Overview of the Performance Credits Mechanism

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Background

- In June 2022, the Public Utility Commission of Texas (PUCT) engaged Energy+Environmental Economics (E3) to study options for market design aligned with the principles and proposals adopted by the PUCT in its blueprint for reliability reforms. Options in the blueprint included:
  - ✓ Load-Serving Entity Obligation (LSEO): Bilateral procurement of reliability credits by LSEs with mandatory forward showing
  - ✓ Dispatchable Energy Credits (DEC): Annual LSE target procurement of credits produced by eligible dispatchable resources as a percentage of retail load with mandatory compliance filings
  - ✓ Backstop Reliability Service (BRS): Centrally procured resources that can only be deployed in physical scarcity

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E3 Study Results

- The results of E3's study were published in November 2022. In addition to the initial 3 options, E3 also studied 2 additional proposals: Forward Reliability Market (FRM) and Performance Credits Mechanism (PCM)
  - ✓ E3 recommended adoption of the FRM, the closest in concept to a traditional capacity market
  - ✓ BRS should only be used as a temporary measure as it is contrary to a competitive market
  - ✓ DEC does not yield improvement in system reliability and overall increases system cost through distortionary effect on the energy market
  - ✓ LSEO had higher market power risk and less compatibility with Texas' retail market
  - ✓ PCM entails significant risk because of its novel design

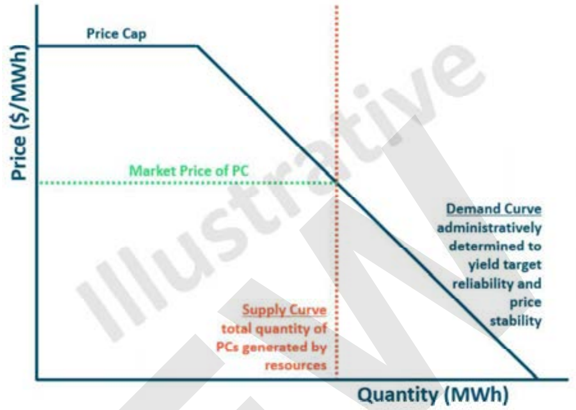
Contrary to E3's recommendation, all 5 Commissioners voted to adopt the PCM

PCM High-Level Principles

- Establishes a requirement for LSEs to purchase "performance credits" (PC) at a centrally determined clearing price
- PC requirement is a fixed quantity determined in advance of the compliance period and would be used to shape a demand curve
- A voluntary forward auction would be administered by ERCOT for PCs
- Generators are awarded PCs based on their availability to the system during the hours of highest reliability risk
  - ✓ Awards cannot exceed the generators' forward auction offer (HB1500)
- Settlement is conducted retroactively based on the quantity of PCs that were actually produced during periods of "highest reliability risk"
- Subject to an annual $1 billion net cost cap (HB1500)

Demand Curve

- E3 highlights that the PC requirement must be higher than the sum of energy and operating reserve requirements during critical periods in many years, thus providing "more stable compensation in years without scarcity"
- With the increase in resource market entry because of PCM, scarcity pricing events are less frequent and corresponding reductions would be expected in energy and ancillary service pricing outcomes



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Forward Auction

- ERCOT would administer a centrally cleared forward auction for LSEs and generators to exchange PCs to hedge against outcomes in the retroactive settlement process
- Though participation in the forward auction is completely voluntary for LSEs, any generator that wants to qualify to produce a PC would need to offer into the forward auction
  - ✓ E3 notes that actual quantities of PCs produced may differ from forward offers, thus in their PCM design the mandatory forward offer requirement would not materially affect the ultimate quantity of PCs awarded or the resultant settlement price

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