#### Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs DEPARTMENT OF ENERGY RESOURCES

## CLEAN PEAK ENERGY PORTFOLIO STANDARD

## CLEAN PEAK DEMAND RESPONSE RESOURCE GUIDELINE

## for Clean Peak Energy Portfolio Standard Participants

October 26, 2020

Pursuant to the Clean Peak Energy Standard Regulations at 225 CMR 21.00

This Guideline clarifies the method by which the Department of Energy Resources ("Department") determines Demand Response Resource Eligibility.

#### 1. Interconnection

#### a. **Provisions in the CPS Statute and Regulations**

The CPS statute at M.G.L. Chapter 25A, Section 3<sup>1</sup> defines the following:

"Clean peak resource", a qualified RPS resource, a qualified energy storage system or a demand response resource that generates, dispatches or discharges electricity to the electric distribution system during seasonal peak periods, or alternatively, reduces load on said system.

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

## CMR 21.05 (1) (a) requires the following:

The Clean Peak Resource shall be interconnected with or offset load otherwise served by the Distribution System, or shall be interconnected with the Transmission System in the Commonwealth of Massachusetts. Clean Peak Resources must demonstrate that they generate, dispatch, or discharge electricity to the electric distribution system in Massachusetts.

CMR 21.05 (1) (a) (3) requires the following:

Demand Response Resources must demonstrate that changes to electric usage from their normal consumption patterns are measurable and verifiable.

## b. <u>Determinations</u>

<sup>&</sup>lt;sup>1</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

Per the definition of a Clean Peak Resource, a Demand Response Resource must reduce load on the electric distribution system, and as such, it must be served by the electric distribution system.

#### 2. <u>Generation is Ineligible to Qualify as a Demand Response Resource</u> a. <u>Provisions in the CPS Statute and Regulations</u>

The CPS statute at M.G.L. Chapter 25A, Section 3<sup>2</sup> defines the following:

"Clean peak resource", a qualified RPS resource, a qualified energy storage system or a demand response resource that generates, dispatches or discharges electricity to the electric distribution system during seasonal peak periods, or alternatively, reduces load on said system.

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

CMR 21.05 (1) (a) (3) (a) requires the following:

A facility that generates electricity, including a Qualified RPS Resource, shall not be considered a Demand Response Resource.

#### b. **Determinations**

The definition of a Demand Response Resource is specific to changes in *usage* and *consumption*. Generation is not a form of usage or consumption, and thus is ineligible to qualify in the Clean Peak Energy Portfolio Standard as a Demand Response Resource. A non-exhaustive list of such ineligible generation includes; backup generators, combined heat and power plants, and renewable energy generators.

#### 3. <u>Commercial Operation Date</u> a. <u>Provisions in the CPS Statute and Regulations</u>

The CPS statute at M.G.L. Chapter 25A, Section 3<sup>3</sup> defines the following:

"Clean peak resource", a qualified RPS resource, a qualified energy storage system or a demand response resource that generates, dispatches or discharges electricity to the electric distribution system during seasonal peak periods, or alternatively, reduces load on said system.

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small

<sup>&</sup>lt;sup>2</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

<sup>&</sup>lt;sup>3</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

CMR 21.02 defines the following:

<u>Commercial Operation Date</u>. The date that a Clean Peak Resource first produces or provides electrical energy for sale. In the case of a Clean Peak Resource that is connected to the End-use Customer's side of the electric meter, the date on which the local Distribution Company grants approval for the Clean Peak Resource to interconnect with the grid. In the case of a Demand Response Resource, the date on which the resource first changes electric usage.

## b. **Determinations**

With respect to Demand Response Resources, the Commercial Operation Date defined in the regulation should be applied specifically to the equipment that enables the Clean Peak-specific demand response. Equipment installed on or January 1, 2019 shall not be considered an Existing Resource subject to the Existing Resource Multiplier.

# <u>Energy Storage Systems as Demand Response</u> <u>Provisions in the CPS Statute and Regulations</u>

The CPS statute at M.G.L. Chapter 25A, Section 9<sup>4</sup> defines the following:

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized

## b. **Determinations**

Energy storage which changes the demand profile of electric usage by end-use customers can be qualified to participate in the Clean Peak Energy Portfolio Standard as a Demand Response Resource. Energy storage which is issued a statement of qualification as a Demand Response Resource is not Qualified Energy Storage, is not subject to the requirements of Qualified Energy Storage, and does not enable existing Class I/II RPS resources to become eligible because only Qualified Energy Storage can enable their eligibility.

Electric energy storage systems which can provide their electric performance data shall need to provide all performance data in a format accepted by the PTS.

The consideration of measurement and verification of thermal energy storage systems which change electric usage of end-use customers from normal consumption patterns will be discussed

<sup>&</sup>lt;sup>4</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

by a Clean Peak Energy Portfolio Standard working group and may be updated in guideline and PTS reporting requirements.

#### 5. <u>Electric Vehicle Supply Equipment (EVSE)</u> a. <u>Provisions in the CPS Statute and Regulations</u>

The CPS statute at M.G.L. Chapter 25A, Section 8<sup>5</sup> defines the following:

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

CMR 21.05 (1) (a) 3 requires the following:

<u>Demand Response Resources</u>: Demand Response Resources must demonstrate that changes to electric usage from their normal consumption patterns are measurable and verifiable.

#### b. **Determinations**

EVSE may qualify to participate in the Clean Peak Energy Portfolio Standard as a Demand Response Resource.

In order for an EVSE to demonstrate that it has changed its usage from a normal consumption pattern during the Seasonal Peak Periods, it must demonstrate that: 1) a vehicle was plugged in during the Seasonal Peak Period and 2) the vehicle could have otherwise charged during the period and instead delayed charging until a period after the Seasonal Peak Period.

The resource must be able to provide sufficient data to demonstrate 1) and 2) above in a format which meets Production Tracking System (PTS) reporting requirements for all charge events at the EVSE.

The PTS will calculate the performance of the EVSE charging event for Clean Peak Certificate production purposes by determining: 1) the percent of the Seasonal Peak Period in which the electric vehicle was plugged in and not charging and 2) the power and energy of the charge event following the Seasonal Peak Period.

#### 6. <u>Electric Distribution Company (EDC) Active Demand Response (ADR) Programs</u> a. <u>Provisions in the CPS Statute and Regulations</u>

The CPS statute at M.G.L. Chapter 25A, Section 8<sup>6</sup> defines the following:

<sup>&</sup>lt;sup>5</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

<sup>&</sup>lt;sup>6</sup> CPS was established by Chapter 227 of the Acts of 2018, available at <u>https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter227</u>

"Demand response resource", changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

CMR 21.05 (1) (a) 3 requires the following:

<u>Demand Response Resources</u>: Demand Response Resources must demonstrate that changes to electric usage from their normal consumption patterns are measurable and verifiable.

## b. <u>Determinations</u>

Aggregations of demand response resources which are dispatched by an EDC as part of a retail customer Active Demand Response program can be eligible to receive a statement of qualification. The entire aggregation must consist of otherwise eligible resources, for example there can be no generation included in the aggregation.

The ADR resources and/or aggregations must be able to provide sufficient performance measurement data in a format accepted by the PTS. Reported performance data shall be based upon actual operational data available to the EDC, and shall not be based upon baseline calculations.

## 7. Metering

## a. <u>Provisions in the CPS Statute and Regulations</u>

CMR 21.05 (2) requires the following:

<u>Metering.</u> A Clean Peak Resource shall meter and report fifteen (15) minute interval performance in compliance with standards and protocols as established by a third-party Program Administrator designated by the Department. The Department may grant an exception to the fifteen (15) minute interval and designate a shorter or longer interval on a case-by-case basis. The Program Administrator shall be the designated independent third-party meter reader, as defined in Rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule. All standards and metering protocols shall be subject to review and approval by the Department. A Clean Peak Resource shall submit metered data to the Program Administrator for all hours of the previous month.

CMR 21.05 (1) (a) 3 requires the following:

<u>Demand Response Resources</u>: Demand Response Resources must demonstrate that changes to electric usage from their normal consumption patterns are measurable and verifiable.

## b. **Determinations**

The Program Administrator will be the sole metering and data verification provider, utilizing a production tracking system to support the Clean Peak Standard. As such, once a resource is qualified to participate in the CPS, all reporting will go through the Program Administrator's production tracking system. The Department and the Program Administrator are collaborating on

the design of the specific reporting requirements and guidelines for all resources but at the minimum, each qualified Clean Peak Resource must provide fifteen-minute interval data for the entire preceding month of performance. The fifteen-minute interval data must be submitted monthly, or more frequently as permitted, to the production tracking system unless an exception has been granted by the Department to allow for a shorter or longer interval.