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FirstLight Power Comments: Clean Peak Standard Straw Proposal (An Act to Advance Clean Energy Chapter 227 of the Acts of 2018)

We appreciate the opportunity to provide comments on the Massachusetts Department of Energy Resources' (DOER) Straw Proposal for proposed regulations for the Clean Peak Standard (CPS).

Company Overview

FirstLight Power (FirstLight) is a hydropower, energy storage, and solar generation company with assets based in Connecticut and Massachusetts. Our hydropower facilities in New England produce over 690,000 MWh of emissions-free generation, reducing the region's carbon footprint by more than 780,000 tons annually. In addition to our conventional and run-of-river hydro facilities, we also own and operate Northfield Mountain pumped hydro storage station and Rocky River pumped hydro storage station, which are respectively the largest and third largest energy storage facilities in New England. Because of its ability to store regional electricity generation from times when cleaner resources are running, existing pumped hydro storage is one of the greenest options for integrating and storing energy from intermittent resources such as wind and solar. Our facilities represent over a billion dollars of private investment in the region, employ 125 people, and pay our host communities in Massachusetts more than \$15 million in local property taxes.

Implementing the Clean Peak Standard

FirstLight is a strong advocate for maintaining equitable competitive solutions to achieve desired public policy outcomes, and we view the CPS as a viable method to accelerate the decarbonization of the electric sector. By mitigating the impacts of increased integration of intermittent renewable resources and offsetting fossil generation during peak demand periods, the CPS will assist the Commonwealth in achieving its environmental and climate change policy goals.

The new renewable portfolio standard (RPS) adopted in "An Act to Advance Clean Energy" (the "Act") will drive a great deal of renewable generation development in the Commonwealth. It is in the best interest of the state's citizens to implement this first-in-the-nation policy in a way that is cost-effective and ensures reliability. The CPS is a naturally complementary program to the RPS; however, the straw proposal as presented by DOER contains unnecessary restrictions that, if addressed, we believe would provide more timely and cost-effective contributions to meeting the clean peak standard.

The DOER is appropriately seeking to meet the Act's 1,000 megawatt hour energy storage target by accommodating the integration of these clean peak resources in the most cost-effective way while reducing emissions. However, limits on participation, such as excluding existing storage, limiting the eligibility of out-of-state resources, and requiring the co-location of storage resources, unnecessarily constrains and delays the Commonwealth's ability to bring enough storage online in a timely fashion to accommodate the accelerated development of renewable generation. The rapid and substantial deployment of additional distributed renewable energy resources, combined with the development of large-scale offshore wind resources, will necessitate a large amount of energy storage to offset the substantial volatility that will inevitably result.

Principles Informing Eligibility Definitions under the Straw Proposal:

1. **Eligibility should maximize participation of low-cost clean energy resources:** The DOER's stated goal with the CPS is to "Implement a clean peak program that aligns clean energy generation and zero emission demand resources with periods of peak electricity demand in the most cost-effective manner for Massachusetts customers possible while reducing emissions". The proposed exclusion of certain out-of-state clean energy resources on the basis of their method of interconnection seems to run contrary to the stated goal of the program, and unnecessarily deprives ratepayers of lower-cost clean energy resources.
2. **Allowing energy storage resources to be developed wherever they make the most sense will accelerate development and lower cost:** Distributed renewable generation resources are currently sited wherever it makes sense to build them. The same should be true of energy storage resources. Requiring co-location would unnecessarily delay and limit storage development and exclude lower-cost solutions. Co-location may not always be feasible at a useful scale, and may unnecessarily slow and constrain the development of adequate storage, which is necessary to accommodate accelerated renewable resources coming on line as a result of the increased RPS.

Suggestions Regarding the Proposed CPS Regulations:

1. **Allow out-of-state clean energy resources that are interconnected via distribution in addition to transmission:** FirstLight believes that existing out-of-state zero-carbon resources can provide a significant benefit to the Commonwealth, and should be allowed to participate in the program. Due to the fact that New England's pooled transmission system was designed to integrate all resources, FirstLight believes that a transmission system-only interconnect eligibility requirement would unnecessarily reduce and delay the potential benefits available to Massachusetts ratepayers. The more existing clean energy resources that are eligible, the faster Massachusetts will achieve the carbon reduction benefits of the CPS. We urge DOER to reconsider this eligibility restriction, and allow distribution-connected clean resources to participate as well.
2. **Storage can be distributed, and aggregated:** The development of energy storage facilities should not be limited by a co-location requirement. Eligibility for non-co-located storage that offsets peaks at aggregated sites could provide a low-cost means for smaller clean energy generation resources to contribute to meeting the state's CPS goals. Contractual pairing can be

monitored and verified via the same platform that the Commonwealth will use for behind-the-meter co-located resources.

3. **Define “incremental pumped storage capacity” as incremental energy throughput capability rather than nameplate capacity:** In “An Act to Advance Clean Energy”, the clean peak energy storage target is stated as 1000 megawatt hours – an energy target rather than a capacity target. Therefore it is appropriate to define eligible incremental pumped storage as incremental energy throughput capability rather than as nameplate capacity.

Conclusion

The CPS has the potential to significantly assist the Commonwealth in achieving its greenhouse gas reduction goals as well as lowering costs and improving reliability for its ratepayers. Given the stakes involved, FirstLight believes that Massachusetts consumers would greatly benefit from a more expansive and inclusive Clean Peak Standard that leverages as many clean resources as possible. By avoiding unnecessary restrictions, the Commonwealth will more significantly reduce carbon-emissions and costs associated with peaking generation more rapidly and at a lower cost to ratepayers.

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