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**RE: Proposed Framework for Procurement of Clean Peak Energy Certificates
pursuant to regulation, 225 C.M.R. 21.05(8), Clean Peak Energy Portfolio
Standard (CPS)**

Mr. Lauwers,

On January 22, 2021, the Department of Energy Resources (the “DOER” or the “Department”) released a draft EDC Procurement for Clean Energy Peak Certificates (“CEPCs”) Straw Proposal (“Straw Proposal”) pursuant to the Clean Peak Energy Portfolio Standard (“CPS”).¹ 225 C.M.R. 21.05(8). In 2018, the Legislature directed the DOER to adopt rules and regulations in order to develop a statewide clean peak standard to annually increase the kilowatt-hour sales to end-use customers from clean peak resources. St. 2018, ch. 227, §§ 7–11, 13 (“the Act”). The DOER promulgated the final Clean Peak Energy Portfolio Standard regulations on August 7, 2020. 225 C.M.R. 21.00 *et seq.* The DOER now proposes that the Electric Distribution Companies (“EDCs”) annually solicit for and procure CPECs according to a

¹ <https://www.mass.gov/doc/procurement-of-clean-peak-energy-certificates/download>

procurement framework set forth in the Straw Proposal and resulting Guidance document. The DOER accepted questions on the Straw Proposal and posted Summarized Questions and Answers on February 5, 2021. Pursuant to the DOER's request for comments on the Straw Proposal, the Office of the Attorney General ("AGO") submits these comments for the Department's consideration.

I. COMMENTS

The DOER's Straw Proposal would create a framework for the EDCs to procure CPECs at a reasonable cost and to allow the nascent CPS market time to mature. Based on prior experience with procurements for energy attributes and commodities, the AGO recommends that, before finalizing the Straw Proposal, the DOER:

1. Specify the procurement's product as a single CPEC minted from any qualifying technology.
2. Run the CPEC procurement several years in advance of the delivery year to improve financeability and spur new entry for eligible resources.
3. Procure CPECs using a pay-as-bid auction format to lessen market power concerns.
4. Add flexibility in the DOER's procurement target, rather than a fixed procurement target.
5. Establish a shorter "lock-in" period for Clean Peak resources.
6. Create Penalties for non-compliance or non-delivery based on the current market rate for CPECs.

The region has experience with forward procurement for electricity commodities through the ISO New England ("ISO-NE") Forward Capacity Market ("FCM")² and current discussion of the Forward Clean Energy Market ("FCEM")³ concept as a method to procure clean energy.

² ISO-NE FCM, Available at: <https://www.iso-ne.com/markets-operations/markets/forward-capacity-market/>

³ Spees et al, 2019, "How States, Cities, and Customers Can Harness Competitive Markets To Meet Ambitious Carbon Goals Through A Forward Market For Clean Energy Attributes" ("FCEM Concept Paper"), available at: https://brattlefiles.blob.core.windows.net/files/17063_how_states_cities_and_customers_can_har

Although the DOER is familiar with an auction mechanism for their SREC programs, the AGO recommends that the DOER leverage the best practices from these ISO-NE markets when considering CPEC procurement.

A. Auction Product Eligibility

One of the virtues of the Clean Peak Standard design is that it creates a homogenous product: the CPEC. Aside from vintage considerations, any CPEC is interchangeable with any other CPEC. Because the CPEC itself is homogenous, there is no need for, or value in, multiple sub-auctions or multiple technology-specific clearing prices. To that end, the EDC procurements should acquire CPECs without regard for the technology that mints them. Procuring CPECs with a bias towards particular technologies will increase customer costs and lessen the market's ability to achieve the goals of the program efficiently.⁴ At this time, the Straw Proposal appears agnostic regarding the technology used, and the AGO recommends that the DOER retain that approach.⁵ *See* Straw Proposal, slide 4.

B. Auction Timeline

The EDCs could procure CPECs forward or for immediate delivery. Under a forward procurement framework, the EDCs would run an auction for CPECs that would not be delivered for several years, similar to ISO-NE's Forward Capacity Market. For example, a 2021 procurement might be for 2024 delivery.⁶ Conversely, under a "just-in-time" or immediate

[ness competitive markets to meet ambitious carbon goals - through a forward market for clean energy attributes.pdf](#)

⁴ *See* FCEM Concept Paper, n. 4; 38–41.

⁵ The AGO supports the exclusion of SMART and 83C generation units for the reason identified by the DOER—these units already receive significant ratepayer support through the underlying programs. *See* Straw Proposal, slide 4.

⁶ The ISO-NE FCM and the FCEM concept both rely on auctions run three years forward. *E.g.*, FCEM, at 13–14.

delivery framework, CPECs would be procured and delivered in the same compliance year. It is not clear whether the Straw Proposal contemplates a forward or a delivery procurement method.

The AGO recommends a forward procurement for CPECs, rather than a just-in-time procurement. A forward procurement is feasible because under 225 C.M.R. 21.05(8), the Straw Proposal, and anticipated CPEC Guidance documents, the approximate quantity of CPECs required and their alternative compliance payments are known in advance. Forward procurement would provide developers certainty that could help them develop new qualifying projects, enabling the Straw Proposal to support existing resources and new entrants. For non-operational projects, a forward procurement should also require financial assurance and milestones to ensure projects are completed on time.

C. Auction Format

An auction for CPECs has many design considerations related to how supply is defined, demand is defined, and the rules by which the auction is cleared and the price is set. The Straw Proposal provides some description of its proposed auction format but leaves other aspects unspecified. *See* Straw Proposal, slides 3 and 5.

There is significant risk to consumers if the procurement relies on a uniform clearing price auction and a fixed procurement requirement. However, with changes to the Straw Proposal, the DOER can minimize the risk. In markets with known, fixed procurement quantities (inelastic demand), it is possible for firms to force uncompetitive outcomes through use of strategic withholding, tacit collusion, and other forms of market power.⁷ Although the

⁷ For example, FERC required ISO-NE to develop “sloped” (i.e., non-vertical / fixed) capacity requirements for its Forward Capacity Auction over market power concerns (see June 28, 2016 Order Accepting Filing in Docket ER16-1434, at 2–3, available at: <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=14287974>).

The current Forward Clean Energy Market concept to procure clean energy, being explored by

specifics vary, for a firm with a portfolio of eligible resources, it is sometimes possible for an offer to withhold a fraction of the supply, increase the auction's clearing price, and earn increased profit on the remaining resources.⁸ Market power might be especially pronounced in early years of the procurement program, if supply is constrained. Fixed resource procurements also increase the risk of unnecessary price volatility which adversely affects both consumers and suppliers.

Absent modifications to the Straw Proposal's procurement format, the DOER will need to develop robust market surveillance and mitigation practices to ensure that auction results are competitive. Given the complexity of market monitoring, there are several possible remedies that could ameliorate the worst of these risks, including:

1. **Use a pay-as-bid auction structure.** In the absence of a robust, established, and vetted framework to ensure procurement is competitive, a pay-as-bid structure offers important consumer safeguards. Pay-as-bid auctions pay each winning resource the price that they offered into the auction, not the market's clearing price (where supply-and-demand intersect). Pay-as-bid reduces the opportunity of supply-side market manipulation such as strategic withholding or tacit collusion, because clearing resources get paid what they offer. In a pay-as-bid auction, a market participant withholding a portion of their CPS portfolio from the auction cannot increase inframarginal rents and portfolio revenues, because there are no inframarginal rents to inflate. Instead, the participant would simply

the New England States, proposes a similar sloped demand curve. (See Kathleen Spees at New England Energy Vision technical session on wholesale markets, Slide 20, <https://newenglandenergyvision.files.wordpress.com/2021/01/spees-energy-only-iccm.pptx>)

⁸ E.g., Gregory J. Werden, "Identifying Market Power in Electric Generation," Public Utilities Fortnightly, February 15, 1996, p. 1. Available at: <https://www.fortnightly.com/fortnightly/1996/02-0/identifying-market-power-electric-generation>

earn less money if they withheld a fraction of their otherwise competitive portfolio. Pay-as-bid procurement is in line with other long-standing procurements for clean energy attributes (e.g., EDC procurement of RECs).⁹

2. **Enable demand-side procurement flexibility.** Because market power considerations are elevated in markets with inelastic demand, the DOER could modify the proposed procurement demand in two ways. First, the DOER could create a procurement with a solicitation range, instead of a point value. For example, the procurement could be for 25–30 percent of the CPEC requirement, rather than a firm 30 percent. Second, the DOER could implement a sloped “demand curve” that would specify the price that the EDCs would be willing to pay for varying quantities of CPECs. Such a demand curve is common in related markets for energy commodities, like the ISO New England Forward Capacity Market or the pending straw-proposal for a region Forward Clean Energy Market Procurement.¹⁰ For example, the DOER could specify that the EDCs would be willing to buy up to 25 percent of demand at the ACP rate, 25–35 percent at a linearly decreasing rate, and would pay nothing above 35 percent. Creating effective demand curves, however, would require careful assessment of the Commonwealth’s willingness-to-pay for CPECs.

Given the inherent complexity of creating a CPEC procurement process, shifting to a pay-as-bid auction format is likely an easier path forward. Pairing the pay-as-bid format with

⁹ All else being equal, a homogenous product lends itself to a uniform-clearing auction design because the value of the product is equal to society despite different costs to produce it. That said, uniform clearing markets are more susceptible to market manipulation absent the discussed enhancements.

¹⁰ For example, *see* FCEM Concept Paper, at 18–21.

some demand-side procurement flexibility would help ensure that the market will be competitive, that consumers get CPECs for a fair price, and that market manipulation is minimized.

D. Multi-Year Price-Lock

Multi-year price-locks for commodities can help solidify project financing, but they also shift risk from suppliers to consumers. The Straw Proposal considers a clearing price but does not describe how the price applies throughout the contract delivery period. Straw Proposal, slide 3. Given the early stage of the CPS program, some risk shifting may be reasonable, but a six-year price-lock is excessive.

Price-locks should not be necessary for the vast majority of CPS eligible technologies, given their maturation. Robust REC markets provide evidence to this point. Moreover, it is the AGO's understanding that the ACP rates were designed to be high enough to support new entry for CPS resources.¹¹ Given these high ACPs, a multi-year price-lock is unnecessary to build and operate CPS eligible facilities and thus would unnecessarily shift risks to consumers while providing little to no additional benefits.

While the AGO finds a six-year term excessive, should the DOER find value in a longer price-lock, then it should not exceed the current ISO-NE term of seven years. In the most recent ISO-NE Forward Capacity Auction #15, run 8-February-2021, almost 600 MW of energy storage cleared.¹² FCA 15 allowed for a seven-year price-lock and given the volume of participating

¹¹ See CPS Consultant Report Section 3, Slide 21. "Maintain S-D tension (so CPEC price near ACP)"

¹²https://www.iso-ne.com/static-assets/documents/2021/02/20210211_pr_fca15_initial_results.pdf

energy storage, it has been demonstrated that market participants are readily able to develop projects with a price-lock of seven years or less.

Should the DOER desire a multi-year procurement schedule, as the Straw Proposal suggests, then it should consider reducing the price-lock to three years. *See* Straw Proposal, slide 5. Alternatively, the DOER should allow resources to lock in price-locked periods of less than the maximum duration. For example, if the DOER prefers a six-year price-lock, then resources should be allowed to sign up for price-locks of one to six years.

Separately, the DOER should ensure that in no case can a price-locked resource earn more than the ACP value in a given year. This requirement is important because ACPs are set to decline with time, so it would be unfair to consumers if a resource could lock-in six years of revenue at the Year 1 ACP rate. Instead, a price-cap on multi-year offers should equal the CPEC-weighted ACP rate.¹³ If a resource generates the same number of CPECs in each of the six years, then the price cap would equal the simple average of the ACPs over the price-locked period.

E. Penalties for Non-Performance

Resources participating in a CPEC solicitation should be subject to penalties if they do not meet their performance obligations. In wholesale markets, a common penalty requires a non-compliant resource to “buy-out” their obligation at the current market price. In the ISO-NE energy market, for example, if a resource cannot meet its day-ahead energy schedule it must buy out its obligation at the real-time locational-marginal price (“LMP”). The FCEM concept relies on a similar buy-out mechanism where

¹³ Formulaically, *Offer Price Cap* =
$$\frac{\sum_{Year=1}^6 (Generation_{Year Y} \times ACP_{Year Y})}{Total\ 6-Year\ Generation}$$

“Any remaining supplier deficiency ... will be automatically fulfilled with a mandatory buy-out bid. Such a bid may induce a significant loss or penalty on a supplier in the event that they had cleared at a low price in the forward market but must then buy out of that obligation at a higher price in the spot auction to cover any remaining shortfall. No additional penalty will be assessed on suppliers unable to meet their forward obligations.”¹⁴

The same logic could be extended to non-delivery of CPECs. At the end of a delivery period, a deficient CPEC supplier would be charged at the current spot-rate for CPECs, or potentially the ACP rate if the spot-rate is not available. This charge provides a strong incentive to deliver CPECs and ensures that consumers will not be made worse-off due to supplier non-performance.

II. CONCLUSION

The Office of the Attorney General respectfully requests that the DOER adopt the above recommendations into its Straw Proposal.

Respectfully submitted,

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¹⁴ FCEM Concept Paper, at 27.