

Clean Peak Energy Portfolio Standard (CPS)

EDC Procurements Final Straw Proposal

Procurement Objectives

- Spur new and incremental clean peak resource development
- Provide revenue certainty for clean peak resources to enable financing
 - > Decrease the risk of a new market
 - > Target resources which do not have existing policies that provide long-term revenue certainty
- Provide cost-effective CPEC supply



Straw Proposal Structure: 2 Round Auctions

- EDCs hold 2-Round Auctions up-to twice-per-year
 - > Auction size (#CPECs) will be announced in advance (see Slides 6 & 7 for procurement size determination)
 - First RFP of year can procure up-to full procurement target of the year, the second RFP of the year only occurs if more than 20% of the year's procurement target remains unawarded.
 - First RFP of year will seek to finish with award notices by mid-summer, project CPEC delivery will begin ~30 months following RFP award
 - ➤ Bidders pre-qualify resources in advance of auction (approx. 1 month advance)
 - Qualified resources are not published
 - > Round 1:
 - Bidders bid fixed increments of CPECs and price
 - Bid stacking & selection up-to the auction size establishes Round 1 Clearing Price, which is then published
 - > Round 2:
 - Bidders may reduce bid price per CPEC and/or increase # CPECs bid
 - Bid stacking & selection determines the Round 2 Clearing Price
 - Awarded bids are enrolled in the Tariff for payment and CPEC transaction
 - Tariff enrollees are paid the Round 2 Clearing Price for the duration of their enrollment
 - Tariff enrollment will be an 8-year term
- Notes
 - Each EDC will only award and enroll projects sited within their service territory and connected to their distribution system
 - > Auction size may be reduced to ensure competition. Unawarded CPECs or CPECs from auction size reductions would carry over into future Auctions
 - > Clearing price caps may consider the ACP decline rates established in 225 CMR 21.00
 - > Tariff enrollment only conveys CPECs (not bundled with energy, capacity, or any other services the resources can provide)

Massachusetts Department of Energy Resources

Straw Proposal Structure: Eligibility

- Eligible for Auction Participation & Tariff enrollment:
 - ➤ New RPS resources (first RFP will require COD on/after 1/1/2019, future RFPs may update COD to on/after the RFP release date)
 - Exclude: Projects receiving SMART incentives, 83C contracted offshore wind resources
 Reason: Already receive long-term revenue from other programs
 - ➤ New Energy Storage (first RFP will require COD on/after 1/1/2019, future RFPs may update COD to on/after the RFP release date)
 - Exclude: Projects receiving SMART Adder incentives for energy storage
 Reason: Already receive long-term revenue from other programs
- Eligible to count toward Procurement Target, but not in Tariff:
 - > SMART STGU & 83C OSW CPECs
- Not counted toward Procurement Target
 - > EDC owned CPS Resources



Straw Proposal Structure: Eligibility

- Project Maturity Requirements to Bid:
 - > Site Control
 - ➤ Local Permit Applications
 - > System Impact Study complete
 - ➤ Bid deposit established in \$/CPEC bid, capped at \$350,000 per facility

- Bid deposits are returned either:
 - > At time of notice of non-award/non-clearance
 - > At facility Commercial Operation Date



Size of Procurement

- 225 CMR 21.05(8) establishes that
 - > "procurements shall be designed to achieve an initial target of 30% of the total market obligation of Retail Electricity Suppliers in a given Compliance Year."
 - 225 CMR 21.05(8)(b) enables DOER adjusts the 30% according to market supply, increasing scale of procurement in response to an undersupplied market, and decreasing scale in response to an oversupplied market.
- Proposed Method by which DOER will Determine # CPECs in RFP (See next slide for example)

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RFP size equals
[ 30% of the Forecast Total CPEC Obligation of the First Year of RFP Awarded CPEC Delivery ]
minus
[ # CPECs already awarded from previous RFPs for First Year of RFP Awarded CPEC Delivery ]
minus
[ # CPECs forecast from other procured resources (SMART STGUs, OSW) for First Year of RFP Awarded CPEC Delivery ]
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- Annual target would account for CPECs supplied from those enrolled in the tariff from previous RFPs
- Auction size may be reduced to ensure competition
 - > If Auction size reduced, those CPECs carry forward to following Auctions



Example Procurement Schedule

| | А | В | С | D | E | F | G | Н | I | J | K | L | М | N | 0 |
|----|---|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| 2 | Forecast Load Subject to CPS (MWh) | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 | 42,500,000 |
| 3 | Forecast Obligation (%) | 4.50% | 6.00% | 7.50% | 9.00% | 10.50% | 12.00% | 13.50% | 15.00% | 16.50% | 18.00% | 19.50% | 21.00% | 22.50% | 24.00% |
| 4 | Forecast Total CPEC Obligation | 1,912,500 | 2,550,000 | 3,187,500 | 3,825,000 | 4,462,500 | 5,100,000 | 5,737,500 | 6,375,000 | 7,012,500 | 7,650,000 | 8,287,500 | 8,925,000 | 9,562,500 | 10,200,000 |
| 5 | 30% of Total CPEC Obligation | 573,750 | 765,000 | 956,250 | 1,147,500 | 1,338,750 | 1,530,000 | 1,721,250 | 1,912,500 | 2,103,750 | 2,295,000 | 2,486,250 | 2,677,500 | 2,868,750 | 3,060,000 |
| 6 | Forecast Procured STGU & OSW CPECs | 5,600 | 7,000 | 22,800 | 32,800 | 40,000 | 47,200 | 61,600 | 68,800 | 76,000 | 86,800 | 86,800 | 86,800 | 86,800 | 86,800 |
| 7 | Procurement Size | 568,150 | 758,000 | 933,450 | 1,114,700 | 1,298,750 | 1,482,800 | 1,659,650 | 1,843,700 | 2,027,750 | 2,208,200 | 2,399,450 | 2,590,700 | 2,781,950 | 2,973,200 |
| 8 | Forecast ACP | \$ 45.00 | \$ 45.00 | \$ 45.00 | \$ 43.46 | \$ 41.92 | \$ 40.38 | \$ 38.84 | \$ 37.30 | \$ 35.76 | \$ 34.22 | \$ 32.68 | \$ 31.14 | \$ 29.60 | 28.06 |
| | | | | | | | | | | | | | | | |
| 9 | 2022 Procurement RFP | 933,450 | | | | | | | | | | | | | |
| 10 | Annual CPECs from Procurement | Example: 50% of it filled & clea | ars | 466,725 | 466,725 | 466,725 | 466,725 | 466,725 | 466,725 | 466,725 | 466,725 | | | | |
| 11 | | RFP Size (incl. carry over from unfilled prev yr) | 647,975 | | | | | | | | | | | | |
| 12 | | Example: 100% filled & clears | | | 647,975 | 647,975 | 647,975 | 647,975 | 647,975 | 647,975 | 647,975 | 647,975 | | | |
| 13 | | RFP Size | | 184,050 | | | | | | | | | | | |
| 14 | | Example: 100% filled & clears | | | | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | | |
| 15 | 2025 Procurement RFP | RFP Size | | | 184,050 | | | | | | | | | | |
| 16 | | Example: 100% filled & clears | | | | | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | 184,050 | |
| 17 | Total CPECs Under Procurement | | | 489,525 | 1,147,500 | 1,338,750 | 1,530,000 | 1,544,400 | 1,551,600 | 1,558,800 | 1,569,600 | 1,102,875 | 454,900 | 270,850 | - |
| 18 | Total % of CPEC Obligation Contracted - | + Procured | | 15% | 30% | 30% | 30% | | | | | | | | |

- •Row 4 is Row 3 x Row 2
- •Row 5 is 30% x Row 4
- •Row 6 is an estimated possible CPECs from STGUs & OSW
- •Row 7 is Row 5 minus Row 6
- •B9 is equal to D7, the expected procurement goal of the year that awarded CPECs will begin delivery
- •D10 is 50% of B9 as a hypothetical only half of the first RFP clearing to demonstrate how leftover CPECs carry over to the future RFP
- •Row 10 is the CPECs delivered from awards in the 2022 RFP
- •C11 is F7 minus F10, representing the target # CPECs to procure minus CPECs already procured for that year from previous RFPs
- •Row 12 is the CPECs awarded under the 2023 RFP as a hypothetical that the entire RFP clears, and no CPECs carry over to future RFP
- •Cell D13 is equal to F7 minus (F10 plus F12)
- •Row 17 shows totally number of CPECs awarded under past RFPs in a given year
- •Row 18 shows what percent of the total obligation is met with CPECs from RFP plus Contracted resources (STGU + OSW)
- •Note, as shown 2030 RFP would increase in size as past procured CPECs come off-contract
- •Note, not shown, 2022 would have 2 auctions since more than 20% of the Auction target remained unprocured following the first auction of the year

Table provided as an example only. This example should not be interpreted as an attempt to forecast actual future load, obligation, procurement size, or procurement results. It is only provided to demonstrate the structure of how RFP sizes are determined and impacted by the results of previous year RFPs.

Straw Proposal Structure: Terms

- RFP & Tariff to include a CPEC delivery requirement
 - > May be a percentage of a projects total CPECs produced and need not be 100%
- Penalties
 - Penalty schedule may be established through tariff and may be technology and/or development stage specific
 - Underperformance by more than 10% carries penalty, where the penalty is a percent of the awarded value of the CPECs not-delivered.
 - Underperformance as a result of unplanned maintenance or other force majeure may have a cure period, not to exceed 6 months, in which project owner can supply CPECs from other resources to meet the shortfall
 - Continued underperformance will result in termination of the project from the tariff
- Termination
 - > Termination can only occur with EDC permission or force majeure/destruction
- At the end of the tariff terms (8 years), the resource will own all future CPECs



Implementation

Completed

- DOER to release Procurement Straw Proposal for public review
 Provide opportunity for Q&A
- DOER to take public feedback on the straw procurement proposal
- DOER release Final Straw Proposal

Next Steps:

- EDCs file Tariff
- EDCs draft RFP in consultation with DOER
- EDCs release first RFP
- First RFP awards announced Spring 2022
- First CPECs delivered under tariff 2024

2022

2021

