A Forward Clean Energy Market for New England

A REPORT ON STAKEHOLDER EFFORTS TO CONTRIBUTE TO REGIONAL MARKET REFORMS

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Today's Topics

- Ambitions of our stakeholder process
- FCEM Design Objectives
- Key design elements
- Critical open questions

Stakeholder Discussions

- Convened by NRG Energy
- We have engaged a diverse set of interests across the market and industry space
- Individual meetings with interested stakeholders over the summer; monthly group meetings since September; Chatham House Rule
- Volunteer working group has been meeting more frequently to discuss and draft documents
- The thoughts in this presentation and the accompanying document are the product of these group efforts
- Our ambition is to contribute to the broader stakeholder consideration of reforms that will align wholesale markets with States' decarbonization goals – recognizing that achieving reform will take very broad regional engagement

FCEM Objectives

A successful Forward Clean Energy Market will:

- Incentivize investment and production of clean energy and contribute to achievement of state-mandated clean energy and carbon reduction goals through market-based revenues, shifting risk from ratepayers to investors
- Provide a path for clean energy resources to count as capacity resources without undermining the price signal necessary for resource adequacy
- Ensure that FCEM revenues are 'in-market' from FERC's perspective, while vesting the states with substantial control over FCEM
- Avoid allocating FCEM costs to non-participating states
- Avoid inefficient price suppression in real-time energy markets

Our Taxonomy

- Demand Participation
- Supply Eligibility
- Market Integration
- Regulatory Integration
- Settlement Characteristics

  - We found it very helpful to focus our discussions on one topic at a time

Demand Participation

- Establish durability of demand participation
- Establish FCEM as the primary vehicle for procuring clean energy
- Demand bidders could be states or designees; costs would be allocated to LSEs in participating states according to Real Time Load Obligation
  - Voluntary bidders (eg, corporates, municipals) may also participate
- Demand bids can have both quantity and price specifications
- Potential to include 'targeted' resource characteristics in the FCEM auction that may clear at a higher price than the 'base' product

Supply Eligibility

- Eligibility should be as broad as possible, eg, "any resource that produces electricity without direct carbon emissions"
- Comparability – no distinction between 'new' and 'existing', no distinction among technologies, locations, etc
- Voluntary participation by sellers, subject to appropriate market power protections
- Offer a price lock for new FCEM resources, eg, 7-12 years
- Resources under existing contracts could participate via the contract off-takers (utilities) as the 'sellers' in FCEM; revenues would offset contract payments
- 'Dynamic' credits to create value for energy storage; further enhancements?

Market Integration – Two Approaches

- 1) Separate but coordinated (FCEM+FCM)
  - FCEM qualification mirrors FCM qualification process, in terms of timing and content of non-binding Show Of Interest, critical path schedules, offer price reviews, financial assurance
  - FCEM auction runs shortly before FCA
  - Resources with cleared FCEM obligations adjust FCA offer prices to reflect FCEM revenues
  - Clearing in FCEM does not guarantee clearing in FCM; treating FCEM revenues as 'in market' diminishes the impact of MOPR
- 2) Integrated/Co-optimized (ICCM)
  - As presented by Kathleen Spees of Brattle at October 1 NEPOOL meeting
  - Single offer 'price' for both capacity and clean energy attribute, but distinct clearing prices for each product
  - Market 'clears' resources for both products; no risk of obtaining one obligation without the other if both are offered
  - MOPR would be limited to assessing the market value of any revenues from outside ICCM

Regulatory Integration – (At Least) Two Approaches

- 1) A Carbon-free Attribute
  - FCEM transacts the part of existing RECs that meet the broad clean energy definition; this would create a Clean Energy Attribute Credit
  - Compliance with RPS would require a CEAC plus the 'residual' part of the REC representing other attributes, such as technology, vintage, location, etc
  - CEACs would count toward FCEM obligations and also partial RPS compliance, but otherwise could not be double counted
- 2) All Environmental Attributes
  - Sellers in FCEM relinquish all environmental attributes and RPS eligibility of their units
  - Buyers in FCEM receive proportional shares of all GIS certificates, which would then be bought/sold as needed to meet applicable state RPS obligations
- These assume the use of GIS; it may be possible to track and settle outside of GIS

Settlements

- Track energy production through NEPOOL GIS, including time and system carbon intensity for 'dynamic' approach
- FCEM charges and payments settled through normal ISO processes as clean energy is produced and verified
- FCEM delivery obligation for sellers is an annual obligation
  - Under-delivery subject to penalty; over-delivery potentially eligible for 'spot' compensation
  - Final settlement for compliance purposes would occur after the close of the delivery year, similar to the settlement of RPS compliance

Critical Open Questions

- Clarity on a path to state adoption and authorization to use FCEM/ICCM
  - How do states determine their demand quantities and prices? Is the quantity anticipated to increase each year?
- Clarity on the respective roles of FERC and States in designing and governing FCEM/ICCM
- Settling on a sufficiently broad definition for supply eligibility
- If ICCM is not selected, clarity on treatment of FCEM revenues in FCM MOPR
- Integration of existing clean energy contracts into FCEM/ICCM
- Integration of FCEM/ICCM with existing RPS (and similar) programs
- Impact of eliminating the price lock from FCM

Questions and Feedback

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