increase the price of certificates and the resulting costs borne by ratepayers. It also avoids consumers having to bear the expense for clean energy at any price. For instance, if only two generators qualify as CES-E eligible, without an ACP, the cost of CES-E certificates will not be capped in

²⁶ See Clean Energy Standard (CES) Stakeholder Meetings: Options for Amending the CES, Stakeholder discussion slides – March 2019, at 5 (noting that CES attribute has been added to NEPOOL-GIS certificate tracking system for all CES-qualified generation).

²⁷ Discussion Document, at 3.

any way; thus, Retail Sellers could end up paying exorbitant prices to satisfy their compliance obligations with those costs ultimately being borne by ratepayers. By instituting an ACP, the Department can ensure that the CES-E does not cost ratepayers more than is necessary. An ACP will also provide the Department with an indication of how the market is functioning and appropriate signals to determine if there is a need to make adjustments to the administratively set CES-E standard to account for how the market is functioning. Thus, RESA requests that the Department include an ACP in the CES-E standard.

In addition, the Department should establish an ACP schedule that extends at least ten (10) years into the future as has been done with other programs.²⁸ Otherwise, suppliers will be faced with a constantly moving target that will not permit them to appropriately price their products. As a consequence, customers will always be subject to a significant risk premium as suppliers attempt to ensure they have adequately covered the costs of CES-E compliance.

D. The Department Should Consider Modifications To The CES-E Resource Qualification Requirements

The Discussion Document suggests potential parameters for resources to qualify as CES-E eligible.²⁹ If these parameters are adopted, in order to qualify as a CES-E resource, a generator would need to be “located in a state or adjacent control area that has consistently been a significant exporter of clean energy to Massachusetts, on a net annual basis (i.e., Quebec and NH).”³⁰ In addition, the Discussion Document notes that the “inclusion of existing non-emitting generators in Newfoundland or Labrador that can track imports through Quebec into New

²⁸ See Solar Carve-out (SREC) and Solar Carve-out II (SREC II) Current Status, Alternative Compliance Payment Rates and SREC I and II Auction Rates (available at: <https://www.mass.gov/service-details/solar-carve-out-srec-and-solar-carve-out-ii-srec-ii-current-status>) (providing schedule for the Solar Carve-out II ACP Rates in effect for every Compliance Year through 2029) (last visited Mar. 28, 2019).

²⁹ Discussion Document, at 3.

³⁰ *Id.*

England could also be considered.”³¹ Given the regional nature of the electric system and markets, these parameters are too limiting and may be impossible to satisfy.

Competitive suppliers that operate in the Commonwealth and in other jurisdictions acquire, bank, and assign RECs and comparable certificates in order to ensure compliance with all applicable renewable portfolio standards (“RPS”) and similar programs throughout their footprint. To do this in a way that minimizes the costs for which their customers are ultimately responsible, suppliers need to know, with certainty, whether particular generation qualifies to be associated with a REC or comparable certificate in each jurisdiction in which they operate. In New England, most states, including Massachusetts, recognize certificates from renewable or clean energy resources that are located in the ISO New England Inc. (“ISO-NE”) control area or control areas that import into ISO-NE.³²

Moreover, it will be extremely difficult, if not impossible, to identify the subset of resources that are “located in a state or adjacent control area that has consistently been a significant exporter of clean energy *to Massachusetts*”³³ as opposed to all of New England. As the Department is aware, the regional electric transmission system is controlled by ISO-NE. Electricity is transmitted across the ISO-NE electric system, which receives electricity from power plants throughout the region and imports from other regions to meet the requirements of all customers in New England. Thus, it is not possible to track the exact location to which electricity from a particular power plant or area has been transmitted. As a consequence, determining whether power from a plant in Maine, for instance, has been exported to Massachusetts would be extremely difficult, if not impossible. Thus, just as it did when it

³¹ Discussion Document, at 3.

³² See, e.g., 310 C.M.R. 7.75(7).

³³ Discussion Document, at 3 (emphasis added).

adopted to the CES, the Department should permit all resources located in the ISO-NE control area or an adjacent control area to qualify as CES-E eligible.³⁴

The Discussion Document also suggests that a generator that has an announced retirement date would not be eligible to qualify as a CES-E resource.³⁵ However, the Department did not impose a similar requirement on the requirements for CES eligibility.³⁶ Furthermore, until retirement actually occurs, power generated by clean energy resources with announced retirement dates could still displace higher emitting generation sources and contribute to the Commonwealth's GHG reduction goals. Moreover, a generator may announce an expected retirement date then, for a variety of reasons, decide not to proceed as planned. Thus, the Department should not prohibit generators with announced retirement dates from qualifying as CES-E resources.

The Discussion Document also envisions special provisions for Seabrook.³⁷ While it may be appropriate to establish certain provisions in a CES-E standard to address unique aspects of Seabrook, any such special provisions should not unduly complicate the CES-E standard or effectively create another standard that is either carved out of or in addition to the CES-E standard.

V. THE DEPARTMENT SHOULD REVIEW THE CES AT APPROPRIATE TIMES

The Discussion Document also contemplates periodic reviews of the CES to consider, among other things, whether the two percent (2%) annual CES increase should end in 2045 to ensure that aggregate clean energy requirements in 2050 will not exceed 100% of electricity

³⁴ *Cf.* 310 C.M.R. 7.75(7).

³⁵ Discussion Document, at 3.

³⁶ *See* 310 C.M.R. 7.75(7).

³⁷ Discussion Document, at 3.

sales.³⁸ The Commonwealth's aggregate clean energy requirements imposed on Retail Sellers should not exceed 100% of electricity sales. If they do, Massachusetts consumers effectively would subsidize the costs of clean energy consumed outside the Commonwealth. Accordingly, RESA supports appropriate review of the CES to ensure that the Commonwealth's aggregate clean energy requirements do not exceed 100% of electricity sales. In addition, the Department should also conduct periodic reviews to evaluate the impact that changes in supply, demand and technology have had on the various requirements of the CES, including the ability of Retail Sellers to satisfy their obligations.

CONCLUSION

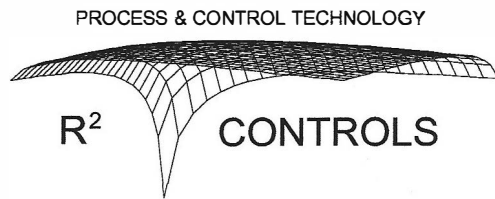
For all of the foregoing reasons, RESA urges the Department to ensure that any expansion of the CES protects existing customer expectations, that Municipal Utilities are included in the CES, and that any CES-E structure provides as much regulatory certainty as possible.

Respectfully submitted,
RETAIL ENERGY SUPPLY ASSOCIATION

By: 

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³⁸ Discussion Document, at 3.



Tuesday, March 12, 2019

Richard Rys
128 Mountain Road
Princeton, MA 01541

Climate Strategy stakeholder input,

My comments are based on my experience as a registered professional Chemical Engineer who works in the fossil industry, electric power generation (including nuclear power), transmission and distribution, and renewable energy technologies and also as light commissioner in the town of Princeton MA for PMLD.

As a control system engineer familiar with modeling dynamic behavior of systems, returning our planet surface temperature to normal without a major overshoot requires prompt action and regrettably, on a global level, we have not yet even been able to start the reduction of the atmospheric CO₂ concentration. In this regard the Massachusetts CES and RPS regulations are going in the right direction even in the face of many worldwide stakeholders not yet seriously working on this urgent problem. We do have an ethical and logical responsibility to act and not to hope others will solve this problem for us.

In order to cut CO₂ emissions from the transport and building sectors by replacement of fossil infrastructure, electrification is the most likely technology, as there is no other large scale established safe chemical, mechanical, or nuclear energy options to support this. As such it is urgent that electricity supply must be substantially non-emitting as a top priority.

Municipally-owned utilities

It is fairest and easiest to administer when all stakeholders have the same goals and when regulations are based on science and are kept simple as possible. In my opinion, MLP's should be required to meet the CES requirements by 2021 with no more than 2-3 years' time to comply, without exception due to size, but with the allowance that certificates representing clean generation output purchased or owned under existing contracts with pre-2010 non-emitting (hydro, but not nuclear) generators could be counted toward compliance.

While municipal electric suppliers have always had the option of exceeding the CES and RPS goals of the IOU's it is clear from the recent MCAN report card and other evidence that MPL's have not chosen to do that. The generally accepted reason for this lack of action is to keep electric power rates as low as possible. Retiring RECs for wind and solar, generous net metering policies, and encouraging customer efficiency are not so common with MPL's compared to the IOU's. In my opinion, a carbon tax would be the preferred regulatory path to curtail emissions, but experience shows that politically this is currently a problematic approach, so for the moment it is best to encourage non-emitting alternatives with the CES certificate and ACP method even though it may bias some alternatives.

Muni's with long term contracts can buy RECs to meet their obligations. In Princeton we estimated that buying class 1 RECs would amount to roughly \$0.02 per kw*hr increase in rates to get to 100% renewable

power immediately. This depends on the cost of the RECs. If needed, long term contracts might be renegotiated as most suppliers recognize that new regulations may require change.

CES-E

The CES-E should ensure that new clean energy replaces emitting generation and reduces emissions.

ISO New England estimates a CAGR (Cumulative Average Growth Rate) of about 0.9 % per year for power consumption over the next 10 years. Lacking corresponding increases in CO₂ sequestering from natural and geoengineered processes it would be appropriate to adjust emission targets to insure our overall policy is resulting in a net reduction of CO₂ emissions at an appropriate trajectory.

Fossil

Fossil power might be considered non-emitting to the extent that CO₂ is captured and sequestered so it is unlikely to re-enter the atmosphere and any methane emissions used to produce the fossil fuel are taken into consideration. Carbon emitting generation should be classified based on how much electrical energy is delivered per unit of CO₂ and other greenhouse gases emitted.

Nuclear

Electricity from nuclear power is essentially non-emitting for CO₂ and other greenhouse gases and should be classified as non-emitting for greenhouse gases. The emissions risk for nuclear power is mainly from radiation due to meltdowns and waste mis-management. Over the life of nuclear power, we have observed two serious accidents; one at Chernobyl at a total cost of roughly ~700 \$Billion and one at Fukushima (3 reactors melted down) at a total cost of about ~300 \$Billion. There are about 450 reactors worldwide, 98 in the US, and 4 in New England with an average age of 37 years. Statistically the cost meltdowns are roughly \$60 million per reactor*year of operation if current reactors operate as they have in the past (\$1 Trillion in damage for 450*37 reactor*years of operation). The Price Anderson Act limits liability of plant operators to \$450 Million per accident which is woefully inadequate to pay damages for a serious accident. In my opinion the advantage of nuclear power with the current generation of power reactors (BWR, PWR, CANDU, RBMK) are too dangerous to properly insure and not a good candidate for CES certificates. On 24 Sept 1979, 200 residents of Princeton showed up at a meeting to reject buying into Seabrook and went on to install wind turbines. I do not recommend issuing CES certificates for power from existing nuclear plants.

Canadian Hydro

Quebec hydro alone has more than 32GW of installed hydro power and this power should be valued to the extent it is not CO₂ or methane emitting. Hydro power could offer an important asset that can be an energy storage resource over much longer durations than grid scale batteries, to enable higher penetration of non-dispatchable renewable generation. Canadian hydro could potentially be configured to make off-shore wind generation at a large scale more economically feasible. Imported hydro certificates should be allowed to the extent that doing so does not result in replacing hydro power by higher emitting generation.

Sincerely,



Rick Rys P.E.
Principal



RESPONSE OF THE MASSACHUSETTS CHAPTER OF THE SIERRA CLUB
TO REQUEST FOR WRITTEN COMMENTS
ON PROPOSED AMENDMENTS TO THE CES

I. Introduction

The Massachusetts Chapter of the Sierra Club (MASC) here submits comments on the Department of Environmental Protection's (the "Department") proposed amendments to regulation 310 CMR 7.75 Clean Energy Standard (CES). These comments address questions from the Department about options that the Department posted on Feb. 20, 2019, to expand the CES to achieve additional emissions reductions in support of the Global Warming Solutions Act.

The Sierra Club is the oldest and largest non-profit, non-partisan environmental organization in the country with close to three million members and supporters nationwide. The Massachusetts Chapter of the Sierra Club represents over 130,000 members and supporters throughout the state. We fight for clean energy, clean air, clean water, the preservation of the Commonwealth's natural spaces, and environmentally and economically healthy, vibrant and sustainable communities. We respectfully submit these comments.

II. Substantive Comments

1. Increasing the Stringency of the CES in 2020

The Department proposes a one-time acceleration of the CES requirement from 20% to as much as 22% in 2020 and 2021. The stated purpose of this change is to ensure compliance with the 2020 emissions reduction goals of the Global Warming Solutions Act without triggering

the use of Alternative Compliance Payments (ACP).

MASC supports this adjustment and recommends the full increase to 22% in 2020, accepting the rationale that the purpose is to ensure compliance with the GWSA and not to generate revenue under ACP.

2. Applying CES Requirements to Municipal Light Plants Beginning in 2021

The Department proposes to apply CES requirements to Municipal Light Plants starting in 2021 and asked about various implementation options.

MASC supports applying CES requirements to MLP's starting in 2021. The best approach is the proposed phase-in starting at approximately 6% and rising to 80% in 2050. Starting at this low level allows MLP's to adapt their special situations including the generation that they own and long term, power purchase agreements.

With this slow start, no special provision need be made for pre-existing clean energy sources owned or used by MLP's.

Special exceptions should not be made for small MLP's as they are as prepared as any to meet the initial 6% requirement.

MASC does not support the enhanced reporting only option.

Recently the Massachusetts Climate Action Network completed an assessment of the clean energy portfolios and programs of all 41 MLP's in Massachusetts. The assessment and resulting report card showed that no MLP had enough renewable energy to meet the Renewable Portfolio Standard in 2017, and no MLP is yet running an effective energy efficiency program. Crucially, MLP's provide 14% of the electricity in Massachusetts. We cannot continue to let MLP's operate outside the regulation and oversight of our efforts to meet the greenhouse gas emissions required by the GWSA. Neither is waiting or delaying a good option. Sooner or later,

the MLP's must meet our clean energy requirement. Later is harder. Starting in 2021 with a 6% requirement is a good starting point.

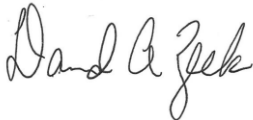
III. Conclusion

The Department suggests using regular program reviews to ensure long term alignment among our goals and requirements. This is a good idea regardless of what changes are made to the CES.

We are very much encouraged that the Department is taking these proactive steps to beef up the CES. We appreciate you inviting comments on these subjects and thank you for your consideration.

Respectfully submitted,

Date: March 29, 2019

A handwritten signature in cursive script, reading "David A. Zeek".

David A. Zeek
MASC Energy Committee

50 Federal Street, 3rd Floor
Boston, MA 02110
(617) 423-5775

Held, Jonathan (DEP)

From: Strategies, Climate (DEP)
Sent: Thursday, March 14, 2019 2:13 PM
To: Garfinkle, Jordan (DEP)
Subject: FW: Clean Energy Standard 310CMR

From: Kim Slack
Sent: Thursday, March 14, 2019 2:12:58 PM (UTC-05:00) Eastern Time (US & Canada)
To: Strategies, Climate (DEP)
Subject: Clean Energy Standard 310CMR

Regarding including Municipal Light Plants in the Clean Energy Standard (CES) 310 C.M.R. 7.75

As a resident of Concord, I've seen how quickly a Muni Light Plant can shift to non-emitting sources of energy. Currently, we have 52% of our energy either renewable energy or offset by purchasing Renewable Energy Credits.

If MA is to achieve its climate goals, then we need to expect that all MLP's change their energy sources as quickly as possible. Many MLP's counted renewable sources but have not retired their RECs. This practice should be discouraged. They can follow Concord's lead by purchasing RECs to offset longer term contracts they may have and meet the current CES of 6%.

Time is running out, we need to expect that MLPs catch up to IOU's requirements to shift to non-emitting sources and do it quickly. Oftentimes, local light boards are overwhelmed with technical details and get bogged down. Clear rules from the State will help clarify where they can shift their policies.

I would also encourage the legislation include efforts from DOER be made to publicize the shift, to help MLP's justify a change to their rate payers.

Kim Slack, 29 Adams Rd, Concord, MA 01742



Serving a Public Power Community

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

March 29, 2019

RE: Comments on Expanding 310 CMR 7.75, Clean Energy Standard.

In response to the February 20, 2019 MassDEP ("Department") stakeholder document regarding the expansion of the Clean Energy Standard ("CES"), the Taunton Municipal Lighting Plant ("TMLP") offers the following comments. MassDEP also asked for input on specific questions, some of which are addressed within these comments. For those questions which TMLP does not provide a response, it is assumed that we have no specific comment on the matter.

General Comments:

TMLP agrees with the goals of House Bill No. 2863 (HB-2863), which is designed to honor the Global Warming Solutions Act ("GWSA") while maintaining our local control rights. The standard described within this bill is known as the "Municipal Lighting Plant GGES." The GGES sets the minimum percentage of non-carbon emitting energy sold by each Municipal Lighting Plant ("MLP") to all retail end-user customers purchasing electricity pursuant to rates established pursuant to section 58 of chapter 164 as follows: (1) seven percent by 2021; (2) forty percent by 2030; (3) sixty percent by 2040; and (4) eighty percent by 2050. This approach offers more flexibility by (1) reducing the annual compliance requirement (from the CES) to every ten years, and (2) being more inclusive of other technology types and vintages that achieve the goal of the GWSA, but has been omitted by the CES.

TMLP has been providing renewable energy to our customers long before any of the REC programs began and before they were a requirement for any suppliers. The primary focus of TMLP is to provide reliable service and competitive rates to its customers. Furthermore, it needs to be addressed that for the non-emitting sources of generation from which we currently purchase but do not own the RECs, TMLP is not explicitly selling the RECs. Rather, it is agreed upon during contract negotiations that TMLP will not receive any RECs as a result of generation, and the supplier is free to use the RECs as they please.

Answers to specific questions:

DEP Question: Do you support increasing the stringency of the standard in 2020 and 2021? Is an increase of 1-2% appropriate?

TMLP Response: TMLP does not support the increase of the stringency of the standard regardless of its applicability to MLPs or not. The Department should be aware of the precedent that they are setting if they move forward with this, which might cause a reduction in support if it appears that the Department will continue to amend these regulations once approved. This may be interpreted as a back-door approach to increase the requirements after receiving initial approval. Furthermore, the TMLP believes that the stringency for MLPs described in HB-2863 is appropriate.

DEP Question: Do you support implementing the CES-E Concept?

TMLP Response: TMLP supports the CES-E approach as this will encourage non-emitting generators to continue to produce non-emitting generation to potentially be purchased by MA utilities. Without the inclusion of existing non-emitting generation in the CES, this will only incent buyers to look for generation elsewhere and not support the existing non-emitting generators which could result in their closure and therefore increase emissions in the Commonwealth.

DEP Questions: Is a stringency of approximately 15% of current electricity sales reasonable?

TMLP Response: If a CES-E were adopted and made applicable to MLPs, MLPs would have much more of an ability to comply, as many MLPs already have contracts in place with existing non-emitting generators. However, limiting the amount of existing non-emitting supply to only 15% might be too restrictive to MLPs who currently have a much larger portion of their supply covered by existing non-emitting generation. The same concern is expressed that there might be less support available for these existing generators that could force their closure and therefore increase emissions in the Commonwealth.

DEP Question: Do you support including MLPs in the CES?

TMLP Response: TMLP does not support including MLPs in the CES (310 CMR 7.75), due to our regulatory structure and the manner in which we have procured our current power supply. Since the time of deregulation, MLPs have been purchasing generation in long-term and "life of unit" contracts. While we honor the goals of the Global Warming Solutions Act, we believe that MLPs require additional considerations over Investor Owned Utilities that are not being adequately represented in the current CES. For instance, the CES will be too restrictive to MLPs by requiring greater levels of generation from non-emitting sources with accompanying RECs, however TMLP has traditionally been purchasing energy from non-emitting generation in long-term contracts which did not include the RECs. This type of energy purchasing is not consistent with Investor Owned Utilities since deregulation, Chapter 164 of the Acts of 1997 Massachusetts (Electric Industry Restructuring Act), and IOU's are prohibited to invest in long term energy contracts. HB-2863 has been filed and offers a more flexible solution for MLPs to reduce their greenhouse gas emissions. In addition, this solution encompasses more non-carbon emitting generating resources of older technology types. TMLP supports the goal of HB-2863.

DEP Question: Do you support the phase-in schedule that was proposed in 2016 (6% in 2021 rising to 80% in 2050)? A different schedule?

TMLP Response: TMLP believes that the phase-in schedule proposed in 2016 of 6% in 2021 to 80% in 2050 is reasonable if it is inclusive of the technology types as noted in HB-2863. In addition, TMLP believes that 6% in 2021 to 80% in 2050 is achievable only if compliance reporting is required every ten years, as opposed to requiring compliance with annual percentage increases. This will address some instances where MLPs have existing contracts and will not want to over-procure generation (i.e. purchasing significantly more generation than there are sales to customers) just for the sake of complying with a version of the CES.

DEP Question: Do you support exempting the smallest MLPs?

TMLP Response: TMLP believes that all MLPs have a role to play in reducing GHG Emissions in the Commonwealth, regardless of size. While we recognize that smaller MLPs may have larger percentages of their portfolios locked in with existing contracts than larger MLPs, if we have a more flexible phase-in schedule with compliance required every ten years (that still plans to achieve 80% in 2050), we believe that the small MLPs will be able to increase their non-emitting portfolios as well.

DEP Question: How should contractual and ownership relationships with “existing” (pre-2010) nuclear and hydro facilities be addressed?

TMLP Response: TMLP supports the inclusion of existing (pre-2010) nuclear and hydro facilities, as well as other pre-existing non-emitting generation to count towards compliance. If there is non-emitting generation that is being purchased by any utility, it is offsetting electricity sales that might otherwise be covered by GHG-emitting supply and therefore achieving the goal of the GWSA. While many opponents to this notion will argue that that generation has already been reducing emissions in MA and therefore their inclusion would not reduce emissions *further*, TMLP challenges this by stating that the emission-reducing attributes of non-emitting generation should be counted based on the location of the electricity sales which it is offsetting.

DEP Question: Do you support the reporting-only approach, making reporting of clean energy mandatory?

TMLP Response: As expressed through our support of HB-2863, TMLP supports the reporting-only approach for MLPs. If this is used, all MLPs will be subject to reporting the same type of information which will offer a more transparent method of comparison between MLPs. Without this unified reporting, the public does not have a clear understanding of how MLPs compare to all utilities.

Conclusion:

The TMLP appreciates the opportunity to provide these comments to the Department. TMLP suggests that the Department abstain from taking additional steps to applying the CES to MLPs in light of the proposal provided in House Bill No. 2863.

Sincerely,



Kenneth Goulart
General Manager, TMLP

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Jim Irving
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WEST BOYLSTON MUNICIPAL LIGHTING PLANT

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March 29, 2019

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

Subject: Expanding the Clean Energy Standard

Dear MassDEP,

Thank you for the opportunity to submit comments related to “Expanding the Clean Energy Standard (CES)”.

Do you support implementing the CES-E concept?

Yes

***Are the proposed eligibility requirements reasonable with respect to location and vintage?
Is a stringency of approximately 15% of current electricity sales reasonable?***

All existing and new qualified resources should count towards CES compliance if they are located within the ISO-NE control area, directly interconnected to the ISO-NE control area and delivered to ISO-NE consistent with NEPOOL GIS rules for specifying source specific imports. No limits on existing or new non-greenhouse gas (GHG) emitting and CES qualified generation should be set by MassDEP.

The Massachusetts Department of Energy Resources (DOER) coordinated and sponsored a request for proposals for clean energy pursuant to Section 83D of Chapter 169 of the Acts of 2008 (the “Green Communities Act”) and amended by chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity (the “Energy Diversity Act”). The Commonwealth’s Section 83D clean energy request for proposals allowed the distribution companies to purchase clean hydroelectricity from existing Hydro Quebec facilities. There are no restrictions on vintage, location, or size of this CES qualified energy procurement contract sponsored by the Commonwealth. DOERs July 23, 2018, Petition for Approval to the Department of Public Utilities (DPU) states; “implementation of this project will result in nearly half (47%) of the electricity consumed by Massachusetts being generated from clean energy. The project’s 9,554,000 MWh represents 17% of Massachusetts’ total load, and 20% of the EDCs Massachusetts’ state load.”

WBMLP recommends equal treatment of existing and new non-GHG emitting and CES qualified generation and no restrictions on location, size, or vintage.

Do you support including MLPs in the CES?

The CES is designed specifically for deregulated distribution companies and competitive suppliers as authorized under the Global Warming Solutions Act (GWSA). MLPs are regulated by elected Light Board's directly representing our consumers. MLPs were not included in the original stakeholder process designing the CES or represented on the advisory committee established by Chapter 21N, Section 8 of the GWSA because of our unique structure and regulation at the local level.

WBMLP supports an alternative to the CES, through pending legislation (HB 2863) that creates a "greenhouse gas emissions standard" (GGES) for municipal light plants, for the purpose of promoting the Commonwealth's goals of reducing GHG emissions while acknowledging and preserving the statutory schedule of Chapter 164 which places municipal lighting plant operations, finances, and rates under local control. HB 2863 requires MLPs achieve the same 80% reduction in GHG emissions by 2050, but on a schedule that recognizes the existence of our long-term resource commitments.

Do you support the phase in schedule proposed in 2016? A different schedule?

Any CES or GGES must be phased in to accommodate our unique vertically integrated structure and our existing long-term energy portfolio consisting of generation assets that are owned or contractually binding. WBMLP supports a phased in schedule that accomplishes the same Commonwealth goal of 80% by 2050 through a tiered approach; seven percent by 2021; forty percent by 2030; sixty percent by 2040; and eighty percent by 2050.

How should contractual and ownership relationships with existing nuclear and hydro facilities be addressed?

All existing pre-2010 non-GHG emitting and clean energy generation should count towards CES compliance for MLP's. West Boylston's ratepayers paid for the development, construction, operation, and future decommissioning cost associated with owning a portion of both Seabrook and Millstone nuclear power plant. WBMLPs ratepayers own the energy, capacity, and environmental attributes (EFECs) generated from these non-GHG emitting generation assets.

WBMLP will receive and retire, through our joint action agency MWMEC, the "Emissions-Free Energy Credits" (EFECs) associated with our share of Seabrook and Millstone nuclear power plant. The EFECs will be transferred from NEPOOL GIS into MMWEC's GIS account and retired on behalf of WBMLP. Our annual MWh's from both Seabrook and Millstone are also already reported as non-GHG emitting on MassDEPs AQ31 annual report and therefore must count towards CES compliance.

WBMLPs ratepayers purchase clean hydroelectricity from the adjoining NYSIO control area. MLPs purchase and proportionally share 53 megawatts of inexpensive hydroelectric power from the New York Power Authority (NYPA). WBMLP expects to receive this clean energy supply through 2057. As the Commonwealth considers procurements to import hydroelectricity from Canada, please recognize that MLPs have already done so since 1985. Our annual MWh's from NYPA are already reported as non-GHG emitting on MassDEPs AQ31 annual report and therefore must count towards CES compliance

West Boylston contractually owns transmission rights to the Hydro-Quebec Phase I and Phase II Project, the largest existing electric transmission interconnection between the Eastern Canada and the Eastern United States. This transmission system was built to deliver surplus hydroelectricity power into New England (Phase I was operational in 1985 and Phase II in 1990). If WBMLP purchases and imports existing or new source specific clean energy and attributes from Canada over our exiting transmission rights, these quantities must count towards CES compliance.

Do you support the reporting only approach, making reporting of clean energy mandatory?

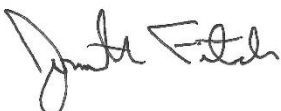
WBMLP recognizes and supports MassDEPs authority to require MLP reporting under the GWSA. WBMLP supports a reporting only approach of our non-GHG emitting energy supply. 50.1% of WBMLPs energy supply is non-GHG emitting, as a percentage of sales in 2018. The CES standard for the distribution companies and competitive suppliers is 16% in 2018. WBMLPs existing non-GHG emitting nuclear and hydroelectricity energy supply already meets MassDEPs proposed CES through 2040, so a reporting only approach make sense, while MLP supported legislation, HB2863, is contemplated by the Commonwealth.

WBMLP further recommends a monitoring only approach until EEA prepares an economic analysis on the impact a CES would have on WBMLP ratepayers. The GWSA requires the Secretary of EEA to "evaluate the total potential costs and economic and noneconomic benefits of various reduction measures to the economy, environment, and public health, using the best available economic models, emissions estimation techniques and other scientific methods". An economic analysis that determines the cost impact a CES would have on WBMLPs ratepayers has not been completed. WBMLP requests EEA and MassDEP to prepare a cost impact study for WBMLPs ratepayers based on our unique structure and energy portfolio.

Conclusion

On behalf of WBMLP's ratepayers please consider our concerns and comments regarding the proposed CES regulations.

Sincerely,



General Manager