



To: NEPOOL Markets Committee
From: Mark Karl
Date: April 29, 2020
Subject: Forward Capacity Market (FCM) Parameters Updates Process and Forward Reserve Market Sunset for Capacity Commitment Period 16 (2025-2026)

Overview

The ISO must periodically review and, as necessary, update FCM parameters that are integral components of the market. These FCM parameters are the Cost of New Entry (CONE), Net CONE, Offer Review Trigger Prices (ORTPs), Dynamic De-List Bid Threshold (DDBT), and Performance Payment Rate (PPR). In 2018, the ISO, joined by NEPOOL, filed and FERC approved Tariff revisions to consolidate the schedule for these FCM parameters such that they would be jointly reviewed for updates for CCP 16.¹ Therefore, in the upcoming months, the ISO and stakeholders will be addressing the FCM parameter updates for use beginning with the 2025-2026 Capacity Commitment Period (CCP 16).

The ISO has considered the benefits of developing timely parameter updates for CCP 16, such as calculating ORTP values for new technologies, while acknowledging the uncertainty of upcoming changes in some of the underlying markets in the calculations, such as Energy Security Improvements (ESI). Because of the three-year forward nature of the FCM, some lag between changes in related markets and the FCM parameters is expected; but where revenues can be reasonably calculated, it is preferable to incorporate them ahead of the next scheduled auction cycle (e.g., FCA 16). Additionally, because the ISO will be able to illustrate the impacts on the FCM parameters with and without those anticipated market

¹ See ER19-335-000, Consolidation of FCM Parameter Review, November 14, 2018. Available at: https://www.iso-ne.com/static-assets/documents/2018/11/consolidation_of_fcm_parameter_review.pdf

changes, stakeholders will have information on them while awaiting orders on matters before the Commission.

In addition, the ISO proposes to sunset the Forward Reserve Market (FRM) effective June 1, 2025. For several years the external market monitor has recommended the elimination of the FRM,² and the ISO has previously signaled plans to replace the FRM when reserves are implemented in the day-ahead market.³ The proposed June 1, 2025 sunset date for the FRM will enable this prospective change to be incorporated into the FCM parameter recalculations that will be reviewed with stakeholders during 2020 and provide more certainty about the FRM's disposition heading into FCA 16.

Again, the ISO plans to illustrate the impacts to the FCM parameters both with and without this proposed change. The ISO will discuss the removal of the FRM with stakeholders on a parallel path in committee meetings, also starting in May, and the application of the updated FCM parameter values and the elimination of the FRM will be aligned for the start of CCP 16.⁴ The ISO anticipates filing the FRM change ahead of the FCM parameter calculations with the goal of obtaining a Commission order before the FCM parameters filing later this year.

To support the FCM parameter updates, the ISO will provide estimates of several related input values: (a) additional day-ahead market energy and ancillary service revenues (which will vary by technology type) associated with the ESI design;⁵ (b) the impact of the elimination of the FRM on ancillary service revenue (which may affect Net CONE and ORTPs), and (c) estimates of the system's expected scarcity hours (including both summer and winter scarcity hours). Each of these values is an input into one or more FCM parameter updates, and will be discussed with stakeholders in conjunction with the parameters review.

² See Potomac Economics, *2015 Assessment of the ISO New England Electricity Markets* (June 2016), pp. 28-29 ("Accordingly, we recommend ISO-NE eliminate the forward reserve market.").

³ See June 26, 2018 NEPOOL Participants Committee minutes, available at http://nepool.com/uploads/Minutes_NPC_2018_0626-28.pdf, at page 6 of 42 (marked as page 3944) ("Mr. van Welie confirmed that ISO management had planned to replace FRM once Day-Ahead Energy Market reserves were implemented.").

⁴ The FRM and ESI treatment in the 2024-2025 capacity commitment period will be evaluated as part of the conforming change work to be completed before 2024.

⁵ The Energy Security Improvements are proposed to be in effect for the 2024-2025 Capacity Commitment Period and therefore will be considered in the energy and ancillary service revenue calculations for Net CONE and ORTPs.

There are many dependencies among the individual FCM parameter values and various input data. In brief, the parameter update process involves assembling and reviewing the independent input data, and then simultaneously determining (accounting for certain parameters' dependencies) a unified set of FCM parameter values. These relationships are described for background reference further below.

To provide sufficient time for discussion with the committee, the ISO proposes a topic sequence and timeline that is provided further below.

FCM Parameters and Their Interdependencies

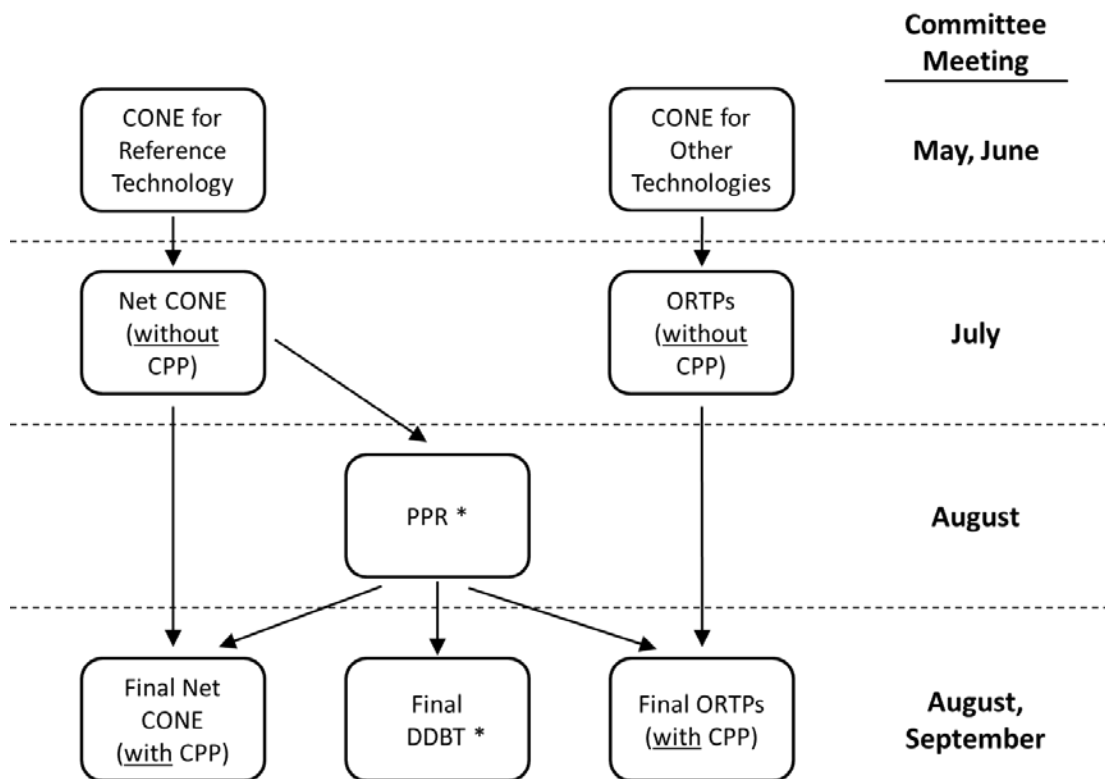
The five FCM parameters to be reviewed are:

- **(Gross) Cost of New Entry (CONE):** An estimated gross entry cost for a new capacity resource that is likely to be economically viable in New England. This value is an input to the calculation of the Forward Capacity Auction (FCA) Starting Price.
- **Net CONE:** The CONE value, net of estimated revenues from energy and ancillary services. This value is an input to the calculation of the FCA Starting Price and the FCA demand curves.
- **Offer Review Trigger Prices (ORTPs):** Additional Net CONE estimates for select resource technologies. New resource offers submitted below the ORTP value for the resource's technology type are subject to further review by the Internal Market Monitor.
- **Dynamic De-List Bid Threshold (DDBT):** An estimate of a competitive market-clearing price, under expected FCA market conditions. This parameter sets a threshold price above which existing resources' de-list bids are reviewed by the Internal Market Monitor.
- **Performance Payment Rate (PPR):** The PPR is the rate used to determine Capacity Performance Payments (CPP), that is, to credit or charge resources under the FCM rules for their performance during Capacity Scarcity Conditions.

Further, as noted above, along with the impact of the elimination of the FRM, future revenue associated with ESI and expected annual Capacity Scarcity Condition hours will be estimated, as they are inputs to many of these FCM parameters. The ISO plans to discuss the calculation of these estimates as separate (but concurrent) agenda items during the Net CONE and ORTP review process, to facilitate discussions on each specific topic.

Most of the FCM parameters have interdependencies with other parameters. That is, a parameter may be an input or an output used in the calculation of another parameter. These relationships are summarized below.

Figure 1
Workflow and Inter-dependencies Among Key FCM Parameters



*Performance Payment Rate and Dynamic Delist-Bid Threshold (DDBT) discussions are planned to begin in July; see Table 1.

Proposed Schedule

The proposed Markets Committee schedule for discussing the FCM parameters and their inputs, along with the FRM sunset discussion, is summarized in Table 1 below. We look forward to discussing each of these topics in more detail at the upcoming NEPOOL Markets Committee meetings.

Table 1
FCM Parameters – Proposed Markets Committee Schedule

<i>Topic:</i> Meeting Date	CONE, Net CONE, ORTPs	DDBT	PPR	Revenue Offsets	Scarcity Hours	FRM Sunset
May 12 – 13	X					X
June 9 – 10	X			X		X
July 14 – 16	X	X	X	X	X	<i>MC Vote</i>
August 6						<i>PC Vote</i>
August 10 - 11	X	X	X	X	X	
September 1						<i>FERC Filing</i>
September 9 – 10	X	X	X	X	X	
October 6 - 7	<i>MC Vote</i>	<i>MC Vote</i>	<i>MC Vote</i>			
November 5	<i>PC Vote</i>	<i>PC Vote</i>	<i>PC Vote</i>			
December 1	<i>FERC Filing</i>	<i>FERC Filing</i>	<i>FERC Filing</i>			

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