



SMART GROWTH AND REGIONAL COLLABORATION

April 12, 2019

Judith Judson, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street
Boston, MA, 02114

RE: Comments from the Metropolitan Area Planning Council (MAPC) on DOER's Clean Peak Standard Straw Proposal

Dear Commissioner Judson,

Thank you for the opportunity to offer input on the straw proposal for the state's new Clean Peak Standard. Overall, the proposal appears to provide a sound structure for how a first-in-the-nation Clean Peak Standard could be implemented to incentivize demand reduction and the optimal use of renewable energy and storage resources during each season throughout the year. The Metropolitan Area Planning Council (MAPC) is supportive of the state's continued efforts to increase the amount of distributed clean energy resources dispatched in general and to optimize their deployment during seasonal peak periods, thereby reducing the greenhouse gas emissions resulting from the state's electric grid.

As you know, MAPC serves as the regional planning agency for the 101 cities and towns of Metropolitan Boston, which comprises roughly half the state's population and two-thirds of the state's jobs. MAPC's Clean Energy Department works with our municipalities to reduce GHG emissions in their communities and across the region. Since 2015, MAPC has operated a Peak Demand Notification Program, which has helped dozens of municipalities proactively reduce demand in their largest facilities to minimize capacity charges and associated GHG emissions. Additionally, MAPC has administrated the Department of Energy Resources' (DOER's) *LED Streetlight Rapid Retrofit* grant program since 2017, helping an additional 60 municipalities retrofit approximately 100,000 streetlights. We appreciate working hand-in-hand with DOER on these and numerous other programs to reduce GHG emissions, energy consumption, and costs for our cities and towns throughout the Commonwealth.

MAPC would like to commend DOER on developing a straw proposal that will effectively incentivize renewable energy and energy storage development and demand response mechanisms, and potentially improve the economics of systems that provide added resiliency benefits to our cities and towns. MAPC believes that the proposal could be strengthened by addressing the following questions and suggestions.

Proposed Clean Peak Certificate Multipliers

MAPC supports the core design elements proposed in the straw proposal for a seasonal multiplier and the actual monthly system peak multiplier. Regarding the proposed policy enhancement multipliers, MAPC raises the following questions and recommendations:

- Resilience Multiplier: MAPC is supportive of mechanisms to further incentivize projects that support improved building and community resiliency. However, the inherent tensions between

demand response objectives and resiliency objectives should be acknowledged and resolved in the final proposal for the Clean Peak Standard. For a system to support a community's resiliency needs, it will often need to maintain a minimum amount of stored energy at all times in the event of an emergency. The Clean Peak Standard will need to address how, when, or if that same system should be called upon for demand response purposes during peak hours so that resiliency risks could be minimized.

- Minimum Load Negative Multiplier: MAPC would like confirmation from DOER in the final proposal that the minimum load negative multiplier would not end up charging participants for contributing "too much" energy to the electric grid during these times (i.e. the overall CPC quantity generated amount would never dip below zero). The multiplier does seem like a valuable mechanism to incentivize investment in energy storage or other technologies to control flow of energy onto the grid; however, it is important that there is no risk of assuming a cost. For example, we would be concerned that, if a municipality's solar generating system without storage operated only on the weekends in April due to a malfunction, a negative multiplier could penalize that system for generating a negative total quantity of CPCs. This would be an extreme case, but exemplifies how a negative multiplier could sorely hurt a municipality's bottom line as well as disincentivize their participation.
- Distribution Circuit Multiplier: MAPC does not support a distribution circuit multiplier at this time. Should DOER decide to include one later on, MAPC recommends further stakeholder discussion. Moreover, we recommend that utilities be required to publicly share the maps of their infrastructure and each distribution circuit's current capacity for interconnection.

Clarification of the Relationship among State Standards

MAPC requests that DOER provide further explanation of the relationship, and potential overlap, among certificates generated from the Renewable Portfolio Standard, Clean Energy Standard, and new Clean Peak Standard. While all of these standards help us achieve our necessary clean energy goals as a state, it is important that the market signals are clearly defined and accessible to system owners and project developers, and that potential interactions – positive and negative – are explained upfront.

Streetlights with Wireless Controls as Eligible Resources

MAPC would like to confirm that streetlights with wireless controls that are capable of demand response would be eligible resources for Clean Peak Certificates. The current straw proposal specifies that demand response resources could include, "all other responsive electric loads for which the response can be measured and verified." MAPC strongly advises that this list include streetlights with wireless controls.

Cobrahead-style streetlights are typically not metered and are historically controlled by a photocell. The photocell senses the presence or absence of daylight and turns the light on or off accordingly. The utility bills for usage based on the wattage of the light and an assumed number of operating hours. Today, another option exists for controlling the lights: wireless (also known as "smart") controls. The wireless controls use Radio Frequency or cellular networks to communicate with a Central Management System, allowing a user to program a schedule for on/off and dimming, as well as to adjust light levels on demand, via an online or software interface. As a result, any municipality with wireless controls for streetlights has the ability to act as

a Demand Response Resource. This would most likely apply to winter peaks, when lights turn on in the late afternoon or early evening.

Wireless controls have the capability to meter and report usage. In mid-2018, MAPC collaborated on a working group with Eversource to establish a new tariff that would bill for streetlight usage based on the reported data from these control systems. Eversource elected to allow this practice for any wireless controls that meet current ANSI C12.20 standards for accuracy and performance of meters. The language, found in Eversource's S-2 tariff, could serve as a useful model.¹ It should be noted that the wireless controls' Central Management System provides reporting, if needed, to document the reductions.

Similarly, MAPC also supports the inclusion of energy storage and electric vehicle charging infrastructure as eligible demand response resources.

Thank you for your consideration of MAPC's comments and attention to these important issues as DOER further develops the regulations for implementation of the Clean Peak Standard in Massachusetts. Please feel free to contact me directly at cpeterson@mapc.org or my colleague, Patrick Roche, at proche@mapc.org, with any questions or for additional discussion.

Sincerely,

A handwritten signature in black ink, appearing to read "Cammy Peterson". The signature is fluid and cursive, with the first name "Cammy" written in a larger, more prominent script than the last name "Peterson".

Cammy Peterson
Director of Clean Energy, MAPC

¹ https://www.eversource.com/content/docs/default-source/rates-tariffs/45-tariff-ma.pdf?sfvrsn=a482c462_16